

AGENDA

WILSONVILLE CITY COUNCIL MEETING OCTOBER 6, 2014

8:00 P.M.

CITY HALL
29799 SW TOWN CENTER LOOP
WILSONVILLE, OREGON

Note start time for
regular meeting

Mayor Tim Knapp

Council President Scott Starr
Councilor Susie Stevens

Councilor Richard Goddard
Councilor Julie Fitzgerald

CITY COUNCIL MISSION STATEMENT

To protect and enhance Wilsonville's livability by providing quality service to ensure a safe, attractive, economically vital community while preserving our natural environment and heritage.

Executive Session is held in the Willamette River Room, City Hall, 2nd Floor

- | | | |
|------------------|---|-----------|
| 5:00 P.M. | EXECUTIVE SESSION | [30 min.] |
| A. | Pursuant to ORS 192.660(2)(i) Performance Evaluation of City Attorney
ORS 192.660(2)(h) Litigation | |
| 5:30 P.M. | REVIEW OF AGENDA | [5 min.] |
| 5:35 P.M. | COUNCILORS' CONCERNS | [5 min.] |
| 5:45 P.M. | PRE-COUNCIL WORK SESSION | |
| A. | Frog Pond Update (Neamtzu)
<i>Attachments to staff report are separately bound.</i> | [30 min.] |
| B. | Transit Integration Plan (Lashbrook) | [20 min.] |
| C. | Stormwater Utility Fee Update (Kraushaar) | [10 min.] |
| D. | Town Center Loop Restriping (Kraushaar/Ward) | [15 min.] |
| 7:55 P.M. | ADJOURN | |
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CITY COUNCIL MEETING

The following is a summary of the legislative and other matters to come before the Wilsonville City Council a regular session to be held, Monday, October 6, 2014 at City Hall. Legislative matters must have been filed in the office of the City Recorder by 10 a.m. on September 16, 2014. Remonstrances and other documents pertaining to any matters listed in said summary filed at or prior to the time of the meeting may be considered therewith except where a time limit for filing has been fixed.

8:00P.M. CALL TO ORDER

- A. Roll Call
- B. Pledge of Allegiance
- C. Motion to approve the following order of the agenda and to remove items from the consent agenda.

8:05 P.M. MAYOR'S BUSINESS

- A. Proclamation for National Manufacturing Month (staff –Retherford)
- B. Upcoming Meetings

8:15 P.M. COMMUNICATIONS

- A. Community Survey Results (staff – Cosgrove)
The survey results are bound separately.
- B. Wilsonville Leadership Academy (staff – Gail/Handran)

8:45 P.M. CITIZEN INPUT & COMMUNITY ANNOUNCEMENTS

This is an opportunity for visitors to address the City Council on items *not* on the agenda. It is also the time to address items that are on the agenda but not scheduled for a public hearing. Staff and the City Council will make every effort to respond to questions raised during citizens input before tonight's meeting ends or as quickly as possible thereafter. Please limit your comments to three minutes.

8:50 P.M. COUNCILOR COMMENTS, LIAISON REPORTS & MEETING ANNOUNCEMENTS

- A. Council President Starr – (*Park & Recreation Advisory Board Liaison*)
- B. Councilor Goddard – (*Library Board Liaison*)
- C. Councilor Fitzgerald – (*Development Review Panels A & B Liaison*)
- D. Councilor Stevens – (*Planning Commission; CCI; Wilsonville Seniors Liaison*)

8:30 P.M. CONSENT AGENDA

- A. **Resolution No. 2490**
A Resolution Of The City Of Wilsonville Approving A Design-Build-Operate Agreement Amendment With CH2M Hill To Construct A Temporary Repair To The City's Wastewater Treatment Plant Outfall Pipe. (staff – Mende)
- B. Minutes of the September 4 and 15, 2014 Council Meetings. (staff – King)

8:30 P.M. PUBLIC HEARING

- A. **Ordinance 749** – 1st Reading
An Ordinance Of The City Of Wilsonville Amending Chapter 10 Of The Wilsonville Code By Amending Section 10.240 Control Of Dogs To Adopt 2014 Changes To Clackamas County Code 5.01. (Staff – Kohlhoff)

8:45 P.M. NEW BUSINESS

- A. **Resolution No. 2489**
A Resolution Of The City Of Wilsonville Authorizing Acquisition Of Property Interest Related To The Planned Future Construction Of Road, Sewer And Trail Improvements On Boeckman Road East Of Canyon Creek Road. (staff – Retherford)

9:00 P.M. CITY MANAGER'S BUSINESS

- A. Quarterly Goals Update

9:15 P.M. LEGAL BUSINESS

9:20 P.M. ADJOURN

Time frames for agenda items are not time certain (i.e. Agenda items may be considered earlier than indicated. The Mayor will call for a majority vote of the Council before allotting more time than indicated for an agenda item.) Assistive Listening Devices (ALD) are available for persons with impaired hearing and can be scheduled for this meeting if required at least 48 hours prior to the meeting. The city will also endeavor to provide the following services, without cost, if requested at least 48 hours prior to the meeting:-Qualified sign language interpreters for persons with speech or hearing impairments. Qualified bilingual interpreters. To obtain services, please contact the City Recorder, (503)570-1506 or king@ci.wilsonville.or.us

CITY COUNCIL WORKSESSION STAFF REPORT

Meeting Date: October 6, 2014		Subject: Frog Pond Area Plan Alternatives Evaluation Staff Member: Chris Neamtzu, Planning Director Department: Community Development	
Action Required		Advisory Board/Commission Recommendation	
<input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Information or Direction <input type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda		<input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input checked="" type="checkbox"/> Not Applicable Comments: NA	
Staff Recommendation: Staff recommends that the Council provide specific input and direction on the land use and transportation alternatives evaluation as well as any other specific comments on the packet materials.			
Recommended Language for Motion: NA			
PROJECT / ISSUE RELATES TO:			
<input checked="" type="checkbox"/> Council Goals/Priorities Thoughtful land use	<input type="checkbox"/> Adopted Master Plan(s)	<input type="checkbox"/> Not Applicable	

ISSUE BEFORE COUNCIL: This worksession is to present progress on the Frog Pond Area Plan and receive feedback from the Council on the work completed to date.

EXECUTIVE SUMMARY: With support of a Metro grant, the Frog Pond Area Plan was formally initiated in March 2014. Since that time, the project has completed four major tasks of the work plan including:

- Project set up
- Context and site analysis

- Vision, objectives and evaluation criteria
- Major infrastructure evaluation

The Frog Pond Task Force has met three times and the Technical Advisory Committee (TAC) has met twice to provide guidance during these first four tasks. The project to this point has also included ongoing distribution of public information and outreach.

The project's current work focuses on creating alternatives for preliminary concept plans, infrastructure analyses and a draft funding plan. Three alternative land use plans have been created most noticeably differentiated by residential density and street network. The attached alternatives evaluation memorandum and supporting information aim to inform the Council of the working ideas and provide an opportunity to discuss the ideas prior to a community open house scheduled for October 16, 2014.

Supporting information includes:

- Draft transportation and trail plans
- Street design concepts
- Site studies for a potential neighborhood commercial center
- Neighborhood character images
- Estimates of housing capacity and density

In addition, technical memoranda have been prepared to evaluate transportation, water, sanitary sewer, and storm water infrastructure. An evaluation matrix, based on the project's Guiding Principles, is provided as a tool to evaluate the alternatives and identify the best elements to include in a draft concept plan. One piece of information not yet ready for review is the Infrastructure Funding Plan. This technical memorandum will be finalized over the next several weeks.

EXPECTED RESULTS: Staff desires to receive direction from the City Council on the draft materials contained in the packet. The Council could focus much of its discussion on providing feedback on the best elements of the three alternatives, providing input into refinements of the alternatives and the sets of conclusions to frame key issues.

TIMELINE: Next steps include:

- Task Force and TAC review of alternatives evaluation summary – October 2
- Planning Commission briefing – October 8
- Community Open House – October 16
- Task Force and TAC review of draft concept plan – December 2014
- Joint Planning Commission – City Council work session – January 2015
- Completion of Phase 1 of the project by spring 2015

CURRENT YEAR BUDGET IMPACTS: This is a Metro grant funded project. Significant amounts of staff time are required to manage and advance the project. These costs were included in the adopted City of Wilsonville 2014-15 Budget.

FINANCIAL REVIEW / COMMENTS:

Reviewed by: _____ CAR _____ Date: ____9/26/14_____

Project #3001-Frog Pond Master Planning has a current budget of \$211,000. The matching portion of the grant is funded through Water, Sewer, Street, Stormwater and Parks SDCs.

LEGAL REVIEW / COMMENT:

Reviewed by: _MEK_____ Date: _9/26/14_____

NA

COMMUNITY INVOLVEMENT PROCESS: Successful concept planning is a citizen driven process. The first community wide open house on the project is scheduled for October 16th. An on-line open house will run following the brick and mortar open house which is designed to gather input from a broader cross section of interested persons. A Task Force and Technical Advisory Committee have been established to guide the project and the Planning Commission will conduct work sessions and public hearings in preparation for recommendations to the City Council.

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY (businesses, neighborhoods, protected and other groups): Completing a concept plan for the Frog Pond area is a City Council goal. Conducting a thorough and thoughtful planning process will identify and resolve potential impacts to the community. The benefits to the community include the potential for well-planned new neighborhoods that are well-connected to existing neighborhoods and that include diverse housing types, quality trails, parks and retail services to serve new and existing residents.

ALTERNATIVES: The consultant team has developed three land use alternatives and two transportation alternatives. There are pros and cons to all of the alternatives, and the preferred alternative will in all likelihood combine elements of each. It is important for the Council to clearly articulate their preference for specific elements of the alternatives so that the project team can begin to move toward preparation of preferred alternatives and a draft concept plan.

CITY MANAGER COMMENT:**ATTACHMENTS**

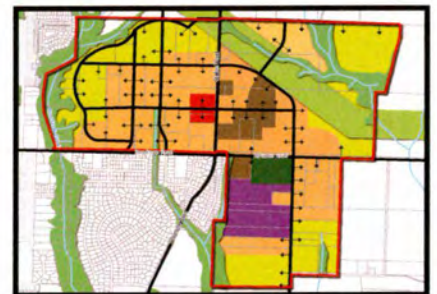
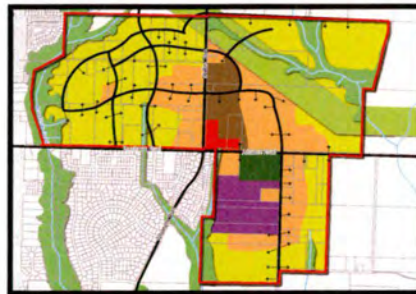
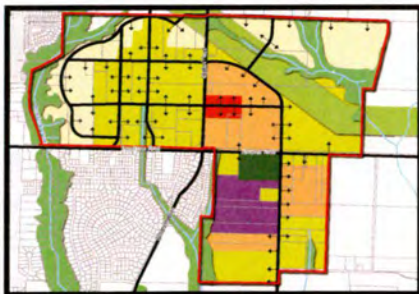
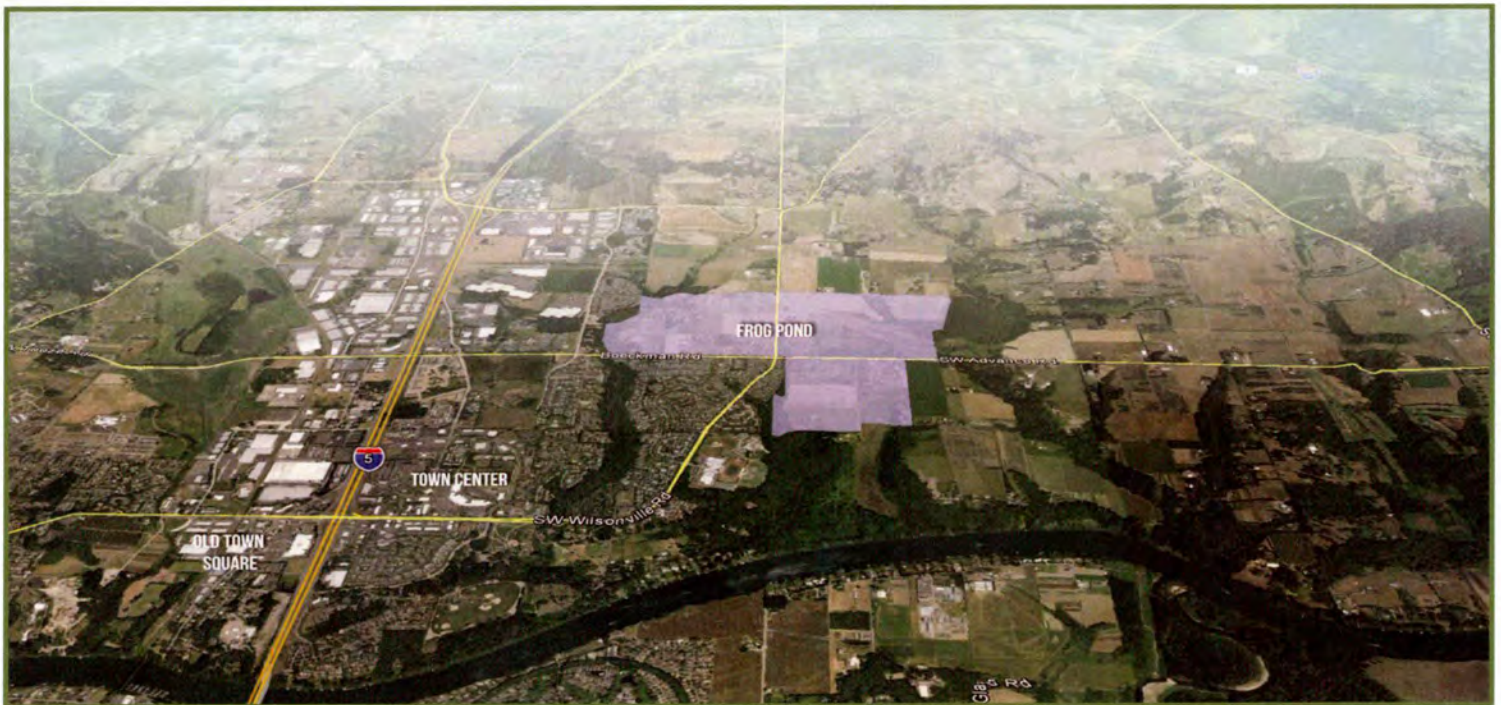
A. Alternatives evaluation summary and exhibits (bound separately)



FROG POND AREA PLAN

Creating a great community

Land Use and Transportation Alternatives Summary and Evaluation





Prepared by Angelo Planning Group, DKS Associates, Leland Consulting Group, Murray, Smith & Associates, Pacific Habitat Services, and Walker Macy.





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Executive Summary

Introduction

The Frog Pond Area Plan, led by the City of Wilsonville, will establish a vision for the 500-acre Frog Pond area, define expectations for the type of community it will be in the future, and recommend implementation steps. The project team has developed a set of three land use and transportation alternatives for consideration by the Frog Pond Planning Task Force, the public, stakeholders, and city policy-makers. All three of the alternatives are intended to implement the Frog Pond Area Plan's vision and guiding principles. The variations between the alternatives illustrate how there are different ways to achieve the vision. Based on this evaluation and the community dialogue that will occur, a "preferred" concept plan will be prepared. It is likely that a hybrid plan will be created that will combine the best elements of each of the alternatives.

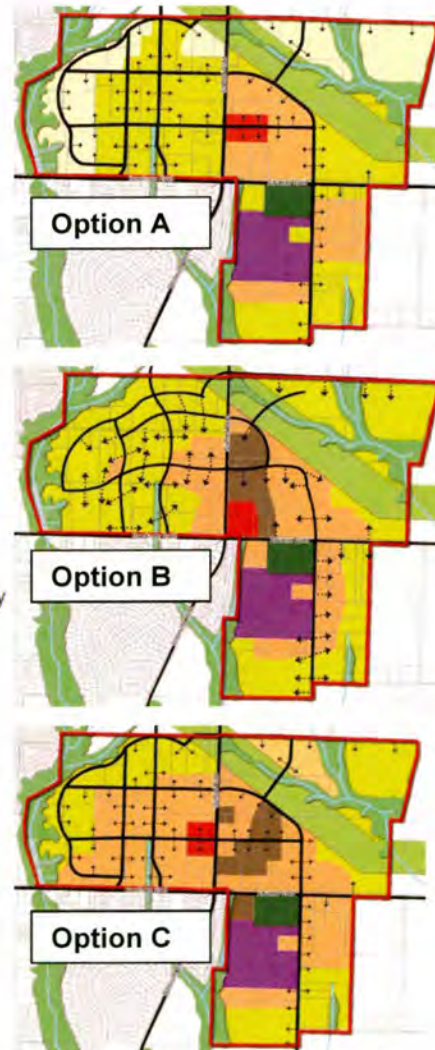
Alternatives Overview & Land Use

Land use in all three alternatives is predominately residential, with a neighborhood-scale retail area to serve new and existing residents.

Option A has a "grid" street network and the lowest overall residential capacity of the three alternatives; the retail area is located at the east side of the intersection of Stafford Road and a new local street south of Frog Pond Lane. This option prioritizes single family detached housing in the early years of development, located in the neighborhood west of Stafford Road. Medium density is included in the Urban Reserve, to achieve a mix of housing types, consistent with the guiding principles and market analysis recommendations.

Option B is laid out around a more curvilinear or "organic" street network. In Option B, the variety of housing ranges increases, resulting in a greater mix

- Framework Street
 - ... Local Connection
 - Planning Area
 - Planned School Site
 - Community Park
 - Stream
 - BPA Corridor
 - Natural Resources Overlay
 - Taxlots
- Land Use Designations**
- Very Low Density (3 Units / Net Acre)
 - Low Density (7.2 Units / Net Acre)
 - Medium Density (12.1 Units / Net Acre)
 - High Density (25 Units / Net Acre)
 - Commercial





than Option A and an overall residential capacity and density that falls in between the other alternatives. The retail area is located adjacent to the intersection of Stafford Road and Advance Road. The housing program in this option is in the middle of the range recommended in the market analysis, providing the full range of housing from detached single family to cottages to townhomes to apartments.

Option C organizes residential uses around the “grid” street layout and provides more medium density housing (cottages and townhomes) than Option B, resulting in the highest total number of residential units of the three alternatives. It represents the high end of the housing programs recommended in the market analysis. The retail area is located on the west side of the intersection of Stafford Road and a new local street south of Frog Pond Lane.

The estimated total residential capacity of the Frog Pond area for each land use alternative is summarized in the table below.

Land Use Alternative	Total Housing Capacity (Units)	Average Net Density (Units / Net Acre)
Option A - Grid Low	1,759	7.2
Option B - Organic Medium	2,343	9.6
Option C - Grid High	2,653	11.0

Roads & Trails

Existing roads in the Frog Pond area will be upgraded to the City of Wilsonville’s standards, including sidewalks and bike lanes. Stafford Road will have adequate capacity at three lanes (one travel lane each direction and a center turn lane as needed) to accommodate the build-out of the Frog Pond area, but will likely need to be widened to five lanes due to growth of background traffic and the future development of the Elligsen Urban Reserve (4G). Boeckman Road will have adequate capacity with three lanes. Advance Road can likely remain a collector road, providing access and on-street parking to serve adjacent land uses.

New collector roads are planned to run through the Frog Pond Area providing connections within the neighborhoods to the perimeter streets – from Boeckman Road at Willow Creek Drive to the northern edge of the Frog Pond Area, with potential for extension into the Elligsen Urban Reserve; along or adjacent to Frog Pond Lane to Stafford Road and continuing east to the BPA power lines; and from 60th Avenue north to the BPA power lines. These new collector roads will have sidewalks and bike lanes. In addition, a network of local roads will provide connectivity within the neighborhoods. All new local roads will include sidewalks.

The planned Boeckman Creek Regional Trail is shown extending north of Boeckman Road along the top of the bank of Boeckman Creek. Another trail is proposed within the BPA easement east of Stafford Road. Additional trails are proposed to provide links to the future school sites south of Advance Road. All trails are planned to connect across the major streets at local street intersections.



Safe and convenient bicycle and pedestrian crossings of the major roads are an essential part of making the Frog Pond area a great neighborhood. In particular, Stafford Road at Kahle Road will become a new entrance to the city. This location marks the transition “from country to city” and also ties into the history of the Grange. This area merits a “gateway” treatment.

Natural Resources, Open Space, and Parks

Several stream corridors and one wetland within the planning area have been identified as likely meeting locally significant resource criteria. These will be subject to Significant Resource Overlay Zone (SROZ) protections upon annexation to the City of Wilsonville. Other wetlands that were identified as part of the inventory for the Frog Pond Area that do not meet the criteria for local significance are assumed to be addressed by property owners / developers in accordance with state and federal regulations, which allow impacts subject to mitigation requirements when the property owner can show that the proposed project has the least impact to wetlands or waterways of all practicable alternatives that meet the project purpose and need. Further coordination with the Department of State Lands is needed to refine implementation strategies.

One of the project's Guiding Principles is to provide access to nature. One of the ways this can be implemented is through visual and physical access to protected resource areas, such as with parks or streets located adjacent to the edge of the protected area. The “framework” streets have been located to support visual and physical access to Boeckman Creek and the BPA Power line easements. All three alternatives provide for these areas to be amenities enjoyed by the neighborhoods, and not resources that are “walled off” by development.

The City's planned 10-acre community park is planned south of Advance Road as a key focal point. Two neighborhood parks will be needed in the neighborhood west of Stafford Road, and one in the neighborhood east of Stafford Road and north of Advance Road. Neighborhood parks are generally designed to be about 2.5 acres in size. Locations for future neighborhood parks are not identified specifically; they will be worked out either through development review or through land acquisition by the City of Wilsonville.

Sustainable stormwater management is another key component of the Frog Pond plan. The stormwater management approaches are anticipated to consist largely of roadside bioswales, with green street features wherever possible, and detention basins to manage drainage originating from development.

Key Questions and Considerations

The following summarizes key questions and considerations to be discussed by project participants during the evaluation of the alternatives and creation of the preferred alternative.

What is the appropriate mix and location of housing to achieve the vision and ensure feasible implementation? The alternatives explore a key “creative tension” for the plan: the more an alternative provides a mix of housing types as recommended in the market study - i.e. including attached single family and multi-family - the less that alternative provides single family detached housing. Option B is the closest to providing a middle ground of housing mix that generally matches market demand while also emphasizing single family homes. Option B provides 50%



Low Density Residential, 36% Medium Density Residential (which includes small-lot single family), and 14% High Density Residential. Based on the market study, roughly half of the Medium Density Residential shown on the plan options would be comprised of small-lot single family detached homes. Variations in housing mix and density between the three options have little impact on transportation or utility infrastructure improvement needs or costs; however, more housing generates more System Development Charge revenue to pay for off-site improvements.

Is a wider range of housing types needed in the West Neighborhood? Potential refinements could include providing a limited amount of Very Low Density Residential and/or a small amount of High Density Residential along with a mix of Low and Medium Density in the West Neighborhood in order to increase diversity of housing options.

Can Medium Density Residential be designed to provide a sensitive and compatible edge to adjacent Rural Reserve, or should urban-rural edges be developed only with Low or Very Low Density Residential? There may be little difference in impacts between having townhomes and small-lot single family versus standard lot single family adjacent to the rural edge, but more density increases the number of households in close proximity to working farmland, and means that tools like setbacks and landscaping would need to be provided through common open space or a trail corridor. Where possible, each plan option provides a “transect” from higher to lower densities, including lower density adjacent to rural lands.

Should housing transition down adjacent to Boeckman Creek or should the natural area be treated as an amenity for higher density housing? With clustered development, site planning can provide visual and physical access to a greater degree than would be possible with single family homes. The southern area along Boeckman Creek also has good access to employment areas to the east and the Town Center to the south, though it has less proximity to any of the retail sites within the Frog Pond Area.

Which retail location is most desirable? The locations identified in Options A and C would not have access from an intersection with a signal, which is a significant drawback. Since retail generally follows “rooftops” rather than preceding them, this is an advantage to a location in the East neighborhood, as in Options A and B. The location identified in Option B provides the greatest visibility for pass-by traffic and could have a synergistic relationship with the city’s future community park, located just across Advance Road. A fourth potential retail site adjacent to the Grange has several advantages, including highlighting the historic Grange building as a community focal point, and the potential to site some parking and stormwater management for the development in the BPA easement.

Which street network is preferable? The grid network in Options A and C offers advantages including providing internal connections that support circulation and access, a local street network that is easy to understand and navigate, a better location for a future traffic signal that improves traffic flow, better potential for future transit coverage, better alignment with property lines, and better flexibility for incremental implementation without a master developer. The



“organic” street network is somewhat more responsive to topography and as a result requires fewer utility easements.

Issues for Further Study

Several implementation considerations for the Frog Pond Area Plan have begun to emerge from the evaluation of alternatives. As the concept plan and implementation strategies are prepared, the plan should address:

- Site design techniques for the Frog Pond retail area to ensure it is compatible with adjacent neighborhoods, easily accessible by all modes, and supports a high-quality pedestrian environment on adjacent streets;
- Where and to what degree to allow or encourage the use of alleys for residential development;
- Mechanisms to ensure provision of neighborhood parks if the Frog Pond Area is developed incrementally;
- Stormwater management strategies – on-site treatment and detention versus consolidated facilities serving multiple developments;
- Appropriate levels of protection for existing mature trees and tree groves;
- Wetland mitigation strategies;
- Appropriate bicycle and pedestrian crossing treatments for major road intersections to ensure safe routes to school and easy connections within the Frog Pond Area; and
- How certain road and utility infrastructure improvements will be built and paid for, such as urban upgrades to Stafford Road.

These issues will be explored further throughout the course of the project.



Introduction

The Frog Pond Area Plan, led by the City of Wilsonville, will establish a vision for the 500-acre Frog Pond area, and define expectations for the type of community it will be in the future. The project team has developed a set of three land use and transportation alternatives for consideration by the Frog Pond Planning Task Force, the public, stakeholders, and city policy-makers. This report describes the three alternatives currently under consideration as well as certain design concepts that are equally relevant for all alternatives. This report also summarizes information detailed in separate technical memoranda on the performance of the three alternatives to enable the Task Force, public, and policy-makers to make informed recommendations and decisions about a preferred alternative.



Description of Land Use and Transportation Alternatives

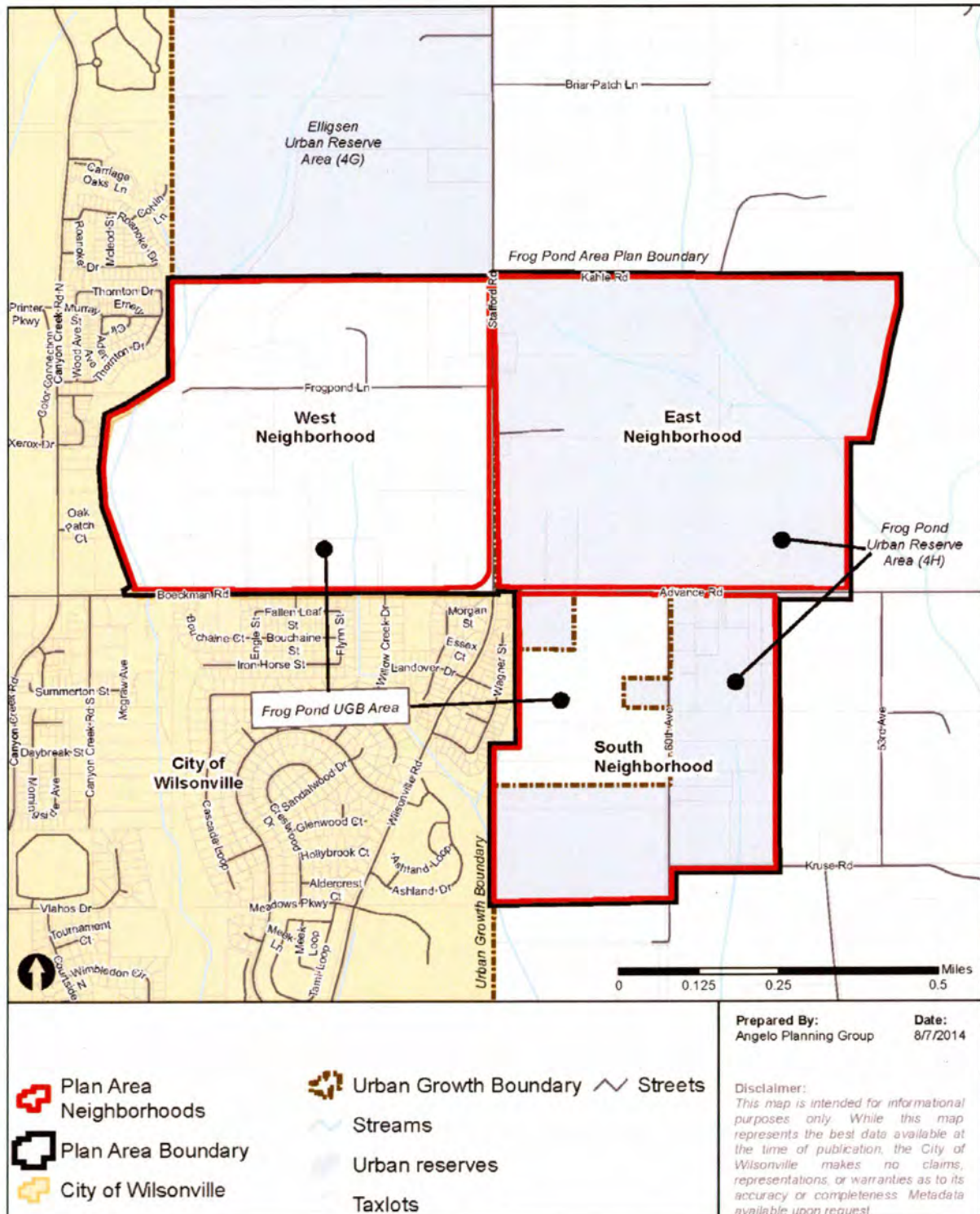
Overview

All three of the alternatives are intended to implement the Frog Plan Area Plan's vision and guiding principles. The alternatives, while different, share certain common elements in the area of land uses, schools and institutions, and street network. The variations between the alternatives illustrate how different ways exist to achieve the vision. Based on the alternatives evaluation presented in this summary and the community dialogue that will occur, a "preferred" concept plan will be prepared. Likely the evaluation and dialogue will create a hybrid plan combining the best elements of each of the alternatives together with the common elements.

The descriptions of the three alternatives make reference to three neighborhoods within the Frog Pond Area, identified on Figure 1. Exhibits 1A, 1B, and 1C show the land use and street frameworks for each of the three alternatives.



Figure 1: Frog Pond Neighborhoods





Land Uses

Land use in all three alternatives is predominately residential, with a retail area to serve new and existing residents.

The land use choices were shaped by the Frog Pond Area Plan Market Analysis prepared by Leland Consulting Group (included as Appendix A to this report); local policy direction about desired housing mix and balance of attached versus detached housing; requirements to provide land for needed housing; the urban design principle of “transects” that arrange land uses based on intensity, transitioning from the highest intensity to the lowest intensity; and focusing density near amenities such as retail areas, parks, and transit.

The retail area is approximately the same size in each alternative – approximately 5.3 acres, which would accommodate approximately 69,000 square feet of space in multiple buildings. The size is based on the Market Analysis done previously in the project based on projected demand from new residential growth, pass by traffic, and existing homes in the area. The Market Analysis also examined the locations of existing retail and services

The East and South neighborhoods have generally higher densities than the West neighborhood, because the residential areas are outside the Urban Growth Boundary (UGB), are designated Urban Reserve, and are more likely to be brought into the UGB by Metro if they demonstrate efficient accommodation of needed housing. Residential densities in each alternative are generally highest adjacent to the location identified for the retail area and adjacent to existing and potential transit service. The intention of this combination of land use is to support a walkable retail center with excellent transportation facilities.

Residential densities are described as “Very Low”, “Low”, “Medium”, and “High” on the alternatives. Example images of these categories are provided in Exhibit 2. They are described in general terms below.

- **Very Low Density Residential** is assumed to be all single-family detached housing on relatively large lots, averaging roughly three housing units per net acre¹ of land.
- **Low Density Residential** is assumed to be nearly all single-family detached housing on standard-sized lots (e.g. 5,000 to 8,000 square feet), averaging 7.2 housing units per net acre of land.
- **Medium Density Residential** is assumed to include small-lot single-family homes as well as townhomes, cottage homes, and similar housing types, averaging 12.1 units per net acre of land. In the market study, approximately half of the medium density residential homes are small-lot single family.
- **High Density Residential** is assumed to include multi-family housing, such as two- to three-story apartments and similar housing types, averaging 25 units per net acre of land.

Table 1 presents the key elements of the three alternatives.

¹ A net acre is the buildable land remaining after environmental and other constraints, street right-of-way, and stormwater management areas are accounted for and deducted.



Table 1: Land Use Alternatives

Alternative & Summary	Land Use by Neighborhood		
	West Neighborhood	East Neighborhood	South Neighborhood
Option A: "Grid" street network with lowest residential density	Exclusively Low and Very Low Density Residential use. The lowest densities are located closer to Boeckman Creek and the BPA power lines.	The retail area is located at the east side of the intersection of Stafford Road and the southern framework street. Medium density residential surrounds and supports the retail area, which are a key ingredients necessary for successful retail, enclosed by a framework street. Areas further east and north transition to Low Density Residential, with Very Low Density Residential in the "lobes" of buildable land between the creeks south of Kahle Road.	Two blocks of Medium Density Residential are shown: one east of 60th Avenue and one just south of the school property. The remainder is shown as Low Density Residential.
Option B: Curvilinear or "organic" street network with a residential density that falls between the other alternatives	Includes a mix of Low and Medium Density Residential use. The Medium Density is generally focused closer to Stafford Road and along the southern east-west framework street, although one block of Medium Density is shown further west, in a location central to the neighborhood. This arrangement is intended to focus medium density near the neighborhood center, and also provide low density residential along the north side of Boeckman Road across from similar single family homes.	The retail area is located adjacent to the intersection of Stafford Road and Advance Road. It is surrounded and supported by High Density Residential use, which then transitions to Medium Density Residential. The farthest east and north portions of this neighborhood are planned for Low Density Residential, including the areas south of Kahle Road.	Medium Density Residential is focused close to the school and park site, with Low Density residential along the east and south edges.
Option C: "Grid" street network with highest residential density	Includes the neighborhood retail area, located on the west side of the intersection of the southern framework street. Much of the neighborhood is planned for Medium Density Residential, with a transition to Low Density Residential at the northern and eastern edges.	Includes a mix of residential densities, with High Density Residential generally close to the southern framework street for ease of access to the retail area to the west. It is broken into one area that spans the southern framework street, reaching diagonally from Stafford Road to the BPA easement, and one smaller area adjacent to Stafford Road a little further north. The eastern portion of this neighborhood is planned for Low Density Residential, providing a transition to rural areas to the east. Of the two "lobes" south of Kahle Road, one is planned for Medium Density Residential, while the other (further east) is planned for Low Density residential.	There is a block of High Density Residential located between the school/park property and Advance Road, buffered from the existing neighborhoods to the west by Meridian Creek. The southern portion of this neighborhood is planned for Low Density Residential, while the remainder is planned for Medium Density Residential.



Institutions and Schools

All three alternatives identify the future school and community park site in the South neighborhood as a fixed location. The land is already owned by the School District, which, pending the outcome of a November bond measure, could initiate land use actions to begin development of a middle school on the site.

Because the future plans of existing institutions, such as the Grange and the Community of Hope church, are not known at this time, and because the school district has indicated that the land it holds in the West Neighborhood may not ultimately be used for a future school, land use designations have been identified for all land within the Frog Pond Area, including these institutions, except for the future school and park site in the South neighborhood.

Parks

A future 10-acre city owned community park is planned south of Advance Road. The land is currently part of the school district's 40-acre property. This park will serve the Frog Pond Area as well as existing neighborhoods. Its primary recreational focus will be to provide athletic fields to meet the growing needs of the community. Facilities are expected to include multi-use play fields and appropriate parking, a playground, restroom building, concession area, and picnic shelter.

Neighborhood parks will be needed in the West and East neighborhoods: two in the West neighborhood and one in the East neighborhood. The two neighborhood parks in the West Neighborhood implement the parks adopted in the Wilsonville Parks and Recreation Master Plan (2007). Locations for future neighborhood parks are not identified specifically; rather, a parks framework diagram is included in Exhibit 3 that illustrates general areas within which a future neighborhood park should be located. Neighborhood parks are typically designed to be about 2.5 acres in size and include a wide range of features balancing passive and active recreation. Exhibit 4 includes examples of different styles of neighborhood-scale parks. One option is to provide a linear neighborhood park along a portion of the Boeckman Creek Corridor that would include a proposed trail alignment (discussed on page 13).

Street Network

The alternatives all envision a connected local street network, framed around identified "Framework Streets", connecting to the existing major roadways. While there are three land use alternatives, there are only two street frameworks: the "grid" option or the curvilinear "organic" option.

All alternatives include two connections to Boeckman Road at existing local street intersections and three connections to Stafford Road north of Boeckman Road. The number of connections to Advance Road is expected to be roughly the same in all alternatives, with the existing connection to 60th Avenue and two or more additional local street connections. Access points to existing streets are driven by minimum street spacing and intersection alignment requirements. A future



north-south roadway through the West Neighborhood is envisioned to ultimately extend into the Elligsen Urban Reserve (4G).

All alternatives provide the option for alleys in some or all blocks. Alleys may be especially appropriate for development adjacent to major roads where direct vehicle access to the property is restricted by access spacing standards, but are simply one option for consideration at this stage of the project.

The grid street network responds to existing property lines and right-of-way, and provides a regular, largely rectilinear local street pattern, while acknowledging natural areas and constraints. The organic street network assumes one or a few master developers within each neighborhood, allowing for street alignments that do not follow property lines, but take their inspiration from the area's topography and natural resources. Additional local streets are assumed to provide a connected set of blocks. However, these blocks are not necessarily regularly shaped, and do not always intersect at right angles. Few of the streets follow property lines.

Street Classification

Exhibits 5A and 5B show the proposed street functional classifications for each street framework. A detailed explanation of these classifications and the associated standards and designs is included in the Future Transportation Analysis memorandum by DKS Associates, which is included as Appendix B to this report. Generally speaking, arterial roads, especially major arterials (such as Stafford Road), are intended to prioritize flow of traffic through an area over access to individual developments or homes within an area. Collector roads are intended to provide access into neighborhoods or commercial/industrial areas and connections to arterial roads and key destinations. Local roads are intended to provide primarily access to individual properties, with little through-traffic. In the Frog Pond Area, pedestrian safety and comfort is a priority along all streets, regardless of classification and functional role for vehicles.

Street Design Concepts and Crossings

Exhibits 6A and 6B, respectively, show design concepts for Stafford Road, and the north-south collector in the West Neighborhood, at key intersections. These illustrations are intended to highlight the importance of pedestrian and bicycle treatments and crossings, and the character of the roadways, consistent with their functional classification and the street cross-sections identified in the Transportation System Plan (TSP). Exhibit 7 includes examples of intersection crossing treatments. In addition, roundabouts may be considered at key intersections within the neighborhoods to facilitate traffic movement and moderate vehicle speeds in the neighborhood.

In addition, Exhibit 8 shows a Stafford Road gateway concept. Development in the West Neighborhood, and eventually in the East Neighborhood as well, will establish a new entrance to the city. Placement of the gateway is at the intersection of Kahle Road and Stafford Road and will extend south toward Frog Pond Lane. This location marks the transition "from country to city" calming traffic and also ties into the history of the Grange. A high level concept is shown, along with a selection of design elements to consider for the gateway.



Bicycle and Pedestrian Frameworks

The overall intent and organization of the bicycle and pedestrian frameworks is similar for both the grid and organic street frameworks, shown in Exhibits 9A and 9B. Exhibit 10 shows an additional diagram illustrating the relationship between the Frog Pond Area trails and other bicycle and pedestrian routes and destinations within and adjacent to the City of Wilsonville.

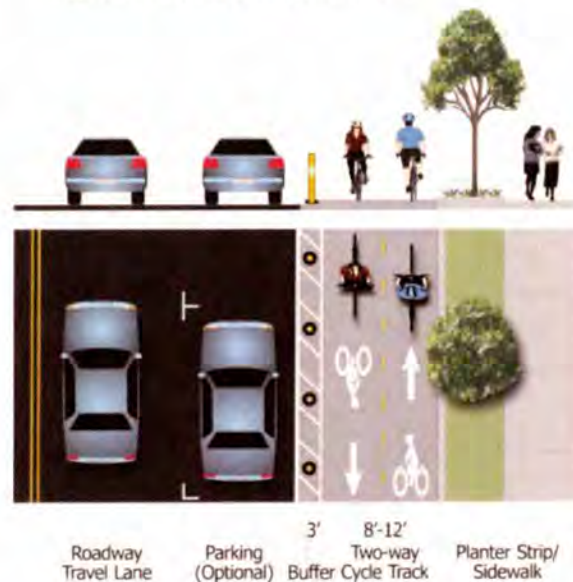
Providing safe routes to existing and planned schools is a key goal of the bicycle and pedestrian frameworks. Grade-separated bicycle and pedestrian crossings may be appropriate for key intersections on the major roadways in order to provide safe routes to school and better linkages between the neighborhoods.

Figure 2: Two-Way Cycle Track

On-Street Facilities

Collector and Arterial streets are planned for future bike lanes where they do not currently exist, either through urban upgrades or through construction of new roadways within the neighborhoods. All new local roads will include sidewalks.

A cycle track treatment that places bikes going both directions on the same side of the street, with a buffer or barrier to provide protection from vehicle traffic, as shown in Figure 2, may be appropriate on 60th Ave from Advance Road to the southern edge of the planning area on west side, adjacent to the school.



West Neighborhood: Boeckman Creek Trail

Plans show the planned Boeckman Creek Regional Trail extending north of Boeckman Road into the West neighborhood. South of Boeckman Road, the Wilsonville TSP shows the trail running within the creek canyon along the sewer line easement. After passing under the Boeckman Road bridge, the trail would likely climb to the top of bank along an existing access/maintenance road and run roughly along the edge of the vegetated corridor / Significant Resource Overlay Zone through the West neighborhood. Where outside the SROZ The trail alignment provides the opportunity for a linear park along the natural feature that could have nodes of activity framed by the forest edge. The location of this trail as a visible and accessible part of the neighborhood's west side is an intended outcome. This location will ensure the trail is a neighborhood amenity, and increase its use and safety. This trail would leave Boeckman Creek and traverse the northern edge of the West neighborhood to link to the BPA corridor, intersecting Stafford Road at Kahle Road. As a regional trail, this should be paved, but stormwater runoff from the trail will need to be managed so as not to impact Boeckman Creek.



Connections to the trail from the adjacent streets and in the form of accessways between homes in residential developments should be provided as frequently as is practical in order to maximize bicycle and pedestrian connectivity and convenience.

East Neighborhood: BPA Easement Trail

In the East neighborhood, where the BPA easement cuts through on a diagonal, plans propose a trail to run from Kahle Road to roughly the point where the easement turns to run east, at which point the trail would leave the easement, turning south to intersect with Advance Road at a local street intersection. Connections from the adjacent streets should be provided as frequently as is practical in order to maximize bicycle and pedestrian connectivity and convenience. Trails in all three neighborhoods will provide important Safe Routes to Schools opportunities.

South Neighborhood: School Connection Trails

The trail from the BPA easement would link to a proposed trail along the eastern edge of the South Neighborhood that would provide an edge to the future urban area, and, through landscaping and appropriate fencing, help buffer and protect the farmland in the adjacent rural reserve area. The trail would connect to the southern edge of the school property, providing as direct a route to the planned location of the school buildings as possible.

An additional trail would link from the existing Wilsonville High School and Boeckman Creek Elementary School across Meridian Creek to the future school sites, co-located with infrastructure easements and associated creek crossings. The two trails should meet along the southern edge of the school property in order to provide through-access for the public as well as access for students and school employees.

60th Avenue Trail

The possibility of using the existing unimproved 60th Avenue right-of-way as a trail south of the Frog Pond Area, connecting to the Willamette River at Oregon State Parks Willamette Meridian Landing, is identified for further exploration. Such a connection could provide a highly desirable link to the river and the open space and recreational opportunities at Willamette Meridian Landing.

Natural Resources

Significant Resources

Exhibit 11 shows stream corridors and wetlands identified as likely meeting locally significant resource criteria. These will be subject to Significant Resource Overlay Zone (SROZ) protections upon annexation to the City of Wilsonville.

Other wetlands identified as part of the inventory for the Frog Pond Area that do not meet the criteria for local significance are assumed to be addressed by property owners / developers in accordance with state and federal regulations, which allow impacts subject to mitigation requirements when the property owner can show that the proposed project has the least impact to wetlands or waterways of all practicable alternatives that meet the project purpose and need. For the purposes of calculating capacities, it was assumed that 80% of the non-significant



wetlands would be developed and mitigated off-site. This is a significant implementation issue that will need further definition.

Tree Groves

Existing tree groves were also inventoried as part of the planning work for this project. Identified groves are shown on Exhibit 11. The tree groves within the planning area provide a key visual asset, and are a link to the historic character of the area. To the extent that existing, mature trees can be retained and protected as annexation and development occurs, it will contribute to the character and desirability of new neighborhoods, as shown in several of the example images in Exhibits 2, 4, and 12. The city has existing annexation policies that incentivize (but do not mandate) tree retention.

Open Space Edges

One of the project's Guiding Principles is to provide access to nature. One of the ways this can be implemented is through visual and physical access to protected resource areas. Exhibit 12 provides example images of relationships between open spaces and the adjacent land use that provide for visual and physical access. Trails and park improvements are generally assumed to be located outside the SROZ boundary, with the possible exception of creative play, natural trails and crossing points.

Stormwater Management

Sustainable stormwater management is another key component of the Frog Pond Plan. The stormwater management approaches are anticipated to consist largely of a toolbox of approaches to treat, detain, and infiltrate runoff on-site. The City expects drainage originating from private development required to be managed by the private developer in accordance with the City's Public Works Standards and Oregon Drainage Law. The plans also assume new streets and on-site development will include low impact development (LID) techniques to the extent possible. The city's Stormwater Master Plan and Public Works Standards include a variety of LID options for stormwater management. Examples of low impact development as well as other types of green infrastructure are shown on Exhibit 13.

Alternatives Evaluation

Overview

The transportation impacts and infrastructure needs associated with the three alternatives have been evaluated in technical memoranda produced by DKS Associates and Murray Smith Associates, respectively. These technical memoranda are included as appendices to this report, and a brief summary of key findings from each evaluation are presented in this section. In addition, Leland Consulting Group is preparing an infrastructure Funding Analysis that evaluates infrastructure costs and expected city revenues from System Development Charges (SDCs). While this analysis is not yet complete, a few of the key early findings are summarized in this section.



This section also includes an evaluation of the land use considerations of each alternative. Finally, a matrix is provided on page 20 that summarizes the project team's evaluation of the three alternatives relative to the project's Guiding Principles.

Land Use Considerations

Capacity and Density

The total residential capacity of the Frog Pond Area is estimated to range from roughly 1,760 units in Option A to roughly 2,650 units in Option C, as shown in Table 2. The overall net residential density for the full Frog Pond Area ranges from 7.2 units per net acre in Option A to 11 units per net acre in Option C. A more detailed table showing net acres, percent of total units, and an estimate of the percent detached housing by neighborhood and for total for the planning area is included in Exhibit 14.

Table 2: Residential Capacity and Density Estimate Summary

	West Neighborhood		East Neighborhood		South Neighborhood		Frog Pond Area (Totals)	
Land Use	Units	Net Density	Units	Net Density	Units	Net Density	Units	Net Density
Option A - Grid Low								
Very Low Density	99	3	104	3	-	3	203	3
Low Density	492	7.2	169	7.2	219	7.2	880	7.2
Medium Density	-	12.1	384	12.1	292	12.1	677	12.1
High Density	-	25	-	25	-	25	-	25
Total	591	5.8	657	7.3	511	9.4	1,759	7.2
Option B - Organic Medium								
Very Low Density	-	3	-	3	-	3	-	3
Low Density	609	7.2	320	7.2	230	7.2	1,159	7.2
Medium Density	201	12.1	381	12.1	274	12.1	856	12.1
High Density	-	25.0	328	25.0	-	25	328	25
Total	810	8.0	1,029	11.6	504	9.2	2,343	9.6
Option C - Grid High								
Very Low Density	-	3	-	3	-	3	-	3
Low Density	276	7.2	229	7.2	174	7.2	680	7.2
Medium Density	706	12.1	574	12.1	330	12.1	1,610	12.1
High Density	-	25.0	363	25.0	-	25	363	25
Total	982	10.2	1,166	12.4	505	9.8	2,653	11.0

Housing Mix and Variety

Each of the three land use alternatives provides at least two different housing designations within each neighborhood. The East neighborhood has three density designations in each of the



alternatives. In addition, each residential designation is intended to capture a range of lot sizes and, in some cases, housing types, as described on page 9 and illustrated in Exhibit 2. To ensure that any one neighborhood does not become too dominated by a single housing type or style, policies and regulations could be developed that would allow, encourage, or even require development of a variety of housing styles and types within each development or each neighborhood.

The mix of single family detached homes relative to attached and multi-family housing is not entirely fixed by the land use alternatives, because some of the residential density categories, especially the Medium Density Residential designation, may include both detached homes and attached or multi-family housing. However, for the purposes of estimating the share of attached and detached housing, we assume that the Very Low Density is entirely single family detached homes, the Low Density residential is 95% detached, the Medium Density Residential is roughly half detached housing and half attached housing, and the High Density Residential is entirely attached housing. Given those assumptions, Option A provides the highest percentage of detached housing in the West Neighborhood (96%) and overall (78%), while Option C provides the lowest percentage with 63% in the West Neighborhood and 55% overall (see details in Exhibit 14).

There is a trade-off for each of the alternatives in that the better the alternative is aligned with the housing program recommended in the market study, the less well it meets the city's goals of reaching a balance between attached and detached housing (although they all have the potential to move the city closer to that balance, if the mix matches that assumed above). Option B may be the closest to providing a middle ground of density that generally matches market demand while also emphasizing single family homes.

Potential refinements as a preferred land use alternative is developed could include providing a broader range of densities in the West Neighborhood, such as a limited amount of Very Low Density Residential and/or a small amount of High Density Residential along with a mix of Low and Medium Density in order to increase diversity of housing options in this neighborhood.

Residential Land Use Patterns

Each of the land use alternatives has its own strengths and weaknesses. In addition to decisions about the overall level of residential density and housing mix discussed above, some of key distinctions and decision points related to the arrangement of different residential densities include:

- *What housing type is appropriate in the Kahle Road area?* Lower density may provide a more compatible transition to adjacent rural uses, but because both "lobes" require their own small sewer pump stations, the development costs may necessitate more units to spread the costs across.
- *What housing type is appropriate for the parcel bounded by the future school and park site, Advance Road, and Meridian Creek?* This location has excellent amenities, including proximity to the community park and school and the Meridian Creek natural area. If the retail is located at the location shown in Option B, this area would also have



excellent proximity to the retail area. It is also buffered from existing single family neighborhoods by the creek. This is an important and fairly visible location, so design will be important, regardless of housing type.

- *Can Medium Density Residential be designed to provide a sensitive and compatible edge to adjacent Rural Reserve, or should urban-rural edges be developed only with Low or Very Low Density Residential?* There may be little difference in impacts between having townhomes and small-lot single family versus standard lot single family adjacent to the rural edge, but it does increase the number of households in close proximity to working farmland. Setbacks and landscaping could be important site design tools regardless of density, but the smaller the lots, the less room there is for such features, unless they are provided through common open space or a trail corridor.
- *Should density transition down adjacent to Boeckman Creek (as shown in Options A and C) or should the natural area be treated as an amenity for higher density housing?* With clustered development, site planning can provide visual and physical access to a greater degree than would be possible with single family homes. The southern area along Boeckman Creek also has good access to employment areas to the east and the Town Center to the south, though it has less proximity to any of the retail sites within the Frog Pond Area.

Retail Location and Character

The three land use alternatives identify three different retail locations. Exhibits 15A, 15B, and 15C are site studies of how each of these locations could work – locations of buildings, parking, access points, etc. In addition, Exhibit 15D is a site study for a fourth location adjacent to and including the Grange; this site is not shown on any of the three land use alternatives.

The retail areas in Options A and C are envisioned as a two-sided “Main Street” environment, with excellent accessibility by all modes and pedestrian-friendly, street-oriented storefronts. Wilsonville has experience with trying to create walkable storefronts but a number of marketplace realities have made this outcome difficult to achieve in practice. While on-street parking would be available on the local streets, parking areas would face residential development on the back sides of the blocks. Developers and retailers generally only want one entrance, and generally prefer it to be oriented towards the bulk of the parking, making it difficult to get operational front doors to the sidewalk with parking behind.

The locations identified in Options A and C share another challenge: for transportation reasons (as discussed on subsequent pages), a traffic signal is more appropriate at the second new intersection north of Boeckman Road along Stafford Road, but this means the retail area would not have a signal at its access point. The success of the retail area will depend on ease of access for Frog Pond Area residents as well as residents of existing neighborhoods and those passing by. Access from an intersection with a traffic signal is much preferred for the retail area.

The retail locations in Options A and B, being in the East neighborhood, allow more time for residential development to be built in the West neighborhood before the retail could be built. Since retail generally follows “rooftops” rather than preceding them, this is an advantage to a location in the East neighborhood.



The location identified in Option B provides the greatest visibility for pass-by traffic and could have a synergistic relationship with the city's future community park, located just across Advance Road. Those visiting the park for athletic events and activities as well as for general recreation would have easy walking access to shops and services. However, this location also has a number of drawbacks. Little or no access would be provided from Stafford Road due to access spacing standards; however, access would be available from Advance Road. This access location would require nearly all those driving to the retail area to pass through the Wilsonville / Boeckman / Stafford / Advance Road intersection – one of the busiest in the area – and then make a left turn into the retail area. The issue of wanting stores to provide a pedestrian-oriented face to the street while the parking is located to the back is a challenge for the location in Option B, as it is in Options A and C. In Option B, with on-street parking not expected on Stafford Road, it is even less likely that stores would want to provide entrances facing that street.

The fourth potential retail site (called Option D), shown in Exhibit 15D but not in any of the land use options, has several advantages, including highlighting the historic Grange building as a community focal point, the potential to site some parking and stormwater management for the development in the BPA easement, and a location in the East neighborhood. Other than Kahle Road, the property next to the Grange may be one of the last areas to develop – a favorable consideration for small scale commercial.

Of these choices, the most promising seem to be Option B and Option D, though both need additional refinement and evaluation for access and site design considerations.

Key Transportation Findings

The evaluation of the future transportation system based on the land use and transportation alternatives presented in this report found the following:

- The variation in residential land uses (location and amount) between the three alternatives makes little difference in traffic and intersection delays; the additional transportation projects needed to support growth in Frog Pond are essentially the same for all alternatives.
- The location of a new traffic signal on Stafford Road makes more difference in delays – the location further north in Options A and C provides better traffic flow.
- Having the new east-west collector road through the East and West Neighborhoods and the associated traffic signal located further north in Options A and C also provides better future transit coverage in the northern part of the Frog Pond Area if a bus can be routed along the collector in the future.
- Stafford Road can function acceptably with three lanes (two travel lanes and a center turn lane) through the 20-year planning horizon for this project, but will likely need to be expanded to five lanes shortly thereafter.
- Advance Road is currently designated as a Collector. Retaining this designation (rather than reclassifying it as a Minor Arterial) when the East and South Neighborhoods urbanize offers benefits including allowing more frequent street and driveway access points and opportunities for on-street parking. More access points and connections



could facilitate multi-modal connections to the community park and schools in the South neighborhood, as well as providing greater opportunities for access to a retail or multi-family development at the northeast corner of Stafford and Advance Road. On-street parking could support both the community park and retail or higher intensity land uses near that corner.

- Urban upgrades (including adding sidewalks, bike lanes, center turn lanes) are needed for Boeckman Road, Stafford Road, and Advance Road in conjunction with development to fill in the pedestrian and bicycle network and connect to adjacent parts of Wilsonville.
- The layout of the grid network does a particularly good job of providing internal connections that support circulation and access.

Key Utility Infrastructure Findings

The evaluation of the water, sanitary sewer, and stormwater systems needed to serve growth in the Frog Pond Area found the following:

- The overall costs for providing utility infrastructure are similar for the three alternatives. Although the demands for each utility service varied between alternatives, the minimum requirements for infrastructure sizing typically governed their design. These minimum requirements often generate utilities with capacities that exceed their service demands.
- Water and sewer lines can generally be aligned with the framework streets; however, some easements will be necessary. The street layout of Option B requires slightly less use of easements.
- A number of the “framework” water and sewer lines that will serve Frog Pond will need to be “oversized” relative to minimum standards in order to serve growth in other parts of the Frog Pond Area or to provide capacity for future growth in the Elligsen Urban Reserve. Where on-site infrastructure must be over-sized to serve development beyond the abutting property, developers are anticipated to install these improvements at time of development; however, they are given System Development Charge (SDC) credits for the incremental cost increase due to oversizing.
- Both the water and sewer systems have major off-site improvements needed that are partially related to growth in Frog Pond, but are also needed to serve other parts of the city or to correct existing issues.
- Several parts of the East Neighborhood require pump stations for sanitary sewer, including both “lobes” off Kahle Road and the far southeastern corner of the East Neighborhood. An additional pump station is needed to serve the southern end of the South Neighborhood. The cost of these pump stations is assumed to be borne by the developer.
- The higher development density in Option C will have more impervious areas than in the other alternatives. These larger impervious areas will generate the need for larger stormwater management facilities, increasing stormwater management costs above the other alternatives.



Key Infrastructure Funding Findings

The preliminary work on the Frog Pond Funding Analysis has identified the following key findings:

- The amount of net SDC revenue generated by development in Frog Pond varies based on the amount of residential development: Option A generates the least SDC revenue for the city, while Option C generates the most. The difference in total SDC revenues (across all SDCs) between Option A and Option C is close to \$20 million.
- The infrastructure costs estimated for building out Frog Pond are very consistent across the three alternatives, as noted above.
- While the City is expected to pay for and build a number of key pieces of infrastructure, Frog Pond developers are expected to pay for the majority (about three-quarters) of infrastructure costs. Clackamas County, Metro, and the West Linn Wilsonville School District are also expected to pay for some improvements.
- For all three alternatives, there is sufficient SDC revenue to exceed the amount of expected SDC credits and pay for some or all of the other city-funded projects that are related to growth in Frog Pond.

Guiding Principles Evaluation Summary

The following matrix summarizes the evaluation of the three land use and transportation alternatives against the project's Guiding Principles and other relevant evaluation measures. This is a relative comparison – “good”, “better”, and “best” notations refer to good, better, or best fulfillment of the stated Guiding Principle. Ties are possible.



Table 3: Evaluation Summary Matrix

Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
Create great neighborhoods <i>Frog Pond's homes, streets, open spaces, neighborhood-scale retail, and other uses fit together into walkable, cohesive, and connected neighborhoods. Frog Pond is a fun place to live.</i>	% of housing units within ¼ mile of neighborhood-scale retail	Good (45%)	Good (45%)	Better (50%)	Research shows that people are more likely to walk to service if they are located within about a quarter mile, or about a five-minute walk. Option C clusters more of the housing adjacent to the neighborhood retail area relative to the other two alternatives.
	"Legibility" & distinctiveness of neighborhoods – sense of place	Better	Good	Better	Grid streets make way-finding easy and are also somewhat distinctive since they are not common in Wilsonville today. The grid scheme also follows some of the original parcel and settlement patterns, providing a tie to the history of the area. The organic street network creates a distinctive feel to the neighborhood but may make way-finding more difficult.
Create a complete streets and trails network	Compliance with 300' spacing guideline identified in TSP	Good	Good	Good	While only a few local streets have been identified, both street frameworks lend themselves to 300' blocks.

Alternatives Evaluation Summary



FROG POND AREA PLAN Creating a great community

Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
<i>Streets are designed for safe and enjoyable travel by bike, on foot, or by car. A great network of trails is provided. Safe crossings and connections are provided throughout the street and trail network.</i>	Provision for safe routes to planned schools	Good	Good	Good	<p>All three alternatives have nearly identical off-street trails that provide connections to the future school site, and all provide nearly identical connections to the existing elementary and high school located to the south on Wilsonville Road (via either Wilsonville Road or local streets). Depending on how local streets are actually connected, the grid pattern has slightly more potential for shorter, more direct, and more convenient routes to and from the schools.</p> <p>The main distinction between the alternatives is the location of the presumed traffic signal. The more northerly location in Options A and C will provide a convenient bicycle and pedestrian crossing point only for those coming from the northern portion of the West Neighborhood; those starting further south will likely use the Boeckman Road crossing instead, which is a busier intersection. The more southerly location in Option B will provide a more convenient crossing point for cyclists and pedestrians crossing Stafford Road to reach the future school site. However, with the retail located at the first intersection north of Boeckman Road in both Options A and C, the location of the signal may need to be reconsidered for these alternatives.</p>
	Alignment of trails & primary bicycle/pedestrian routes with safe & easy crossing locations	Good	Good	Good	All three alternatives align proposed trail crossings of major roads with proposed local street intersections; however, all of the proposed crossing points are at what are presumed to be stop-controlled, rather than signalized, intersections.
	Miles of trails proposed	Good	Good	Good	All three alternatives have essentially the same trail network proposed.



Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
	Streets and trail network provide connections to allow for a variety of route options	Good	Good	Good	All three alternatives provide nearly identical trail networks with similar opportunities to connect to the street network. The grid network framework street alignment near Boeckman Creek could mean that the trail parallels that street for a portion of its length at the north. In either case, stubbed streets or bicycle & pedestrian accessways can be provided that link to the trail network from all adjacent streets.
Provide access to nature <i>The creeks and natural areas provide opportunities to see and interact with nature close to home.</i>	Length of street frontage abutting to natural areas	Better	Good	Better	The grid network framework street alignment along the north end of Boeckman Creek provides more opportunity for a street adjacent to the open space without development in between. The organic street framework could easily be adjusted to do the same.
	Street layout integration with natural resource areas	Good	Better	Good	Both street frameworks respond to the natural resource areas on site. Neither includes framework streets that cross a natural resource area except to provide a connection to the development in the northeast corner of the East neighborhood across the BPA easement and the drainage/wetland area that runs through it. The crossing location identified in the organic street network (Option B) may have slightly less impact on the resource area due to its location further upstream, but more detailed study is needed to determine this with any certainty.
	Length of trails adjacent to or within natural areas	Good	Good	Good	The three alternatives provide essentially identical trail networks, all of which are focused along the edge of Boeckman Creek and within the BPA easement.
Create community gathering spaces <i>Beautiful parks, quality schools, and</i>	Retail node centrally located as focal point for Frog Pond neighborhoods	Good	Good	Good	All three retail locations are fairly centrally located within the Frog Pond area and all provide good focal points for adjacent development.

Alternatives Evaluation Summary



FROG POND AREA PLAN Creating a great community

Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
<i>other public spaces serve as community centers and gathering places. The land uses, transportation, and open space around the Advance Road school and park sites support a compatible neighborhood plan in that area. The Frog Pond Grange, and adjacent uses, fit together as a focal point of the community.</i>	Compatibility of land uses in South neighborhood with future park and schools	Good	Good	Better	Option C includes high density residential in the corner between Advance Road and the park / school site. This location provides the higher density development with excellent access to the future community park and schools while also buffering it from nearby lower density housing. The medium density housing surrounding much of the park and school site in all three alternatives provides many households in housing types that may be more family-oriented with excellent proximity to the future park and schools.
Provide for Wilsonville's housing needs <i>A variety of attractive homes are provided to fulfill the City's housing needs and align with the market. Single-family homes are an important part of the mix, and</i>	Degree of match between housing mix and recommended mix from market analysis	Good	Better	Best	The market analysis included two housing mix options. The higher density mix included in the market analysis, which best reflected market trends, is most similar to Option C. The lower density mix from the market analysis, which is similar to Option B, was noted as offering limited diversity in the product mix, with less small lot single family homes and multifamily housing than demographic trends would suggest demand for. Option A provides a substantially different mix of housing products than recommended in the market study, with a greater emphasis on larger lot single-family homes and less attached housing types.



Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
<i>neighborhoods are designed to be multi-generational and offer a diversity of attractive housing options at a variety of prices.</i>	Degree of match between housing mix and Wilsonville's housing policy objectives	Best	Better	Good	Wilsonville has expressed a policy objective of moving towards an overall balance between single family detached housing and attached housing that is closer to a 50/50 split. Some policy-makers have also expressed a desire for more large-lot single-family housing. Option A best meets those policy objectives, with an overall 62% to 38% split for the whole Frog Pond area between the residential categories that are all or nearly all single family detached homes, and those that are more likely to be attached products (Medium Density, as noted previously, may include a mix of attached townhomes and detached small-lot homes). Option C has just 26% of the housing for the Frog Pond area overall in the density ranges that are expected to be detached homes, and 74% in Medium and High Density, which are more likely to be attached housing products.
	Each neighborhood provides for a variety of housing options	Good	Good	Better	While the range of densities provided in each neighborhood varies somewhat between the alternatives, all three provide for two densities of housing in the West neighborhood and three densities of housing in the East neighborhood. Option C provides three densities of housing in the South neighborhood, while the other alternatives provide two.
Create a feasible implementation strategy <i>A realistic funding plan for infrastructure, smart and flexible</i>	Cost and ease of available mechanisms to fund transportation system improvements	Good	Better	Best	The difference in transportation costs between the three options is negligible; however the greater levels of residential development in Option C and, to a lesser extent, Option B generate more SDC revenue to pay for transportation improvements.

Alternatives Evaluation Summary



FROG POND AREA PLAN Creating a great community

Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
<i>regulations, and other strategies promote successful implementation of the plan.</i>	Cost and ease of available mechanisms to fund water system improvements	Good	Better	Best	Water system improvements for Option B are slightly less costly - about 4% (\$1 million) less than Options A and C overall due to differences in the layouts. There is a greater difference in SDC revenue generated by each alternative, with Option C and, to a lesser extent, Option B generating more SDC revenue to pay for off-site water system improvements.
	Cost and ease of available mechanisms to fund sanitary sewer system improvements	Good	Better	Best	Sewer system improvements for Options A and C are slightly less costly – about 2% (\$0.8 million) less than Option B due to differences in the layouts. There is a greater difference in SDC revenue generated by each alternative, with Option C and, to a lesser extent, Option B generating more SDC revenue to pay for off-site sewer system improvements.
	Compatibility of water, sewer and stormwater alignments with road layout	Good	Better	Good	Option B requires slightly less easements for water and sewer lines than Options A and C due to differences in the street networks.
	Operations & maintenance considerations, including accessibility of lines, for water, sewer and stormwater	Good	Good	Good	No significant operations and maintenance concerns have been identified for any of the alternatives.
	Reliance on gravity sewer vs. pumping	Good	Good	Good	All three alternatives require three small pump stations in the East neighborhood and one in the South neighborhood, but can otherwise be served by gravity sewer.



Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
	Ability of plan to develop over time with multiple developers	Best	Low	Better	<p>The grid street network in Options A and C is more feasible to build incrementally without a master developer. The organic street network in Option B would be difficult to build without significant lot consolidation in the West Neighborhood.</p> <p>In Options A and B, the retail is nearly all located on a single parcel, which would make it easier to implement than in Option C, in which it is split across multiple properties that are not in common ownership.</p> <p>In Option B, the shaping of the residential land uses does not respond to property lines, and as a result is more dependent on a master developer for implementation. In Option C, the shaping of residential land uses in the West neighborhood largely works with the property lines, but the locations identified for High Density Residential are fragmented across properties that are not in common ownership. In Option A, the shaping of residential land uses works well with the property lines.</p>
Frog Pond is an extension of Wilsonville <i>Frog Pond is truly connected – it is an easy and safe walk, bike trip, or bus ride to other parts of Wilsonville, and Frog Pond feels like a well-planned extension of the city.</i>	Alignment of main access points and internal circulation roads (i.e. Neighborhood Collector streets) with adjacent neighborhood connections	Good	Good	Good	All three alternatives align the connection points to Boeckman Road with the existing local street intersections that connect to neighborhoods to the south.
	% of residents/jobs within 1/4 mile of existing transit routes	Good (36%)	Better (38%)	Best (40%)	Over a third of housing units would be located within a quarter mile of existing transit routes in all three alternatives. Option C focuses the greatest percentage of new housing adjacent to existing transit routes. (Percentages are shown at left.)

Alternatives Evaluation Summary



FROG POND AREA PLAN Creating a great community

Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
	Accessibility of commercial area to existing neighborhoods	Good	Best	Better	All three alternatives provide access to the future retail area from existing Wilsonville neighborhoods via Wilsonville / Stafford Road. The retail location in Option B provides more direct access for existing neighborhoods to the south and west.
Retain trees <i>Mature native trees are integrated into the community to enhance the area's character and value.</i>	Alignment of roads to avoid stands of mature native trees	Good	Good	Good	The framework streets in all alternatives generally avoid existing tree groves.
	Potential impacts to tree groves from infrastructure alignments	Good	Good	Good	All three alternatives require a water line easement through a wooded area around Newland Creek in the East neighborhood. No other framework infrastructure alignments are anticipated to impact tree groves.
	Potential for parks to align with high-quality tree groves	Good	Good	Good	All alternatives have roughly the same potential for future parks to be aligned with high-quality tree groves. Future park locations will be determined through land acquisition efforts by the city, through subsequent concept plan refinements or the development review process.
Honor Frog Pond's history <i>A sense of history is retained, recognized, and celebrated.</i>	Prominence of Grange relative to street network and other land uses	Good	Best	Better	The northern framework street in Option B crosses closer to the Grange itself, providing an opportunity to create a plaza between the Grange and the street that would complement and highlight the Grange building. The location of the retail in the West neighborhood in Option C provides the possibility of a second, smaller node in the East neighborhood near the Grange.
	Retention of Frog Pond Lane	Better	Low	Better	The organic street framework in Option B assumes that Frog Pond Lane is abandoned. The grid street framework in Options A and C retains Frog Pond Lane as part of the future street network. Frog Pond Lane may have historic and sentimental value to those whose families have lived or owned property in the area for many decades.



Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
Provide compatible transitions to surrounding areas <i>New urban land uses are good neighbors to adjacent rural land uses, future developable areas, and existing neighborhoods. The plan provides for future growth of the City into adjacent urban reserves.</i>	Number of new homes within 1,000 feet of a Rural Reserve	Best (about 470)	Better (about 550)	Good (about 570)	Option A has the fewest new homes located within 1,000 feet of a Rural Reserve (numbers shown at left).
	Use of transects to transition density adjacent to rural edges	Better	Better	Good	Option A has very low density housing in the northeast corner of the East neighborhood where it abuts Rural Reserve and low density housing on the southern end of the South neighborhood where it abuts Rural Reserve, but some medium density housing on the east side of the South neighborhood. Option B locates low density housing along all of the outer edges of the Frog Pond plan area. Option C has medium density in part of the northeast corner of the East neighborhood and on part of the eastern edge of the South neighborhood.
	Use of open spaces or other features to provide buffers to adjacent rural areas	Good	Good	Good	All three alternatives show a potential future trail alignment down the eastern edge of the South neighborhood that could help provide an edge and a buffer to the adjacent Rural Reserve if appropriately designed and landscaped.
	Land use and transportation patterns can logically be extended into Elligsen Urban Reserve in the future	Good	Good	Good	All three alternatives plan for the eventual extension of the north-south neighborhood collector through the West neighborhood into the Elligsen Urban Reserve.

Alternatives Evaluation Summary



FROG POND AREA PLAN Creating a great community

Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
Promote healthy, active lifestyles <i>Extensive walkways, community gardens, recreational facilities, and other elements support active and healthy lifestyles.</i>	Connectivity of trails to parks, schools, open spaces, and neighborhood-scale retail	Good	Good	Good	All three alternatives have essentially the same trail network, which connects well to the future schools and to the BPA powerline easement and the Boeckman Creek corridor, but does not connect directly to the retail area or the future community park.
Integrate sustainability <i>The plan integrates solutions which address economic, environmental and social needs. Frog Pond is a sustainable community over the long term.</i>	Environmental impacts to wetlands, tree groves and SROZ areas in the placement of transportation, water, sewer, and stormwater facilities	Good	Good	Good	Alignment of framework streets and infrastructure facilities (with the possible exception of local streets) generally avoid tree groves and significant natural resource areas. Wetland impacts from roads and infrastructure are about the same in all three alternatives.
	Total impervious area	Better	Better	Good	Option C has higher density residential development, which tends to have higher impervious surface coverage.
	Proximity of new infrastructure to seismic & landslide hazard areas, and steep slopes	Good	Better	Good	Alignment of West Neighborhood roadway for Concept 2 being offset from Boeckman Creek ravine reduces proximity of new infrastructure to the Boeckman Creek ravine, which has steep slopes.
	Compatibility of stormwater management facilities with existing topography	Good	Good	Good	All alternatives offer similar opportunities to design stormwater management facilities that are compatible with existing topography.



Guiding Principle	Evaluation Measures	Option A Rating	Option B Rating	Option C Rating	Rationale
Coordinate with Wilsonville's transportation network <i>The plan is consistent with the Wilsonville Transportation System Plan for all modes of travel: trails, bikeways, SMART, and vehicles. Traffic impacts are managed for key streets and intersections, including the I-5 interchanges.</i>	Level of Service (LOS) at Study Intersections	Best	Good	Better	Two study intersections would fail to meet LOS standards in Option B. Option A and C each have only one intersection that fails to meet standards, but one study intersection performs slightly better in Option A than Option C and delays are slightly shorter for Option A. This difference is primarily due to the difference in the signal location; the location further north in Options A and C performs better.
	Integration of the various travel modes (pedestrian, bicycle, transit, and motor vehicle) that facilitates transportation choices	Better	Good	Better	The layout of the grid network does a particularly good job of providing internal connections that support circulation and access. The collector street route being located further north also provides better transit coverage in the northern part of the planning area.
	Number and magnitude of deviations to projects and standards identified in TSP	Good	Good	Good	No major deviations from TSP standards are needed for any of the alternatives. The additional transportation projects needed to support growth in Frog Pond are essentially the same for all alternatives.



Issues for Further Study

Several implementation considerations for the Frog Pond Area Plan have begun to emerge from the evaluation of alternatives, including:

- Site design techniques for the Frog Pond retail area to ensure it is compatible with adjacent neighborhoods, easily accessible by all modes, and supports a high-quality pedestrian environment on adjacent streets;
- Where and to what degree to allow or encourage the use of alleys for residential development;
- Mechanisms to ensure provision of neighborhood parks if the Frog Pond Area is developed incrementally;
- Stormwater management strategies – on-site treatment and detention versus consolidated facilities serving multiple developments;
- Appropriate levels of protection for existing mature trees and tree groves;
- Wetland mitigation strategies;
- Appropriate bicycle and pedestrian crossing treatments for major road intersections to ensure safe routes to school and easy connections within the Frog Pond Area; and
- How certain road and utility infrastructure improvements will be built and paid for, such as urban upgrades to Stafford Road.

These issues will be explored further throughout the course of the project as it moves towards a final plan and set of implementation measures.



Exhibits & Appendices

List of Exhibits

- Exhibit 1 A-C: Land Use Alternatives, Options A, B and C
- Exhibit 2: Land Use and Housing Types Example Images
- Exhibit 3: Parks Framework
- Exhibit 4: Park Design Concepts
- Exhibit 5 A-B: Proposed Street Functional Classifications
- Exhibit 6 A-B: Stafford Road and New Neighborhood Collector Design Concepts
- Exhibit 7: Intersection Crossing Treatment Example Images
- Exhibit 8: Stafford Road Gateway Concept
- Exhibit 9 A-B: Bicycle and Pedestrian Frameworks
- Exhibit 10: City-wide Bicycle and Pedestrian Routes and Destinations
- Exhibit 11: Frog Pond Area Natural Resources
- Exhibit 12: Open Space Edge Example Images
- Exhibit 13: Green Infrastructure Example Images
- Exhibit 14: Capacity and Density Estimates Detailed Table
- Exhibit 15 A-D: Retail Site Studies

List of Appendices

- Appendix A: Frog Pond Area Plan Market Analysis (Leland Consulting Group)
- Appendix B: Future Transportation Analysis memorandum (DKS Associates)
- Appendix C: Frog Pond Area Plan – Concept Plan Infrastructure Analysis memorandum (Murray Smith & Associates)



Exhibit 1A
FROG POND AREA PLAN
Creating a great community

Option A

- Framework Street
- Local Connection
- Planning Area
- Planned School Site
- Community Park
- Stream
- BPA Corridor
- Natural Resources Overlay
- Taxlots

Land Use Designations

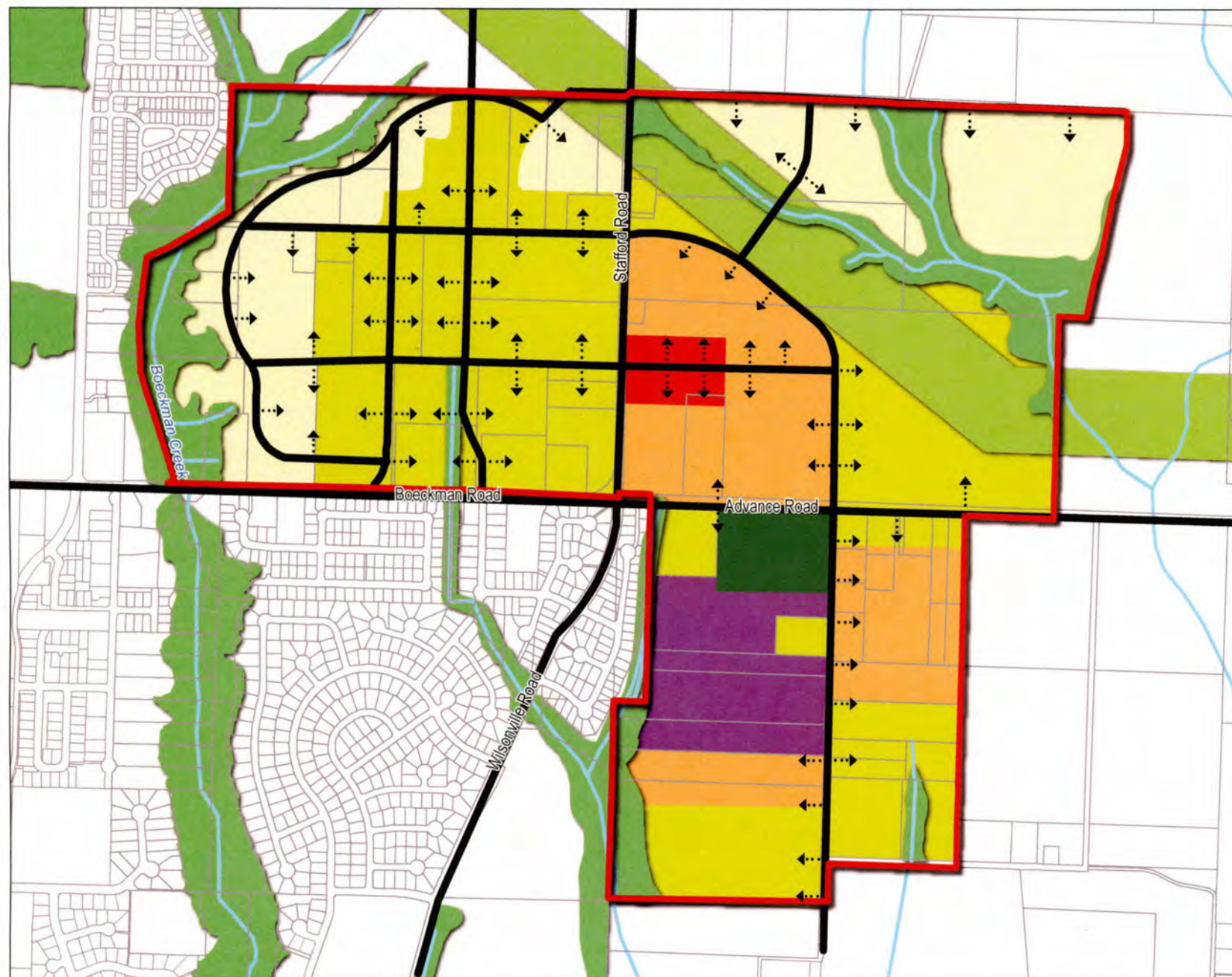
- Very Low Density
(3 Units / Net Acre)
- Low Density
(7.2 Units / Net Acre)
- Medium Density
(12.1 Units / Net Acre)
- High Density
(25 Units / Net Acre)
- Commercial



Prepared By: Angelo Planning Group Date: 8/19/2014

Coordinate System:
NAD 1983 HARN State Plane Oregon North FIPS 3501

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Option B

- Framework Street
- Local Connection
- Planning Area
- Planned School Site
- Community Park
- Stream
- BPA Corridor
- Natural Resources Overlay
- Taxlots

Land Use Designations

- Very Low Density
(3 Units / Net Acre)
- Low Density
(7.2 Units / Net Acre)
- Medium Density
(12.1 Units / Net Acre)
- High Density
(25 Units / Net Acre)
- Commercial

0 250 500 1,000 Feet



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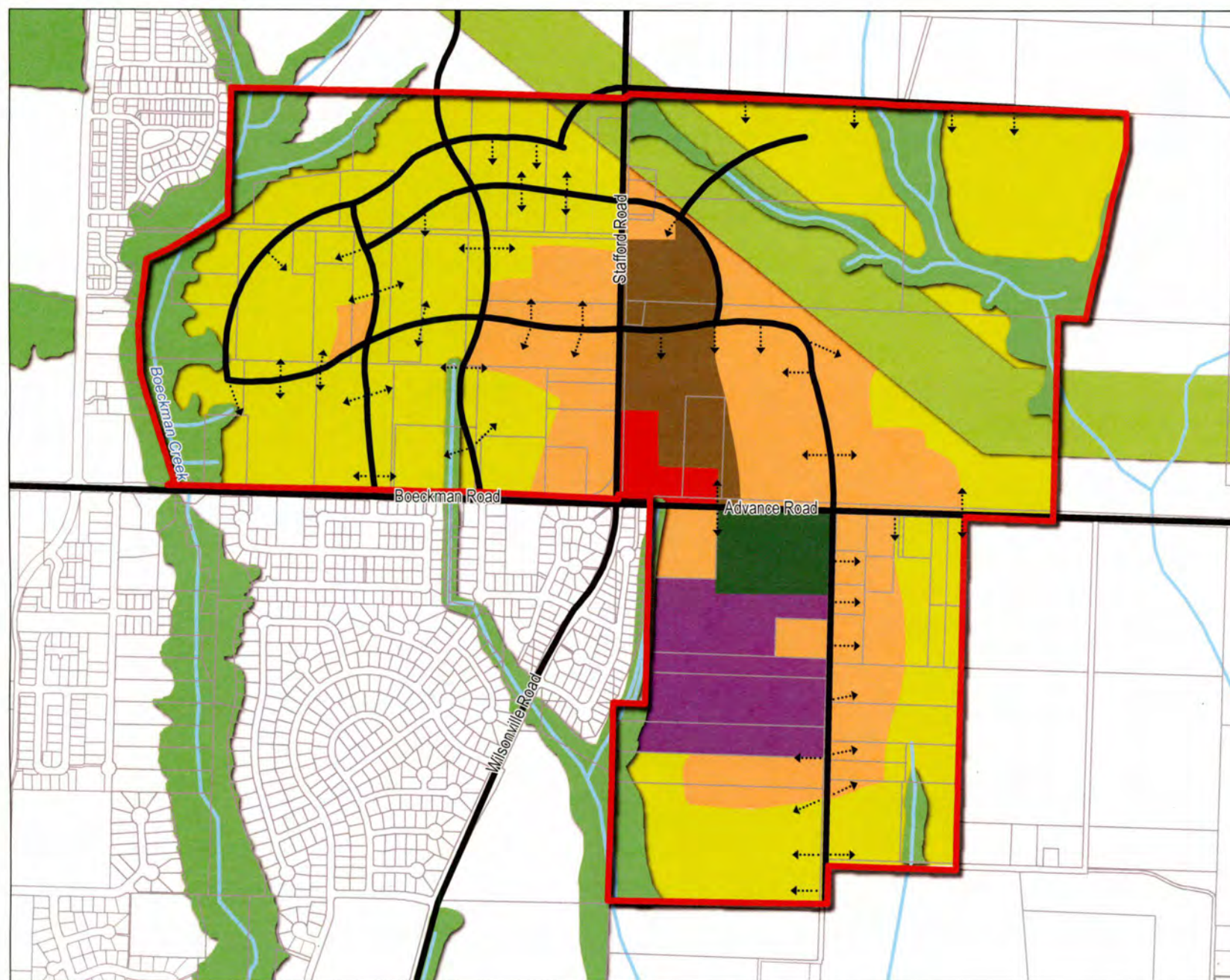




Exhibit 1C
FROG POND AREA PLAN
Creating a great community

Option C

- Framework Street
- Local Connection
- Planning Area
- Planned School Site
- Community Park
- Stream
- BPA Corridor
- Natural Resources Overlay
- Taxlots

Land Use Designations

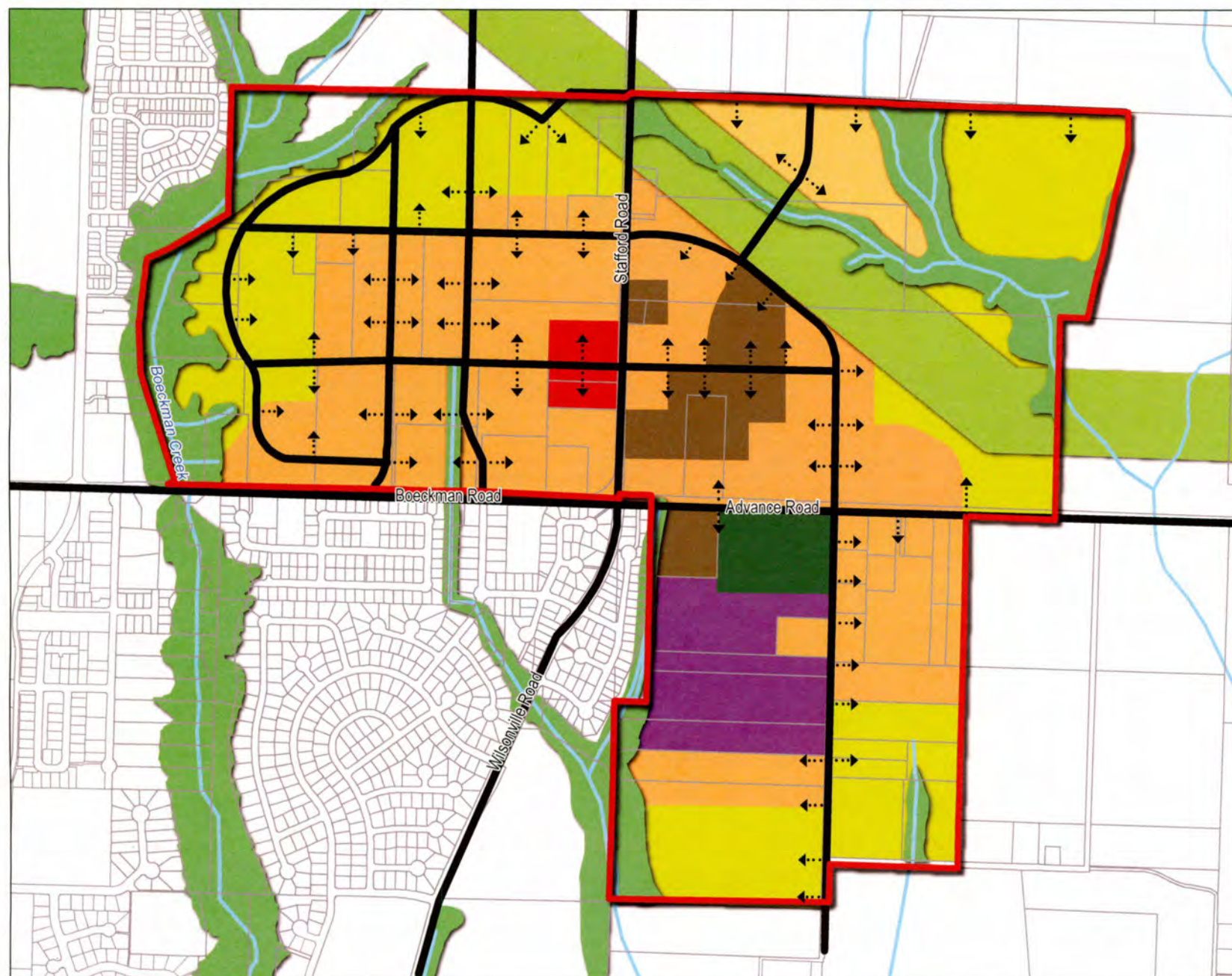
- Very Low Density
(3 Units / Net Acre)
- Low Density
(7.2 Units / Net Acre)
- Medium Density
(12.1 Units / Net Acre)
- High Density
(25 Units / Net Acre)
- Commercial



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Very Low Density
(with Accessory Dwelling Unit over garage)



Very Low Density Residential



Very Low Density Residential



Exhibit 2



Low Density Residential



Low Density Residential



Low Density Residential



Low-Density Residential
(Duplex within single-family home neighborhood)



Low Density Residential
(With mature tree protected in front yard)

Land Use & Housing Types



Medium Density Residential
(Townhomes)



Medium Density Residential
(Townhomes)



Medium Density Residential
(Townhomes)



Medium Density Residential
(Cottages)



Medium Density Residential
(Cottages)



High-Density Residential
(Small Condominium)



High-Density Residential
(Garden Apartments)



High-Density Residential
(Garden Apartments)



Creating a great community

Exhibit 2

Land Use & Housing Types



Creating a great community

Exhibit 2



Neighborhood-scale commercial building



Corner left unbuilt to provide access into parking lot from Main Street



Parking is located behind buildings and well-landscaped. On-street parking contributes to supply.



Mature trees protected within parking lot



Stormwater treatment integrated into Main Street



Commercial
(Small-scale retail)



Commercial
(Mixed Use, 3 stories housing over 1 retail)



Commercial
(Mixed Use, 2 stories housing over 1 retail)

Neighborhood Commercial



FROG POND AREA PLAN Creating a great community

Exhibit 3

Parks Framework

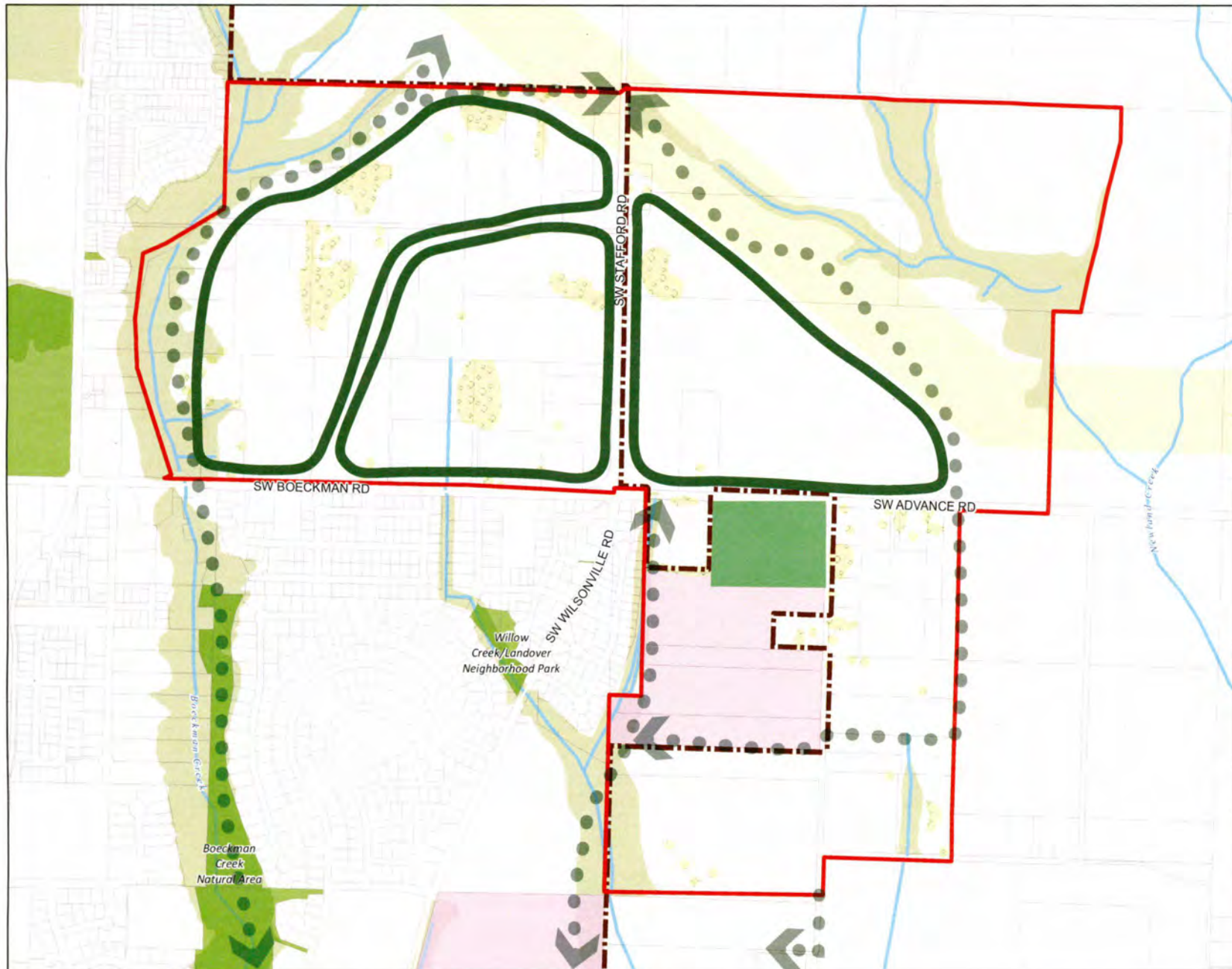
- Planning Area
- UGB
- Streams
- Tree Groves
- Taxlots
- Existing Parks and/or Natural Areas
- Existing & Future School Sites
- Significant Natural Resources
- BPA Easement
- Future Community Park
- Neighborhood Park Target Area
- Future Trail Connection



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Kids' fountain in park plaza



Neighborhood Center Plaza



Park events



Civic space and mature trees in neighborhood park



Neighborhood Park



Trails



Park integrated with powerline easement

Park Design Concepts



Exhibit 5A

FROG POND AREA PLAN
Creating a great community

Transportation Framework Options A and C

- Existing Major Arterial
- Existing Minor Arterial
- Existing Collector
- New Collector*
- New Local Framework Street
- New Local Connection
- Planning Area
- Planned School Site
- Community Park
- Stream
- BPA Corridor
- Natural Resources Overlay
- Taxlots

* Includes bike lanes and on-street parking where appropriate.

0 250 500 1,000 Feet

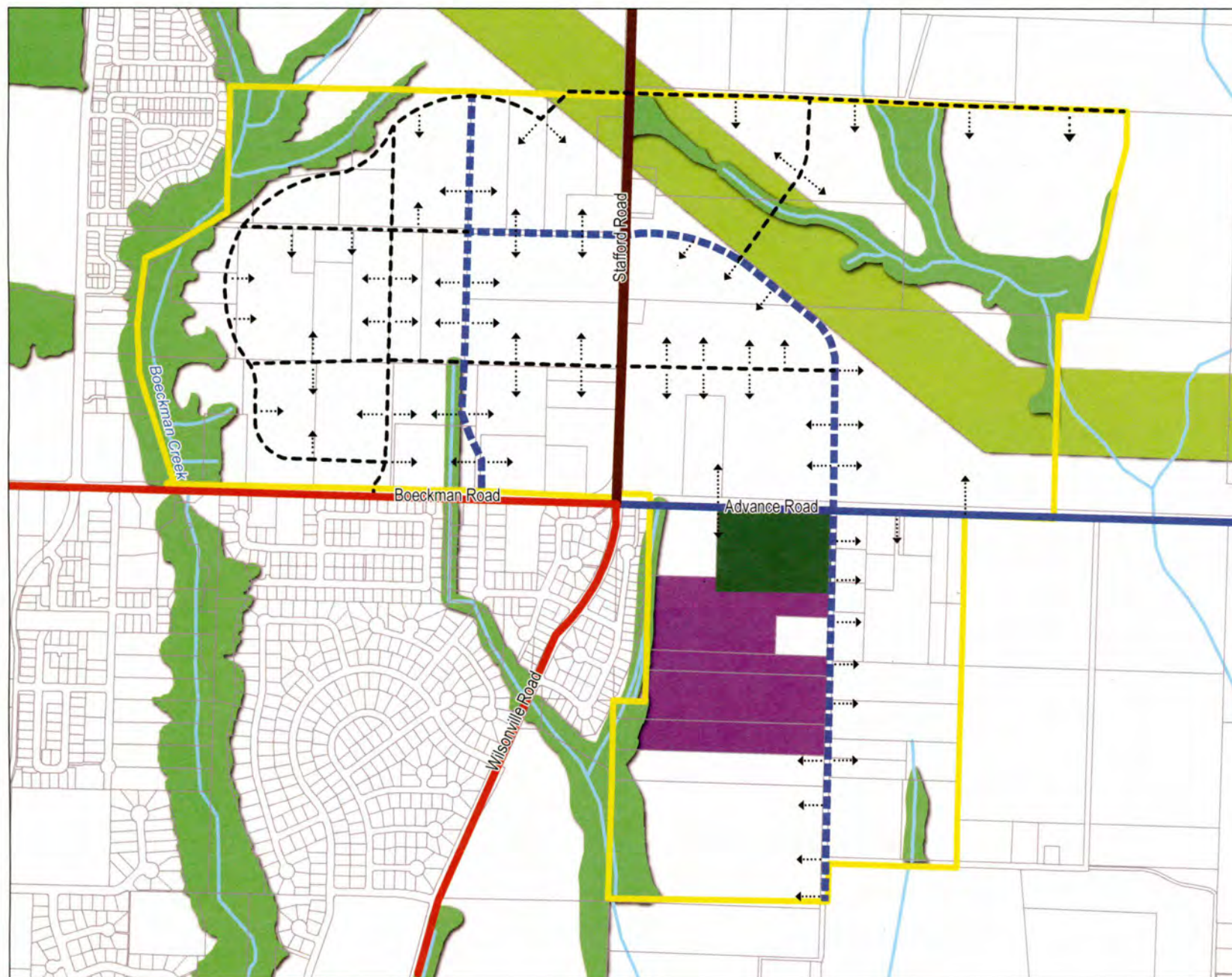


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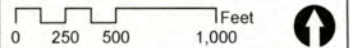




**Transportation Framework
Option B**

- Existing Major Arterial
- Existing Minor Arterial
- Existing Collector
- New Collector*
- New Local Framework Street
- New Local Connection
- Planning Area
- Planned School Site
- Community Park
- Stream
- BPA Corridor
- Natural Resources Overlay
- Taxlots

* Includes bike lanes and on-street parking where appropriate.

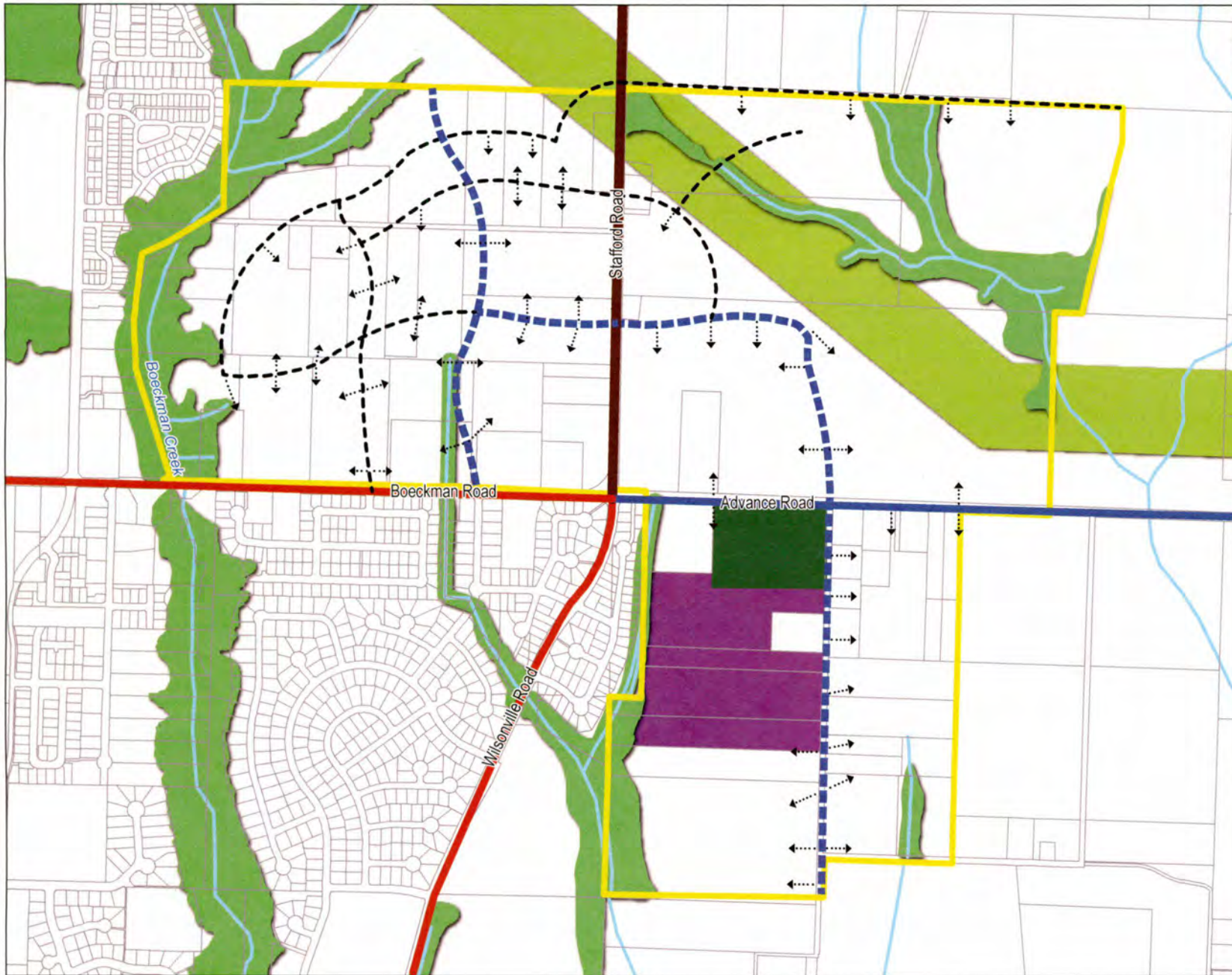


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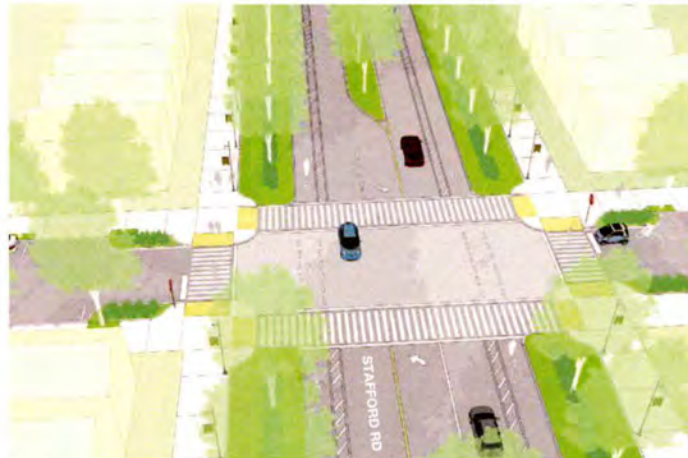
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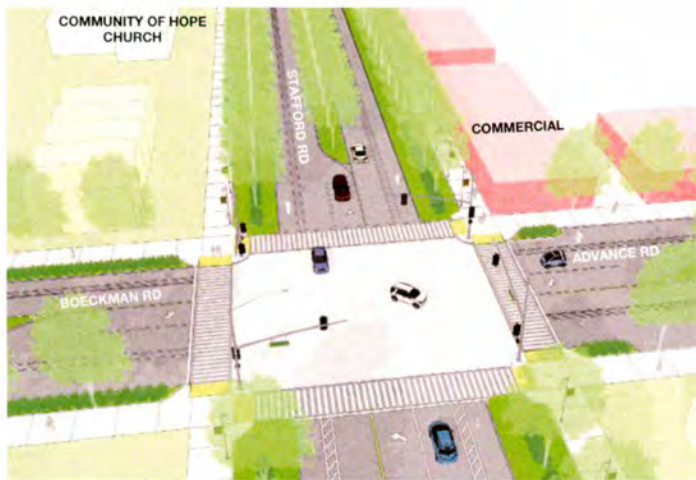




1 New Neighborhood Collector Intersection

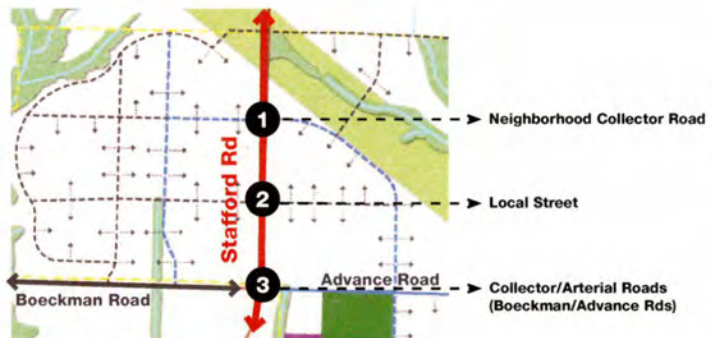


2 New Local Street Intersection



3 Boeckman Road/Advance Road Intersection

Sidewalk extents represent sufficient ROW for potential expansion of Stafford Rd. to 5 lanes

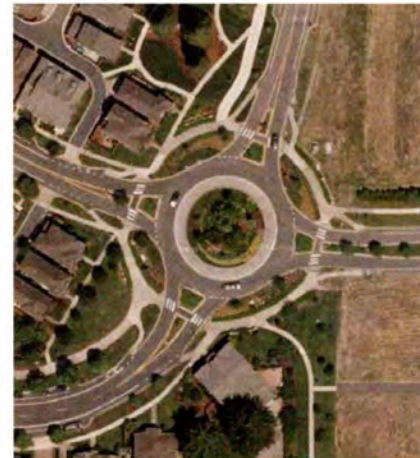


Key Map

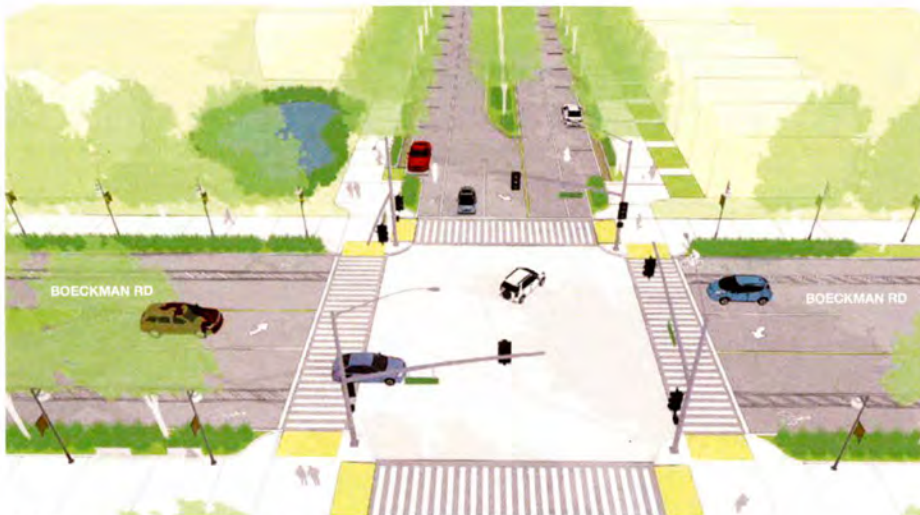
Stafford Road Intersection Types



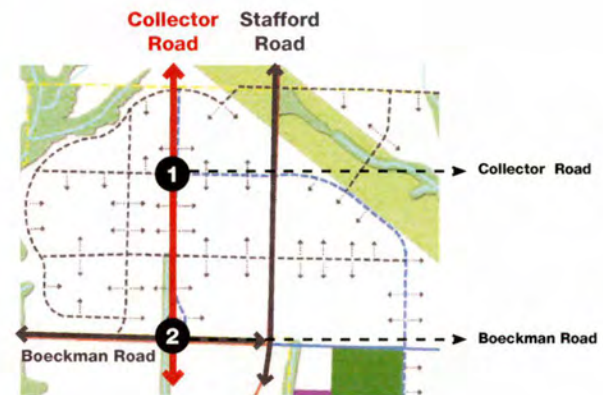
1 Collector Road Roundabout



Wilsonville Roundabout Example



2 Boeckman Road Intersection



Key Map

Collector Road Characteristics



Pedestrian Refuge at Roundabout



Bicycle Priority at Intersection



Curbless Street and Intersection



Pedestrian Undercrossings



Pedestrian Undercrossings



Concrete Crosswalk



Curb Bump-Out



Zebra Crossing
(Provides wide, visible and safe crossing)



Exhibit 7

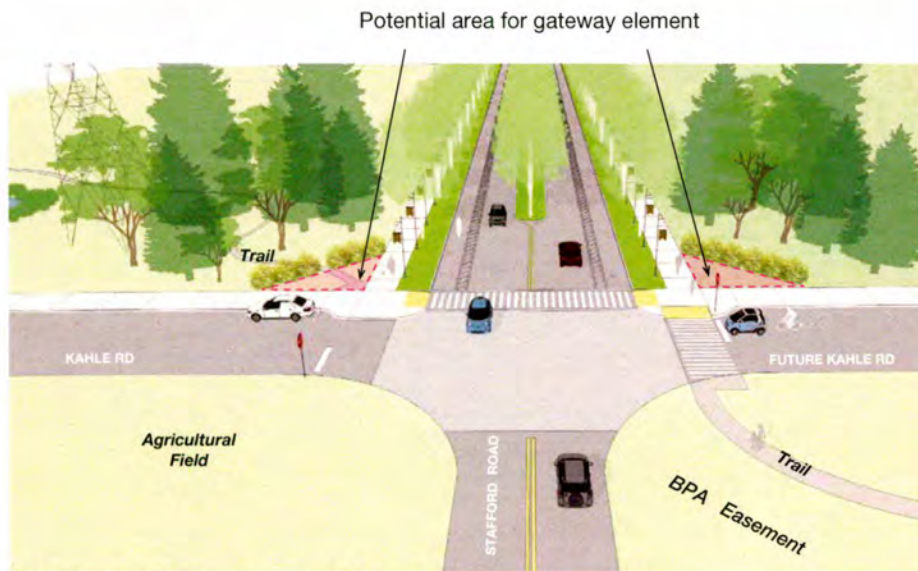
Intersection Treatments



Seasonal color provides visual interest



Opportunity to highlight trail connection



Conceptual Gateway Intersection
SW Stafford & SW Kahle, looking south

- Facilitates transition from rural to urban setting
- Landscape and signage design should reflect the character of the planning area



Vertical elements, landscape and signage mark transitions and gateways

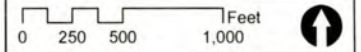
Stafford Road “Gateway” Intersection



Bicycle / Pedestrian Circulation

Option A and C

- Framework Street
- Local Connection
- Planning Area
- Planned School Site
- Community Park
- Stream
- BPA Corridor
- Natural Resources Overlay
- Taxlots
- Existing Sidewalks
- Framework Street with Proposed Sidewalks
(All local connections will have sidewalks)
- Existing Bicycle Lane and Sidewalks
- Proposed Bicycle Lane and Sidewalks
- Future Trail Connection
- ✱ Potential Grade-Separated Crossing

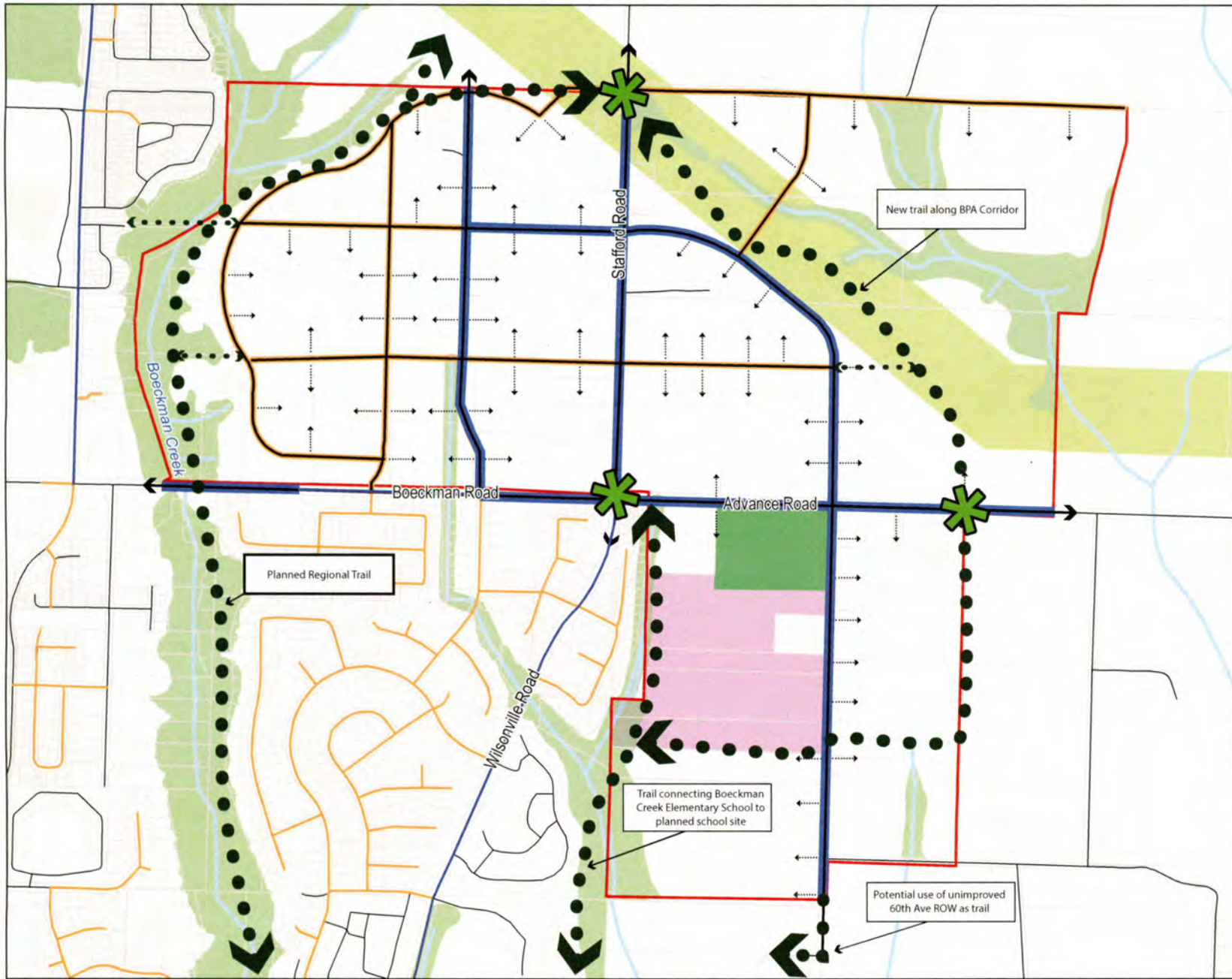


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Bicycle / Pedestrian Circulation

Option B

- Framework Street
- Local Connection
- Planning Area
- Planned School Site
- Community Park
- Stream
- BPA Corridor
- Natural Resources Overlay
- Taxlots
- Existing Sidewalks
- Framework Street with Proposed Sidewalks
(All local connections will have sidewalks)
- Existing Bicycle Lane and Sidewalks
- Proposed Bicycle Lane and Sidewalks
- ➔ Future Trail Connection
- ✱ Potential Grade-Separated Crossing

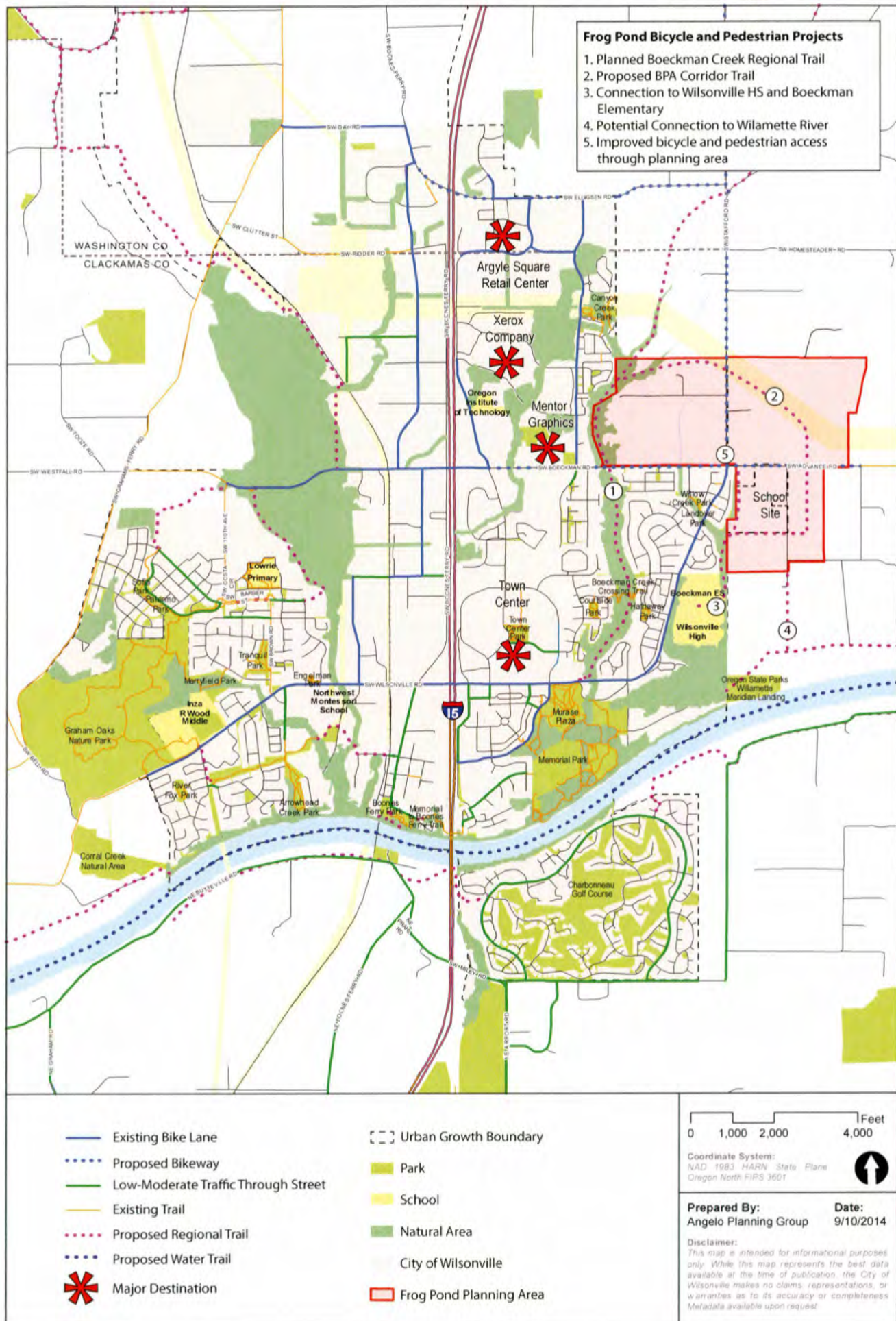


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








Frog Pond Area Plan

Natural Resources

Exhibit 11

-  Building Footprints
-  Planning Area
-  UGB
-  Parks
-  Streams
-  Tree Groves
-  Wetlands*
-  Taxlots
-  Future Primary & Middle School Site
-  Significant Natural Resources
-  Locally Significant Wetland
-  BPA Easement

*Jurisdictional, likely not locally significant

0 250 500 1,000 Feet

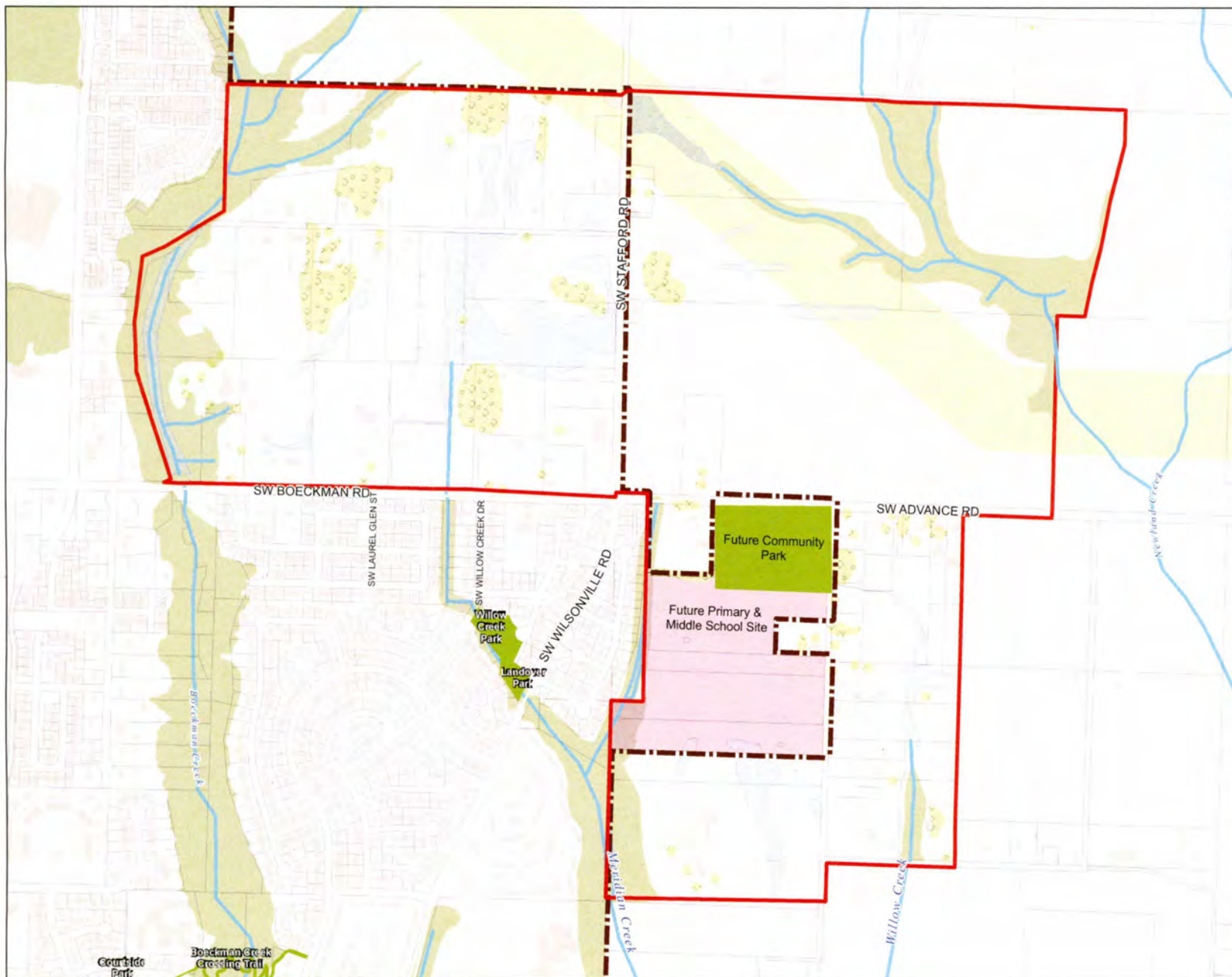


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Homes overlooking community garden



Homes facing pocket park



Low density home overlooking open space



Homes facing park and natural area



Homes overlooking nature park



Homes facing Powerline easement



Exhibit 12

Open Space Edge Conditions



Green Roof
(Reduces roof runoff and improves building insulation)



Pervious Paving
(Allows rainwater to percolate into soil)



Parking Lot Rain Garden
(Natural detention and filtration of parking lot rainwater)



Retention Pond
(Holds rainwater in wetland environment)



Stormwater Bioswale
(Natural detention and filtration of on-street rainwater)



Street Trees
(Provide canopy over street for shade, pedestrian comfort, and rainwater absorption)



Exhibit 13

Frog Pond Area Plan Land Use Options: Capacity and Density Estimates

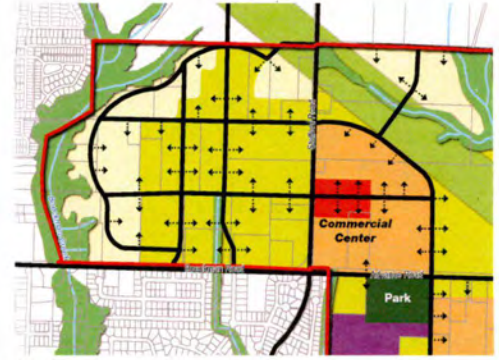
Option A - Grid Low		West Neighborhood					East Neighborhood					South Neighborhood					Frog Pond Area (Totals)				
Land Use	Map Key	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density
Very Low Density		33.0	99	17%	17%	3	34.6	104	16%	16%	3	-	-	0%	0%	3	67.6	203	12%	12%	3
Low Density		68.3	492	83%	79%	7.2	23.5	169	26%	24%	7.2	30.4	219	43%	41%	7.2	122.2	880	50%	48%	7.2
Medium Density		-	-	0%	0%	12.1	31.7	384	58%	29%	12.1	24.2	292	57%	29%	12.1	55.9	677	38%	19%	12.1
High Density		-	-	0%	0%	25	-	-	0%	0%	25	-	-	0%	0%	25	-	-	0%	0%	25
Total		101.3	591		96%	5.8	89.8	657		69%	7.3	54.6	511		69%	9.4	245.7	1,759	100%	78%	7.2

Option B - Organic Medium		West Neighborhood					East Neighborhood					South Neighborhood					Frog Pond Area (Totals)				
Land Use	Map Key	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density
Very Low Density		-	-	0%	0%	0	-	-	0%	0%	0	-	-	0%	0%	3	-	-	0%	0%	3
Low Density		84.579612	609	75%	71%	7.2	44.4	320	31%	30%	7.2	31.9	230	46%	43%	7.2	160.9	1,159	49%	47%	7.2
Medium Density		16.6	201	25%	12%	12.1	31.5	381	37%	19%	12.1	22.7	274	54%	27%	12.1	70.7	856	37%	18%	12.1
High Density		-	-	0%	0%	25.0	13.1	328	32%	0%	25.0	-	-	0%	0%	25	13.1	328	14%	0%	25
Total		101.2	810		84%	8.0	89	1,029		48%	11.6	54.6	504		71%	9.2	244.8	2,343	100%	65%	9.6

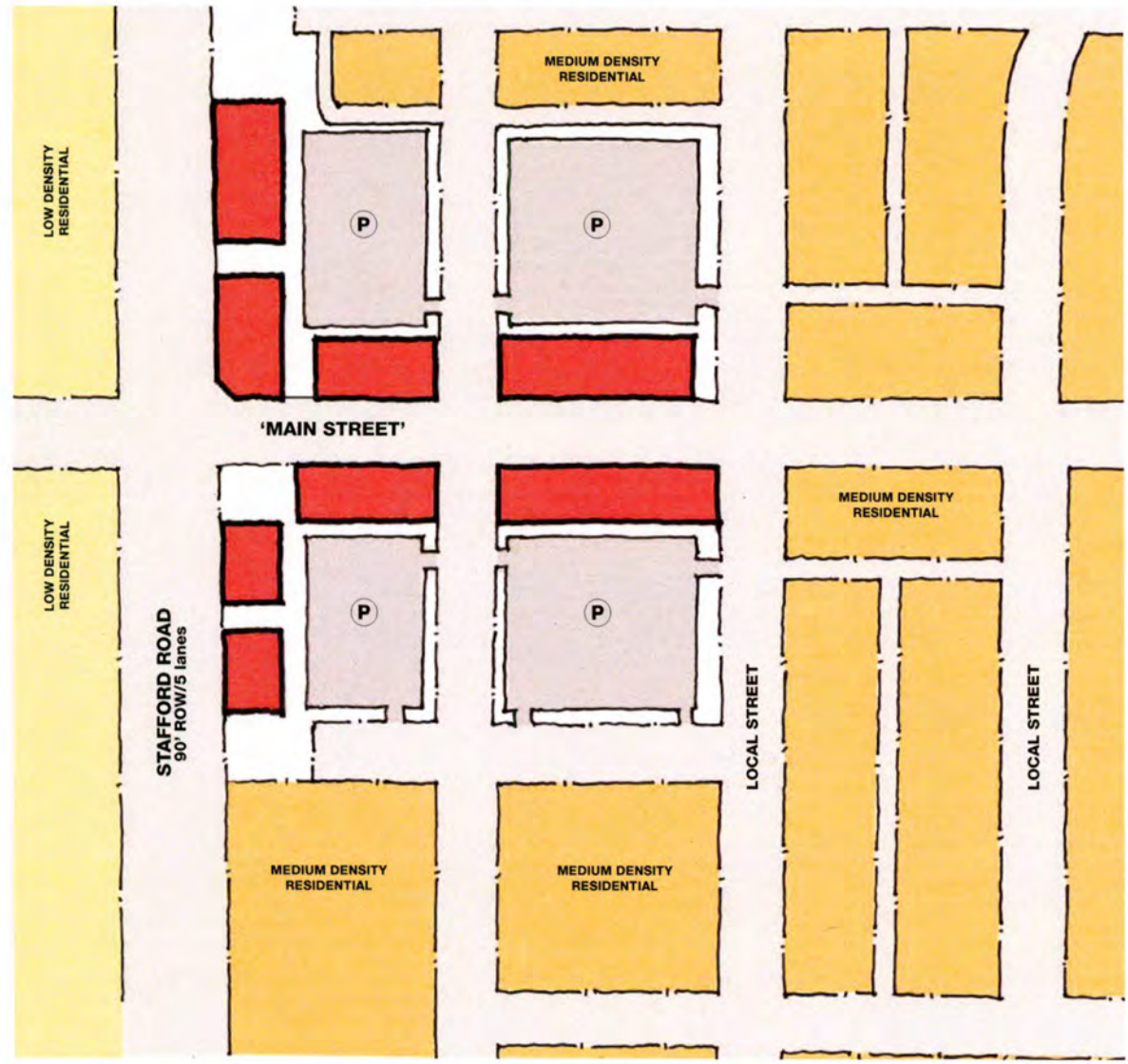
Option C - Grid High		West Neighborhood					East Neighborhood					South Neighborhood					Frog Pond Area (Totals)				
Land Use	Map Key	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density	Net Residential Acres	Units	% of units	% detached (est)	Net Density
Very Low Density		-	-	0%	0%	0	-	-	0%	0%	0	-	-	0%	0%	3	-	-	0%	0%	3
Low Density		38.4	276	28%	27%	7.2	31.9	229	20%	19%	7.2	24.2	174	35%	33%	7.2	94.5	680	26%	24%	7.2
Medium Density		58.3	706	72%	36%	12.1	47.4	574	49%	25%	12.1	27.3	330	65%	33%	12.1	133.0	1,610	61%	30%	12.1
High Density		-	-	0%	0%	25.0	14.5	363	31%	0%	25.0	-	-	0%	0%	25	14.5	363	14%	0%	25
Total		96.7	982		63%	10.2	93.8	1,166		43%	12.4	51.5	505		66%	9.8	242.0	2,653	100%	55%	11.0



Exhibit 15A



Key Map



 COMMERCIAL FOOTPRINTS

* Option shows 69,000sf of commercial space, with +/-240 surface parking spaces

* See Neighborhood Commercial Images for more information

**Neighborhood Commercial Center
Program and Access Study
Option A**

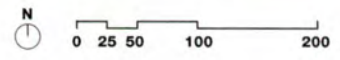
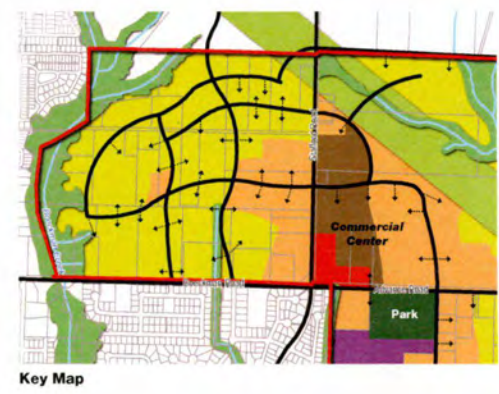
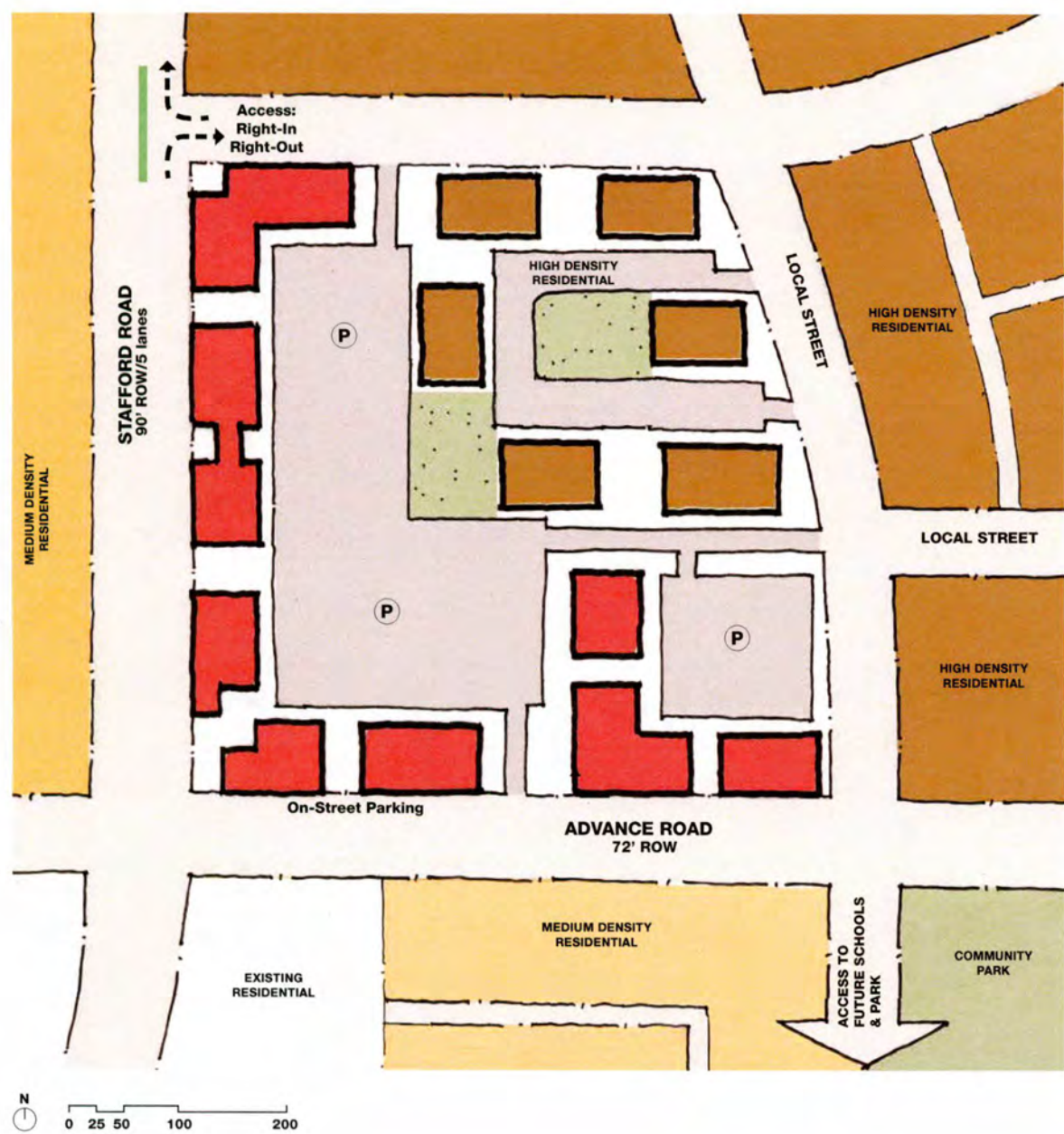




Exhibit 15B



Key Map



 COMMERCIAL FOOTPRINTS

* Option shows 69,000sf of commercial space, with +/-240 surface parking spaces

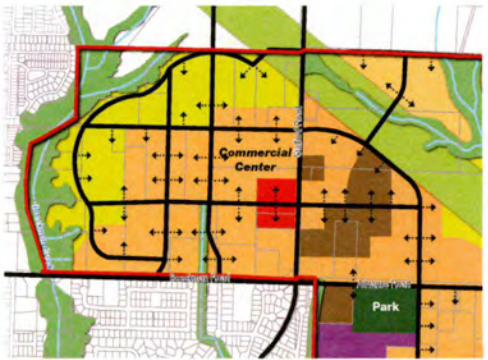
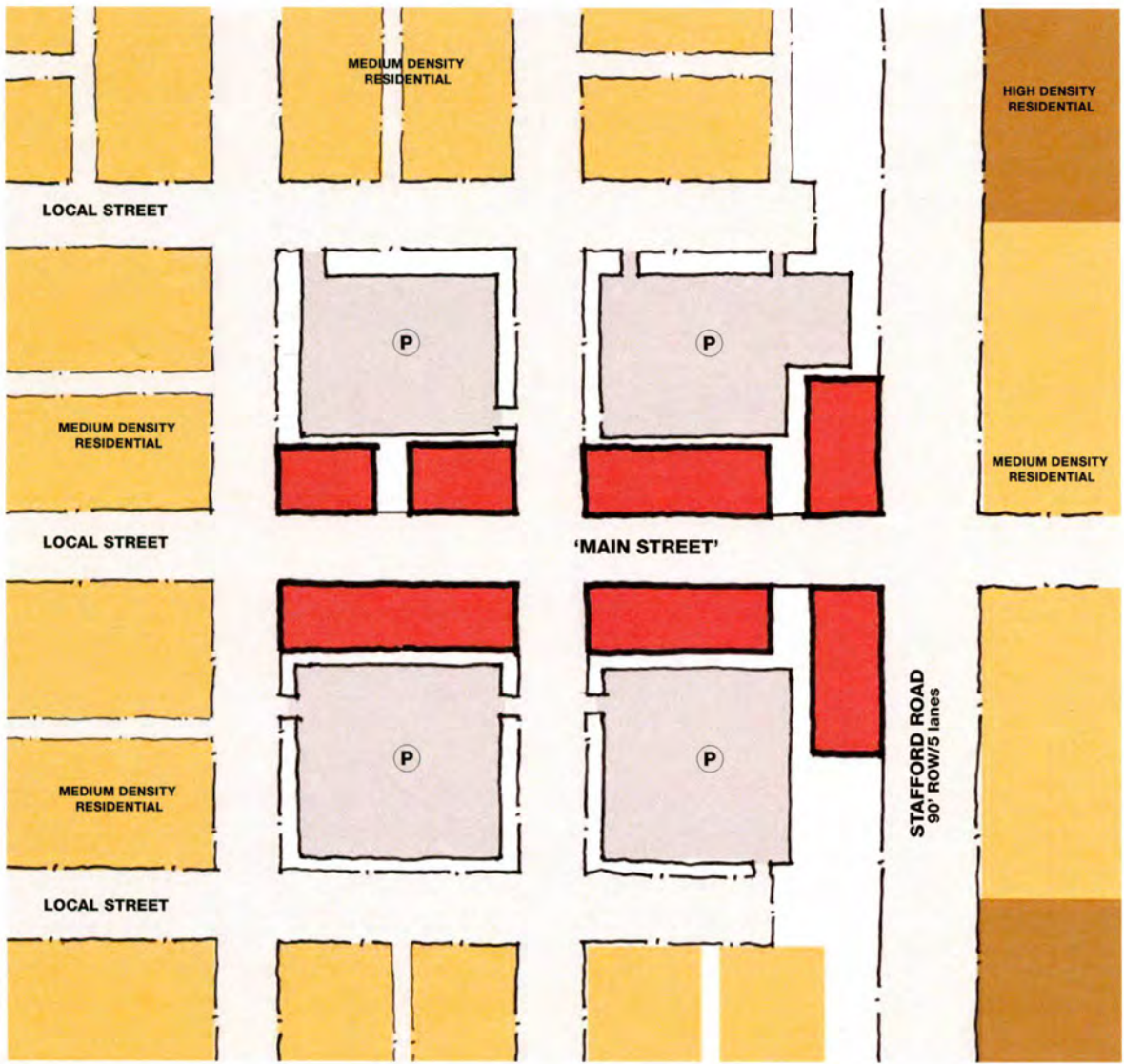
* See Neighborhood Commercial Images for more information

**Neighborhood Commercial Center
Program and Access Study
Option B**



Creating a great community

Exhibit 15C



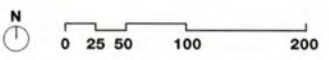
Key Map



* Option shows 69,000sf of commercial space, with +/-240 surface parking spaces

* See Neighborhood Commercial Images for more information

Neighborhood Commercial Center Program and Access Study Option C



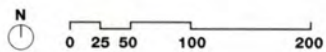
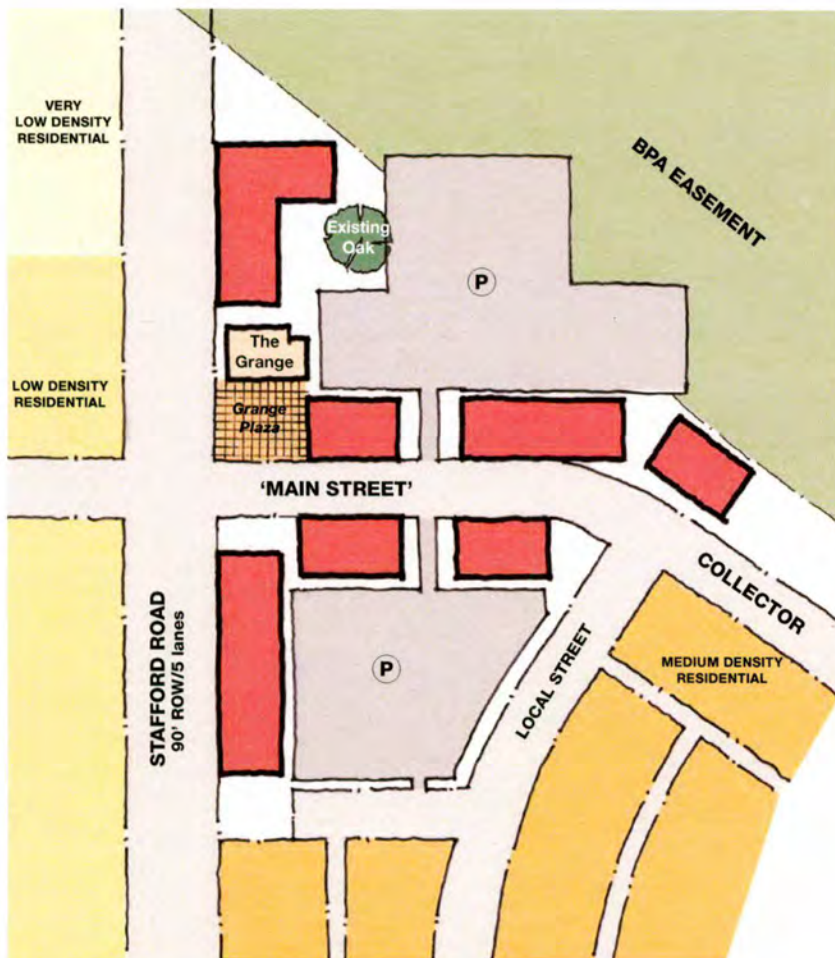
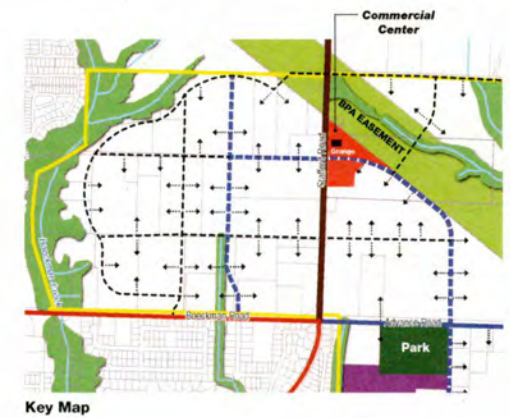


Exhibit 15D



* Option shows 69,000sf of commercial space, with +/-240 surface parking spaces

* See Neighborhood Commercial Images for more information

Neighborhood Commercial Center Program and Access Study Option D



FROG POND AREA PLAN

Creating a great community

Appendix A: Frog Pond Area Plan Market Analysis



City of Wilsonville

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FROG POND AREA PLAN



MARKET ANALYSIS

PREPARED FOR



PREPARED BY



LELAND CONSULTING GROUP

Contents

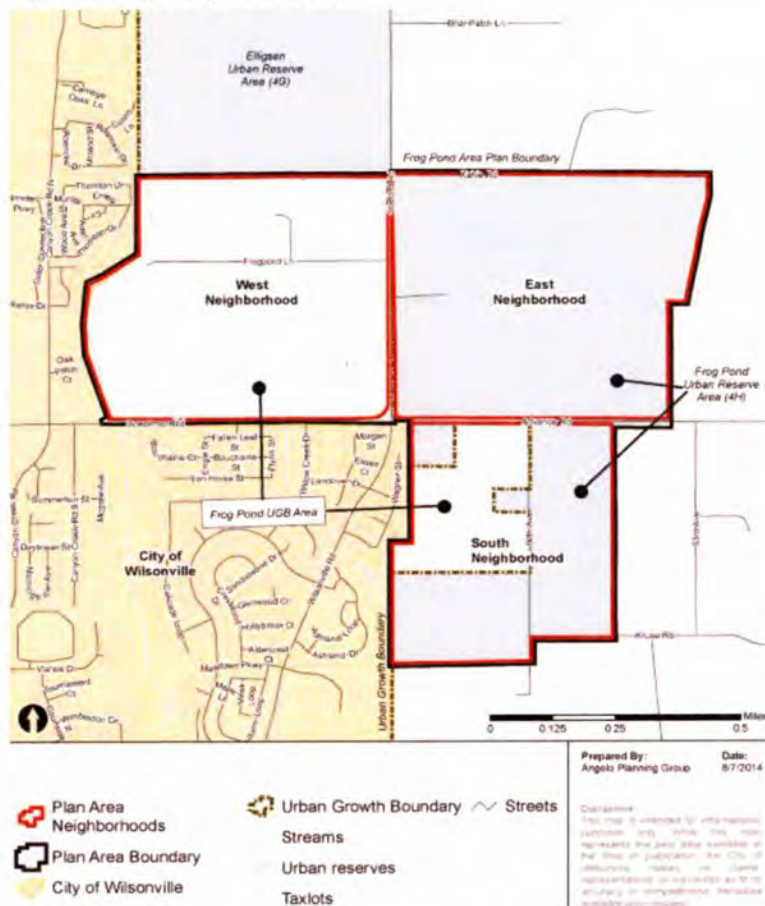
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Introduction and Executive Summary

This market analysis is one component of the Frog Pond Area Plan, which the City of Wilsonville has initiated in order to establish a vision for the area, and to define expectations for the type of community that the 495-acre Frog Pond Area will become in the future. Leland Consulting Group (LCG), the authors of this report, is part of a consultant team led by Angelo Planning Group, which has been engaged by the City of Wilsonville to manage parts of the Frog Pond Area Plan. Through a process that will involve Wilsonville's citizens and elected officials, the Frog Pond Area Plan will ultimately identify the types of development (housing, neighborhood retail, parks, etc.), supporting infrastructure, regulatory framework, and a series of implementation steps needed to realize the plan. This executive summary provides key findings of the market analysis, while details are contained in the body of the report beginning on page 7.

The purpose of this market analysis is to provide the City and Frog Pond Area Plan participants with information about the types of residential and commercial real estate that are likely to be in demand and market feasible in the Frog Pond study area. The market analysis takes into account the project's goals to (1) create a concept plan for the entire 495-acre Frog Pond Area shown in Figure 1 below; and (2) create more specific master plan recommendations for the 179-acre "West Neighborhood" portion that is within the Urban Growth Boundary (UGB). Development within the West Neighborhood will occur first, and development within the East and South Neighborhoods will occur later if they are brought into the UGB by Metro. The real estate market is of critical importance to the future of the entire Frog Pond Area, since this new community will be shaped by both the private sector (e.g., land owners, developers, new residents, retail tenants) and the public sector (through planning, regulation, provision of infrastructure, annexation, and other actions).

Figure 1. The Frog Pond Area



Source: City of Wilsonville, Angelo Planning Group.

Demographic context. Wilsonville is one of the Portland region's fastest growing cities. Metro has projected that the city's households will grow at 1.8 percent annually through 2035, faster than the region and other nearby cities such as Tualatin and Sherwood. The city may also grow faster than this rate: between 2000 and 2012, Wilsonville's households grew at a rate of 2.8 percent per year, despite the recession. Therefore, there will almost certainly be demand for housing, and potentially commercial development, in Wilsonville and Frog Pond during the next two decades.

Wilsonville's residents are more likely to have a bachelor's or advanced degree than residents of the region, they earn slightly more than households regionwide, and they are more likely to work in white collar jobs. Wilsonville has large shares of both young adults and senior residents, while the city has a smaller share of households headed by middle-aged adults compared to the region.

Analysis by Metro, the State of Oregon, and the US Census Bureau indicate that America's demographics are changing, and growth in the Frog Pond market area is likely to include a wide variety of household types. The most dramatic growth will come in the 65+ senior population, whose numbers will increase by 93 percent between 2015 and 2035. By comparison, no other age group is expected to grow by more than 29 percent during that time period. In addition, "non-traditional" household types such as families with children, couples, single-parent households, and single-person households will be important components of growth and therefore will shape real estate demand in

Frog Pond. Sixty-eight percent of Wilsonville's current households are one or two people; such smaller households have been growing as a share of the country's population since the 1970s, a trend that is expected to continue. Wilsonville's recently adopted Residential Land Study (RLS) documents many of these projections and sets the stage for this market analysis.

The Frog Pond Area. Past policies adopted by the City of Wilsonville and Metro call for the Frog Pond Area to be developed primarily as a residential community, though ancillary commercial development may take place in Frog Pond. These policy decisions directly influence this market analysis. As shown in Figure 1, the Frog Pond Area contains two main sub-areas. The first is the West Neighborhood, which is located west of Stafford Road and is 179 gross acres in size. The second is the East and South Neighborhoods combined, located east of Stafford Road. With the exception of the planned school property, the East and South Neighborhoods are outside the UGB, will therefore develop later, and are 316 gross acres in size. Together the two areas comprise 495 gross acres.

Frog Pond has a number of positive features including easy access to natural areas, existing and planned schools and parks, jobs, retail services, and major transportation infrastructure. Developers interviewed as part of this study consistently view Wilsonville in general and Frog Pond in particular as a desirable location for future residential and commercial development, though they did not consistently point out any specific advantages that Frog Pond has compared to other Wilsonville locations.

Housing market analysis. Based on the RLS, demographic projections, past housing built in Wilsonville, and other factors, Leland Consulting Group recommends that Frog Pond be developed as a community that contains a relatively broad mix of housing types including a variety of detached single-family, attached single-family, and multifamily homes. In total, LCG projects that Frog Pond is likely to be built out with between 2,200 and 2,700 homes. This report proposes a series of housing development principles on page 23, followed by two housing development scenarios for the West Neighborhood, and two for the East and South Neighborhoods, in order to provide alternative development options. The primary housing type should be single-family detached homes within a variety of lot sizes, since such homes continue to be the choice of most American households. Because one and two-person households make up the majority of market area households, and because of the dramatic growth of the senior population, LCG recommends that the program contain a significant share of small lot single-family homes (lots between 2,500 and 4,000 square feet), as well as multifamily and attached housing. Developers generally support a diversity of housing within a large community such as Frog Pond, since such a broad mix of housing will accommodate a wider segment of the population, and therefore speed sales and absorption.

Recent surveys and research by the National Association of Realtors (NAR), Urban Land Institute (ULI), and others show that the amenities associated with complete and walkable neighborhoods are important in addition to the home itself. These popular amenities include shops within an easy walk, places to walk for exercise, public transportation, and sidewalks. Such features should be taken into account in the design of the community.

There is no single "correct" development program for the purposes of this study. Rather, the development scenarios described above provide a range of reasonable expectations. The actual housing program should be influenced by the community's goals and vision, public policy set by the City, and this Frog Pond Area Plan process. In addition to market considerations, development alternatives with more housing will generate more public revenues, particularly through systems

development charges, which fund community infrastructure such as roads, sewer, and water lines, and reduce the funding required from elsewhere in the city.

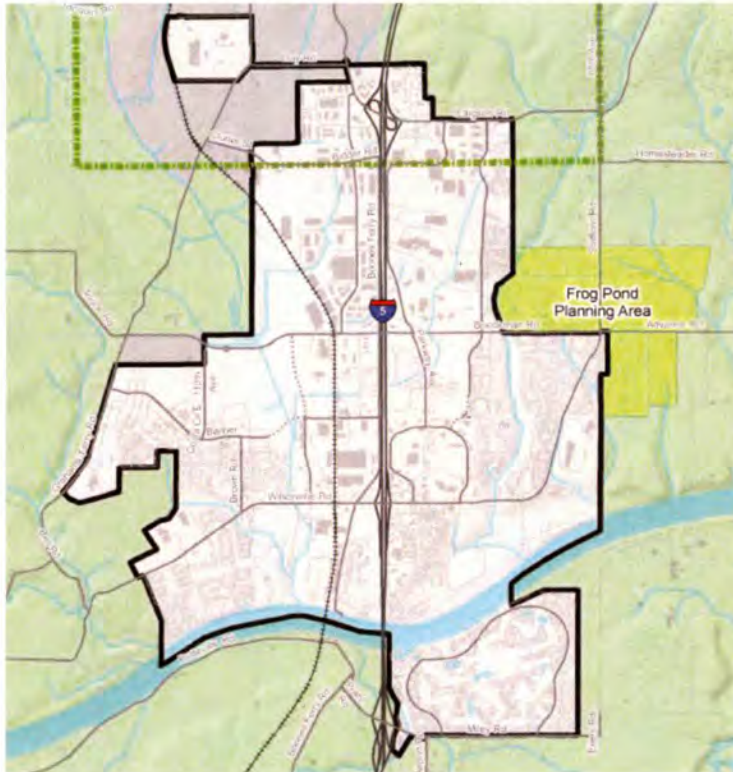
Retail market analysis. The Frog Pond Area community will build out along the edge of an existing urbanized city and region. As mentioned above, nearby goods and services are an amenity that residents will want; however, “retail follows rooftops”—in other words, significant retail development only takes place when there is a significant population of likely shoppers in the area. As a potential retail location, Frog Pond benefits from being situated along two arterial roads, Boeckman/Advance Roads and Stafford/Wilsonville Roads, which will provide some drive-by traffic. Retail in Frog Pond can also serve some adjacent existing communities to the west and southwest.

Based on an evaluation of current and projected future retail spending, LCG projects that Frog Pond could *potentially* support a small to medium-size grocery-anchored retail center (60,000 square feet or more) at full project build out in approximately 2035. If such a grocery-anchored center cannot be attracted, Frog Pond could support a smaller center of between 10,000 and 30,000 square feet. A variety of factors will affect retail feasibility, particularly whether or not other retail is built near Frog Pond during the next 20 years, the number of homes in the area, and retail development formats in the future. Regardless of the size and scale of retail, the focus should be on establishing a retail/commercial hub development that provides some goods and services for local residents, while also creating a gateway, center, sense of place, and social hub for the area.

Demographic Context

Figure 2 below shows the Frog Pond Planning Area and the City of Wilsonville. Frog Pond is well located: It is proximate to both urban amenities such as employment centers, retail areas, major transportation routes, and parks. It is also adjacent to attractive rural lands to the north, east, and south. The area's specific attributes including natural areas are evaluated in more detail on page 21.

Figure 2. City of Wilsonville and Frog Pond Area



Source: City of Wilsonville.

Information Sources

The population and demographic projections on the following pages make use of a number of information sources, including demographic forecasts prepared by Metro, Portland's regional government; ESRI Business Analyst, a private third-party data provider; the State of Oregon's Office of Economic Analysis, which produces the official long-term population forecasts for all of the State's counties; the US Census; and the City of Wilsonville Residential Lands Study (2014) and permitting database. In addition to these data sources, LCG consulted recent research on housing preferences completed by the National Association of Realtors, the Urban Land Institute (ULI), and others. The purpose of the Residential Land Study (RLS), completed in compliance with Statewide Planning Goal 10, is to inventory Wilsonville's existing residential land, project future demand for housing and residential land, and to help Wilsonville's decision makers develop policies to guide housing development in the city over the next 20 years, from 2014 to 2034. While the Residential Land Study's findings and recommendations apply citywide, it also contains some high level guidance specifically for the Frog Pond Area, which is referenced in this report.

Population and Household Forecast

Demographics are fundamental to estimating market demand for residential and commercial real estate. The types of housing and commercial goods forecasted to be in demand in the future in Wilsonville and Frog Pond will depend on the types of people and households who live there in the future.

Table 1 shows the household growth projected by Metro (the Portland regional government) for the 2010 to 2035 time period for the Cities of Wilsonville, Tualatin, and Sherwood, the "Frog Pond market area," and the three primary metro-area counties. The market area encompasses the three cities and the areas immediately around them. This area was defined based on interviews with developers, who stated that it is the area that future Frog Pond residents are most likely to be drawn from. A map of the market area is shown on the following page. Some key takeaways from this demographic projection are:

Wilsonville is projected to grow quickly. As shown in Table 1, Metro projects the number of households in Wilsonville to grow at a rate of 1.8 percent annually between 2010 and 2035. Metro projects Wilsonville will grow at faster rate than other nearby cities such as Tualatin, Sherwood, Tigard, West Linn, and Lake Oswego, and at a faster rate than the region as a whole. While Metro's projections show rapid growth for Wilsonville, they may actually underestimate the pace of growth: The Residential Land Study documents that Wilsonville's "average annual population growth between 1990 and 2012 was nearly 5% and 3.2% between 2000 and 2012."

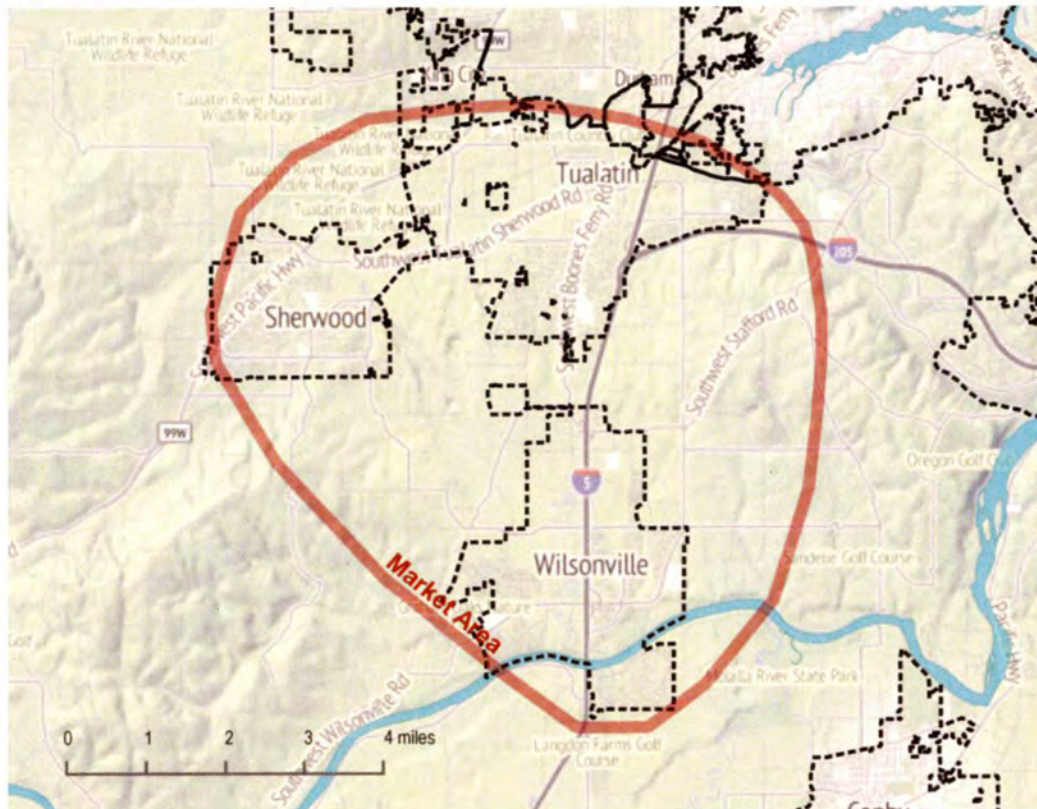
Regardless of the exact rate, household growth is the key driver of demand for new housing, as well as a key driver of commercial development. This means that there will be demand over the next 20 years for housing in the Frog Pond Area, and that it makes sense to conduct this Concept Plan process now in order to prepare for that demand.

Table 1. Demographic Forecasts for Wilsonville and the Metro Region

Jurisdiction	Households			
	2010	2035	Change	CAGR
City of Wilsonville	8,011	12,530	4,519	1.8%
City of Tualatin	10,000	11,170	1,170	0.4%
City of Sherwood	6,316	7,269	953	0.6%
Frog Pond Market Area	27,825	38,704	10,879	1.3%
Clackamas County	146,324	208,437	62,113	1.4%
Multnomah County	304,649	442,546	137,897	1.5%
Washington County	202,647	289,592	86,945	1.4%
Three County Total	653,620	940,575	286,955	1.5%

Source: MetroScope Gamma Forecasts, Published Feb 07, 2013, <http://www.oregonmetro.gov/regional-2035-forecast-distribution>. Note that Metro's projections shown in Table 1 include the Frog Pond West Neighborhood, but not Frog Pond East or South, since those neighborhoods are currently outside the UGB.

Figure 3. Frog Pond Primary Market Area



Source: Leland Consulting Group.

Wilsonville's Current Demographic Characteristics

Table 2 and Table 3 on the following page summarize key demographic attributes of Wilsonville, the Frog Pond market area, and the Portland region (Metropolitan Statistical Area or MSA). The data is for 2014 except where noted. Some key takeaways from this demographic analysis are:

- Wilsonville has a higher percentage of young adult residents (aged 24 to 34) and older residents (aged 65+) than the market area or region. Conversely, a slightly smaller percentage of Wilsonville's population is middle-aged (aged 35 to 64) than the market area or region.
- Fifty-nine percent of Wilsonville's households are "family households"—those with two or more related family members living together—compared with 68 and 64 percent in the market area and region, respectively.
- Wilsonville has a larger share (68 percent) of one and two-person households than the market area or region.

Table 2. Demographic Summary

Key:

Lower

Higher

Compared to the other geographical areas shown below.

Demographic figures are for 2014 except where otherwise noted.

Demographic Attribute	City of Wilsonville	Frog Pond Market Area	Portland MSA
Comparison to Portland MSA:	More 25 - 34 and 65+ HHs Fewer family HHs Smaller HHs More 1 and 2 person HHs Slightly higher HH and Per Capita Incomes	More children, 35 - 54 HHs More family HHs Larger HHs More 1 and 2 person HHs Higher HH and Per Capita Incomes	NA
Population By Age			
0 to 24	31%	34%	32%
25 - 34	16%	13%	15%
35 - 44	14%	15%	14%
45 to 54	13%	14%	14%
55 to 64	11%	12%	13%
65 +	15%	11%	13%
Family Households (2010 Census)	59%	68%	64%
Median Age	37.0	36.6	37.5
Household Size (Average)	2.32	2.57	2.52
Household by Size (2010 Census)			
1 and 2 person households	68%	58%	61%
3 and 4 person households	25%	32%	29%
5 + person households	7%	10%	10%

Source: ESRI Business Analyst, Leland Consulting Group.

Table 3 shows that:

- Both Wilsonville and the market area have a high percentage of residents (70 and 69 percent respectively) that are employed in “white collar” jobs, compared with 63 percent regionwide. This reflects a high earning demographic of professional, technical, and management workers and bodes well for the city’s long-term economic health.
- Incomes—particularly household incomes—are very high in the market area. Wilsonville household incomes are lower than the market area but slightly higher than the region. The high incomes in the market area reflects the high number of professional, technical, and management employees who perform their work in the market area or commute to those jobs elsewhere.
- Educational attainment follows a similar pattern to incomes. Forty-one percent of residents of the market area have a bachelor’s degree or higher, which is slightly more than Wilsonville, and significantly more than the region.
- The median home value in Wilsonville is slightly higher than the market area, and significantly higher than the region.
- These demographic attributes, along with the long-term population growth forecast by Metro, also demonstrate that housing demand is likely to be strong in Frog Pond during the next two decades.

Table 3. Demographic Summary (Continued)

Demographic Attribute	City of Wilsonville	Frog Pond Market Area	Portland MSA
Occupation			
"White Collar"	70%	69%	63%
"Blue Collar"	14%	14%	20%
Median Household Income	\$59,812	\$70,256	\$57,441
Per Capita Income	\$31,995	\$33,336	\$30,135
Education and Employment			
Less than High School	8%	8%	9%
High School or Equivalent	20%	18%	22%
Associate's or Some College	32%	33%	34%
Bachelor's or Advanced Degree	39%	41%	34%
Median Home Value	\$349,927	\$337,289	\$275,516
Housing Tenure			
Owner Occupied Housing Units	43%	55%	56%
Renter Occupied Housing Units	51%	40%	38%

Source: ESRI Business Analyst, Leland Consulting Group.

Tapestry Segments

"Tapestry segments" are a series of demographic categories developed by ESRI, a national third-party demographic information provider that describe groups of people based on their lifestyles, attitudes, purchasing patterns, and interests. The benefit of Tapestry segments is that they go beyond raw numbers and begin to describe groups of people in everyday language. Tapestry segments can also sometimes be overly simplistic, and because they are created at the national level, some aspects of different segments may not apply locally. ESRI uses information from the US Census, Bureau of Labor, and other private sector data sources to create Tapestry segments.

As shown in Table 4 below, the City of Wilsonville is dominated by three main Tapestry segments—Enterprising Professionals, Silver and Gold, and Up and Coming Families—which together comprise 95 percent of the city's total population. ESRI estimates that the Enterprising Professionals group alone accounts for 65 percent of the city's population, and is therefore 34 times more prevalent than in the nation at large. Attributes of the top three Tapestry segments are summarized below; additional information about them is included in the appendix.

Table 4. City of Wilsonville's Primary Tapestry Segments

Tapestry Segment	Percent of Households		
	City of Wilsonville	United States	Prevalence Compared to US
Enterprising Professionals	65%	2%	34
Silver and Gold	19%	1%	19
Up and Coming Families	12%	4%	3
Urban Chic	4%	1%	3
Exurbanites	1%	3%	0
All others	0%	89%	NA

Source: ESRI, Leland Consulting Group

Enterprising Professionals (65%)

- Young, educated, single, married, working professionals, residents of Enterprising Professionals neighborhoods have a median age of 33.2 years.
- Forty-three percent of the households are singles who live alone or share housing with roommates, and 43 percent are married couple families.
- With an annual household growth of 1.95 percent per year since 2000, the households in this segment comprise approximately two percent of total U.S. households.
- Enterprising Professionals residents move frequently to find growth opportunities and better jobs, especially in cities such as Chicago, Atlanta, and Seattle.
- Forty-six percent of the households are located in the South, 29 percent are in the West, and 20 percent are in the Midwest.
- They prefer to own instead of rent in newer neighborhoods of townhouses or apartments. The median home value is \$239,007.
- For those who rent, the average gross rent is 36 percent higher than the U.S. average.

Silver and Gold (19%)

- With a median age of 61.3 years, Silver and Gold residents are the second oldest of the Tapestry segments.
- More than 70 percent are aged 55 years or older.
- Most residents have retired from professional occupations. Half of the households are composed of married couples without children.
- Residents of these neighborhoods are not ethnically diverse; 93 percent of them are Caucasian.
- One-fourth of this Tapestry segment is located in the West, mainly in California and Arizona. Neighborhoods are exclusive with a home ownership rate of 81 percent.
- The median home value is \$290,103. Silver and Gold ranks second of the Tapestry segments for the percentage of seasonal housing owners.
- Because these seniors have moved to newer single-family homes, they are not living in the homes where they raised their children.

Up and Coming Families (12%)

- With an annual household growth rate of 1.69 percent, Up and Coming Families represents Tapestry's second highest household growth market.
- A mix of Generation Xers and Baby Boomers with a median age of 32.8 years, this segment is the youngest of Tapestry's affluent family markets.
- Residents of these neighborhoods are young, affluent families with younger children.
- Eighty percent of the households are families. Most of the residents are Caucasian; however, diversity is increasing as the segment grows.
- Most residents live in new single-family housing in the suburban outskirts of mid-sized metropolitan areas with populations higher than 250,000, with a median home value of \$193,161. More than half the housing units were built in the last 10 years.
- Homeownership is at 80 percent.

Long-Term Demographic Trends

Two long-term demographic trends that are expected to have a significant impact on real estate demand at Frog Pond are described below. These are the aging of the Baby Boom generation, and the trend towards household diversity and decreasing household size.

Many other demographic trends are also affecting our communities today. For example, one is "Generation Y"—young Americans now in their 20s and early 30s. This is a large generation and is a major driver of the recent apartment market boom. However, over the 20-plus year build out of Frog Pond, the two trends identified above are expected to have the most significant impact.

Aging Baby Boomers

The figures below show the demographic trend that is variously called the aging of the Baby Boomers or the "silver tsunami," which is expected to have a significant impact on housing demand. As Baby Boomers (those born between 1946 and 1964) retire and begin to consider selling their homes and relocating within or beyond the metropolitan region, they are expected to have a major impact on housing markets, as they always have had throughout their lifespan. Many will be selling medium and large-size single-family homes and looking for smaller homes with lower maintenance and upkeep, and the freedom to "lock and leave" home to visit family and friends, and vacation elsewhere.

Figure 4 highlights several points. The population of Washington and Clackamas Counties for all age categories is growing between 2015 and 2035—the period during which Frog Pond is expected to build out—creating demand for housing that meets the needs of all of these groups. The 65+ population will grow by the largest amount. The effect of this growth will be even more pronounced since these are relatively small households and thus more housing units are needed to serve the same population. The population of the 35 to 64 age category, and their children, under 19, will also grow significantly. This group is likely to re-occupy many of the single-family homes now in the market area, and new homes in Frog Pond. The size of the 20 to 34 age group is not expected to increase much. This is because Generation Y / Millennials, now in their 20s and early 30s, make up a large age cohort, and the cohort behind them is expected to be smaller.

Figure 4. Forecasted Net Population Change by Age Group, 2015 to 2035

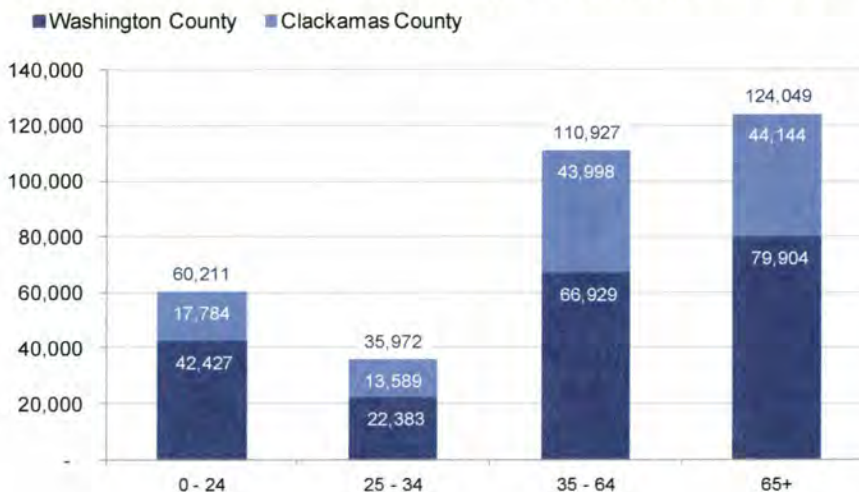
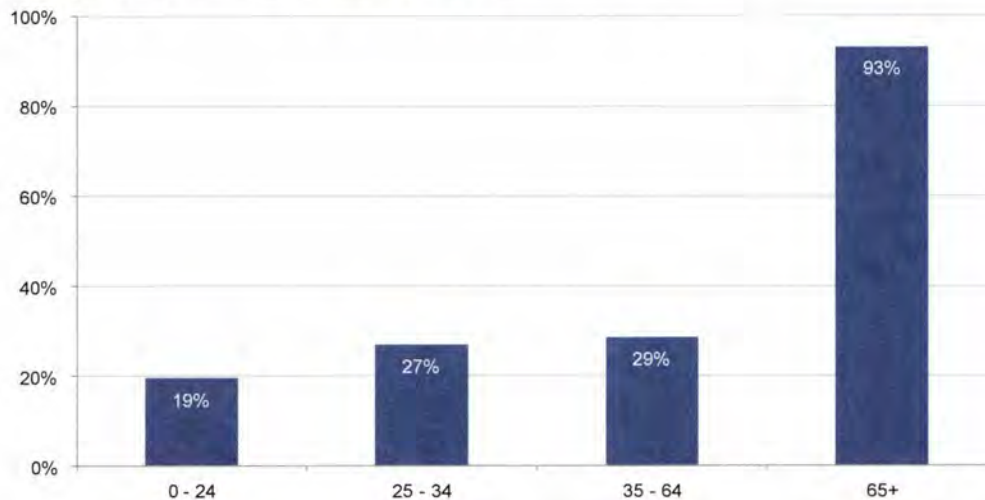


Figure 5 shows that, as a percentage of the current population, the growth in the 65+ age group will be far, far greater than growth in other age groups. While the numerical increase (shown in Figure 4) is only slightly greater than the increase in other population groups, the percent increase is far greater. Therefore, the impacts this age group will have on housing, healthcare, and other parts of society is likely to be greater. This local impact of the Baby Boom generation is consistent with the impact anticipated nationwide.

Figure 5. Forecasted Percent Population Increase by Age Group, 2015 to 2035

Washington and Clackamas Counties combined.



Source for both figures: Long-term Oregon State's County Population Forecast, 2010-2050, Office of Economic Analysis, State of Oregon, 2013; Leland Consulting Group.

Research on 65+ aged households tends to reach several broad conclusions. The following are some of the key findings from a Portland State University study on age-related housing demand shifts:¹

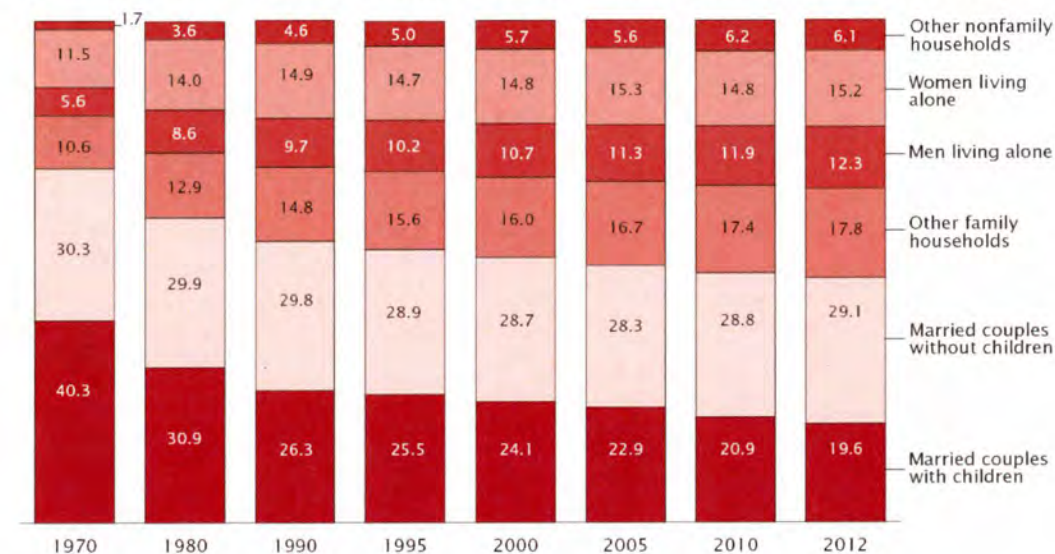
- "Middle-aged and older adults' clear preferences for suburban living must be acknowledged and plans developed to make suburban areas more pedestrian friendly and homes retrofitted or designed initially to better meet the needs of older adults."
- "With respect to features within the residence, there is a preference for a full bath and a bedroom on the main level as well as an entrance without steps."
- "When older householders do move, they are more likely to move into higher density housing than middle-age adults."
- "There are a number of indications... that baby boomers are more likely than younger adults to have a preference for more walkable locations, public transit, and higher density living."

¹ *Age-Related Shifts in Housing and Transportation Demand. A Multidisciplinary Study Conducted for Metro*, Portland State University, College of Urban and Public Affairs. 2006; excerpts from pages 1 and 44.

Increasing Household Diversity and Non-Traditional Households

When thinking about population growth, there can be a tendency to assume that this growth will be driven by “traditional” family households that consist of a married couple with children. However, as Figure 6 shows, this type of household has been becoming less prevalent over time, while most other “non-traditional” household types have increased as a share of the population over time. The other household types tend to be smaller than families with children, and tend to be open to a wider variety of housing types. One writer has identified four demographic “S groups” that have seen the highest rate of growth in recent decades and are expected to continue growing in the coming decades: seniors, singles, single-parent households, and starter households (e.g., the married couples without children shown below, and unmarried couples). This national trend is consistent with the Portland region: As shown in Table 2, the percentage of one-and two-person households is 68 percent in the City of Wilsonville, and 58 percent in the market area.

Figure 6. Households by Type as a Percent of All Households, United States, 1970 to 2012



Source: US Census Bureau.

Community Preferences

Real estate and home buying is all about “location, location, location”—in other words, the community, city, or neighborhood in which a given home is located. Since 2004, the National Association of Realtors (NAR) has conducted a nationwide poll to better understand what Americans are looking for in their future homes and communities. This is the most robust, widely-applicable survey instrument available to suggest how housing demand is evolving. One important focus of this poll is testing Americans' interest in the features of what are variously called “walkable communities,” “complete communities,” or “traditional neighborhood development.” Such communities tend to be pedestrian friendly—parks, schools, shops and businesses are located within walking (and driving) distance of homes—and contain a range of different housing types where households of different ages and sizes can live—single-family homes, townhouses, and multifamily housing.

Figure 7 shows how people responded when asked, “Do you think there is too much, too little, or the right amount of each of the following in the area close to where you live?” Respondents most often felt that there are too few features such as safe routes for walking and biking, public transit, a diversity of housing, and shops and restaurants within an easy walk.

Figure 7. Which Neighborhood Amenities are in Demand?

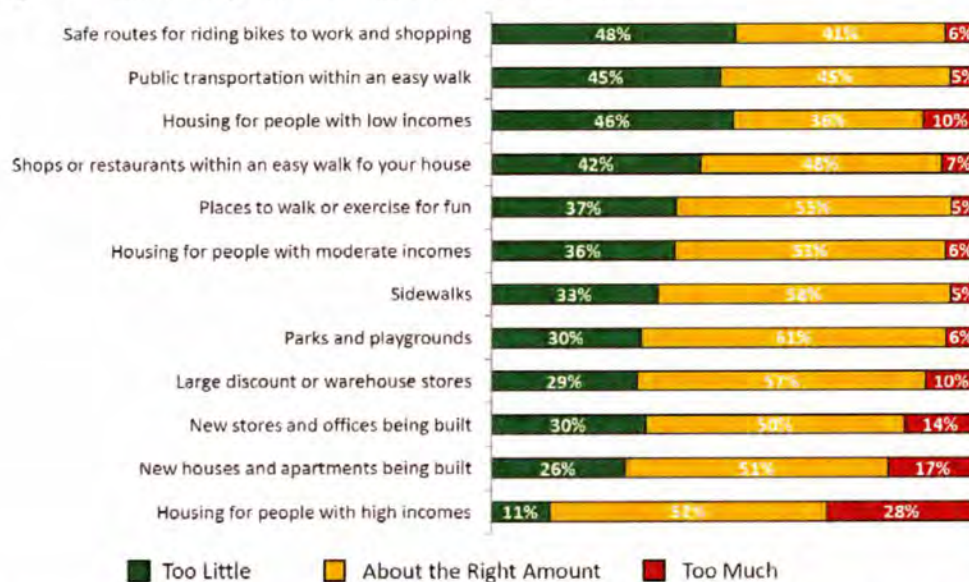


Figure 8 shows how people responded when asked to select the house where they would prefer to live when provided with two community options. By nearly a two-to-one margin, Americans prefer a neighborhood where they can walk to stores and businesses. The preference is significantly more pronounced among those who recently purchased a home or are currently in the market.

Figure 8. Community Preferences



Source, both figures: National Community Preference Survey, National Association of Realtors, October 2013.

The Urban Land Institute (ULI) is another organization that routinely evaluates home buyer and renter preferences. The ULI is a national professional association for developers, homebuilders, planners, and other land use professionals. Some key findings published by the ULI in the organization's *Residential Futures: Thought-Provoking Ideas on What's Next for Master-Planned Communities* (2012) are listed below. These are consistent with findings from Realtor's surveys and respond to the question, "What do buyers need in terms of housing and community?"

- Home buyers are, "looking for value (affordability), walkability, shopping, restaurants, services, good schools, and a sense of community."
- "Single-use zoning is out and mixed use is in, along with living close to services and jobs. The typical master planned community offering, including schools, parks, and pools, is still important, especially to first-time buyers. Couple that with a scarcity of resources, living near where you work and shop is in, long commutes are out."
- Home buyers "want safety, good schools, and proximity to employment, which usually entails less than a 30-minute commute. Financial security related to the home purchase means that the community is on stable ground and the builder is viable. Buyers want to feel that the housing value is permanent and appreciation is likely over time."

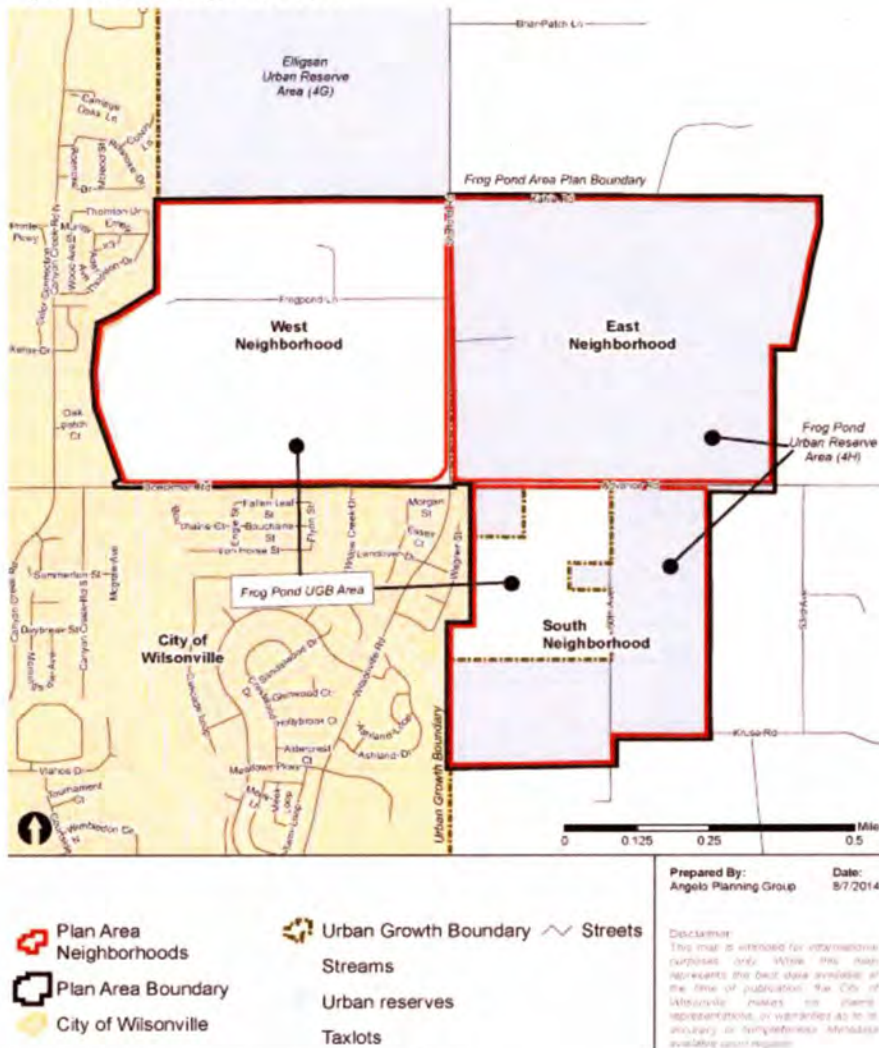
The Frog Pond Area

This market analysis addresses the Frog Pond Area (or "study area") as shown in Figure 9. In some sections of this report, the study area is divided into two parts: the West Neighborhood (or Frog Pond West), which is the land west of Stafford Road; and the East and South Neighborhoods. The entire Frog Pond Area is 495 gross acres. The City's 20-Year Look process has identified the entire Frog Pond Area as the top priority area for future residential development. Metro has supported this policy direction by designating the larger area as Urban Reserve 4H during its 2009 Urban Reserves designation process.

The West Neighborhood is 179.4 gross acres in size. It is currently located outside of the city's boundaries and inside the UGB. Because it is within the UGB, the West Neighborhood can be concept planned, annexed by the City, zoned, and then developed within the next few years. Developers and/or the City will also need to extend infrastructure to the area in advance of or concurrently with development. The intent of the City's current concept and master planning process is to set the stage for the near-term development of the West Neighborhood.

The Residential Land Study found that the development of the Frog Pond West Neighborhood is fundamental to the city's ability to accommodate future housing demand. In addition, based on discussions with Wilsonville's decision makers conducted during the Residential Land Study, and their desire to achieve a more balanced housing mix and the results of the housing needs analysis, the study recommends that Wilsonville plan for the Frog Pond West Neighborhood to be "developed predominantly with single-family detached housing." Specifically, the housing needs assessment modeling conducted for the Residential Land Study assumed that the housing would develop at densities between 5.0 and 8.5 dwelling units per gross acre in the West Neighborhood.

Figure 9. The Frog Pond Area



Source: City of Wilsonville, Angelo Planning Group.

The East and South Neighborhoods are larger—315.8 gross acres. With the exception of the future school property, both of these neighborhoods are currently outside both the city and UGB boundaries, but have been identified by the Metro regional government and the City as a residential Urban Reserve—an area that will be built out, primarily to accommodate housing growth, within the next 50 years. Because of the city's rapid and projected future population growth, Wilsonville may seek to bring the East and South Neighborhoods into the UGB sooner rather than later. For the purposes of this market analysis, LCG has assumed that development can begin in the East and South Neighborhoods in the year 2022; however, the actual date will depend on decisions made by the City of Wilsonville, Metro, and others.

The Residential Land Study concludes that Wilsonville may need residential land by 2032 or sooner, depending on the city's population growth rate in the coming decades. For this reason, the East and South Neighborhoods are being concept planned along with the West Neighborhood. Because of the Urban Reserve status, it is not a question of if the area will be built out with mainly housing, but when.

The Residential Land Study does not offer any specific density or land use recommendations for the East and South Neighborhoods.

Given the amount of time it takes to get a new area to be development-ready (i.e., brought into the UGB, planned, and services extended to the area), Wilsonville should begin discussions about bringing the East and South Neighborhoods into the UGB as part of the next cycle of UGB expansion discussions.

Key Features of the Frog Pond Area

The following are some of the key features of the study area that are most relevant to this market analysis and the future development of the area:

- **Natural areas**, including Boeckman Creek and various tree stands throughout. The area also benefits from views to ridgelines to the north and west. These natural features limit the amount of development that can take place, but can also be unique sources of identity, pride, and land value for the new community if they are properly integrated into the overall concept plan.
- **Schools**. The West Linn-Wilsonville School District currently owns properties in Frog Pond and is planning to build two schools there, a primary school and a middle school. The City will be building a 10-acre community park adjacent to these schools. These schools, along with the high quality of the School District, will increase the desirability of the future community, particularly for families. The concept plan should carefully consider how "safe routes to school" can be designed throughout the community. In addition to its South Neighborhood properties, the School District also owns several parcels in the West Neighborhood, but has not announced specific plans for these properties, which could be retained and developed by the School District, or sold.
- **The City of Wilsonville** has a good reputation in the marketplace for high-quality communities and development. Villebois' carefully integrated parks, homes, schools, and public realm distinguish it from almost all other suburban residential communities in the Portland region.
- **Proximity to jobs**. Wilsonville is known for the significant number of jobs within the city, as well as its accessibility to most Portland metro area employment centers and Salem. The planning area is also within a half-mile of the Mentor Graphics headquarters, Xerox, and other white collar offices, which will drive interest in Frog Pond.
- **Proximity to services and shopping**. The subject area is approximately two miles from the Wilsonville Town Center, and 2.5 miles from the Argyle Square regional shopping center at Elligsen Road. Both commercial centers offer a wide variety of goods and services.
- **Transportation access**. Advance Road/Boeckman Road bisects the area running east to west, and Stafford Road/Wilsonville Road bisects the area running north to south. Both roads currently carry about 5,000 cars per day and are significant transportation routes for travelers going to and from Wilsonville. Certain land uses, including retail, office/commercial, and apartments, benefit from higher exposure, and any such uses should be located near these main roads. The roads will carry more traffic in the future as development increases. SMART bus service connects the subject area to the Town Center and to the WES commuter train station.
- **Property ownership**. Assuming that one desired outcome of the concept plan is the establishment of a cohesive, integrated plan that knits the entire study area together and results in a whole greater than its parts, the fragmented property ownership is likely to present some challenges. Fragmented property ownership can prevent key gateway properties from being developed, empower hold-out owners to demand above-market land prices, and limit the potential for area-wide solutions to issues such as storm water management and transportation.

Buildable Land in the Frog Pond Area

The City of Wilsonville conducted a buildable lands inventory in order to better understand what parts of the study area are likely to remain in natural or undeveloped conditions, become infrastructure such as roads, or be buildable land where new residential and commercial development could take place. A summary of that inventory is shown in Table 5 below. The key figures used in this analysis are the gross buildable area (318 acres) and net buildable area (243 acres) shown at the bottom of the table. The new buildable area is the amount of land on which LCG expects that residential or commercial development can take place.

Table 5. Buildable Land Inventory

Land Category	Frog Pond Neighborhood (Acres)		
	West	East & South	Total
Total Area	179	316	495
Unbuildable			
Committed ^a	12	90	102
Unbuildable (stream corridor/ adjacent wetland / adjacent riparian buffer/ >25% slope)	24	37	61
Buildable but challenging			
Acreage of all non-significant wetlands	18	5	23
20% of the total acreage of non- significant wetlands ^b	4	1	5
Subtotal ^c	54	124	177
Gross Buildable (Total acreage less unbuildable)	126	192	318
Infrastructure and Amenities			
Internal Roads ^d	23	35	57
Stormwater Management	5	3	8
Parks ^e	5	5	10
Subtotal	33	42	75
Net Buildable			
Retail/Commercial	2	5	7
Residential	91	145	236
Net Buildable	93	150	243

Source: City of Wilsonville, Leland Consulting Group. Notes: a. Committed land includes the BPA easement, residential developments valued greater than \$160,000, land held for planned schools and parks, the church property, and the Grange hall. b. This line lists the 20 percent of the land that is unbuildable due to constraints of wetland fill permitting. This is an assumption, to acknowledge the challenge of permitting and possible mitigation of potentially jurisdictional wetlands. c. Some areas of land are categorized in more than one "unbuildable" category. The Subtotal, therefore, is the amount of land classified as "unbuildable" for any reason. d. LCG estimate. e. Land that will be used for the Urban Growth Area community park is included in the "Committed" land above.

Housing Market Analysis

Residential Land Study Findings and Recommendations

Wilsonville's Residential Land Study was adopted in May 2014 and provides a framework for this market analysis, due to its extensive analysis of Wilsonville's household types, demographics, current and future housing, and other information. The Residential Land Study provides the following information that guides this market analysis:

- The types of housing that will be in demand, both citywide and in the study area; and
- Conceptual housing development targets that can be used as a starting point for planning in the study area.

Some of the Residential Land Study's key findings and recommendations that are relevant to the study area are summarized below.

Planning for balance. Wilsonville is planning for a complete, balanced community. The Wilsonville Comprehensive Plan includes a balanced portfolio of different housing types that are well-designed and will be developed across the community to serve different people at different points in their lives.

Future housing demand. The Residential Lands Study projects that the following housing will be needed in the Wilsonville planning area between 2014 and 2034 period. The projection is based on Metro's population growth forecasts as well as other assumptions. While the forecast for Wilsonville shows a need for all types of housing, the Study concludes that the supply of land available for multifamily development is sufficient. To balance the city's housing supply, the Study recommends planning for predominantly single-family housing in the Frog Pond Area.

Table 6. Forecast of Needed Housing Units by Mix and Density, Wilsonville, 2014 to 2034

Housing Type	Needed New Housing Units (2014 - 2034)	
	Number of new new dwellings	Percent of new dwellings
Single Family Detached	1,875	50%
Single Family Attached	375	10%
Multifamily	1,499	40%
Total	3,749	100%
Annual Average	187	

Source: Wilsonville Residential Lands Study, American Community Survey.

The complete Residential Land Study, background technical reports, and associated public records, can be found online at <http://or-wilsonville.civicplus.com/335/2014-Residential-Land-Study>.

Housing Types

In order to illustrate potential development scenarios within the Frog Pond Area, this market analysis uses five different housing types, as shown in Table 7 below. These are broad categories, and there can be significant variation in home design, layout, site size, and other factors within these types. These housing types are key parts of the "palette" with which stakeholders can paint the Frog Pond Area during later phases of the Concept Plan process. These housing types are based on housing recently built in Wilsonville, housing proposed for other comparable new development areas, and the definitions used in the Residential Land Study.

Table 7. Housing Types

Housing Type	Lot Size			Net Density
	Low	Average	High	
Large Lot Single Family	6,000	7,500	8,500	6.0
Medium Lot Single Family	4,000	5,000	6,000	7.5
Small Lot Single Family	2,500	3,500	4,000	11.0
Attached Single Family: Townhomes and Duplexes	1,000	2,250	2,500	16.0
Multifamily: Apts, Condos, and Senior Housing	NA	NA	NA	25.0

Large Lot Single-Family



Medium Lot Single-Family



Small Lot Single-Family



Single-Family Attached



Multifamily



The major change from the types defined by the Residential Land Study is that three different types of single-family detached housing are used here rather than one, in order to provide a more nuanced view of housing demand and on-the-ground development.

The housing densities shown in Table 7 and used elsewhere in this report are *net* densities: the number of units that are located on a given area of *net buildable land*. As shown in Table 5, net buildable land is the amount of land available after deductions have been made for natural areas, slopes, public and private roads, parks, and stormwater retention has been deducted from the *gross area*. Buildable land can also be defined as the parcel upon which residential dwellings are constructed, including any open space (e.g., yard) provided on that parcel. The definitions used here are consistent with the Oregon Administrative Rules and the Residential Land Study.

Residential Density in Wilsonville

Table 8 and Table 9 below show excerpts from the Residential Land Study that document the density of recent (2000 to 2012) residential development in Wilsonville. This analysis is useful because it provides Frog Pond Concept Plan stakeholders with a range of built examples of residential density that can be compared to the Frog Pond development scenarios presented later in this report. Table 8 shows the densities of different housing types, while Table 9 shows the densities within different plan (Comprehensive Plan and Zoning) designations.

The analysis shows a range of potential residential densities. Unsurprisingly, the lowest density housing type built in Wilsonville between 2000 and 2012 were single-family homes, with a density of 7.6 dwelling units per net acre; the net density of multifamily housing is 18.5. The weighted average (total) net density for these two housing types combined is 12.4. Table 9 shows that, across all housing types built within residential zones in the city between 2000 and 2012, the density is 10.8 dwelling units per net acre. In village-designated areas (Villebois), the density is 18.0 dwelling units per net acre.

Table 8. Residential Development Density by Housing Type, Wilsonville, 2000 to 2012

Housing Type	Net Density
Single Family	7.6
Multifamily	18.5
Total	12.4

Source: Wilsonville Residential Land Study, adapted from Table 3-5, May 2014.

Table 9. Residential Development Density by Plan Designation, Wilsonville, 2000 to 2012

Plan Designation	Net Density
Residential	10.8
Village (Villebois)	18.0

Source: Wilsonville Residential Land Study, adapted from Table 3-4, May 2014.

Recent Housing Permits in Wilsonville

In order to inform this market analysis and potential development programs for Frog Pond, LCG reviewed residential permits issued by the City of Wilsonville between 2000 and 2012, the same time period that was evaluated for the Residential Land Study. The summary results of this analysis are shown in the two tables below. Table 10 shows data for permits granted citywide between 2000 and 2012. Table 11 shows permits granted in Villebois during the same time period. Villebois is shown since it is a currently-developing "greenfield" community that is similar in size to Frog Pond, and therefore is likely to be comparable in some ways.

It is important to make several notes about this data in order to understand its applicability to Frog Pond. Past permitting may or may not be a good predictor of future housing demand. The data is likely to reflect some conditions that may or may not be in place at Frog Pond. For example, zoning and lot sizes citywide and in Villebois may or may not be similar to those imposed at Frog Pond. In addition, economic and demographic conditions such as the great recession and the rapid entry of Generation Y into the housing market may create distortions in this data which will not be replicated in the future. Nevertheless, this data can inform planning for Frog Pond.

Several trends emerge from this analysis. First, there have been more permits issued for multifamily housing than any of the other housing types; this is true both citywide and in Villebois. Second, a large share of permitting at Villebois has been within the small lot single-family housing type. This is likely due to a combination of factors, including market demand and the size of lots available to builders, defined by the Villebois Village Concept Plan and subsequent documents.

Table 10. City of Wilsonville Residential Permits, 2000 to 2012

Housing Type	Total Permits	
	Number	Percent
Large Lot Single Family	260	9%
Medium Lot Single Family	298	10%
Small Lot Single Family	356	12%
Attached Single Family	56	2%
Multifamily	1,892	66%
Total	2,862	100%

Source: City of Wilsonville permit database, Leland Consulting Group.

Table 11. Villebois Permits, 2000 to 2012

Housing Type	Total Permits	
	Number	Percent
Large Lot Single Family	74	8%
Medium Lot Single Family	75	8%
Small Lot Single Family	309	35%
Attached Single Family	56	6%
Multifamily	380	43%
Total	894	100%

Source: City of Wilsonville permit database, Leland Consulting Group.

Third, attached single-family homes made up a higher share of permitting in Villebois than the city as a whole. Finally, large and medium lot single-family housing both made up a similar and modest share of all permitting citywide and in Villebois.

Housing Demand Summary

Based on the review of local, regional, and national demographics trends, the Residential Land Study, emerging community preferences, and other factors, LCG has used the following principles in creating a series of development scenarios for Frog Pond:

- **General housing preferences.** Across all household types, there is a general preference for detached single-family homes and for walkable communities in which goods, services, amenities, and community meeting places are within easy walking, biking, or driving distance. People's ideal housing preferences are typically moderated by their home buying budget, location of work, school and relatives, and other factors.
- **Housing diversity.** Housing mix and diversity is important in a large area such as Frog Pond. LCG recommends that a range of housing types be included in the Frog Pond concept planning, since there is a correspondingly wide range of households—old and young, large and small. A large area should appeal to a wide variety of households. This will speed sales and thus the financial viability of the area.
- **Flexibility.** Flexibility is important to developers. Future Comprehensive Plan and Zoning regulation should ideally allow flexibility in Frog Pond, since housing demand in 2035 is by nature difficult to predict, and developers will want some ability to adjust to changes in demand.
- **65+ households.** The greatest amount of household growth in Washington and Clackamas Counties, and other relevant geographical regions is expected to come from households aged 65 and older. This is a dramatic shift from past demographic patterns. Age 65 and older households who move will likely demand a mix of housing, but will tend towards homes that are lower maintenance, somewhat higher density, and have many amenities close by. Many in this age group will still desire detached single-family homes, though others will be interested in attached and multifamily housing.
- **Families with children.** There will also be significant household growth in the 35 to 65 age cohort. Within this broad cohort, married couples with children ("traditional households") are expected to tend to seek single-family detached housing, within a variety of lot sizes.
- **Non-traditional households**—including singles, single-parent, and married couple households without children—have grown consistently and dramatically since the 1970s and are expected to continue to grow. These tend to be one and two-person households, and LCG expects that they will exhibit a broad range of housing preferences, across detached and attached single-family and multifamily housing types. Because of their smaller size, they will tend to seek medium and smaller size homes.
- **Policy.** The Residential Land Study recommends that the Frog Pond West Neighborhood be "developed predominantly with single-family detached housing." However, it also recognizes that this Concept Plan process will ultimately determine the set of land uses at Frog Pond, and it does not set specific expectations for the East and South Neighborhoods.
- **Compatibility.** Housing in Frog Pond should be somewhat compatible with the densities and housing types that have been historically developed in Wilsonville's neighborhoods.

Based on these principles, Table 12 below summarizes LCG's high level forecast of likely housing demand in the Frog Pond Area during the next two decades.

The level of demand within each housing type is reflected by the length of the blue bars at right—the longer the bar, the greater the demand. This reflects a general, high level assessment of demand; the specific quantitative implications (i.e., the number of units likely to be built) are discussed in the following pages.

Table 12. Housing Demand Summary

Housing Type	Lot Size Average	Household Type			
		Boomers	Families with Children	Couples, Single Parents, Non Family HHs	Combined All Households
Large Lot Single Family	7,500				
Medium Lot Single Family	5,000				
Small Lot Single Family	3,500				
Attached Single Family: Townhomes & Duplexes	2,250				
Multifamily: Apts, Condos, and Senior Housing	NA				

Source: Leland Consulting Group.

Housing Development Scenarios

Two housing development programs, or scenarios, for both the West Neighborhood, and the East and South Neighborhoods combined, are shown below, along with a brief summary of the rationale behind each. These housing scenarios will be used by the Frog Pond team—including the City, Angelo Planning Group, and the public—to inform Concept Plan (physical design) alternatives for the area. The scenarios may also be used to test the capacity of transportation, sewer, and water infrastructure, and for other elements of the Concept Plan process. LCG expects that they may be revised later in the planning process.

There is no single correct housing program for Frog Pond. Rather, there are multiple ways that housing at Frog Pond can meet the demand for housing that will be expressed by a variety of different household types that will consider moving to the area in the coming decades. Communities such as Villebois, Charbonneau, and Wilsonville's other neighborhoods each represent a somewhat different approach to appealing to potential residents.

West Neighborhood

The two tables below show Development Scenarios 1 and 2 for the Frog Pond West Neighborhood.

Scenario 1 is approximately the same density (7.7 dwelling units per net acre) as the average density of all single-family housing built in Wilsonville between 2000 and 2012 (see page 25). Ninety-four percent of the housing is single-family detached, which meets the Residential Land Study policy guidance. Nearly 60 percent of all housing is medium lot single-family, with lots between 4,000 and 6,000 square feet, which can be considered a "standard" residential lot. One drawback of this scenario is that the density may be too low to generate the revenues (through lot sales and systems development charges) necessary to build the highquality infrastructure expected in a complete, walkable community.

Scenario 2 has more housing diversity and is slightly denser. The overall density (10.6 dwelling units per net acre) is similar to all housing (including single and multifamily) built in residential-designated land in Wilsonville between 2000 and 2012 (see page 25). Sixty-nine percent of all housing is single-family detached, which should meet the intent of the Residential Land Study policy guidance. This scenario is more likely to achieve the principles of housing diversity and fostering a walkable community than Scenario 1. It is also more likely to meet the housing needs of 65+ and non-traditional households through the provision of more small lot single-family homes, as well as a greater share of attached and multifamily homes. This scenario would likely accommodate a single market rate or age-restricted multifamily project, which tend to start at about 150 units in size.

Table 13. West Neighborhood: Development Scenario 1

Housing Type	Lot Size Average	Net Density	Units		Net Acres	
			#	%	#	%
Large Lot Single Family	7,500	6.0	155	22%	25	28%
Medium Lot Single Family	5,000	7.5	410	59%	55	60%
Small Lot Single Family	3,500	11.0	90	13%	8	9%
Attached Single Family	2,250	16.0	45	6%	3	3%
Multifamily	NA	25.0	-	0%	-	0%
Total			700	100%	91	100%
Average		7.7				

Table 14. West Neighborhood: Development Scenario 2

Housing Type	Lot Size Average	Net Density	Units		Net Acres	
			#	%	#	%
Large Lot Single Family	7,500	6.0	65	7%	11	12%
Medium Lot Single Family	5,000	7.5	245	25%	33	36%
Small Lot Single Family	3,500	11.0	360	37%	33	36%
Attached Single Family	2,250	16.0	115	12%	7	8%
Multifamily	NA	25.0	180	19%	7	8%
Total			965	100%	91	100%
Average		10.6				

Source: Leland Consulting Group.

East and South Neighborhoods

The two tables below show Development Scenarios 1 and 2 for the Frog Pond East and South Neighborhoods.

Scenario 1 is approximately the same density (10.5 dwelling units per net acre) as all housing (including single and multifamily) built in residential-designated land in Wilsonville between 2000 and 2012 (see page 25). The majority (72 percent) of all housing is single-family detached, which is likely to be consistent and compatible with the Residential Land Study policy guidance for Frog Pond West. This scenario also provides some housing diversity and will meet the demands of some 65+ and non-traditional households through the provision of small lot single-family, single-family attached, and multifamily homes. By providing a significant share of these more compact housing types, this scenario should be able to foster a walkable community.

Scenario 2 is similar in terms of density (12.0 dwelling units per net acre) as all housing (including single and multifamily) built in Wilsonville between 2000 and 2012; this includes housing built in residential-designated land and in village-designated (Villebois) land. A majority (63 percent) of all housing is single-family detached, which is likely to be consistent and compatible with the Residential Land Study policy guidance for Frog Pond West. This scenario also provides more housing diversity than Scenario 1, which will meet the demands of some 65+ and non-traditional households through the provision of small lot single-family, single-family attached, and multifamily homes. This significant number of more compact housing types could be clustered in the center of the neighborhood around shops and open space in order to create a small retail and social hub for Frog Pond, putting more services within walking distance. This scenario would likely accommodate several market rate or age-restricted multifamily projects, which tend to start at about 150 units in size.

Table 15. East and South Neighborhoods: Development Scenario 1

Housing Type	Lot Size Average	Net Density	Units		Net Acres	
			#	%	#	%
Large Lot Single Family	7,500	6.0	45	3%	7	5%
Medium Lot Single Family	5,000	7.5	435	29%	58	40%
Small Lot Single Family	3,500	11.0	620	41%	57	39%
Attached Single Family	2,250	16.0	280	18%	17	12%
Multifamily	NA	25.0	145	10%	6	4%
Total			1,525	100%	145	100%
Average		10.5				

Table 16. East and South Neighborhoods: Development Scenario 2

Housing Type	Lot Size Average	Net Density	Units		Net Acres	
			#	%	#	%
Large Lot Single Family	7,500	6.0	35	2%	6	4%
Medium Lot Single Family	5,000	7.5	360	21%	48	33%
Small Lot Single Family	3,500	11.0	700	40%	64	44%
Attached Single Family	2,250	16.0	280	16%	17	12%
Multifamily	NA	25.0	365	21%	15	10%
Total			1,740	100%	145	103%
Average		12.0				

Source: Leland Consulting Group.

Frog Pond Area: All Neighborhoods Combined

Table 17 shows the results of combining the scenarios for both areas. The total number of housing units likely to be built in the area ranges from about 2,200 to 2,700.

Table 17. Development Scenarios for Entire Frog Pond Area

Housing Type	UGB Area		Urban Reserve		Entire Study Area	
	Low	High	Low	High	Low	High
	1	2	1	2		
Large Lot Single Family	155	65	45	35	200	100
Medium Lot Single Family	410	245	435	360	845	605
Small Lot Single Family	90	360	620	700	710	1,060
Attached Single Family	45	115	280	280	325	395
Multifamily	-	180	145	365	145	545
Total	700	965	1,525	1,740	2,225	2,705

Source: Leland Consulting Group.

A combination of these scenarios, or a variation on them, could be implemented. During this Concept Plan process, a preferred scenario should be selected based on this market analysis, the land planning process, input from the public and other stakeholders, transportation and infrastructure analysis, and other factors.

Absorption

Housing absorption—the rate of housing construction and sales—at Frog Pond will depend on a number of factors, including the actual rate of population and household growth in the metropolitan and market areas, economic conditions, when the areas are served with infrastructure and available for development, and the sales pace at Villebois, which will both complement and compete with Frog Pond.

Because of these variables, LCG created two different absorption forecasts, a “goal” or aggressive forecast, and a conservative forecast as shown in Table 18 below. The goal reflects developers’ and potentially the City’s desire for relatively quick absorption, and a build out of between nine and 13 years for the West Neighborhood, and 15 to 17 years for the East and South Neighborhoods. This goal forecast is only achievable if Wilsonville’s population and households continues to grow at the same pace as the city grew

during the 2000 to 2012 period (2.8 percent per year). If the city grows at the slower rate projected by Metro (1.8 percent per year), the conservative absorption rate is more likely.

Table 18. Frog Pond Absorption Forecasts

Neighborhood	Dwelling Units		Goal		Conservative	
	Scenario 1	Scenario 2	Absorption	Years to Buildout	Absorption	Years to Buildout
West	700	965	75	9 to 13	60	12 to 16
East and South	1,525	1,740	100	15 to 17	60	25 to 29
Total	2,225	2,705	175		120	

At peak development levels, when the West, East, and South Neighborhoods are developing and selling at the same time, LCG projects that annual absorption will be between 120 and 175 units per year. For purposes of comparison, about 125 homes were sold at Villebois in 2013, and there should be well over 200 sold at Villebois in 2014. However, the sales rate during the recession was much slower, generally between 40 and 80 units per year.

Assuming that the East and South Neighborhoods are available for development in 2022, the peak development and sales period for Frog Pond would take place between 2022 and 2032. Assuming that development begins in the West Neighborhood in 2017, it will be fully developed by about 2032.

Absorption is important for several reasons. A faster build out increases developers' return on investment, land values, and the systems development charges and other public revenues that help to fund infrastructure.

Retail Market Analysis

Figure 10 shows the Frog Pond Area and the key retail/commercial nodes that are located nearby. The commercial cluster to the north at the Elligsen Road interchange is anchored by Target and Costco; the cluster to the south includes retail centers on both sides of I-5 around Wilsonville Road, and includes anchor retailers such as Fred Meyer and Albertsons. One benefit that both of these clusters have over Frog Pond is the very high traffic, visibility, and access that comes with their location near I-5, and along major high volume arterial roads.

Figure 10. Frog Pond Retail Context



Source: Leland Consulting Group.

Retail at Frog Pond will need to consider these other retail centers, and establish an effective role and niche in order to compete effectively.

Frog Pond's location at the "crossroads" of Wilsonville/Stafford and Boeckman/Advance Roads is positive for potential retail, since retailers depend on visibility and accessibility to customers. "Interior" retail locations such as the retail centers at Villebois and Charbonneau can struggle due to lower levels of drive-by traffic, visibility, and access. Average daily traffic (ADT) levels of about 5,000 on the two arterials are shown on Figure 10. These are too low today to attract retail development, however, they will increase in the future as housing development takes place and the region grows and they reflect significant pass through traffic already. The City's Transportation System Plan forecasts that ADT on these two roads will approximately double in the next 20 years.

Figure 10 also shows the primary retail market area, within the dashed white line. This includes the Frog Pond study area, as well as some built out residential areas to the northwest, west, and southwest. There are currently about 1,150 households living in these existing neighborhoods, and these households are the most likely potential shoppers in addition to those living in Frog Pond proper.

Taking into account this existing stock of about 1,150 households and the approximately 2,500 new households likely to ultimately reside at Frog Pond, there will be about 3,650 households in the primary market area at full project build out in 2035. Retail spending from these households could be supplemented by drive-by shoppers, and by employees who work to the west. However, these secondary markets (drive-by and employees) are already well served by retail to the north and south, and close to those centers.

Types of Retail Centers

Retail is typically built in a series of standard formats, and while these vary somewhat, they maintain general consistency in terms of anchor tenants, size (square footage), trade area, and other features. Several types of retail centers are summarized below. A corner store, convenience center, or neighborhood center are the most appropriate types of retail for Frog Pond. The 3,650 households projected in the primary market area at Frog Pond suggests that a convenience center would likely be feasible, and a grocery-anchored neighborhood center would be a stretch. While neighborhood centers often have a two-mile trade area, such a large trade area is unlikely in this case given the competitive retailers nearby to the north and south.

Table 19. Types of Retail Centers

Retail Center Type	Gross Retail Area	Dwellings Necessary To Support	Average Trade Area	Anchor Tenants
Corner Store	1,500 - 3,000	1,000	Neighborhood	Corner store
Convenience Center	10,000 - 30,000	2,000	1 mile radius	Specialty food or pharmacy
Neighborhood Center	60,000 - 90,000	6 - 8,000	2 mile radius	Supermarket and pharmacy
Community Center	100,000 - 400,000	20,000+	5 mile radius	Junior department store

Sources: Urban Land Institute, Leland Consulting Group.

Corner stores and convenience centers may not be as desirable as a full neighborhood center. They often do not create the same sense of place or have the same quality of design as a neighborhood center, and they do not fulfill the full range of daily needs, particularly in terms of food. Larger regional and lifestyle center information is not shown, since those center types already exist at large freeway interchanges to the north and south and require very high volume transportation infrastructure, and are therefore not appropriate for Frog Pond.

Retail Demand

Retail demand was evaluated for two different future years and is shown in the two tables below. Table 20 shows retail demand in 2025, when the Frog Pond Area will be about halfway to full build out. In 2025, a typical grocery-anchored neighborhood center could not be supported. A typical grocery store is between 40,000 and 60,000 square feet, and this model shows support for only 27,200 square feet. A grocery is the anchor tenant for neighborhood centers, and developers will not build the rest of the center if the anchor is not feasible.

Table 20. Retail Demand and Supportable Retail Area: 2025

Retail Type	Future Demand (Retail Potential) \$ million	Current Supply (Retail Sales) \$ million	Spending Gap \$ million	Sales PSF	Capture Rate	Net New Demand Square feet
Furniture & Home Furnishings Stores	\$1.6	\$0.2	\$1.4	\$275	10%	500
Electronics & Appliance Stores	\$2.1	\$1.2	\$0.9	\$325	10%	300
Bldg Materials, Garden Equip. & Supply Stores	\$2.2	-	\$2.2	\$325	10%	700
Grocery Stores / Food and Beverage	\$13.7	-	\$13.7	\$400	80%	27,200
Health & Personal Care Stores	\$3.9	-	\$3.9	\$350	15%	1,650
Gasoline Stations	\$6.7	-	\$6.7	\$1,200	10%	600
Clothing & Clothing Accessories Stores	\$4.4	\$0.2	\$4.2	\$300	10%	1,400
Sporting Goods, Hobby, Book & Music Stores	\$2.0	\$0.1	\$1.9	\$275	10%	700
General Merchandise Stores	\$13.5	-	\$13.5	\$275	10%	4,900
Miscellaneous Store Retailers	\$2.5	0.53	\$1.9	\$225	20%	1,800
Food Services & Drinking Places	\$8.2	\$1.2	\$7.0	\$325	20%	4,400
Total						44,150

Sources: ESRI Business Analyst, Leland Consulting Group.

Table 21 shows retail demand in 2035, when the Frog Pond Area is expected to be near completion.

Table 21. Retail Demand and Supportable Retail Area: 2035

Retail Type	Future Demand (Retail Potential) \$ million	Current Supply (Retail Sales) \$ million	Spending Gap \$ million	Sales PSF	Capture Rate	Net New Demand Square feet
Furniture & Home Furnishings Stores	\$2.5	\$0.2	\$2.3	\$275	10%	800
Electronics & Appliance Stores	\$3.2	\$1.2	\$2.0	\$325	10%	600
Bldg Materials, Garden Equip. & Supply Stores	\$3.4	-	\$3.4	\$325	10%	1,000
Grocery Stores / Food and Beverage	\$21.0	-	\$21.0	\$400	80%	42,400
Health & Personal Care Stores	\$6.1	-	\$6.1	\$350	15%	2,550
Gasoline Stations	\$10.4	-	\$10.4	\$1,200	10%	900
Clothing & Clothing Accessories Stores	\$6.8	\$0.2	\$6.6	\$300	10%	2,200
Sporting Goods, Hobby, Book & Music Stores	\$3.1	\$0.1	\$3.0	\$275	10%	1,100
General Merchandise Stores	\$20.8	-	\$20.8	\$275	10%	7,600
Miscellaneous Store Retailers	\$3.8	0.53	\$3.3	\$225	20%	3,000
Food Services & Drinking Places	\$12.6	\$1.2	\$11.4	\$325	20%	7,000
Total						69,150

Sources: ESRI Business Analyst, Leland Consulting Group.

In 2035, a typical grocery-anchored neighborhood center is *potentially* feasible. The anchor grocery store is closer to feasibility, and the total square footage in demand is within the typical range of neighborhood centers shown in Table 19. This level of demand is close to the point at which retail developers, in many years, would likely conduct a closer and more detailed feasibility analysis that takes into account the strength of the competitive retail centers, household demographics, traffic patterns, potential tenants, and other factors at that time. Retail is a dynamic type of development, and formats can change significantly over a decade. For example, large stores selling videos, compact discs, and books were commonplace in neighborhood retail centers a decade ago; now they have all but disappeared; photo developers and travel agencies are also rare today.

Retail feasibility will depend on what if any retail is developed in other locations. For example, a new retail center located to the west of the Frog Pond Area on Boeckman Road would absorb demand from Frog Pond and potentially preclude new development in the study area. This analysis assumes that no new retail is built within a one-mile radius of the Boeckman and Wilsonville Road intersection.

Retailer developers may decide to wait until after 2035 to build significant retail, when additional Urban Reserve Areas such as the Elligsen Urban Reserve Area to the north may enter the UGB. Finally, buildable land will be necessary to accommodate new retail development.

Retail development in edge locations such as Frog Pond is challenging and requires the right mix of pass-by traffic and visibility, a dearth of strong competition in the primary market area, and adequate population. This also underscores the adage that "retail follows rooftops" and gets developed only when there is sufficient housing to support it.

Retail as Place Making

While it is often difficult to attract retail to new communities on the edge of metropolitan regions, retail often helps to achieve the goal of building a "complete community" where residents can easily meet their daily needs on foot or by car. Such local-serving retail also provides a social hub and

community-building function, and drives faster housing sales since this is seen as a top amenity by many prospective residents (see Community Preferences on page 17).

There are few good examples of successful, small-scale, local-serving retail in suburban locations. One example is at NorthWest Crossing, a master planned community on edge of the Bend metro area. Northwest Crossing contains about 35,000 square feet of retail, and though the space has for some periods had high vacancy rates, it provides a strong sense of place, and both a gateway and center for the community. The Northwest Crossing retail area is pictured below hosting a farmers market.



Appendices

Selected References

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- *What Americans Really Want*, Arthur C. Nelson, Metropolitan Research Center, 2011.

Wilsonville Demographic Tapestry Segments

As shown in Table 22 below, the City of Wilsonville is dominated by three main tapestry segments—Enterprising Professionals, Silver and Gold, and Up and Coming Families—which together comprise 95 of the city's total population. ESRI estimates that the Enterprising Professionals group alone accounts for 65 percent of the city's population, and is therefore 34 times more prevalent than in the nation at large.

Table 22. City of Wilsonville's Primary Tapestry Segments

Tapestry Segment	Percent of Households		
	City of Wilsonville	United States	Prevalence Compared to US
Enterprising Professionals	65%	2%	34
Silver and Gold	19%	1%	19
Up and Coming Families	12%	4%	3
Urban Chic	4%	1%	3
Exurbanites	1%	3%	0
All others	0%	89%	NA

Source: ESRI, Leland Consulting Group.

Enterprising Professionals

65% of Wilsonville Population

Demographic

- Young, educated, single, married, working professionals, residents of Enterprising Professionals neighborhoods have a median age of 33.2 years.
- Forty-three percent of the households are singles who live alone or share housing with roommates, and 43 percent are married couple families.
- With an annual household growth of 1.95 percent per year since 2000, the households in this segment comprise approximately two percent of total U.S. households.
- The diversity of the population is similar to that of the U.S. Most of the residents are Caucasian; however, 12.4 percent are Asian.

Socioeconomic

- Median household income is \$61,151.
- Ninety percent of the households earn income from wages and salaries; 39 percent receive income from investments.
- This is an educated group: approximately half of the population aged 25 years and older hold a bachelor's or graduate degree; more than three in four have attended college.
- These working professionals are employed in various jobs, especially in management, finance, computer, sales, and office/administrative support.

Residential

- Enterprising Professionals residents move frequently to find growth opportunities and better jobs, especially in cities such as Chicago, Atlanta, and Seattle.
- Forty-six percent of the households are located in the South, 29 percent are in the West, and 20 percent are in the Midwest.
- They prefer to own instead of rent in newer neighborhoods of townhouses or apartments. The median home value is \$239,007.
- For those who rent, the average gross rent is 36 percent higher than the U.S. average.

Preferences

- They are young and mobile with growing consumer clout.
- Those who rent hold renter's insurance policies.
- They rely on cell phones and e-mail to stay in touch.
- They go online to download videos and music, track their investments, and shop for items, including personal computers and software.
- They own laptops, video game systems, and digital camcorders. They love to travel abroad and in the U.S. often.
- They play video games, visit theme parks, jog, and swim. They read computer, science, and technology magazines and listen to alternative, public-all-talk, and sports radio.
- They eat out at Cheesecake Factory and Chili's Grill and Bar. They shop for groceries at stores such as Publix and Albertson's.

Silver and Gold

19% of Wilsonville Population

Demographic

- With a median age of 61.3 years, Silver and Gold residents are the second oldest of the Tapestry segments.
- More than 70 percent are aged 55 years or older.
- Most residents have retired from professional occupations. Half of the households are composed of married couples without children.
- This segment is small, less than one percent of all U.S. households; however, annual household growth is 0.66 percent since 2000. Residents of these neighborhoods are not ethnically diverse; 93 percent of them are Caucasian.

Socioeconomic

- These are wealthy, educated seniors. Their median household income is \$62,157.
- Fifty-six percent of the households still earn wages or salaries, half collect Social Security benefits, 63 percent receive investment income, and 35 percent collect retirement income.
- The percentage of those who work from home is higher than the U.S. worker percentage; nearly one-fourth of employed residents are self-employed, also higher than the U.S. level.

Residential

- Their affluence enables them to relocate to sunnier climates. More than 60 percent of these households are in the South, mainly in Florida.
- One-fourth of this Tapestry segment is located in the West, mainly in California and Arizona. Neighborhoods are exclusive with a home ownership rate of 81 percent.
- The median home value is \$290,103. Silver and Gold ranks second of the Tapestry segments for the percentage of seasonal housing owners.
- Because these seniors have moved to newer single-family homes, they are not living in the homes where they raised their children.

Preferences

- Silver and Gold residents have the free time and resources to pursue their interests.
- They travel domestically and abroad including cruise vacations. They are also interested in home improvement and remodeling projects.
- Although they own the tools and are interested in home improvement and remodeling projects, they are more likely to contract for remodeling and housecleaning services.
- Active in their communities, they join civic clubs, participate in local civic issues, and write to newspaper or magazine editors. They prefer to shop by phone from catalogs such as L.L. Bean and Lands' End.
- Golf is more a way of life than just a leisure pursuit. They play golf, attend tournaments, and watch The Golf Channel. They also go to horse races, bird watching, saltwater fishing, and power boating. They eat out, attend classical music performances, and relax with a glass of wine.
- Favorite restaurants include Outback Steakhouse, Cracker Barrel, and Applebee's. Silver and Gold residents are avid readers of biography and mystery books and watch numerous news programs and news channels such as Fox News and CNN. Favorite non-news programs include detective dramas.

Up and Coming Families

12% of Wilsonville Population

Demographic

- With an annual household growth rate of 1.69 percent, Up and Coming Families represents Tapestry's second highest household growth market.
- A mix of Generation Xers and Baby Boomers with a median age of 32.8 years, this segment is the youngest of Tapestry's affluent family markets.
- Residents of these neighborhoods are young, affluent families with younger children.
- Eighty percent of the households are families. Most of the residents are white; however, diversity is increasing as the segment grows.

Socioeconomic

- Beginning their careers, residents of Up and Coming Families are earning above-average incomes. The median household income is \$73,906, higher than the national median.
- Two-thirds of the residents aged 25 years and older have attended college; more than one in five holds a bachelor's degree.
- Ninety-one percent of households earn income from wages and salaries.
- Although half of the households have children, they also have working parents.

Residential

- In the suburban outskirts of mid-sized metropolitan areas with populations higher than 250,000, approximately half of Up and Coming Families neighborhoods are concentrated in the South, the other half in the West and Midwest.
- Most residents live in new single-family housing; with a median home value of \$193,161. More than half the housing units were built in the last 10 years.
- Homeownership is at 80 percent.

Preferences

- Family and home dictate the products these residents buy.
- Many are beginning or expanding their families, so baby equipment, children's clothing, and toys are essential purchases.
- Because many are first-time homeowners, basic household furniture and lawn fertilizer, weed control, and insecticide products are important.
- Car loans and mortgage payments are major household budget items. They are most likely to own or lease an SUV or a minivan.
- They eat out at family restaurants, especially on the weekends, and buy fast food at the drive-through or for takeout.
- They play softball, take the kids to the zoo, and visit theme parks (generally Sea World or Disney World) where they make good use of their digital camera or camcorder.
- They rent comedy, family, and action/adventure DVDs. Cable station favorites include Country Music Channel, ESPN News, The Learning Channel, and the Disney Channel. They listen to country, soft rock, and contemporary hit radio.



FROG POND AREA PLAN

Creating a great community

Appendix B: Future Transportation Analysis memorandum

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Transportation Costs Associated with Frog Pond Area Plan (Including Assumptions)

Project	Cost Estimate	Funding Source/Proportionate Share (FP = Frog Pond)							Comments/Assumptions
		City of Wilsonville	West	East	South	North	Clackamas County	Regional	
UU-01 Boeckman Road Bridge Improvements (Option A)	\$12,200,000	\$3,700,000	-	-	-	-	-	\$8,500,000	OBEC cost estimate prepared for City of Wilsonville (2014). Metro RTP includes \$8,500,000 for project with 2018-24 funding timeframe.
UU-02 (Part 1) Boeckman Road Urban Upgrade	\$1,600,000	\$800,000	\$800,000	-	-	-	-	-	Portion of project from TSP that only include Boeckman Road urban upgrade; north side is developer's responsibility and south side is City's
UU-02 (Part 2) Boeckman/ Stafford Traffic Signal	\$500,000	-	\$70,000	\$180,000	\$125,000	\$125,000	-	-	Portion of project from TSP that includes signal at Boeckman/Advance/ Stafford/ Wilsonville Rd. Proportionate share methodology based on amount of p.m. peak hour traffic through intersection, which included most of South Neighborhood traffic (and half of South Neighborhood's share allotted to school site)
UU-06 Stafford Road Urban Upgrade (3 lane plus extra ROW)	\$4,200,000	-	\$2,100,000	\$2,100,000	-	-	-	-	Assumes 3-lane cross-section and traffic signal at main project access covered by developer (half East Neighborhood and half West Neighborhood) and additional 24 feet of ROW (12 feet on each side) dedicated by the developer for future widening to 5-lane cross-section. It may also behoove the City to advance some funding from the 5-lane upgrade to add design features that would make for an easier transition to the 5-lane cross-section.
Future Stafford Road Upgrade to 5 Lanes	\$6,825,000	\$6,825,000	-	-	-	-	-	-	Widening to 5-lane cross-section (assumes 3-lane cross-section already built and ROW previously obtained)
Potential Single-Lane Roundabout on Stafford Road	\$600,000	-	\$300,000	\$300,000	-	-	-	-	If desired, a single-lane roundabout could be installed at one of the access on Stafford Road (with the exception of where the traffic signal is needed) in conjunction with the 3-lane cross-section. The cost is assumed to be split evenly between the developers.
Widening Potential Roundabout to Dual Lanes with 5-Lane Upgrade	\$400,000	-	\$200,000	\$200,000	-	-	-	-	If a roundabout is installed, then a dual-lane roundabout would be required when Stafford Road is widened to 5-Lane cross-section.
UU-P1 Advance Road Urban Upgrade (Extended to Full Site Frontage)	\$4,350,000	\$1,000,000	-	\$1,175,000	\$2,175,000	-	-	-	Based on upgrading the existing road to a 3-lane cross section with sidewalks and bike lanes, which would be similar for either a Collector or Minor Arterial. Breakdown assumes City covers south side of road adjacent to park as well as area outside Frog Pond Area
RT-01A Boeckman Creek Trail (West Neighborhood)	\$850,000	\$570,000	\$280,000	-	-	-	-	-	Revised based on new alternative trail alignments. Bike and Ped plan estimate per mile used as base cost, adjusted by Seattle CCI, and then calculated by revised trail distance (north of Boeckman Road only)
BPA Easement Trail (East Neighborhood)	\$670,000	\$450,000	-	\$220,000	-	-	-	-	Revised based on new alternative trail alignments and same approach as RT-01A
South Neighborhood Trail	\$700,000	\$460,000	-	-	\$240,000	-	-	-	Revised based on new alternative trail alignments and same approach as RT-01A
LT-P5 New School Site Trail (South Neighborhood)	\$700,000	\$700,000	-	-	-	-	-	-	From TSP (Additional Planned Projects); does not include land cost
SI-03 Stafford Rd/65 th Ave Intersection Improvements	\$5,500,000	\$1,000,000	-	-	-	-	\$4,500,000	-	Clackamas County TSP includes a roundabout with a cost estimate of \$5,500,000. It is a Tier 1 recommendation. Wilsonville TSP has cost estimate of \$2,000,000, with a 1,000,000 City contribution.
West Neighborhood Collectors	\$9,510,000	\$1,585,000	\$7,925,000	-	-	-	-	-	Assumes reuse of portion of Frog Pond Lane and cost of \$1,500/ft to upgrade. \$3,000/ft cost for new roadway
East Neighborhood Collectors	\$8,160,000	\$1,360,000	-	\$6,800,000	-	-	-	-	Cost based on lineal foot estimate of \$3,000/ft
South Neighborhood Collectors	\$3,900,000	\$450,000	-	-	\$2,650,000	\$800,000	-	-	Assumes reuse of 60 th Avenue and cost of \$1,500/ft to upgrade. A portion of this would be the School District's responsibility
Total	\$60,665,000	\$18,900,000	\$11,675,000	\$10,975,000	\$5,190,000	\$925,000	\$4,500,000	\$8,500,000	



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MEMORANDUM

DATE: September 24, 2014

TO: Project Team

FROM: Scott Mansur, P.E., PTOE
Brad Coy, P.E.
Halston Tuss, E.I.T.

SUBJECT: Frog Pond Area Plan – Future Transportation Analysis

P14033-000

The Frog Pond Area Plan, led by the City of Wilsonville, will establish a vision for the 500-acre Frog Pond area, and define expectations for the type of community it will be in the future. The project team has developed a set of three land use and transportation alternatives for consideration by the Frog Pond Planning Task Force, the public, stakeholders, and city policy-makers. This memorandum is one of several that are intended to provide information on the performance of the three alternatives to enable the Task Force, public, and policy-makers to make informed recommendations and decisions about a preferred alternative.

This memorandum provides information about the transportation performance and tradeoffs associated with the three land use and transportation alternatives currently being considered for the Frog Pond Area Plan. The purpose is to inform the development of a preferred alternative by local stakeholders and decision-makers. The preferred alternative is expected to take the best elements from each of the three alternatives now being studied and combine them to develop an area plan that will best implement the vision statement and guiding principles for the project.

The sections of this memorandum include the executive summary, descriptions of the land use and transportation alternatives, and a transportation evaluation and comparison of alternatives.

Executive Summary

There are three land use and transportation alternatives currently being evaluated for the Frog Pond Area Plan. The primary factor that differentiates these alternatives is the arrangement and density of residential land use (high, medium, low) and the location of a neighborhood commercial center. In addition, there are two street frameworks being considered (grid, organic). Additional details regarding these three alternatives are provided in the *Alternatives Evaluation Summary* memorandum associated with this project.¹

To understand how the transportation system would be affected by the three alternatives, various aspects were considered and analyzed. These include traffic volumes and operations, functional classifications, street design, multimodal connectivity, transit routing and coverage area, and planning level cost estimates.

¹ Draft Alternatives Evaluation Summary, September 11, 2014.



Traffic Volumes and Operations

Future traffic forecasts were performed for a 2035 horizon year based on Metro population and land use assumptions for the region, with the exception of the Frog Pond Area Plan, which was revised based on the proposed land uses. The majority of traffic growth between 2014 and 2035 is expected to occur to the north of Frog Pond because of additional growth in the area and the increasing importance of the Stafford Road connection to I-205.

Future intersection operations were analyzed for the site accesses and major intersections in the Frog Pond Area vicinity, and Stafford Road can perform adequately as a three-lane roadway; however, it will be approaching its capacity and the City should be prepared to widen it to 5 lanes in the future. To accommodate safe and efficient operations for traffic turning into and out of the East and West Neighborhoods, it is important to have a traffic signal at one of the Stafford Road accesses. Because of the high volumes to and from the north and desired traffic signal spacing, the preferred signal location is the middle access (rather than the south access). This middle access provides good connectivity to the heart of the East and West Neighborhoods and aligns with Collector streets as assumed in the Option A and C grid street framework. Even with the traffic signal, the unsignalized access north of the signal is expected to exceed the City of Wilsonville's level of service D performance standard due to increased delay. Therefore, drivers wanting to turn left onto Stafford Road are likely to reroute to the signalized access.

Intersection operations were also analyzed at key off-site study intersections, including both I-5 interchange areas, the Stafford Road/65th Avenue/Elligsen Road junction, and other key east side intersections. With the completion of all High Priority Projects identified in the Wilsonville TSP, these areas are expected to meet applicable mobility targets and operating standards through the year 2035 as required by the City of Wilsonville, Clackamas County, and the Oregon Department of Transportation (ODOT). This analysis assumes growth consistent with Metro forecasts, build out of the current Wilsonville urban growth boundary, and a Maximum Build Out scenario for the Frog Pond Area that exceeds the amount of growth identified in any of the three land use alternatives currently under consideration.

Functional Classifications and Street Design

As a Major Arterial, Stafford Road is envisioned to eventually become a five-lane roadway. While a three-lane roadway is expected to provide adequate capacity over the 20-year planning horizon, Stafford Road would be approaching its three-lane capacity limit. By acquiring adequate right-of-way for the future five-lane facility consistent with the Major Arterial classification and designing a three-lane roadway that can easily be widened, the City would ensure it can support future development in its northeast area and also can have improved access to the future growth areas.

Only a portion of Advance Road is currently in the City's urban growth boundary (UGB), and the Wilsonville TSP currently designates this section as a Collector street. As a Collector, Advance Road can accommodate a greater amount of access, which would be beneficial if a retail development was located at the corner of the Advance Road-Boeckman Road/SW Stafford Road-Wilsonville Road intersection, and also allows more points of connection to the future park and school site. As a Collector, the standard would also support on-street parking, which may be beneficial to the City adjacent to the proposed park and retail areas. The Collector classification

would include lower design speeds and a better pedestrian environment that will be beneficial to the high level of pedestrian activity that would be expected near the park and schools.

The major streets through the East, West, and South Neighborhoods are being proposed as Collectors, which would include bike facilities (dedicated bike lanes or shared lanes) and on-street parking.

Multimodal Connectivity

Both the grid and organic street frameworks have very similar transportation networks with basic features that support multimodal connectivity. A mix of streets, bicycle facilities, and trails connect to the various land uses within the Frog Pond area (including the school site south of Advance Road, which should have safe routes connecting to the adjacent neighborhoods) and take advantage of natural and man-made features (including regional trails along Boeckman Creek and the BPA corridor). In addition, urban upgrades (including adding sidewalks, bike lanes, center turn lanes) are needed for Boeckman Road, Stafford Road, and Advance Road in conjunction with the development to fill in the pedestrian and bicycle network and connect to adjacent parts of Wilsonville.

The street networks for all three options connect internally as well as to Boeckman Road, Stafford Road, and Advance Road at locations that will help distribute traffic while also providing convenient access to the signalized access on Stafford Road (particularly for those needing to make a left turn during peak congestion periods) and connections to the existing neighborhood to the south. The layout of the grid network does a particularly good job of providing internal connections that support circulation and access. Because the neighborhood Collector is located farther north in the grid network, it also provides better transit coverage on the north end of Frog Pond.

Planning Level Cost Estimates

Planning level cost estimates were prepared for the transportation improvements associated with the Frog Pond Area Plan. No substantial differences exist between the transportation network and improvement needs of the three alternatives; therefore, the same cost estimates are considered applicable. The pie chart in Figure 1 at right shows the estimated breakdown in costs between the various funding sources (FP = Frog Pond). Detailed project cost breakdowns are provided in Table 7 and in the appendix.

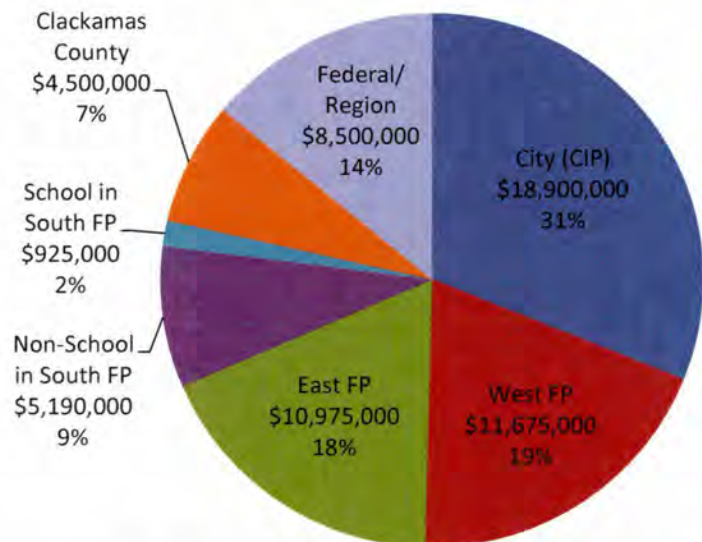


Figure 1: Cost Breakdown of Transportation Improvements by Funding Source or Proportionate Share of Frog Pond Neighborhood



Descriptions of Land Use and Transportation Alternatives

There are three land use and transportation alternatives currently being evaluated. The primary factor that differentiates these alternatives is the arrangement and density of residential land use (high, medium, low) and the location of a neighborhood commercial center. In addition, there are two street frameworks being considered (grid, organic). While the street framework is independent from the land uses, each alternative assumes one of the street frameworks to facilitate analysis. Table 1 lists the land use assumptions and street framework being analyzed for the three alternatives.

Table 1: Land Use and Transportation Alternatives Being Analyzed

Alternative	Residential Land Use	Households	Employees			Street Framework
			Retail	Non-Retail	Total	
Option A	Low	1,773	150	123	273	Grid
Option B	Medium	2,357	150	123	273	Organic
Option C	High	2,742	150	123	273	Grid

Additional details regarding these three alternatives are provided in the *Alternatives Evaluation Summary* memorandum associated with this project.² This memo also includes figures showing the three alternatives, along with their assumed land uses and street framework.

Transportation Evaluation and Comparison of Alternatives

The three land use and transportation alternatives were evaluated for multiple transportation-related considerations, including the following:

- Traffic volumes and operations (project vicinity)
- Traffic volumes and operations (off-site intersections and I-5 Interchange areas)
- Functional classifications
- Street design (Arterial and Collector roadways)
- Multimodal connectivity
- Transit routing and coverage area

Traffic Volumes and Operations (Project Vicinity)

Future traffic volumes and operations were evaluated for the three alternatives to determine how well the City's transportation system would support the long term build-out of the Frog Pond area and whether there would be different improvement needs depending on the area's land use densities and street framework. Based on the analysis provided in the existing and baseline transportation analysis memorandum,³ it was determined that a traffic signal would be needed to accommodate safe and efficient operations at the primary Stafford Road access point into the East and West Frog Pond Neighborhoods, particularly to serve the left turning traffic into

² Draft Alternatives Evaluation Summary, September 11, 2014.

³ Frog Pond Area Plan Existing and Baseline Transportation Analysis, DKS Associates August 8, 2014.



and out of the site. Therefore, the analysis in this memorandum assumes a traffic signal but considers two different locations for its placement based on the street frameworks previously discussed.

For analysis purposes, the Frog Pond Area Plan is assumed to experience full build-out by the year 2035, which is the future horizon year for both the Metro Regional Transportation Plan (RTP)⁴ and the Wilsonville Transportation System Plan (TSP).⁵ The future 2035 traffic volumes were forecasted for the study area using a travel forecast model developed specifically for Wilsonville. The model applies trip generation and trip distribution data directly taken from the Metro Gamma regional travel demand forecast model, but adds additional detail to better represent local travel conditions and routing within Wilsonville. In particular, revisions were made to the model's land use assumptions for the transportation analysis zones (TAZs) that comprise the Frog Pond Area Plan to account for the three proposed land use alternatives. In addition, the neighborhood street network and location of the previously mentioned traffic signal on Stafford Road were accounted for in the trip routing estimates.

The p.m. peak hour traffic volumes, lane geometries, and intersection operating conditions are shown in the following figures:

- Figure 2 (Low with grid street network)
- Figure 3 (Medium with organic street network)
- Figure 4 (High with grid street network).

These figures also show the location of Collector roads with neighborhood characteristics (i.e. bike facilities and on-street parking) throughout the Frog Pond area to provide multimodal connectivity and serve as the backbone for traffic, bicycles and pedestrians entering and exiting each of the neighborhood areas.

Table 2 provides the intersection operating conditions in table format for each of the three alternatives. The installation of a traffic signal at the SW Advance Road-Boeckman Road/SW Stafford Road-Wilsonville Road intersection and the widening of Stafford Road to three lanes (a travel lane in each direction plus a center turn lane) are identified in the Wilsonville TSP as High Priority Projects and are also accounted for in the analysis.

As shown on the figures and in Table 2, the unsignalized accesses along Stafford Road (particularly north of the signalized access) are expected to exceed the City's level of service D performance standard. The primary reason is the high through volumes that contribute to the delay experienced by side street vehicles turning left. Providing left-turn lanes on the side street approaches would be one way to help reduce delays; however, it is not expected to be sufficient to achieve LOS D operations at all accesses during the p.m. peak hour.

Because one of the accesses along Stafford Road would be signalized, it is likely that many of the residents and drivers familiar with the area would choose to turn left at the traffic signal during the peak periods, particularly with Collector/Local Street connectivity that provides good access to the heart of the East and West Neighborhoods. Traffic routing to this signal was assumed in the analysis; however, even a few left-turning vehicles at some of the other accesses would trigger delays that exceed the City's standard. One potential

⁴ *Regional Transportation Plan*, Adopted by Metro Council (Exhibit A to Ordinance No. 14-1340), July 17, 2014.

⁵ *Wilsonville Transportation System Plan*, Adopted by Council (Ordinance 718), June 17, 2013.



option to eliminate failing left turns would be to force traffic to use the traffic signal by installing a median that only allows right-out movements. However, this limits connectivity for all modes of travel and may not be necessary as lower delays would be experienced during off-peak hours.

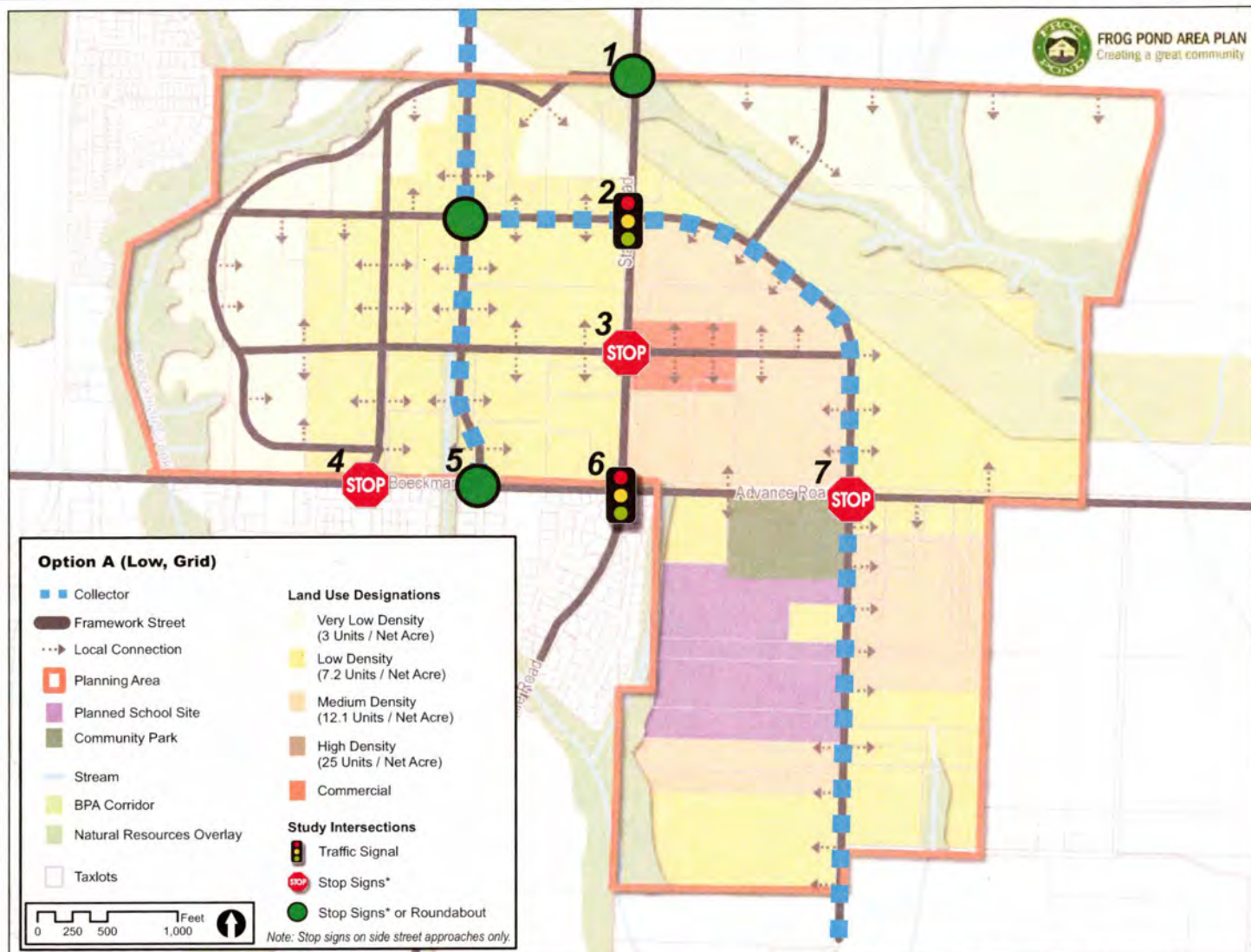
Another option that could be considered further to reduce delay to side street traffic would be to install roundabouts at key access points (except where the traffic signal is recommended) as well as at the intersection of two Collector streets in the West Neighborhood (see locations shown on Figure 2, Figure 3, and Figure 4). There are many tradeoffs associated with roundabouts that should be considered when determining whether to select them as the preferred traffic control at any of the potential locations. Some of the advantages and disadvantages are listed below:

Advantages of Installing a Roundabout

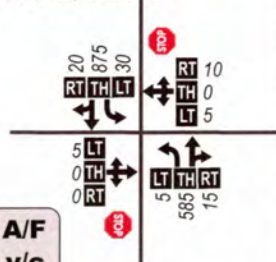
- Roundabouts can help reduce delay for side street traffic because no approach is given more priority than another. Therefore, it is likely that the northern access points onto Stafford Road would no longer be expected to operate at LOS F in the future scenarios.
- A roundabout at the northern access point on Stafford Road would provide a clear gateway between the rural and urban environment. This location is under the BPA power line easement and would have underutilized land available to accommodate the larger footprint that roundabouts require.
- Roundabouts can help to slow traffic speeds on the roadway. Typical circulating speeds for a roundabout are 25 miles per hour (mph), which would help to calm traffic in the vicinity of the new development area.

Disadvantages of Installing a Roundabout

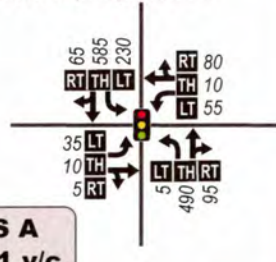
- Because all approaches are treated the same and must yield to traffic within the roundabout, this would introduce delay for traffic on the major approach.
- Roundabouts are more difficult for large trucks to navigate and may result in complaints from the freight community and farmers.
- Roundabouts can be difficult for pedestrians and bicyclists to cross because there is no exclusive stop phase. The lack of straight paths and clear turns can also be difficult for the vision impaired.
- Roundabouts require a larger footprint, which would require additional right-of-way dedication from the developers.
- Roundabouts are significantly more expensive than the alternative being considered for these locations (i.e., unsignalized intersections that would only require the installation of a few stop signs).
- Using different traffic control on SW Stafford Road and Boeckman Road can create uncertainty and negatively affect user expectation, which affects safety. This disadvantage does not affect the potential location within the West Neighborhood.



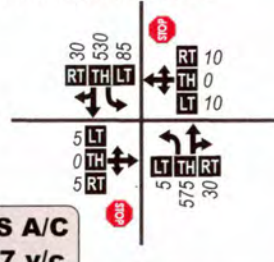
1. Stafford Rd/Kahle Rd



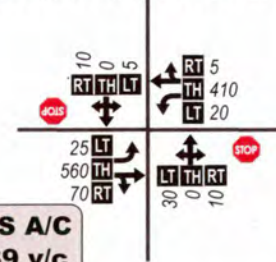
2. Stafford Rd/Frog Pond Ln



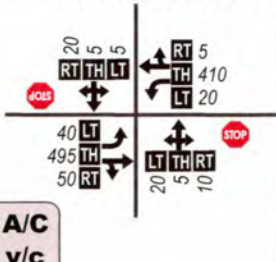
3. Stafford Rd/South Access



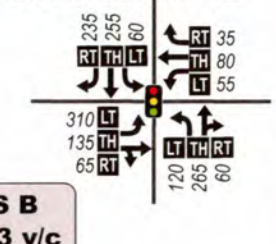
4. Boeckman Rd/Laurel Glen St



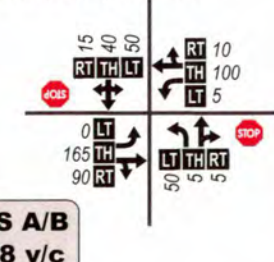
5. Boeckman Rd/Willow Creek Dr



6. Advance Rd-Boeckman Rd/ Stafford Rd-Wilsonville Rd



7. Advance Rd/60th Ave



LEGEND (Operations)

LOS A/A - Level of Service
0.00 v/c - Volume-to-Capacity

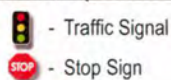
Signalized Intersections

- Level of Service of Intersection
- Volume-to-Capacity of Intersection

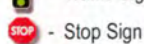
Stop Controlled Intersections

- Level of Service of Major/Minor Street
- Volume-to-Capacity of Worst Movement

LEGEND (Traffic Control and Volumes)



- Traffic Signal



- Stop Sign



- Lane Configuration

000 - PM Peak Hour Traffic Volumes

LT TH RT - Volume Turn Movement
Left-Thru-Right

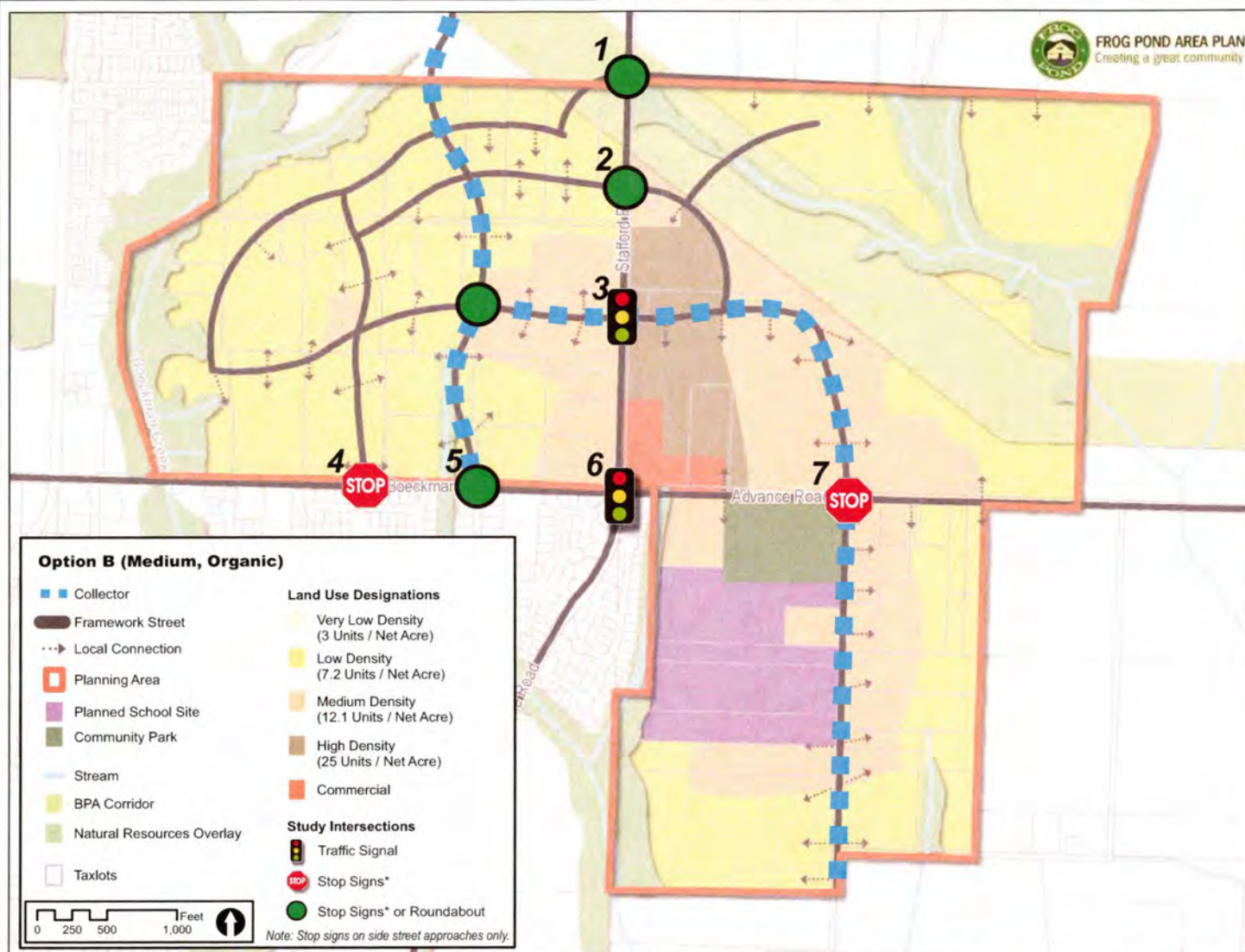
DKS



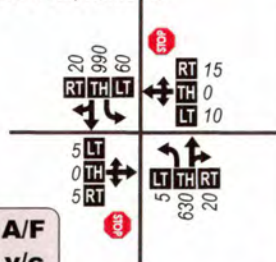
No Scale

Figure 2

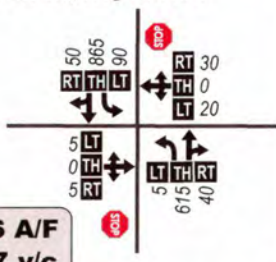
OPTION A (LOW, GRID)
2035 PM PEAK HOUR TRAFFIC
VOLUMES AND OPERATIONS



1. Stafford Rd/Kahle Rd



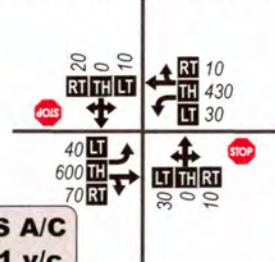
2. Stafford Rd/Frog Pond Ln



3. Stafford Rd/South Access



4. Boeckman Rd/Laurel Glen St



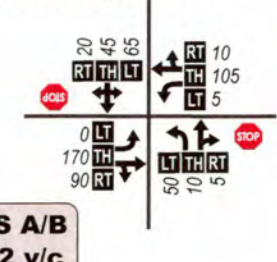
5. Boeckman Rd/Willow Creek Dr



6. Advance Rd-Boeckman Rd/ Stafford Rd-Wilsonville Rd



7. Advance Rd/60th Ave



LEGEND (Operations)

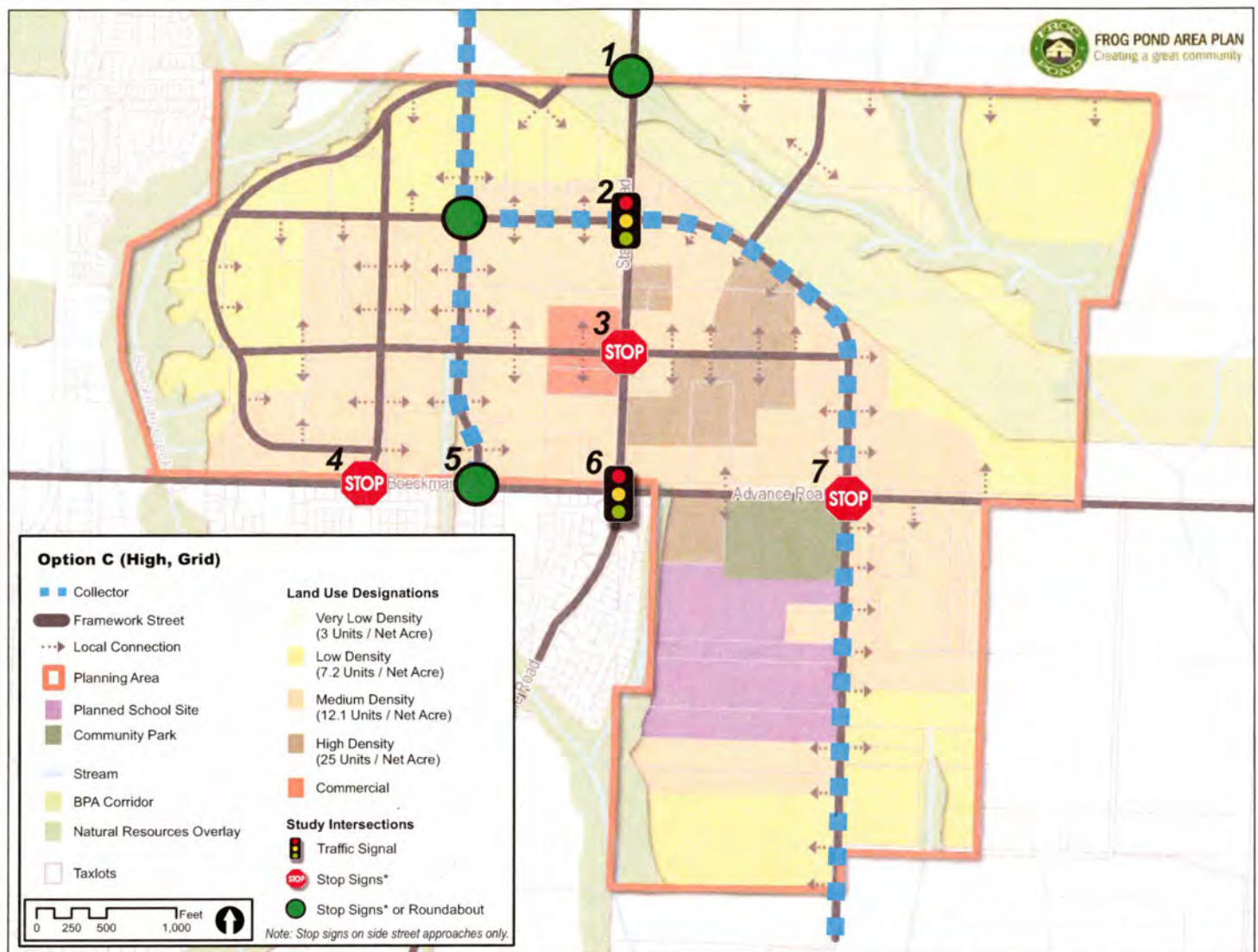
- LOS A/A** - Level of Service
0.00 v/c - Volume-to-Capacity
- Signalized Intersections**
- Level of Service of Intersection
 - Volume-to-Capacity of Intersection
- Stop Controlled Intersections**
- Level of Service of Major/Minor Street
 - Volume-to-Capacity of Worst Movement

LEGEND (Traffic Control and Volumes)

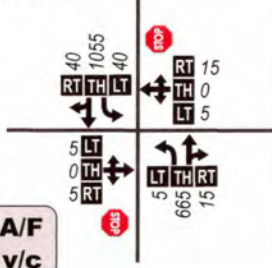
- Traffic Signal
 - Stop Sign
- Lane Configuration
 - Volume Turn Movement
000 - PM Peak Hour Traffic Volumes



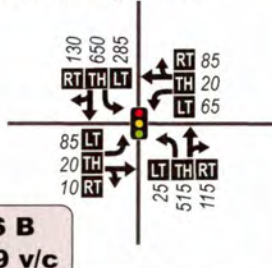
Figure 3
OPTION B (MEDIUM, ORGANIC)
2035 PM PEAK HOUR TRAFFIC
VOLUMES AND OPERATIONS



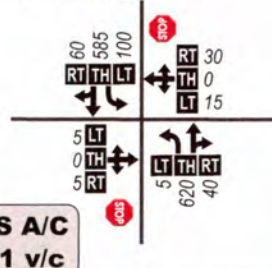
1. Stafford Rd/Kahle Rd



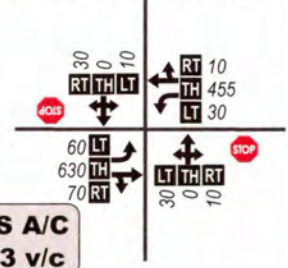
2. Stafford Rd/Frog Pond Ln



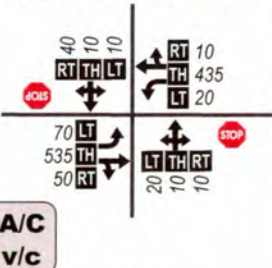
3. Stafford Rd/South Access



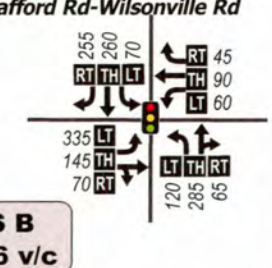
4. Boeckman Rd/Laurel Glen St



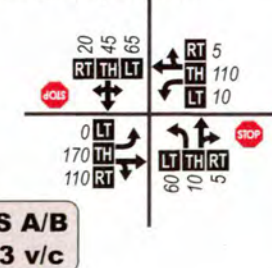
5. Boeckman Rd/Willow Creek Dr



**6. Advance Rd-Boeckman Rd/
Stafford Rd-Wilsonville Rd**



7. Advance Rd/60th Ave



LEGEND (Operations)

LOS A/A - Level of Service
0.00 v/c - Volume-to-Capacity

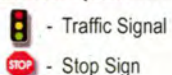
Signalized Intersections

- Level of Service of Intersection
- Volume-to-Capacity of Intersection

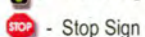
Stop Controlled Intersections

- Level of Service of Major/Minor Street
- Volume-to-Capacity of Worst Movement

LEGEND (Traffic Control and Volumes)



- Traffic Signal



- Stop Sign



- Lane Configuration

000 - PM Peak Hour Traffic Volumes

LT TH RT - Volume Turn Movement
Left-Thru-Right

DKS



Figure 4

OPTION C (HIGH, GRID)
**2035 PM PEAK HOUR TRAFFIC
VOLUMES AND OPERATIONS**



Table 2: 2035 P.M. Peak Hour Intersection Operating Conditions (Low, Medium, High)

Intersection ^a	Traffic Control	Operating Standard	PM Peak Hour			Meets Standard?
			Delay	LOS	V/C	
Option A (Low, Grid)						
1) Stafford Rd/Kahle Rd (North)	Two-Way Stop	LOS D	55.1	A/F	0.37	No
2) Stafford Rd/Frog Pond Ln (Center)	Signalized	LOS D	9.3	A	0.51	Yes
3) Stafford Rd/South Access	Two-Way Stop	LOS D	23.0	A/C	0.37	Yes
4) Boeckman Rd/Laurel Glen St (West)	Two-Way Stop	LOS D	15.8	A/C	0.39	Yes
5) Boeckman Rd/Willow Creek Dr (East)	Two-Way Stop	LOS D	15.0	A/C	0.34	Yes
6) Advance Rd-Boeckman Rd/ Stafford Rd-Wilsonville Rd	Signalized	LOS D	18.2	B	0.53	Yes
7) Advance Rd/60 th Ave	Two-Way Stop	LOS D	12.5	A/B	0.18	Yes
Option B (Medium, Organic)						
1) Stafford Rd/Kahle Rd (North)	Two-Way Stop	LOS D	53.3	A/F	0.24	No
2) Stafford Rd/Frog Pond Ln (Center)	Two-Way Stop	LOS D	55.6	A/F	0.57	No
3) Stafford Rd/South Access	Signalized	LOS D	6.9	A	0.65	Yes
4) Boeckman Rd/Laurel Glen St (West)	Two-Way Stop	LOS D	17.2	A/C	0.41	Yes
5) Boeckman Rd/Willow Creek Dr (East)	Two-Way Stop	LOS D	16.1	A/C	0.36	Yes
6) Advance Rd-Boeckman Rd/ Stafford Rd-Wilsonville Rd	Signalized	LOS D	19.6	B	0.53	Yes
7) Advance Rd/60 th Ave	Two-Way Stop	LOS D	12.7	A/B	0.22	Yes
Option C (High, Grid)						
1) Stafford Rd/Kahle Rd (North)	Two-Way Stop	LOS D	59.4	A/F	0.68	No
2) Stafford Rd/Frog Pond Ln (Center)	Signalized	LOS D	14.7	B	0.69	Yes
3) Stafford Rd/South Access	Two-Way Stop	LOS D	23.5	A/C	0.41	Yes
4) Boeckman Rd/Laurel Glen St (West)	Two-Way Stop	LOS D	18.9	A/C	0.43	Yes
5) Boeckman Rd/Willow Creek Dr (East)	Two-Way Stop	LOS D	17.3	A/C	0.36	Yes
6) Advance Rd-Boeckman Rd/ Stafford Rd-Wilsonville Rd	Signalized	LOS D	19.8	B	0.56	Yes
7) Advance Rd/60 th Ave	Two-Way Stop	LOS D	13.4	A/B	0.23	Yes
Signalized Intersections:		Two-Way Stop Intersections:				
Delay = Average Stopped Delay per Vehicle (sec)		Delay = Average Stopped Delay per Vehicle (sec) at Worst Movement (typically a minor movement)				
LOS = Level of Service of Intersection		LOS = Level of Service of Major Street/Minor Street				
V/C = Volume-to-Capacity Ratio of Intersection		V/C = Volume-to-Capacity Ratio of Worst Movement				

^a Intersection numbers correspond with volume figures: Figure 2, Figure 3, and Figure 4.



Traffic Volumes and Operations (Nearby Intersections and I-5 Interchange Areas)

Traffic volumes and operations were also analyzed for a few key nearby intersections as well as Wilsonville’s two I-5 interchange areas. Analysis at the interchange ramps was performed previously as a sensitivity analysis in the existing and baseline transportation analysis memorandum⁶ to determine the expected effects of the projected maximum reasonable build out of the Frog Pond study area. Table 3 shows the land use assumptions for the “Maximum Build Out” scenario, which was intentionally selected to be as high as the team believed could be feasible for the Frog Pond area in order to test “reasonable worst case” impacts. These land use assumptions are similar to—but slightly higher than—the land use assumptions in Option C (High); therefore, it is sufficiently conservative to apply the results to all three alternatives.

Table 3: Land Use Estimates for Future 2035 Scenarios

Future 2035 Scenario	Households	Employees		
		Retail	Non-Retail	Total
Maximum Build Out	2,812	188	183	371

Table 4 provides the operating conditions for the Maximum Build Out scenario at both the highway interchanges (as previously reported) and other key nearby intersections that were not evaluated in the previous sensitivity analysis. It lists the estimated average delay, level of service (LOS), and volume to capacity (v/c) ratio at each off-site study intersection based on the *2000 Highway Capacity Manual* methodology.⁷ This analysis assumes improved intersection geometries associated with all High Priority Projects included in Wilsonville’s TSP. Specific High Priority Projects include installation of signalized intersections at Boeckman Road/Canyon Creek Road and a traffic signal or roundabout combining the existing intersections of Stafford Road/65th Avenue and Elligsen Road/65th Avenue.

As shown in Table 4, all off-site study intersections are expected to meet applicable mobility targets and operating standards through the year 2035 as required by the City of Wilsonville, Clackamas County, and the Oregon Department of Transportation (ODOT). This analysis assumes completion of all High Priority Projects from the Wilsonville TSP, growth consistent with Metro forecasts, build out of the current Wilsonville urban growth boundary, and a Maximum Build Out scenario for the Frog Pond Area that exceeds the amount of growth identified in any of the three land use alternatives currently under consideration.

⁶ *Frog Pond Area Plan Existing and Baseline Transportation Analysis*, DKS Associates August 8, 2014.

⁷ *2000 Highway Capacity Manual*, Transportation Research Board, Washington DC, 2000.

Table 4: 2035 P.M. Peak Hour Intersection Operating Conditions (Maximum Build Out Scenario)

Intersection	Jurisdiction	Operating Standard or Target	PM Peak Hour			Meets Standard or Target?
			Delay	LOS	V/C	
Signalized						
Elligsen Rd/I-5 SB Ramp	ODOT	0.90 V/C ^a	24.5	C	0.90	Yes
Elligsen Rd/I-5 NB Ramp	ODOT	0.90 V/C ^a	12.8	B	0.66	Yes
Wilsonville Rd/I-5 SB Ramp	ODOT	0.85 V/C	29.6	C	0.83	Yes
Wilsonville Rd/I-5 NB Ramp	ODOT	0.85 V/C	22.5	C	0.58	Yes
Elligsen Rd/Parkway Ave	Wilsonville	LOS D	36.9	D	0.77	Yes
Elligsen Rd/Park Center Dr	Wilsonville	LOS D	34.8	C	0.88	Yes
Boeckman Rd/Canyon Creek Rd	Wilsonville	LOS D	11.6	B	0.68	Yes
Wilsonville Rd/Town Center Loop W	Wilsonville	LOS D	40.6	D	0.86	Yes
Stafford Rd/65 th Ave/ Elligsen Rd (Two Traffic Control Options)						
Traffic Signal	Clackamas Co.	LOS D	49.5	D	0.91	Yes
Roundabout (2-Lane)	Clackamas Co.	LOS D	20.0	C	0.79	Yes
Signalized Intersections: Delay = Average Stopped Delay per Vehicle (sec) LOS = Level of Service of Intersection V/C = Volume-to-Capacity Ratio of Intersection <u>Bold Underlined</u> values do not meet standards.		Two-Way Stop Intersections: Delay = Average Stopped Delay per Vehicle (sec) at Worst Movement (typically a minor movement) LOS = Level of Service of Major Street/Minor Street V/C = Volume-to-Capacity Ratio of Worst Movement <u>Bold Underlined</u> values do not meet standards.				

^a The typical ODOT mobility target for interchange ramps is a 0.85 v/c ratio. However, when the interchange vicinity is fully developed and adequate storage is available on the interchange ramp to prevent queues from backing up on the mainline, then the target can be increased to a 0.90 v/c ratio. Queuing analysis was performed (see Table 5) to ensure this is the case at the Elligsen Road/I-5 interchange, and it is likely the case for the Wilsonville Road/I-5 interchange as well.

In addition, queuing analysis was performed for the p.m. peak hours under the 2035 full build scenario to determine the 95th percentile queues at the Elligsen Road/I-5 interchange ramps. The 95th percentile queue is the queue length for a given intersection movement that has only a 5% chance of being exceeded during the peak traffic hour. This analysis was performed to ensure that adequate storage is available on the interchange off-ramp to prevent queues from backing up on the I-5 mainline. This analysis is important because the applicable ODOT mobility target can be increased from 0.85 v/c to 0.90 v/c when this condition is met and the interchange area is fully developed. Table 5 provides the results of the queuing analysis, and shows that the 95th percentile queues can be accommodated by the existing ramp lengths.

Table 5: Future 2035 PM Peak Hour Queuing Estimates for Elligsen Road I-5 Off Ramps

Intersection Approach	Movements	Number of Lanes	Ramp Storage Length	95 th Percentile Queue of Longest Movement
Elligsen Rd/I-5 SB Ramp	Left, Through-Left, Right	3	700 ft	525 ft
Elligsen Rd/I-5 NB Ramp	Left, Left, Right	3	575 ft	425 ft

Functional Classifications

The Wilsonville Transportation System Plan (TSP)⁸ identifies the functional classifications of the major study area roadways, and Figure 5 shows the Frog Pond Area vicinity. Stafford Road is a Major Arterial, Boeckman Road is a Minor Arterial, and Advance Road is a Collector.

Now that this area is being master planned, some of these classifications may benefit from being changed depending on the desired cross sections (including number of travel lanes, presence of on-street parking, etc.) and access spacing standards. Because Boeckman Road has been developed along its entire south side and portions of the roadway have already been improved with sidewalks and bike lanes, it will be difficult to make changes to its cross section and access spacing; however, now is the ideal time to make any desired revisions to functional classification for Advance Road and Stafford Road. Additional discussion and analysis of cross sections and access will be provided later in this memorandum and should be used as the basis for any functional classification changes.



Figure 5: Wilsonville Functional Classifications in Frog Pond Area Vicinity (Image clipped from TSP)

Another importation functional classification consideration for the Frog Pond Area relates to internal roadways. Similar to how Meadows Loop is a designated Collector street that runs through the neighborhood south of the Frog Pond area, at least one Collector street is recommended through each of the Frog Pond neighborhoods. Figure 2, Figure 3, and Figure 4, which were discussed previously, show the recommended Collectors for each of the three alternatives. These Collectors would have neighborhood design characteristics that would include bike facilities (shared lanes or dedicated bike lanes) and on-street parking. They would also be alley loaded to limit the number of driveways accessing the Collector street.

The purpose of the Collectors is to provide convenient multimodal access into the heart of each neighborhood. These roadways will include bike facilities within and between neighborhoods. They should also be designed to support a transit route and bus stops so that South Metro Area Regional Transit (SMART) is able to provide high quality transit service to the residents and businesses. To best serve these purposes, the Collectors should be continuous streets that allow through movements to have priority.

⁸ *Wilsonville Transportation System Plan*, Adopted by Council (Ordinance 718), June 17, 2013.

Street Design (Arterial and Collector Roadways)

One of the desired outcomes of developing the Frog Pond Area Plan is to determine what the preferred street design is for the arterial and collector roadways. These roadways include Boeckman Road, Stafford Road, Advance Road, and the Collector roadways that serve the Frog Pond Area Plan. Prior to an area developing, it is important for the City to acquire the necessary right-of-way to accommodate the full future cross-section. This will ensure that additional changes, such as widening, can occur as the future need arises. Depending on the preferred cross-section and access spacing, it may be beneficial to change some of the functional classifications for the roadways fronting the Frog Pond Area.

The Wilsonville TSP designates the functional classifications for all of its existing roadways and planned roadway extensions. Each functional classification has corresponding cross-section and access spacing standards. The functional classifications for each of these roadways are provided previously in this memorandum and listed again in Table 6. This table also lists the access spacing standards that correspond with each functional classification. These standards particularly limit the number of accesses that would be provided on major arterials, such as Stafford Road. By having limited access, Stafford Road can better serve the higher traffic volumes it is expected to experience. Boeckman Road, as a Minor Arterial, also benefits from a reduced number of accesses so it can serve vehicles traveling between the Frog Pond Area and land uses to the west.

Table 6: City of Wilsonville Access Spacing Standards (Wilsonville TSP)

Functional Classification	Applicable Study Area Roadways	Access Spacing Standards ^a		What Does This Mean for the Study Area?
		Desired ^b	Minimum	
Major Arterial	Stafford Road	1,320 ft	1,000 ft	2-3 access points spaced approximately 900 to 1,000 feet apart along site frontage, preferably at Collector streets and other higher use streets (variances may be granted but will likely include turn restrictions)
Minor Arterial	Boeckman Road	1,000 ft	600 ft	Up to 3 access points spaced 600 feet apart along site frontage, preferably at Collector streets and/or aligned with existing streets to the south (variances may be granted but will likely include turn restrictions)
Collector	Advance Road	300 ft	100 ft	Preferably no more than 7 access points spaced 300 feet apart along site frontage with driveway access more easily provided
	Primary roadways through Frog Pond Area Plan neighborhoods	300 ft	100 ft	Up to 2 access points per 300-foot block, preferably to shared alleyways, retail sites, and apartments rather than private driveways

^a Spacing is measured from centerline to centerline on Major Arterials and Minor Arterials and between adjacent curb returns on Collectors and Local Streets

^b Desired Access Spacing shall be adhered to unless otherwise approved by the City Engineer. Reasons for deviating from Desired Access Spacing include aligning with existing driveways, topography, property limitations, and other safety related issues as identified in a transportation study.

While a street's functional classification does not dictate which street elements to include, it does facilitate the selection of multimodal facilities and widths that will help ensure the roadway can meet its intended multimodal function both now and in the future. Figure 6, Figure 7, and Figure 8 show the standard corridor cross-sections for Major Arterials, Minor Arterials, and Collectors, respectively. In addition, Figure 9 shows the buffered bike lane and two-way cycle track bicycle facility options. Roadway cross-section design elements include travel lanes, curbs, planter strips, sidewalks on both sides of the road, and bicycle facilities consistent with designated bikeways, walkways, and shared-use trails. Low impact development (LID) standards may also be used throughout the City at the City's discretion.

As a Major Arterial, Stafford Road is envisioned to eventually become a five-lane roadway. The operations analysis presented previously in this memorandum shows that a three-lane roadway would still be expected to provide adequate capacity to serve Frog Pond Area Plan through the 2035 planning horizon. Therefore, a three-lane roadway is considered sufficient in the short-term; however, Stafford Road would be approaching its three-lane capacity limit in the long-term. By acquiring adequate right-of-way for the future five-lane facility and designing a three-lane roadway that can easily be widened to five lanes, the City would ensure it can support future development without impacting established development in its northeast area and also can have improved access to the future growth areas.

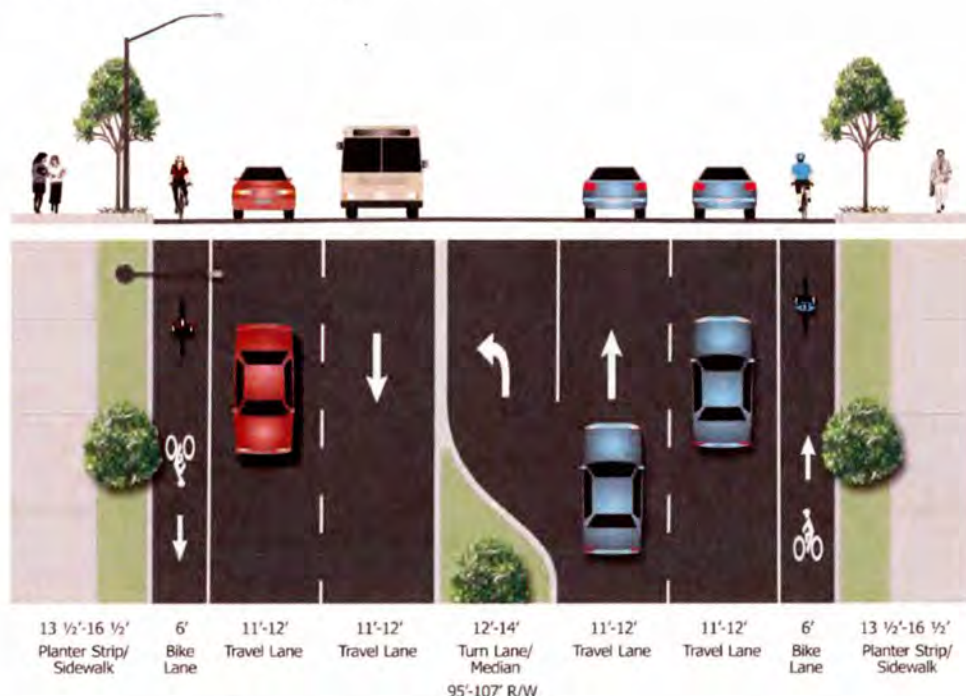


Figure 6: Major Arterial Cross-Section (Wilsonville TSP)

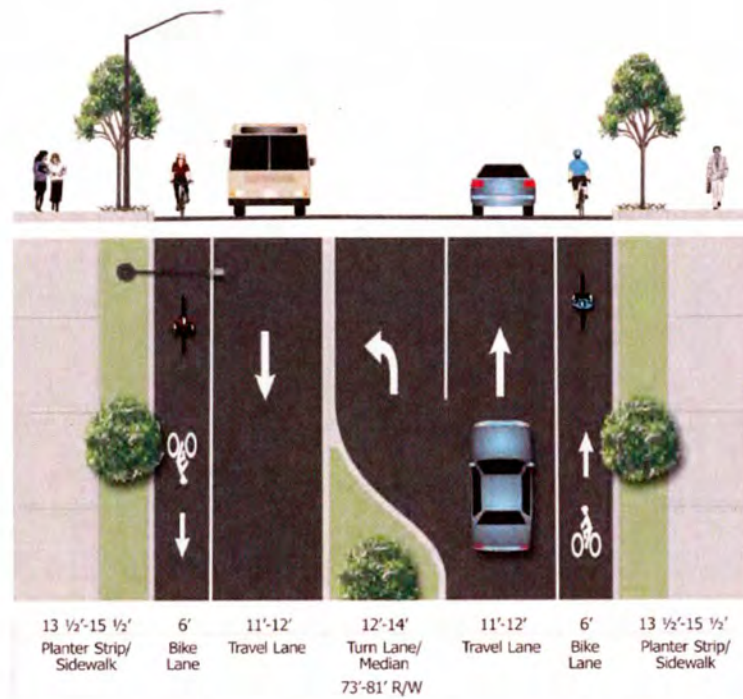


Figure 7: Minor Arterial Cross-Section (Wilsonville TSP)

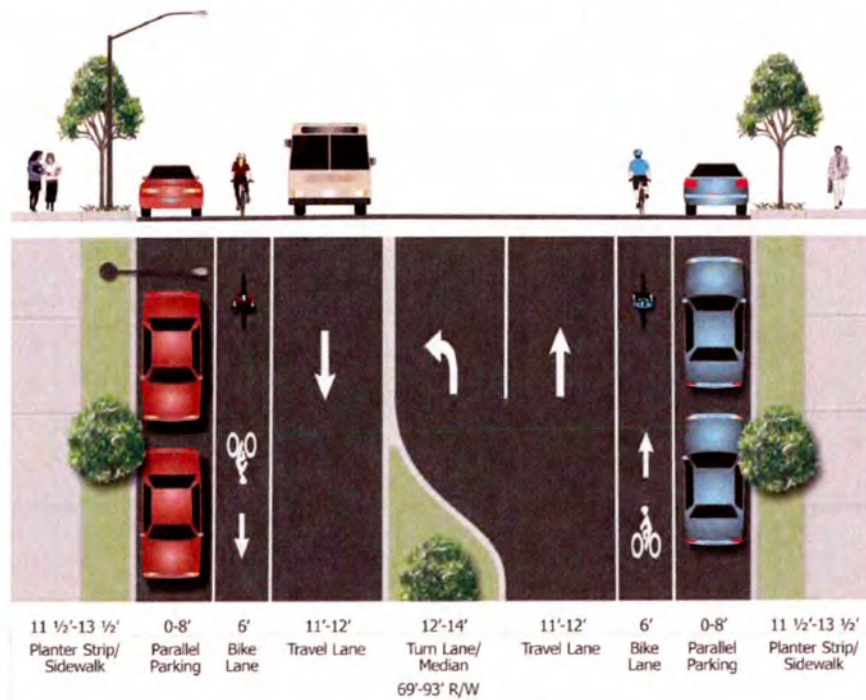


Figure 8: Collector Cross-Section (Wilsonville TSP)

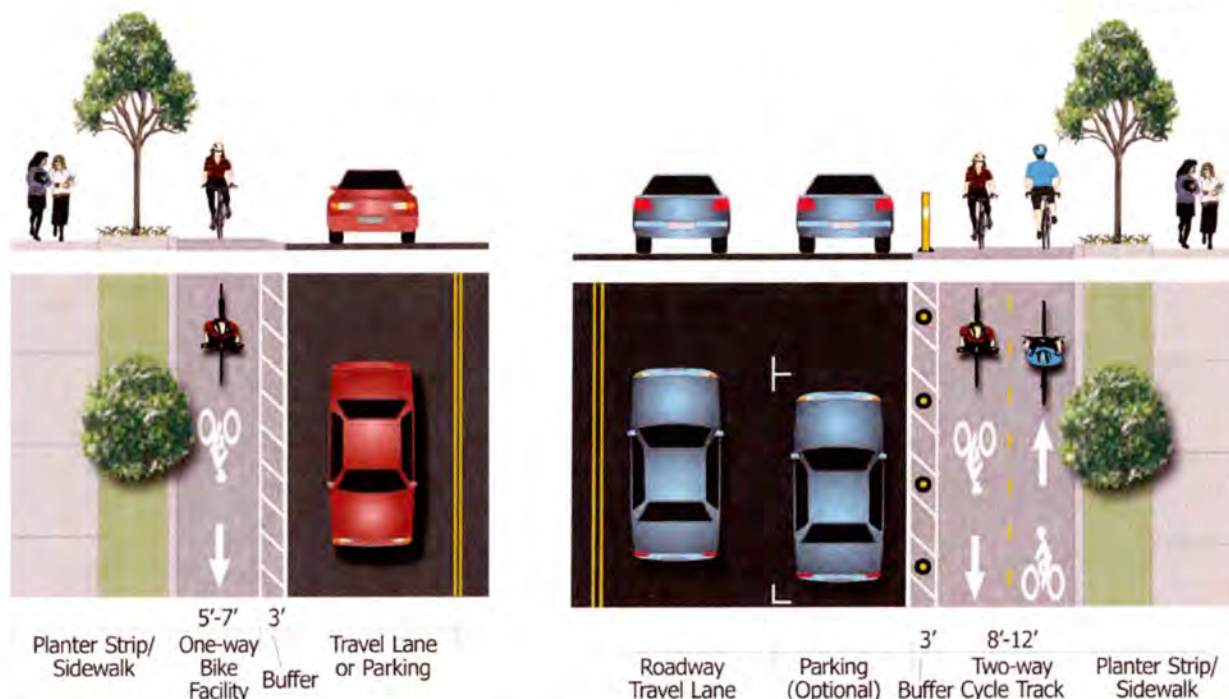


Figure 9: Buffered Bike Lane and Two-Way Cycle Track Bicycle Facility Options (Wilsonville TSP)

Only a portion of Advance Road is included in the City's urban growth boundary (UGB), and the Wilsonville TSP currently designates this section as a Collector street. If a substantial future development area was expected to be built east of the Frog Pond Area, then it may be beneficial to reclassify Advance Road as a Minor Arterial and provide additional capacity to serve greater traffic volumes. However, future urban growth to the east of the Frog Pond Area is highly unlikely during the planning horizon because much of the land to the east is designated Rural Reserve, which precludes its addition to the UGB for 50 years. As a Collector, Advance Road can accommodate a greater amount of access, which would be beneficial if a retail development was located at the corner of the Advance Road-Boeckman Road/SW Stafford Road-Wilsonville Road intersection, and also allows more points of connection to the future park and school site. As a Collector, the standard would also support on-street parking, which may be beneficial to the City adjacent to the proposed park. The Collector classification would include lower design speeds and a better pedestrian environment than an Arterial. These qualities will be beneficial to the high level of pedestrian activity near the park and schools.

The major streets through the East, West, and South Neighborhoods are being proposed as Collectors, which would include bike facilities (dedicated bike lanes or shared lanes) and on-street parking. It will be beneficial to have a consistent cross-section for all the Collector streets and to make the Collector a continuous through street where the side streets have stopped approaches. This would allow the streets to meet user expectation and to better collect traffic and utilize the capacity provided by the proposed traffic signal at the intersection of the Collector roadway and Stafford Road. One of the main challenges in the West Neighborhood is where there are east-west Collector roadway tees into the Collector roadway that runs north-south. As a four-legged intersection, this means the west leg would have a different cross-section from the east leg. Some options to

address this could be to have a roundabout, remove the west leg so it is just a three-legged intersection, or provide sharrows on the west leg so there is some parity with the east leg's bike lane.

Multimodal Connectivity

The City of Wilsonville highly values providing transportation system connectivity within and between its neighborhoods. Bicyclists, pedestrians, and transit riders benefit from closely spaced facilities because they are the most affected by distance. Good connectivity consists of the following:

- Direct connections between neighborhoods, schools, transit stops, retail centers, employment centers, and recreational areas that decrease out of direction travel
- Connected streets that help distribute traffic
- Walking and biking facilities
- Through streets that penetrate neighborhoods and accommodate transit routes

Figure 10 and Figure 11 show bicycle and pedestrian circulation diagrams for the grid and organic street frameworks, respectively. Both the grid and organic street frameworks have very similar transportation networks with basic features that support multimodal connectivity and are expected to facilitate travel choices between the various travel modes (i.e., walking, biking, taking transit, driving).

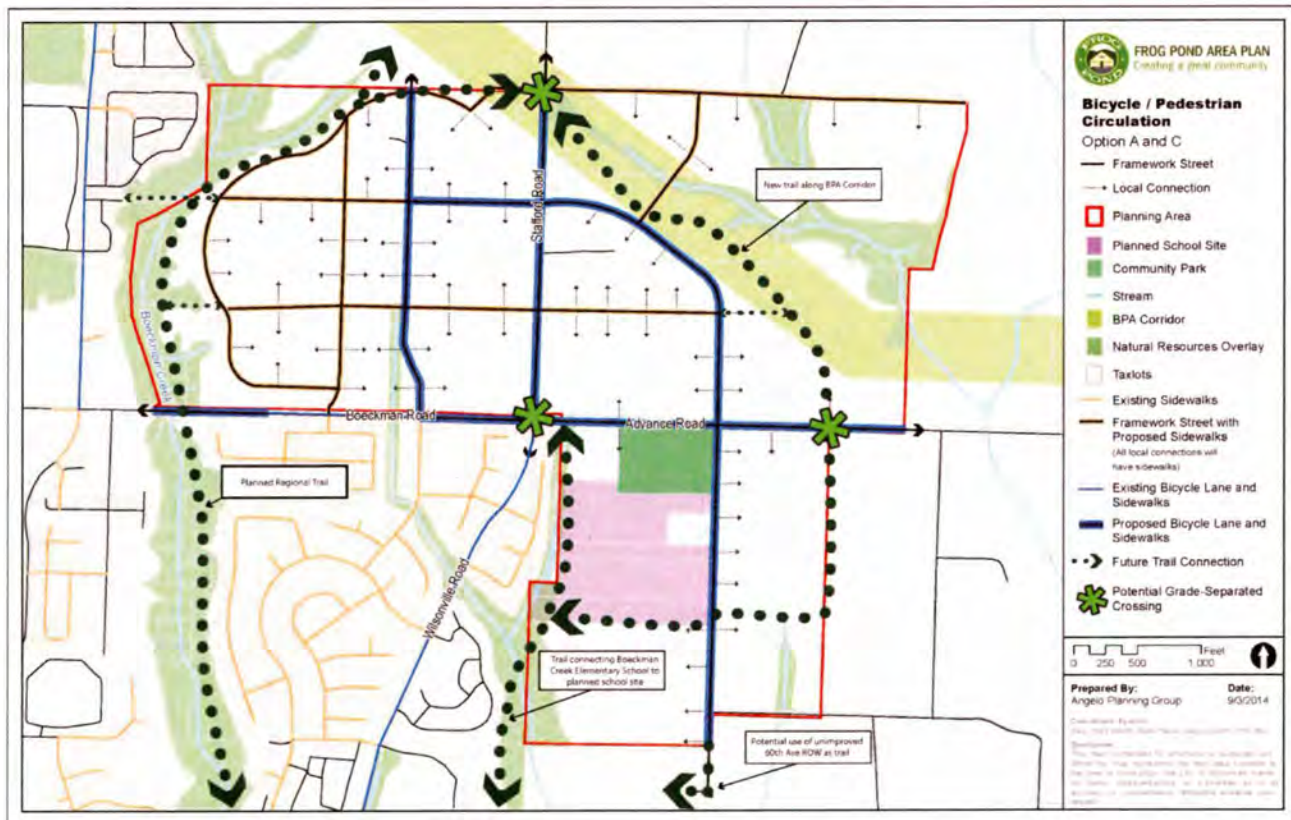


Figure 10: Bicycle and Pedestrian Circulation Diagram for Grid Network (Options A and C)

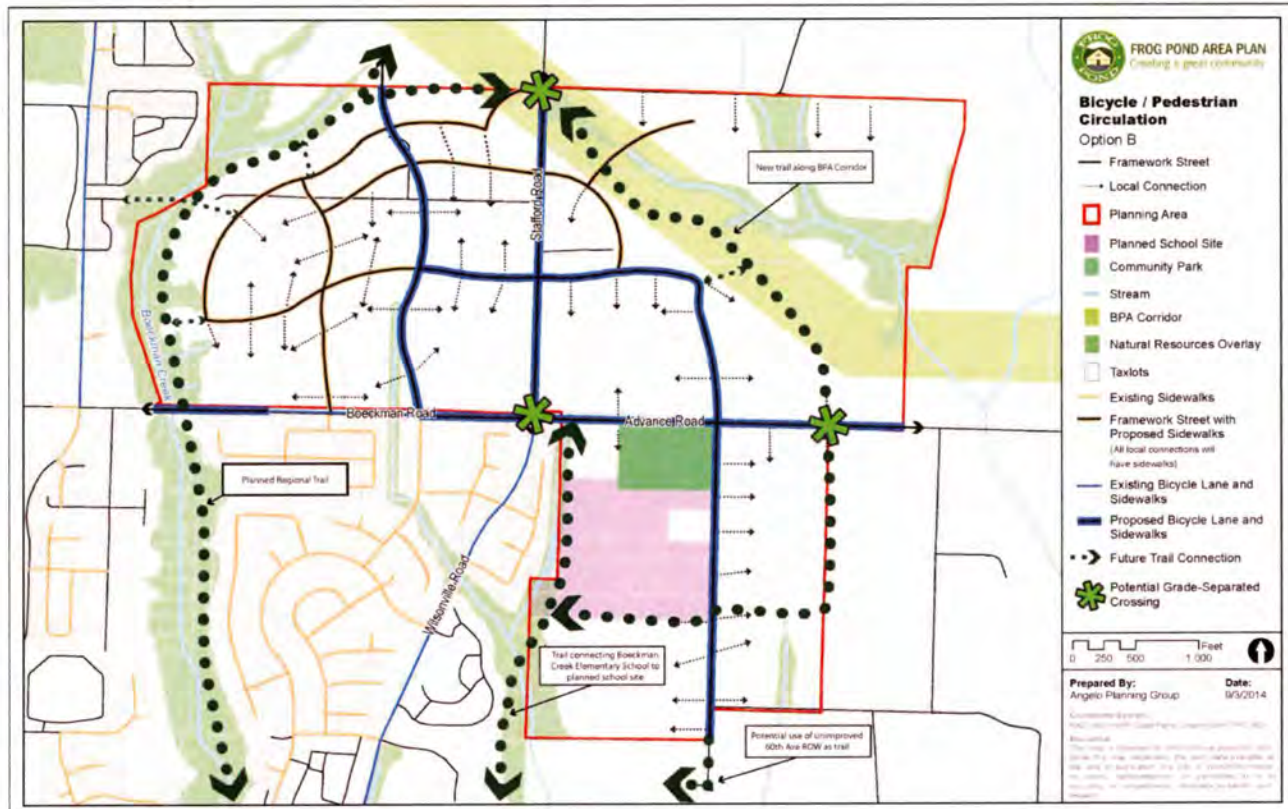


Figure 11: Bicycle and Pedestrian Circulation Diagram for Organic Network (Option B)

A mix of streets, bicycle facilities, and trails are shown on the figures that connect to the various land uses within the Frog Pond area (including the school site south of Advance Road, which should have safe routes connecting to the adjacent neighborhoods) and take advantage of natural and man-made features (including regional trails along Boeckman Creek and the BPA corridor). In addition, urban upgrades (including adding sidewalks, bike lanes, center turn lanes) are needed for Boeckman Road, Stafford Road, and Advance Road in conjunction with the development to fill in the pedestrian and bicycle network and connect to adjacent parts of Wilsonville. A new bridge on Boeckman Road over Boeckman Creek, where there is currently a geometric deficiency, would also improve connectivity between the Frog Pond Area and other neighborhoods to the west.

The street networks are also shown to connect internally as well as to Boeckman Road, Stafford Road, and Advance Road at locations that will help distribute traffic while also providing convenient access to the signalized access on Stafford Road (particularly for those needing to make a left turn during peak congestion periods) and connections to the existing neighborhood to the south. The figures also show arrows that represent potential local roadway connections. These connections occur approximately every 300 feet, which is important to meet City of Wilsonville standards for bicycle and pedestrian facility spacing guidelines.

The layout of the grid network does a particularly good job of providing internal connections that support circulation and access. The straight, regularly spaced roads provide clear expectations that can help reduce



uncertainty regarding the most direct route for walking or biking. However, the organic framework may contribute to a more pleasant walking and biking experience because the roadway curvature can help reduce motor vehicle speeds and add an aesthetic value for some pedestrians (others prefer a direct and convenient walking route). If the curvature of the organic network is desired, then one option may be to adapt the layout of the grid network but add curvature where appropriate.

Each of the different facilities serving the various travel modes should also be connected together at convenient locations in ways that support multimodal access and travel choices, especially to the planned school site, existing schools along Wilsonville Road, and the commercial area along Stafford Road. These trails are intended to accommodate both school and non-school users. The trails are also planned to connect to and cross the street system at either grade separated crossings or at intersections rather than midblock to avoid the need for special crossing treatments that stop traffic or create additional vehicle/pedestrian conflicts.

One important consideration is how to best accommodate pedestrians crossing Stafford Road, Boeckman Road, and Advance Road. The greatest amount of protection can be provided through grade separated crossings, which are recommended for each of the major trail crossings of these roadways. Providing grade separated crossings will improve both safety and the travel experience of trail users and drivers. In addition, pedestrian crossings will be accommodated at the proposed traffic signals at the Boeckman Road/Advance Road/Stafford Road/Wilsonville Road intersection and the signalized access point on Stafford Road. These signals should include clearly marked crosswalks, pedestrian countdown timers, and consideration for signal phasing to eliminate vehicle/pedestrian conflicts arising from vehicles turning left during a permitted phase. In addition, by locating the retail uses adjacent to the traffic signal on Stafford Road, access for both vehicles and pedestrians crossing the street can be best accommodated.

Transit Routing and Coverage Area

Transit routing and coverage are also important considerations for the Frog Pond Area Plan. Figure 12 and Figure 13 show the potential transit routing and coverage for the grid and organic street networks, respectively. The figures also show the existing transit route (Route 4) that uses Wilsonville Road and Boeckman Road. The potential transit routing assumptions through the Frog Pond Area are based on the potential use of Collector streets through the West and East Neighborhoods and the traffic signal on Stafford Road. It is important to ensure that these Collector streets and any required turn movements can accommodate transit vehicles. Coordination should also be performed with South Metro Area Regional Transit (SMART) and TriMet to identify any transit-related needs they have for the area. The study area west of Stafford Road (West Neighborhood) is currently in the SMART service district, while the areas east of Stafford Road and Wilsonville Road (East and South Neighborhoods) are in the TriMet service district. However, it is recommended that the area all be transferred to SMART, who will be better able to serve the development area.

The transit coverage areas are based on the assumption that pedestrians typically find it convenient to take transit when they are able to walk less than one-quarter mile to access a transit stop. A comparison of the grid and organic street networks shows that when the transit route is farther to the north and the signalized crossing is near Frog Pond Lane, the Frog Pond Area Plan experiences greater transit coverage on the north end. Otherwise, there are very few differences.

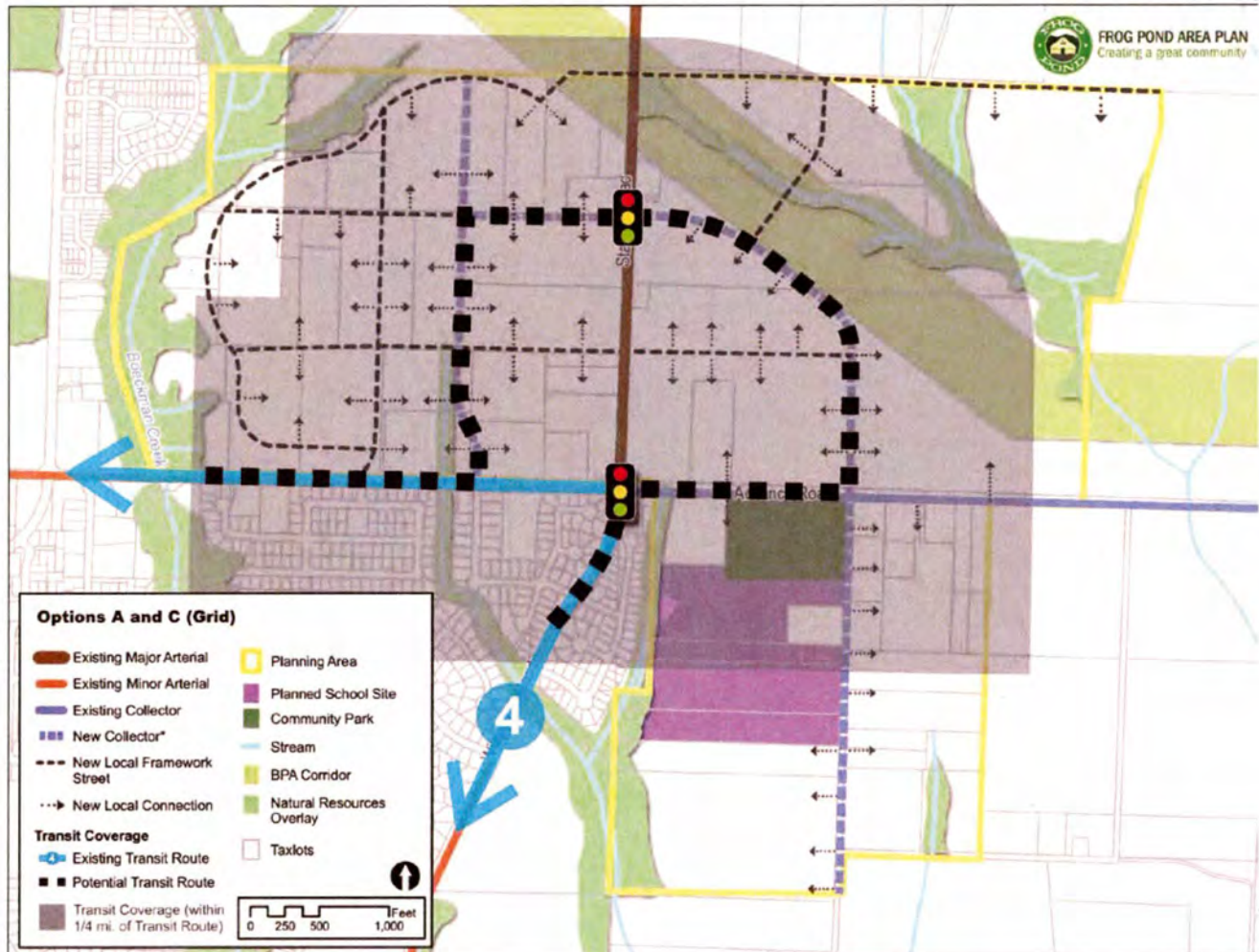


Figure 12: Potential Transit Routing and Coverage for Grid Network (Options A and C)

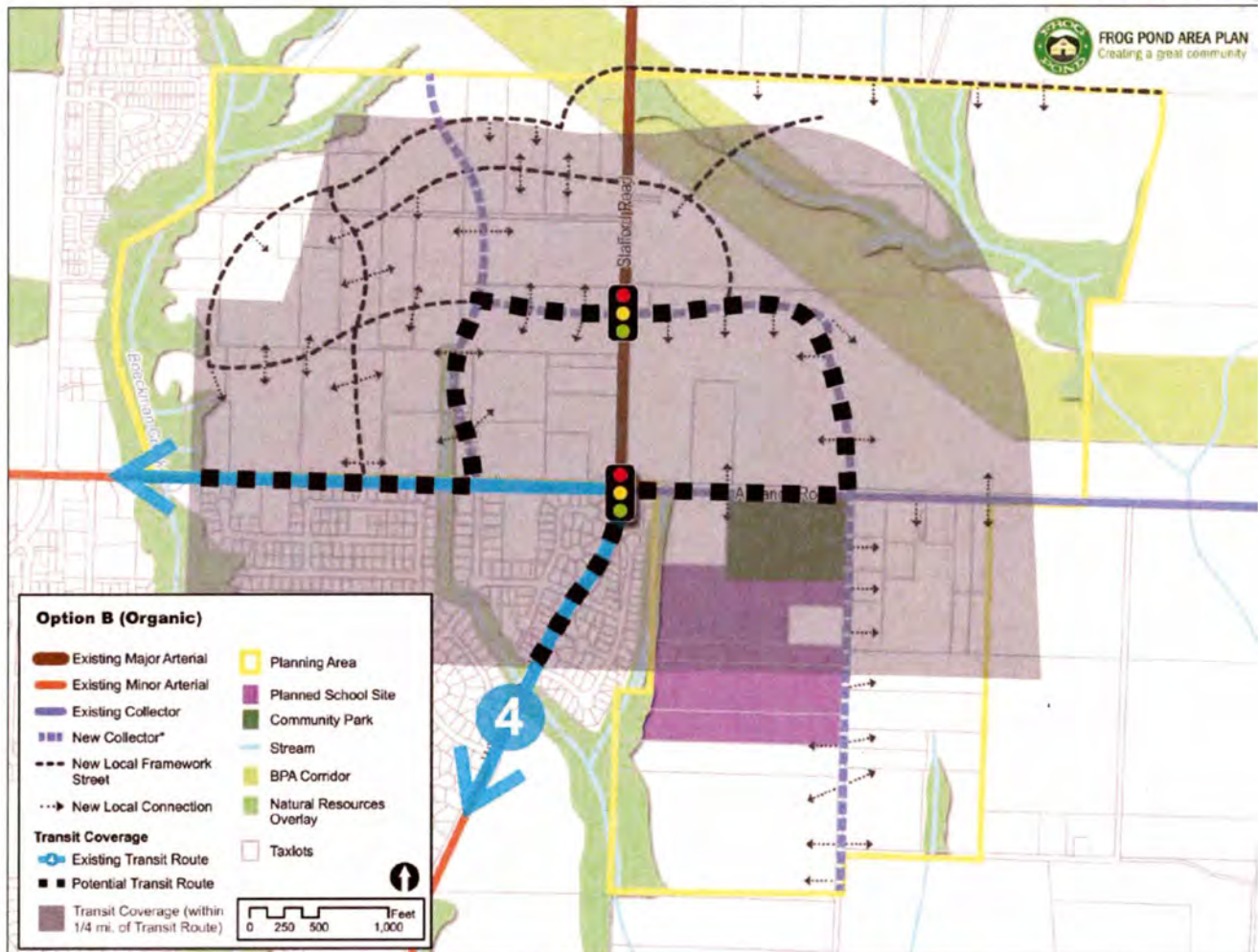


Figure 13: Potential Transit Routing and Coverage for Organic Network (Option B)

Transportation Costs

Planning level cost estimates have been prepared for the transportation improvements associated with the Frog Pond Area Plan. No substantial differences exist between the transportation network and improvement needs of the three alternatives; therefore, the same cost estimates are considered applicable. Table 7 lists the costs, which were primarily based on costs provided in the Wilsonville TSP. However, revisions were made to the funding source breakdown estimates as well as to the total cost of Project UU-01, which now includes a bridge, and Project UU-P1, which now extends a half-mile farther to the east to include the development area. The neighborhood Collector cost estimates were also newly prepared because they were not accounted for in the TSP. The City's portion of the neighborhood Collector cost is based on the assumption that the City would be responsible to pay for the cross-section overage associated with the inclusion of bike lanes on both sides of the road. Additional improvement project cost assumptions are provided in the appendix.

**Table 7: Planning Level Transportation Costs Associated with Frog Pond Area Plan**

Project	Planning Level Cost Estimate	Funding Source or Potential Proportionate Share Breakdown (FP = Frog Pond)						
		City (CIP)	West FP	East FP	Non-School in South FP	School in South FP	Clackamas County	Federal/Region
UU-01 Boeckman Road Bridge Improvements (Option A)	\$12,200,000	\$3,700,000	-	-	-	-	-	\$8,500,000
UU-02 (Part 1) Boeckman Road Urban Upgrade	\$1,600,000	\$800,000	\$800,000	-	-	-	-	-
UU-02 (Part 2) Boeckman/ Stafford Traffic Signal	\$500,000	-	\$70,000	\$180,000	\$125,000	\$125,000	-	-
UU-06 Stafford Road Urban Upgrade (3 lane plus extra ROW)	\$4,200,000	-	\$2,100,000	\$2,100,000	-	-	-	-
Future Stafford Rd Upgrade to 5 lanes	\$6,825,000	\$6,825,000	-	-	-	-	-	-
Potential Single-Lane Roundabout on Stafford Road	\$600,000	-	\$300,000	\$300,000	-	-	-	-
Widening Potential Roundabout to Dual Lanes with 5-Lane Upgrade	\$400,000	-	\$200,000	\$200,000	-	-	-	-
UU-P1 Advance Road Urban Upgrade (Extended to Full Site Frontage)	\$4,350,000	\$1,000,000	-	\$1,175,000	\$2,175,000	-	-	-
RT-01A Boeckman Creek Trail (West Neighborhood)	\$850,000	\$570,000	\$280,000	-	-	-	-	-
BPA Easement Trail (East Neighborhood)	\$670,000	\$450,000	-	\$220,000	-	-	-	-
South Neighborhood Trail	\$700,000	\$460,000	-	-	\$240,000	-	-	-
LT-P5 New School Site Trail (South Neighborhood)	\$700,000	\$700,000	-	-	-	-	-	-
SI-03 Stafford Rd/65 th Ave Intersection Improvements	\$5,500,000	\$1,000,000	-	-	-	-	\$4,500,000	-
West Neighborhood Collectors	\$9,510,000	\$1,585,000	\$7,925,000	-	-	-	-	-
East Neighborhood Collectors	\$8,160,000	\$1,360,000	-	\$6,800,000	-	-	-	-
South Neighborhood Collectors	\$3,900,000	\$450,000	-	-	\$2,650,000	\$800,000	-	-
Total	\$60,665,000	\$18,900,000	\$11,675,000	\$10,975,000	\$5,190,000	\$925,000	\$4,500,000	\$8,500,000



FROG POND AREA PLAN

Creating a great community

Appendix C: Frog Pond Area Plan Infrastructure Analysis memorandum



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Murray, Smith & Associates, Inc.
Engineers/Planners

121 S.W. Salmon, Suite 900 • Portland, Oregon 97204-2919 • PHONE 503.225.9010 • FAX 503.225.9022

TECHNICAL MEMORANDUM

DATE: September 24, 2014

PROJECT: 14-1553.600

TO: Joe Dills, Angelo Planning Group

FROM: Mathew L. Hickey, P.E.
Murray, Smith & Associates, Inc.

RE: Frog Pond Area Plan – Concept Plan Infrastructure Analysis



Introduction

The Frog Pond Area Plan, led by the City of Wilsonville, will establish a vision for the 500-acre Frog Pond area, and define expectations for the type of community it will be in the future. The project team has developed a set of three land use and transportation alternatives for consideration by the Frog Pond Planning Task Force, the public, stakeholders, and city policy-makers. This memorandum is one of several that are intended to provide information on the performance of the three alternatives to enable the Task Force, public, and policy-makers to make informed recommendations and decisions about a preferred alternative.

Executive Summary

The purpose of this memorandum is to evaluate three alternative “on-site” public utility infrastructure improvements and their associated costs relative to various development scenarios for the Frog Pond Area. The term “off-site” is also used throughout this document to refer to those utilities that support larger tracts of developable land. These off-site improvements are oversized in relation to providing services for individual properties that developers will construct, and are eligible for System Development Charge (SDC) credits to the developer under the current City funding policies.

The infrastructure improvements evaluated in this memorandum are limited to domestic water, sanitary sewer and storm drainage. The land use and transportation alternatives consist of the following¹:

- Concept 1 – Grid, Low

This alternative consists of a “grid” street layout with roadway alignments that generally run east to west, and north to south. Residential zoning within this scenario has the lowest average density of the three alternatives.

- Concept 2 – Organic, Medium

This alternative consists of an “organic” street layout and medium average residential densities for the Frog Pond Area.

- Concept 3 – Grid, High

This alternative consists of a “grid” street layout as described under Concept 1. Residential zoning within this scenario has the highest average density of the three alternatives.

The overall costs for providing on-site utility infrastructure are similar for the three alternatives, as summarized in Table 1, and illustrated in Figures 1 through 6². These costs represent the infrastructure necessary to support a development’s actual demands and the minimum required improvements defined under the City’s Public Works Standards (PWS). For developments required to construct infrastructure exceeding their actual demands due to planning considerations for adjacent properties, the City compensates the developer using SDC credits. These costs are summarized in Table 2.

Each concept’s demands for water and the peak flows for wastewater and storm drainage were estimated and evaluated. Although the demands for each utility service varied between scenarios, the minimum requirements for infrastructure sizing typically governed their design. These minimum requirements often generate utilities with capacities that exceed their service demands, which is explained in greater detail within each service summary.

¹ The three land use and transportation alternatives are described and illustrated in more detail in the Frog Pond Alternatives Summary Report prepared by Angelo Planning Group.

² Smaller residential streets are not shown for this analysis. The neighborhood collectors are shown due to a higher degree of confidence in their ultimate location, versus the uncertainty relative to the proposed location of smaller residential streets. The smaller residential streets are anticipated to be configured by property developers as more site specific plans are created.

Table 1 | Total On-Site Infrastructure Cost Summary

Neighborhood	Concept 1 Grid, Low	Concept 2 Organic, Medium	Concept 3 Grid, High
West	\$29.6m	\$35.8m	\$30.0m
East	\$26.9m	\$25.6m	\$27.1m
South	\$24.3m	\$19.1m	\$24.4m
Totals	\$80.8m	\$80.5m	\$81.5m

The previous planning analysis for “off-site” infrastructure improvements associated with the Frog Pond Area described improvements to infrastructure components located outside the Frog Pond Area needed to serve growth within Frog Pond. It also identified the “framework” components of on-site infrastructure to serve growth broadly within Frog Pond as well as future possible growth areas, such as the Elligsen Urban Reserve (4G)³.

Where on-site infrastructure must be over-sized to serve development beyond the abutting property, developers are required by City standards to install these improvements at time of development; however they are given SDC credits for the incremental cost increase due to the required oversizing. Table 2 presents the estimated oversizing costs to be paid by the City thru a reimbursement district, or through SDC credits for installed infrastructure exceeding the City’s minimum requirements.

Infrastructure development options were evaluated relative to a number of criteria including cost, environmental impact and compatibility with development needs. Where utilities deviated from a roadway alignment, an easement was assumed to be necessary through private property and was evaluated as an unfavorable aspect of the alternative. An evaluation matrix (see Table 10) provided later in this memorandum outlines the criteria and results of this analysis. Based on this evaluation it appears that Concept 2 offers the most favorable outcome relative to the utility infrastructure, primarily due to lower overall cost and the compatibility of water, sewer and stormwater alignments with road layout.

³ *Frog Pond Area Plan Off-Site Infrastructure Analysis*, Murray, Smith & Associates, Inc., July 18, 2014.

Table 2 | Total Off-Site Infrastructure Cost Summary

Utility	Total Cost	Developer Cost	City (SDC) share	Remarks
Off-site water distribution within Frog Pond Area	\$1.5m	\$1.2m	\$0.3m	Minimum standard: 8-inch diameter water main
Off-site water storage	\$5.8m	SDCs ⁴	\$5.8m	25% of the total cost is attributable to the Frog Pond Area
Off-site sanitary sewer lines within Frog Pond Area	\$13.7m	\$10.0m	\$3.7m	Minimum standard: 8-inch minimum diameter sewer main
Existing Off-site sanitary sewer piping upgrades	\$8.0m	SDCs ⁴	\$8.0m	52% of total wastewater flow is attributable to the Frog Pond Area
Memorial Park Pump Station expansion	\$5.2m	SDCs ⁴	\$5.2m	48% of total wastewater flow is attributable to the Frog Pond Area
Totals	\$34.2m	\$11.2m	\$23.0m	

Conceptual Plan Infrastructure Analysis

Purpose

The purpose of this memorandum is to evaluate three alternative “on-site” public utility infrastructure improvements and their associated costs relative to various development scenarios for the Frog Pond Area. The term “off-site” is also used throughout this document to refer to those utilities that support larger tracts of developable land. These off-site improvements are oversized in relation to providing services for individual properties for which developers will construct, and may be eligible for SDC credits to the developer or subject to a reimbursement district under the current City funding policies.

Background

The analysis presented in this memorandum is based on information provided in the draft Land Use Alternatives Capacity Analysis provided by Angelo Planning Group, dated July 31, 2014. The infrastructure improvements evaluated in this memorandum are limited to

⁴ The full cost of this improvement will be funded through SDC revenue by the city. The proportion of the demand (and cost) attributable to the Frog Pond Area is included for purposes of comparing SDC revenues and expenditures linked to growth in Frog Pond, as analyzed in the Funding Analysis memorandum prepared by Leland Consulting Group.

domestic water, sanitary sewer and storm drainage. The land use and transportation alternatives consist of the following⁵:

- Concept 1 – Grid, Low

This alternative consists of a “grid” street layout with roadway alignments that generally run east to west, and north to south. Residential zoning within this scenario has the lowest average density of the three alternatives.

- Concept 2 – Organic, Medium

This alternative consists of an “organic” street layout and medium average residential densities for the Frog Pond Area.

- Concept 3 – Grid, High

This alternative consists of a “grid” street layout as described under Concept 1. Residential zoning within this scenario has the highest average density of the three alternatives.

Figures 1 through 6 presented at the end of this memorandum illustrate the utility infrastructure needs for these development options. Figures 1 through 3 show utility infrastructure needed to support the grid street layouts associated with Land Use Concept 1 or 3, while Figures 4 through 6 indicate the utility needs for the organic street layout associated with Land Use Concept 2⁶. Regarding Land Use Concepts 1 and 3, the utility sizes are essentially the same between the development scenarios; as such, a single utility map is provided that will serve them both equally.

Utility Infrastructure Improvement Concepts

The anticipated on-site utility infrastructure required to support the land use alternatives are presented below. These elements consist of stormwater, sanitary sewer, domestic water and fire flow supply improvements. With the exception of stormwater, the infrastructure needs for the Frog Pond Area are very similar for the grid and organic street layouts and the alternative land use scenarios. As such, alternatives relative to planning these neighborhoods will likely be evaluated based on other factors besides the required utility infrastructure.

⁵ The three land use and transportation alternatives are described and illustrated in more detail in the Frog Pond Alternatives Summary Report prepared by Angelo Planning Group.

⁶ Smaller residential streets are not shown for this analysis. The neighborhood collectors are shown due to a higher degree of confidence in their ultimate location, versus the uncertainty relative to the proposed location of smaller residential streets. The smaller residential streets are anticipated to be configured by property developers as more site specific plans are created.

An evaluation supporting this statement is provided under each of the following utility improvement summary sections below.

Stormwater Improvements

The planning for stormwater management facilities relies primarily upon their tributary impervious surface areas. These impervious areas can be estimated from the City of Wilsonville's Stormwater Master Plan, which provides percentages of impervious areas based on various land use types⁷.

A set aside area for stormwater management facilities can then be obtained by applying an assumed ratio of 7.5 percent for commercial and residential areas, and 10 percent for streets relative to these impervious areas. This ratio represents a Low Impact Development (LID) approach to stormwater management, and the resulting set aside areas are summarized in Table 3. Streets were allocated the maximum allowable ratio by City's PWS of stormwater set aside due to their tributary area comprising essentially all impervious surfaces.

The approximate size and location of the stormwater management set aside areas are shown on Figures 1 through 6. The set aside areas have been placed at assumed locations based on general drainage routing resulting from various street configurations. These preliminary locations approximate the proportional set aside area necessary to manage stormwater originating from upstream impervious areas. They may be revised based on site-specific considerations at time of development.

Table 3 | Stormwater Set Aside Acreage for LID Facilities

	Neighborhood	Commercial	Streets	Residential Density				Totals
				Very Low	Low	Medium	High	
Concept 1 Grid, Low	West	0.0	2.8	0.8	2.4	0.0	0.0	6.0
	East	0.3	2.5	0.9	0.8	1.7	0.0	6.2
	South	0.0	1.5	0.0	1.1	1.3	0.0	3.9
	Totals	0.3	6.8	1.7	4.2	3.0	0.0	16.1
Concept 2 Organic	West	0.0	2.8	0.0	2.4	0.9	0.0	6.1
	East	0.3	2.5	0.0	0.8	1.7	1.1	6.4
	South	0.0	1.5	0.0	1.1	1.2	0.0	3.8
	Totals	0.3	6.8	0.0	4.2	3.8	1.1	16.3
Concept 3 Grid, High	West	0.3	2.7	0.0	2.4	3.2	0.0	8.5
	East	0.0	2.6	0.0	0.8	2.6	1.2	7.2
	South	0.0	1.5	0.0	1.1	1.5	0.3	4.3
	Totals	0.3	6.8	0.0	4.2	7.2	1.5	20.1

⁷ Technical Memorandum, March 2012, City of Wilsonville Stormwater Master Plan Update Hydraulic and Hydrologic Modeling, URS Corporation.

The stormwater management approaches are anticipated to consist largely of roadside bioswales and detention basins to manage drainage originating from development. Drainage originating from private developments are expected to be managed by the private developer in accordance with the City's PWS and Oregon Drainage Law.

Since the total length of the neighborhood streets is nearly equivalent between the grid and organic schemes, the impervious areas associated with these facilities are also essentially equivalent. Therefore, the three alternatives are similar or equal in terms of needs and costs for stormwater infrastructure, which is reflected in the estimated costs for the improvements as summarized by Table 4.

Concept 3 will incur additional costs over the other options, since the higher development density is associated with greater impervious areas. These larger impervious areas would generate the need for larger stormwater management facilities, increasing their costs above the other alternatives.

Table 4 | On-Site Stormwater Infrastructure Cost Summary

Neighborhood	Concept 1 Grid, Low	Concept 2 Organic	Concept 3 Grid, High
West	\$5.1m	\$4.8m	\$5.5m
East	\$3.2m	\$3.6m	\$3.4m
South	\$3.0m	\$2.8m	\$3.1m
Totals	\$11.3m	\$11.2m	\$12.0m

Stormwater infrastructure must be constructed to convey drainage in accordance with the City's PWS and Oregon Drainage Law. Each successive conveyance within each basin will experience increased flows to account for the additional tributary areas upstream. As such, improvements are sized to convey the flows that are received, and are ineligible for reimbursement of system development charges.

Figures 1 through 6 anticipates that runoff for public roads will be comingled with private runoff, and conveyed to the downstream receiving conveyance by roadside bioswales and other strategically placed LID stormwater management facilities. The upsizing or additional improvements necessary to manage runoff from public roads is anticipated to be constructed by private developers as part of the overall development. The developers would be compensated for these improvements through a Stormwater Reimbursement District, while being responsible for the costs presented in Table 4.

Sanitary Sewer Improvements

The total length of the proposed streets within each of the grid and organic layout options are within approximately one percent. Since sanitary sewer collection piping is typically placed under the streets serving the adjacent developed areas, the total length of these utilities will

be approximately equal for either street layout selected. In locations where the pipe deviates from a roadway alignment, piping is the same for all options.

For the Frog Pond Area, the alternative land uses do not appreciably impact the sizing of supporting sanitary sewers, since their design is more heavily influenced by inflow and infiltration, the natural topography and PWS for minimum pipe slopes and pipe sizes. Similarly, the pump stations necessary to serve areas with relatively low lying elevations are the same for all options.

Table 5 below summarizes the peak wastewater flows that are estimated to result from the alternative land uses. The Average Peak Daily Flow (APDF) is used to size sewer pipes and is calculated by including Average Dry Weather Flows (ADWF) multiplied by a peaking factor of two, plus contributions from Rainfall Derived Inflow and Infiltration (RDII) at 1,800 gallons per acre per day. These two assumptions for APDF and ADWF are consistent with the values being utilized by the current Wastewater Collection System Master Plan under development with the City.

The sewer flow rates presented in Table 5 were used to size the sanitary sewer pipe diameters shown in Figures 1 through 6. A minimum pipe diameter of 8 inches was selected based on the City's PWS. Another key consideration in determining the pipe diameter was the need to achieve service to remote areas at relatively flat pipe slopes, while still maintaining the minimum flow velocities that typically prevent sediment deposition.

Table 5 | Sanitary Sewer Flow Summary

Neighborhood	Average Peak Daily Flow (APDF), GPM		
	Concept 1 Grid, Low	Concept 2 Organic	Concept 3 Grid, High
West	302	352	397
East	308	393	417
South	215	213	231
Totals	825	958	1,045

In order to provide service to all areas within the Frog Pond Area, sewers in certain locations are anticipated to include segments of deep burial depths at minimum allowable slopes to overcome topographical constraints. This design approach may result in larger diameter pipes at greater free board depths in certain locations, and accommodate facility capacity that exceeds the demands generated in the development footprint of the three alternatives. Therefore, the three alternatives are similar or equal in terms of considerations for sanitary sewer infrastructure, which is reflected in the estimated costs for the improvements as summarized by Table 6.

Table 6 | On-Site Sanitary Sewer Infrastructure Cost Summary⁸

Neighborhood	Concept 1 Grid, Low	Concept 2 Organic	Concept 3 Grid, High
West	\$13.5m	\$20.8m	\$13.5m
East	\$17.2m	\$14.6m	\$17.2m
South	\$15.1m	\$11.2m	\$15.1m
Totals	\$45.8m	\$46.6m	\$45.8m

The previous planning analysis for “off-site” infrastructure improvements associated with the Frog Pond Area included three pump stations and associated force main⁹. The pump stations were categorized as off-site improvements based on the assumption that the basins served would include multiple developments. Categorizing the pump stations as off-site improvements would place the construction, operation and maintenance of the pump stations under the purview of the City. The City has since indicated that these pump stations should be considered “on-site” improvements and the responsibility of the private developer for construction. As such, the “on-site” costs in Table 6 account for the private pump stations indicated on Figures 1 through 6. The construction costs from the previous planning analysis for “Proposed Off-site Piping Connections” would therefore be revised from \$15.9m to \$13.7m.

The City’s minimum sanitary sewer is an 8 inches in diameter. Developers would be required to construct improvements meeting this minimum standard; however, the general development plan will require construction of interceptor sewers within major collector streets that will exceed this size based on anticipated loading from upstream properties. To account for this, these interceptors are considered off-site improvements and are presented in Table 7, along with the costs associated with meeting the City’s minimum sewer sizing requirements (these segments are identified as “OFF-SITE” on Figures 1 through 6). The column indicated as “Developer Cost” represents the sewer cost constructed at an 8-inch minimum diameter.

⁸ The costs for sanitary sewer infrastructure include an assumption all sewers are 15 feet deep and that manholes are provided on average every 400 feet and at all street intersections.

⁹ *Frog Pond Area Plan Off-Site Infrastructure Analysis*, Murray, Smith & Associates, Inc., July 18, 2014.

Table 7 | Proposed Connections to Off-Site Sanitary Sewers

Sewer Line	From	To	Length (lineal feet)	Diameter (inches)	Total Cost (million)	Developer Cost¹⁰ (million)
SW Boeckman Road	Boeckman Creek	SW Stafford Road	2,800	18	\$2.6	\$1.9
SW Advance Road	SW Stafford Road	East boundary of URA North	2,600	10 and 15	\$1.9	\$1.7
SW Stafford Road	SW Boeckman Road	SW Briar Patch Lane	2,700	12	\$1.6	\$0.5
SW Briar Patch Lane	SW Stafford Road	Newland Creek tributary	1,200	10	\$1.4	\$0.8
Boeckman Sewer Extension	Boeckman Road	North boundary of Frog Pond UGB	3,350	12	\$2.6	\$2.2
Frog Pond Lane	Boeckman Road	Frog Pond Lane	1,800	10	\$1.1	\$0.9
SW 60th Ave.	School District south boundary	SW Advance Road	1,250	12	\$1.1	\$0.8
SW 60th Ave.	BPA easement	SW Advance Road	1,850	10	\$1.4	\$1.2
Total =					\$13.7	\$10.0

Domestic Water and Fire Service Improvements

In a similar manner to the sanitary sewer, the length of the proposed streets within each of the grid and organic layouts resulted in nearly equivalent lengths of water main piping. The net densities between alternative land use scenarios do not appreciably impact the sizing of supporting utilities, since their design is primarily influenced by the City's PWS requirements for fire flow and the difference in domestic demands relative to the various development scenarios is relatively small.

The City's PWS stipulate that minimum fire flow shall be 1,500 gallons per minute (gpm) with a residual pressure of 20 pounds per square inch (psi) for single family residential areas. All other areas shall be provided with fire flows of 3,000 gpm at 20 psi. These fire flow rates are significantly higher than the anticipated maximum daily domestic water demands for the area, as summarized in Table 8.

¹⁰ The "Developer Cost" accounts for the expense necessary to construct infrastructure meeting the City's minimum standards. The difference between the total cost and the developer cost would be credited back to the developer through adjustments to system development charges or a reimbursement district.

Table 8 | Domestic Water Demand

Neighborhood	Average Day Demand (ADD), gpm			Maximum Day Demand (MDD), gpm ¹¹		
	Concept 1 Grid, Low	Concept 2 Organic	Concept 3 Grid, High	Concept 1 Grid, Low	Concept 2 Organic	Concept 3 Grid, High
West	100	137	176	246	287	252
East	121	178	190	196	279	263
South	93	91	103	150	151	152
Totals	314	407	469	591	718	667

Fire flow requirements are the main factor in the pipe sizing as shown in Figures 1 through 6. Additionally, analysis considered maintaining flow velocities below 10 feet per second during concurrent maximum day demand and fire demand. Although the peak water demands plus fire flows in certain portions of the Frog Pond Area could be served by piping less than 8-inch in diameter, the PWS requirement for an 8-inch minimum waterline size dictates their use. Figures 1 through 3 illustrate the infrastructure needs for either Concept 1 or Concept 3, which are variations of residential density on the same grid street layout.

Since the fire flow rates typically exceed the domestic demand by eight to ten times, water main diameters are minimally influenced by the street configurations or the alternative land uses. Therefore, the three land use alternates are similar or equal in terms of considerations for domestic water and fire service infrastructure, which is reflected in the estimated costs for the improvements as summarized by Table 9.

Table 9 | On-Site Domestic Water and Fire Infrastructure Cost Summary¹²

Neighborhood	Concept 1 Grid, Low	Concept 2 Organic	Concept 3 Grid, High
West	\$11.0m	\$10.2m	\$11.0m
East	\$6.5m	\$7.4m	\$6.5m
South	\$6.2m	\$5.1m	\$6.2m
Totals	\$23.7m	\$22.7m	\$23.7m

It is recommended that the City conduct hydraulic modeling to confirm the sizing for “on-site” and “off-site” piping systems. Modeling will determine if the pipe sizing of the looped system is adequate to serve future Urban Reserve Areas, such as the Elligsen Urban Reserve (4G) to the north of the Frog Pond Area’s West Neighborhood.

¹¹ Maximum Day Demands are calculated using Table ES.1 – Water Demands by User Type, of the City of Wilsonville Water System Master Plan, September 12, 2012.

¹² The costs for domestic water and fire infrastructure include an assumption that fire hydrants are provided on average every 400 feet and at all street intersections.

The previous planning analysis for “off-site” infrastructure improvements associated with the Frog Pond Area included \$1.5m for “framework” components of the water distribution piping and \$4.2m for off-site storage¹³. The framework water distribution piping accounted for 12 inch diameter mains, which exceed the City’s minimum standard of 8 inches. The cost for 8 inch diameter distribution piping would be \$1.2m. This portion of the cost would be considered developer responsibility, and has been included in Table 2. The remaining \$0.3m would be funded through SDC credits to developers for oversizing.

Additionally, the storage demand from the Frog Pond Area was indicated by the City to represent 25% of the overall storage demand identified for the West Side Tank and 24-inch Transmission Main Project (Capital Improvement Project ID#125). The costs from the previous planning analysis for “Storage” would therefore be revised from \$4.2m to \$1.5m¹⁴. As such, the overall cost for this capital improvement project applicable to the Frog Pond Area is provided in Table 2.

Cost Estimates for Infrastructure

These costs presented in this memorandum are considered a Feasibility Level or Class 4 estimate as defined by the American Association of Cost Engineering (AACE). These values are considered accurate to +50 percent to –30 percent and are inclusive of direct construction costs in addition to a construction contingency, engineering, legal and anticipated City administrative expenses. All costs assume new construction. As such, no costs for pavement surface restoration are included for “on-site” piping. Costs for sanitary sewer are consistent with those being generated for the collection system Wastewater Master Plan under development.

Figures 1 through 6 illustrate infrastructure placed within roadway alignments for neighborhood collector streets. Although the smaller residential streets are not shown on Figures 1 through 6, the cost summaries provided include pricing for utilities placed within them. These costs assume that the utilities are sized for the minimum PWS standards, and are located consistently with the “Local Connection” indications on the area plan maps prepared by Angelo Planning Group¹⁵.

¹³ *Frog Pond Area Plan Off-Site Infrastructure Analysis*, Murray, Smith & Associates, Inc., July 18, 2014.

¹⁴ The full cost of this improvement will be funded through SDC revenue by the city. The proportion of the demand (and cost) attributable to the Frog Pond Area is included for purposes of comparing SDC revenues and expenditures linked to growth in Frog Pond, as analyzed in the Funding Analysis memorandum prepared by Leland Consulting Group.

¹⁵ The three land use and transportation alternatives are described and illustrated in more detail in Frog Pond Alternatives Summary Report prepared by Angelo Planning Group.

Qualitative Evaluation of Development Alternatives

The Evaluation Matrix provided in Table 10 qualitatively evaluates the three land use alternatives relative to the guiding principles and other related evaluation criteria for the Frog Pond Area Plan. These guiding principles have been developed by the planning team to promote cohesive neighborhoods through a holistic approach to the planning process. This approach was developed to foster community connectivity, create neighborhood gathering places, meet the City's housing needs, integrate sustainability, and provide compatible transitions to surrounding areas.

The guiding principles within the matrix are evaluated qualitatively relative to each other within each category. The qualitative scoring is based on the following:

- | | |
|---|---|
| + | Denotes the alternative concept offers benefits relative to the others |
| - | Denotes the alternative concept exhibits additional issues relative to the others |
| = | Denotes the alternative concept is essentially equivalent to the others |

Table 10 | Evaluation Matrix

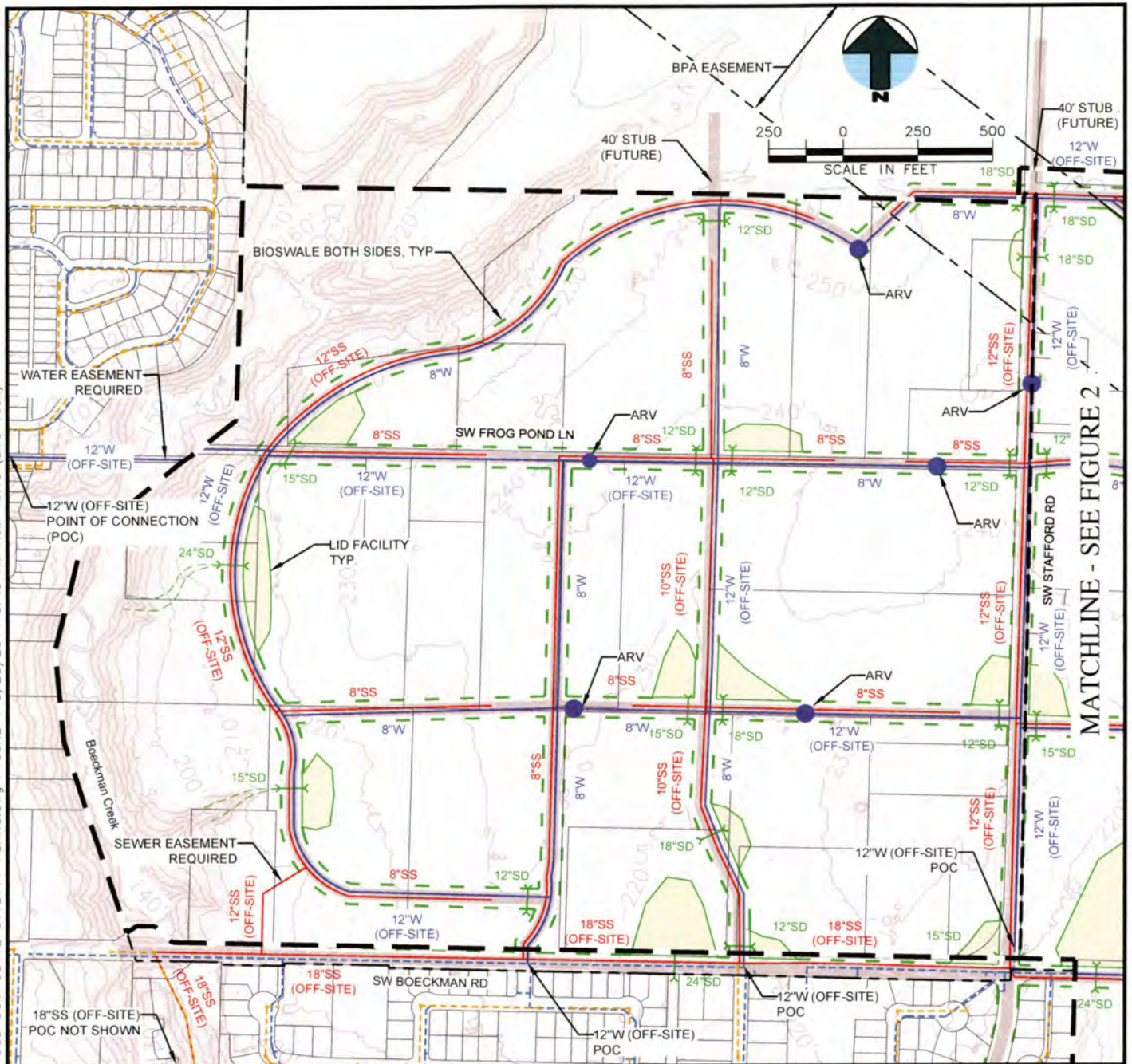
Guiding Principal	Evaluation Measures	Concept 1 Grid, Low	Concept 2 Organic, Med.	Concept 3 Grid, High	Remarks
<i>Create a feasible implementation strategy - A realistic funding plan for infrastructure, smart and flexible regulations, and other strategies promote successful implementation of the plan.</i>	Cost and ease of available mechanisms to fund water system improvements	=	+	=	Concept 2 is the least costly
	Cost and ease of available mechanisms to fund sanitary sewer system improvements	=	-	=	Concept 2 is the most costly
	Compatibility of water, sewer and stormwater alignments with road layout	=	+	=	Concept 2 requires minimum easements
	Operations & maintenance considerations, including accessibility to facilities, for water, sewer and stormwater	=	=	=	Alternatives are similar or equal
	Accommodating gravity sewer vs. relying on pumping	=	=	=	Alternatives are similar or equal
<i>Retain trees - Mature native trees are integrated into the community.</i>	Potential impacts to tree groves from infrastructure alignments	=	=	=	Alternatives are similar or equal
<i>Integrate sustainability - The plan integrates solutions which address economic, environmental and social needs. Frog Pond is a sustainable community over the long term.</i>	Environmental impacts to wetlands, tree groves and SROZ areas in the placement of transportation, water, sewer, and stormwater facilities	=	=	=	Alternatives are similar or equal
	Minimize total impervious area	=	=	-	Concept 3 realizes highest impervious areas
	Proximity of new infrastructure to seismic & potential landslide hazard areas, and steep slopes	=	+	=	West Neighborhood roadway for Concept 2 offset from Boeckman Creek ravine
	Compatibility of stormwater management facilities with existing topography	=	=	=	Alternatives are similar or equal

Summary

This memorandum evaluates the “on-site” utility infrastructure needs for the Frog Pond Area based on various development scenarios. The water demands and sewer and storm drainage design flows were estimated and the facilities sized based on the various development concepts. It was found that the infrastructure needs were very similar between the various street configuration and development densities and this was reflected in the facility sizing and estimated costs for each. The infrastructure needs were also quantitatively evaluated relative to the guiding principles and evaluation criteria developed by the planning team. It was found that utility infrastructure associated with the organic street layout of Concept 2 appeared to offer a slight advantage over the other alternatives relative to cost, compatibility with development configuration, and operations and maintenance considerations. This slight advantage was not of a magnitude to be considered critical in selecting the land use alternative.

MLH:njm

G:\PDX_Projects\14\1553\CAD\Figures\14-1553-OR-NEIGHBORHOOD COMPOSITE UTILITY PLANS.dwg FIGURE 1 8/28/2014 8:43 AM NJM (9.1s (LMS Tech))



LEGEND

- FROG POND AREA BOUNDARY
- WASTEWATER PIPE - NEW
- - - WASTEWATER FORCE MAIN - NEW
- WASTEWATER PUMP STATION - NEW
- - - WASTEWATER PIPE - EXISTING
- STORM CULVERT - NEW
- STORM LID FACILITY - NEW
- - - STORM PIPE - EXISTING
- - - STORM BIOSWALE - NEW
- WATER PIPE - NEW
- WATER AIR RELIEF VALVE (ARV) - NEW
- - - WATER PIPE - EXISTING
- CITY LIMITS
- - - URBAN GROWTH BOUNDARY (UGB)
- NEW STREET



FIGURE 1

Frog Pond Area Plan Composite Utility Plan

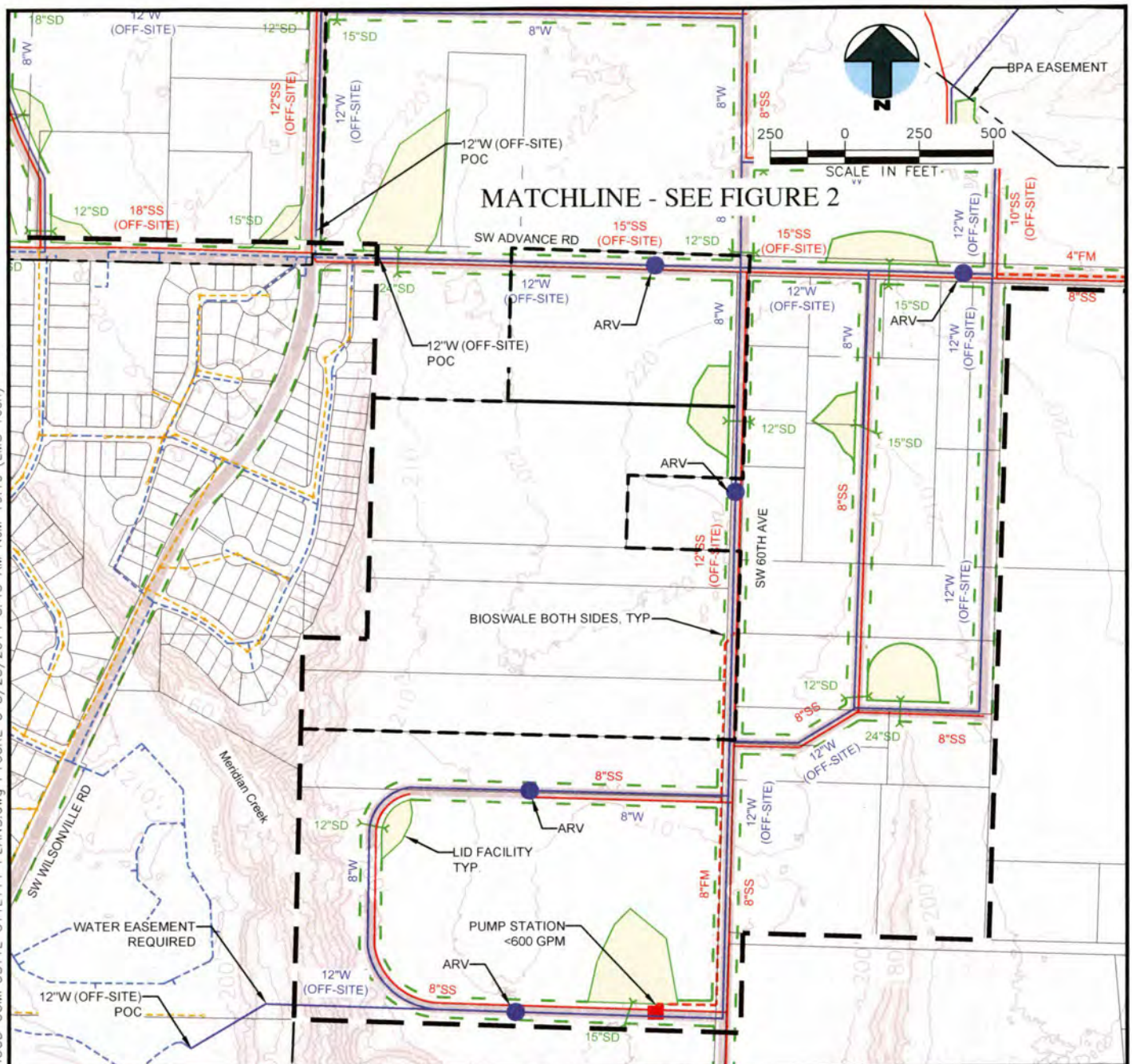
WEST NEIGHBORHOOD CONCEPTS 1 & 3 - GRID

MSA

Murray, Smith & Associates, Inc.
Engineers/Planners
Portland, Oregon

August 2014
14-1553.500

G:\PDX_Projects\14\1553\CAD\Figures\14-1553-OR-NEIGHBORHOOD COMPOSITE UTILITY PLANS.dwg FIGURE 3 8/28/2014 8:43 AM N.J. (LMS Tech)



LEGEND

- FROG POND AREA BOUNDARY
- WASTEWATER PIPE - NEW
- WASTEWATER FORCE MAIN - NEW
- WASTEWATER PUMP STATION - NEW
- WASTEWATER PIPE - EXISTING
- STORM CULVERT - NEW
- STORM LID FACILITY - NEW
- STORM PIPE - EXISTING
- STORM BIOSWALE - NEW
- WATER PIPE - NEW
- WATER AIR RELIEF VALVE (ARV) - NEW
- WATER PIPE - EXISTING
- CITY LIMITS
- URBAN GROWTH BOUNDARY (UGB)
- NEW STREET

FIGURE 3



Frog Pond Area Plan Composite Utility Plan

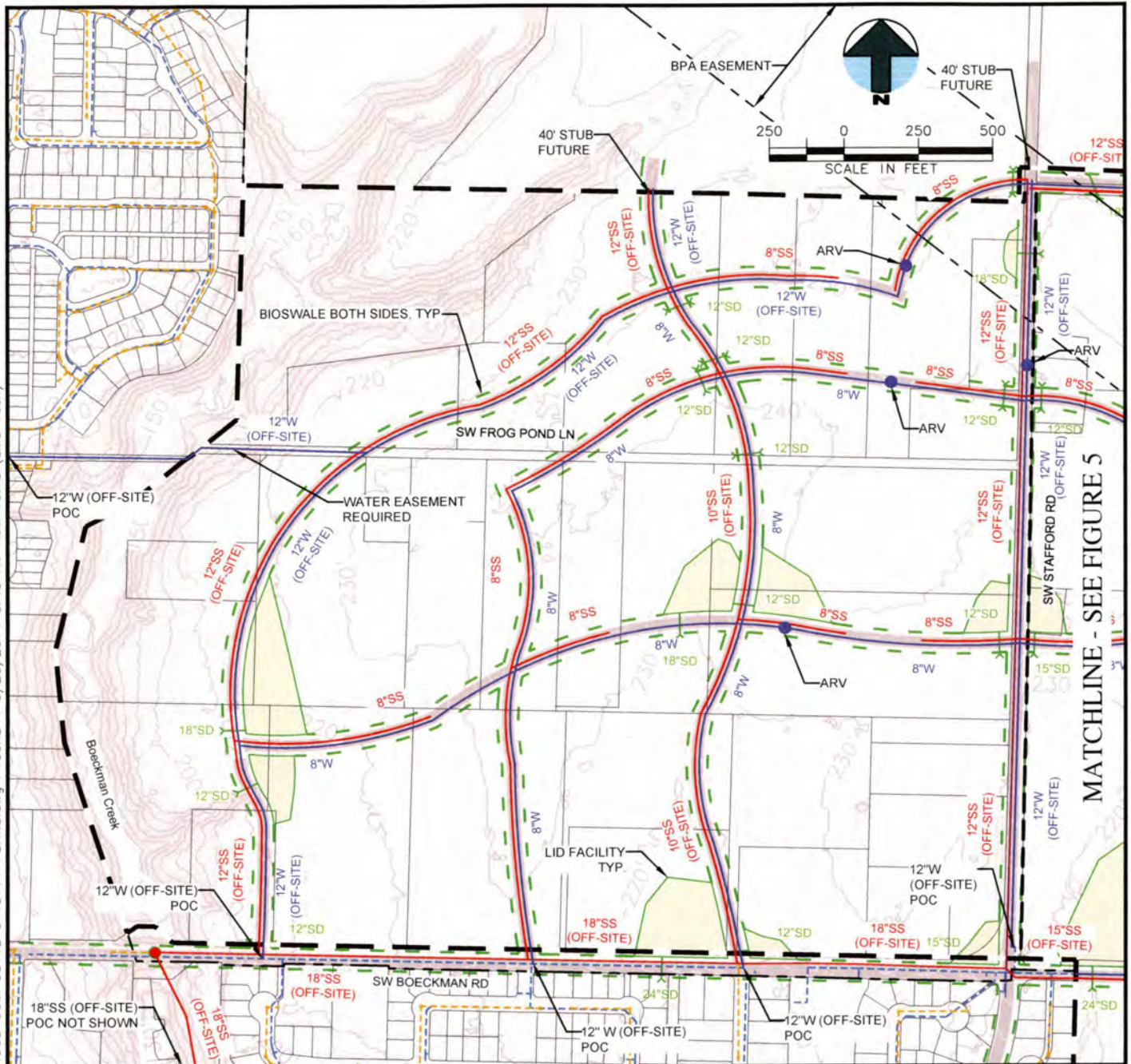
SOUTH NEIGHBORHOOD CONCEPTS 1 & 3 - GRID

MSA

Murray, Smith & Associates, Inc.
Engineers/Planners
Portland, Oregon

August 2014
14-1553.500

G:\PDX_Projects\14\1553-OR-NEIGHBORHOOD COMPOSITE UTILITY PLANS.dwg FIGURE 4 8/28/2014 8:43 AM NJM 19.1s (LMS Tech)



- FROG POND AREA BOUNDARY
- WASTEWATER PIPE - NEW
- WASTEWATER FORCE MAIN - NEW
- WASTEWATER PUMP STATION - NEW
- WASTEWATER PIPE - EXISTING
- X STORM CULVERT - NEW
- STORM LID FACILITY - NEW
- STORM PIPE - EXISTING
- STORM BIOSWALE - NEW
- WATER PIPE - NEW
- WATER AIR RELIEF VALVE (ARV) - NEW
- WATER PIPE - EXISTING
- CITY LIMITS
- URBAN GROWTH BOUNDARY (UGB)
- NEW STREET

FIGURE 4

City of
WILSONVILLE
In OREGON

Frog Pond Area Plan
Composite Utility Plan

WEST NEIGHBORHOOD
CONCEPT 2 - ORGANIC

MSA

Murray, Smith & Associates, Inc.
Engineers/Planners
Portland, Oregon

August 2014
14-1553.500















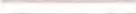
- | | |
|---|------------------------------------|
|  | FROG POND AREA BOUNDARY |
|  | WASTEWATER PIPE - NEW |
|  | WASTEWATER FORCE MAIN - NEW |
|  | WASTEWATER PUMP STATION - NEW |
|  | WASTEWATER PIPE - EXISTING |
|  | STORM CULVERT - NEW |
|  | STORM LID FACILITY - NEW |
|  | STORM PIPE - EXISTING |
|  | STORM BIOSWALE - NEW |
|  | WATER PIPE - NEW |
|  | WATER AIR RELIEF VALVE (ARV) - NEW |
|  | WATER PIPE - EXISTING |
|  | CITY LIMITS |
|  | URBAN GROWTH BOUNDARY (UGB) |
|  | NEW STREET |



FIGURE 6

City of
WILSONVILLE
In OREGON

Frog Pond Area Plan Composite Utility Plan

SOUTH NEIGHBORHOOD CONCEPT 2 - ORGANIC

MSA

Murray, Smith & Associates, Inc.
Engineers/Planners
Portland, Oregon

August 2014
14-1553.500



FROG POND AREA PLAN

Creating a great community





Public Speaking and Testifying

If we want to show leadership or share important stories or lessons from our lives with others we will often have to speak in public. Public speaking is a common source of stress for everyone. Many of us would like to never have to speak in public.

There will be plenty of opportunities to speak on behalf of your community and what is important to you. Some of the different venues in which to speak include: town hall meetings hosted by legislators to educate the public on important issues, meeting with decision/policy makers, city council meetings and other regulatory public hearings.

Testimony Tips

Always be prepared before you give testimony. Here are some tips to keep in mind:

- Identify the process for getting your name on the list to testify (for example, fill out a speakers card).
- Keep your testimony short. Often you may only have 2-3 minutes to speak.
- Tell them:
 1. Who you are and who you are representing
 2. If you support or oppose the policy
 3. Why you support or oppose the policy, include personal stories whenever possible to show how the issue affects real people.
 4. What action would you like the policy makers to take.
- Speak to the policy makers, not the audience.
- Be courteous
- Coordinate your testimony with others, when possible, who are testifying so that you cover different points.
- Anticipate questions the policy makers might ask and plan how to respond.

NERVOUSNESS TIPS

FIVE THINGS YOU CAN DO:

- RELAX YOUR BODY
- BREATHE
- TRY AND "DEFUSE" THE SITUATION
- PRACTICE!
- PREPARE!

- Do not be alarmed if policy makers leave and enter the room during your testimony. Sometimes they need to be in two to three places at once.
- When possible bring copies of your testimony in writing to submit. This emphasizes your views and provides your contact information.

Remember to speak from your own experiences and knowledge!

TALKING POINTS TEMPLATE EXERCISE

Your message should contain a problem, a solution and an action. Condense your message into talking points. Each point should support your key message. Remember to target your talking points to decision/policy makers.

KEY MESSAGE _____

TARGET AUDIENCE _____

TALKING POINTS:

- 1.
- 2.
- 3.

PRACTICE!

CONTINUED ON OTHER SIDE



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Communicating with Policy Makers

There are several ways to communicate with policy makers: meetings, providing public testimony, writing letters or sending emails. The key to humanizing the issue or problem is face-to-face contact with policy makers, showing a sign of commitment to solving it and developing a relationship.

Here are some tips to keep in mind:

- Organize a small diverse group of participants, of three to five people. If you are meeting with an elected official try and make sure some of the participants reside in the elected official's district.
- Select a spokesperson for your message. Choose someone who will appeal to the elected officials you are trying to persuade.
- Decide ahead of time who will conduct the meeting. Who will introduce the participants? Lead the meeting? Close the meeting? What materials will you take to leave with legislators at the end of the meeting?
- Get to know the elected official's staff. Elected officials often rely on the advice of key staff members. Staff will be your main point of contact if an elected official is unavailable or inaccessible.

Talking to Policy Makers

Here are some tips to keep in mind before and during a visit with decision/policy makers.

PREPARE FOR THE VISIT

- ESTABLISH YOUR AGENDA AND GOALS
- IDENTIFY WHO WILL PARTICIPATE IN THE MEETING
- KNOW THE POLICY MAKER'S BACKGROUND
- KEEP YOUR MESSAGE SIMPLE AND SHORT
- BE STRATEGIC ABOUT WHO COMES AND WHO SPEAKS
- WHEN POSSIBLE, PREPARE A ONE PAGE SUMMARY TO LEAVE
- PRACTICE!

WHAT TO EXPECT DURING THE VISIT

- BE PREPARED TO WAIT
- BE PREPARED TO MEET WITH STAFF
- STAY FOCUSED AND BE BRIEF
- BE ACCURATE AND GENEROUS WITH PRAISE
- BE CAREFUL NOT TO CLOSE DOORS
- LEAVE SOMETHING BEHIND
- **FOLLOW-UP:** EXPRESS THANKS AND AN INTEREST IN CONTINUING THE CONVERSATION.

CITY COUNCIL MEETING STAFF REPORT

Meeting Date: October 6, 2014	Subject: SMART system and service planning update Staff Member: Stephan Lashbrook Department: Transit
Action Required <input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input type="checkbox"/> Resolution <input type="checkbox"/> Information or Direction <input checked="" type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda	Advisory Board/Commission Recommendation <input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input checked="" type="checkbox"/> Not Applicable Comments:
Staff Recommendation: n/a	
Recommended Language for Motion: n/a	
PROJECT / ISSUE RELATES TO: <i>[Identify which goal(s), master plans(s) issue relates to.]</i>	
<input type="checkbox"/> Council Goals/Priorities	<input checked="" type="checkbox"/> Adopted Master Plan(s) Transit Master Plan (TMP)
<input type="checkbox"/> Not Applicable	

ISSUE BEFORE COUNCIL:

To begin preparing Council for the Transit Master Plan (TMP) update, staff will provide a general overview of SMART's current and future system planning efforts including transit funding information and project updates.

EXECUTIVE SUMMARY:

The City's transit department is faced with unique challenges operating a relatively small system in a growing region with large urban transit providers to the north and south. Changing demographics and travel trends make it especially important for SMART to monitor the overall efficiency and health of our system and to be prepared to make proactive changes to best serve the public.

Current projects, such as the Transit Integration Project, are helping to lay the groundwork for the Transit Master Plan update which will begin later this year. We will also be working on a Five-Year Strategic Plan to guide internal decision-making.

SMART has just undergone the Triennial Review process where all aspects of financing, maintenance and operations have been subject to scrutiny by federal reviewers. While the findings of that review will not lead to drastic changes, they will lead to a number of relatively minor changes that will be addressed in our new strategic plan.

Given that SMART has now been in existence for 25 years, it seems especially appropriate that we lay the groundwork for future growth and customer service planning as we look to the future.

EXPECTED RESULTS:

After providing this overview, SMART staff and project consultants will be back before Council on October 20, 2014, to present a detailed update on the Transit Integration Project. Later this fall and into early 2015, SMART will kick off the TMP update process and seek Council direction as we consider possible service changes.

TIMELINE:

Fall 2014 – Integration Project Final Report
Early 2015 – TMP update begins
Mid-2015 – 5-Year Strategic Plan completed

CURRENT YEAR BUDGET IMPACTS: n/a

FINANCIAL REVIEW / COMMENTS:

Reviewed by: _____CAR_____ Date: _____9/16/14_____

LEGAL REVIEW / COMMENT:

Reviewed by: MEK_____ Date: 9/16/2014_____
N/A

COMMUNITY INVOLVEMENT PROCESS:

The Transit Integration Project has involved extensive public outreach, with more anticipated as that project moves towards completion and implementation. The planning efforts scheduled for next calendar year will involve more outreach and involvement.

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY:

Improving efficiency of SMART operations and assuring that SMART best meets the needs of its customers are both objectives of the planning programs that are now under way and they will both be of benefit to the community.

ALTERNATIVES: n/a

CITY MANAGER COMMENT:

ATTACHMENTS - None

CITY COUNCIL MEETING – WORK SESSION STAFF REPORT

Meeting Date: October 6, 2014	Subject: Stormwater Utility Rate Study Update Staff Member: Nancy Kraushaar, PE, Community Development Director Department: Community Development
Action Required <input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Information or Direction <input type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda	Advisory Board/Commission Recommendation <input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input checked="" type="checkbox"/> Not Applicable Comments: <div style="height: 80px;"></div>
Staff Recommendation: Staff recommends the City Council discuss the Stormwater Rate Study and provide direction on a preferred rate alternative.	
Recommended Language for Motion: N/A	
PROJECT / ISSUE RELATES TO: <i>[Identify which goal(s), master plans(s) issue relates to.]</i>	
<input checked="" type="checkbox"/> Council Goals/Priorities Goal 6 – Well Maintained Infrastructure	<input checked="" type="checkbox"/> Adopted Master Plan(s) Adopted 2013 Stormwater Master Plan with amended CIP
<input type="checkbox"/> Not Applicable	

ISSUE BEFORE COUNCIL:

This is a follow-up to the August 4, 2014 work session on preliminary rate forecast scenarios for the Stormwater Operating Fund and the associated 20-year Stormwater Capital Improvement Plan (CIP). Based on Council direction from that work session, staff has prepared alternate rate scenarios which show a 5-year initial CIP, a 30-year program for overall CIP implementation and use of both revenue bonds and interfund loans for debt financing.

EXECUTIVE SUMMARY:

The Stormwater Utility has been under financial pressure over recent years resulting in a fund balance that is near zero. This is due to major repair projects at Morey's Landing and the

Rivergreen Bank Stabilization and Channel Restoration. Both these emergency projects were cash funded through the Utility's operating reserves.

As noted in the adopted 2014-15 Wilsonville Budget, the Utility does not meet ending fund balance goals the City has set for all enterprise funds. The fund is able to minimally meet operational needs, but cannot support future capital requirements. The Stormwater Utility Rate Study was initiated to determine necessary actions to restore fund stability.

The study is based on the adopted budget for operational needs and an updated Stormwater Capital Improvement Plan (CIP). The CIP has been updated since its adoption with the 2012 Stormwater Master Plan. Revisions include the addition of stormwater infrastructure needs documented in the Charbonneau Consolidated Improvements Plan, reprioritizing projects over the next 20 years, and elimination of projects that are not considered mandatory at this time based on existing conditions.

Please note that the City's stormwater discharge permit (administered by the Oregon Department of Environmental Quality under their MS4 NPDES program) requires the City to complete a stormwater retrofit study by June 2015 at which time some of these projects may need to be added back to the CIP.

The City's current single-family stormwater utility rate is \$5.25. It is scheduled to increase to \$5.45 in July 2015 and \$5.60 in July 2016. Non-single family residential properties are charged a monthly fee at the single-family rate per 2,750 square feet of impervious area.

As a result of the August 4 work session, Council requested the following:

1. Increase the timeframe for the initial CIP from three to five years. That CIP cost is \$7,130,015,
2. Include in the 5-year CIP costs related to the 4 pending outfall projects (three locations; one location has two phases),
3. Debt finance the 5-year CIP by combining an interfund loan (via the General Fund) with a revenue bond, and
4. Add an alternative that expands the timeframe for implementing the remaining CIP cost from 20 to 30 years. That CIP cost is \$26,318,005 which will be annualized and cash funded.

EXPECTED RESULTS:

The rate study is expected to stabilize the Stormwater Operating Fund.

TIMELINE:

Staff recommends that the preferred rate alternative selected by City Council be adopted this fall to be implemented in January 2015.

CURRENT YEAR BUDGET IMPACTS:

The Stormwater Rate Study was budgeted at \$20,160 in the adopted FY 2013-14 Budget. Approximately half of this was spent before July 1, 2014. A supplemental budget adjustment to the adopted FY 2014-15 Budget has been approved by the City Council to complete the study.

FINANCIAL REVIEW / COMMENTS:

Reviewed by: CAR Date: 9/26/14

Project # 7050-Stormwater Rate and SDC Study has a current budget of \$20,545.

LEGAL REVIEW / COMMENT:

Reviewed by: MEK Date: 9/26/14

NA

COMMUNITY INVOLVEMENT PROCESS:

After the Council has provided direction to staff on the preferred rate alternative, public information will be prepared for distribution.

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY

Stormwater management is an important component of the public works infrastructure in Wilsonville. The stormwater system protects against flooding, improves water quality by removing sediment and pollutants from urban runoff, and can protect and enhance wildlife habitat.

The impact from the rate study is increased monthly stormwater utility rates. Increased rates will allow the City to address aging infrastructure, system deficiencies, growing system needs, and regulatory requirements.

The community will benefit from a reliable stormwater system – including operations and maintenance and well-programmed capital investments. Environmental benefits include water quality protection in the Willamette River, healthier natural resources (such as the Coffee Creek wetlands and the Boeckman Creek watershed), and protection of native plant and wildlife species.

ALTERNATIVES:

To be determined as the rate study continues.

CITY MANAGER COMMENT:**ATTACHMENT**

Attachment 1 – Summary of Rate Projections

ATTACHMENT 1

City of Wilsonville Stormwater Utility Rate Update Summary of Rate Projections

Background

The City hired Shaun Pigott Associates, LLC in May 2014 to update its stormwater rates based on revised capital needs. These revised needs result, in large part, from the City's recent analysis of the stormwater system repairs and replacements required for Charbonneau, and also from recent construction projects that exceeded previously anticipated revenue trends. The following table summarizes the overall stormwater CIP:

Time Period	Master Plan Projects	Charbonneau Projects	Total Costs
Years 1 – 5	\$2,402,014	\$4,728,000	\$7,130,014
Years 6 -10	\$4,708,582	\$5,504,000	\$10,212,582
Years 11 – 20	\$6,754,423	\$9,351,000	\$16,105,423
20 Year Totals	\$13,865,019	\$19,583,000	\$33,448,019

The Utility's future operating requirements were also evaluated including the addition of a staff engineer (2016), utility worker (2025) and the need to re-establish an adequate operating reserve (2017).

A number of rate "cases" have been developed which address various capital financing scenarios including use of interfund loans and revenue bonds. The objective throughout has been to overlay capital, operations and fiscal policy requirements on a forecast that accurately depicts rate trajectories into the future.

Rate Scenarios

The following conditions are reflected in the rate scenarios requested by Council at its August 4 work session:

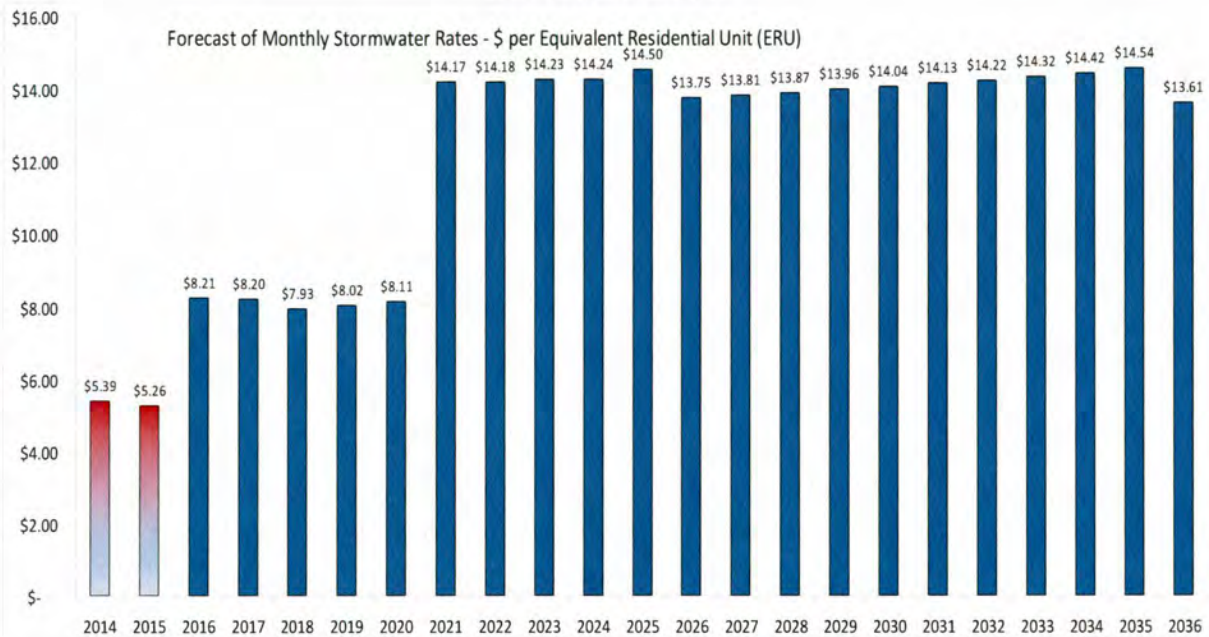
1. Expand the initial CIP timeframe from three to five years (\$7,130,014),
2. Debt finance the entire amount for this timeframe (less any SDC eligible project costs or \$521,586) via an interfund loan and a revenue bond,

3. \$2,000,000 will be the maximum amount to be financed through an interfund loan from the City's General Fund,
4. The remaining amount (\$4.6 million) will be financed through a revenue bond,
5. The revenue bond is 20 years @ 4.5% interest with reserve requirements funded through bond proceeds. Annual debt service will be \$405,993. The interfund loan is 10 years @ .54%. Annual debt service will be \$264,064. Total annual debt service is \$670,057,
6. The overall CIP schedule will be evaluated on both a 20 and 30-year timeframe. In the 30-year case, the projects currently scheduled from years 2021 through 2036 will be realigned to extend to the year 2046,
7. Projects to be scheduled for years 2021 through 2036 and 2046 will be funded via the "capital reserve strategy" shown to Council on August 4 which simply means we will divide the total inflated project costs by 15 and 25 respectively and adjust annual rates to meet that average annual capital cost. The average annual amount will be \$1.8 million for the 20 year case and \$1.1 million for the 30 year case, and
8. The costs for the four (three locations; one location with two phases) recently scoped outfall projects have been included in the 5 year CIP and will be included in the debt issuance.

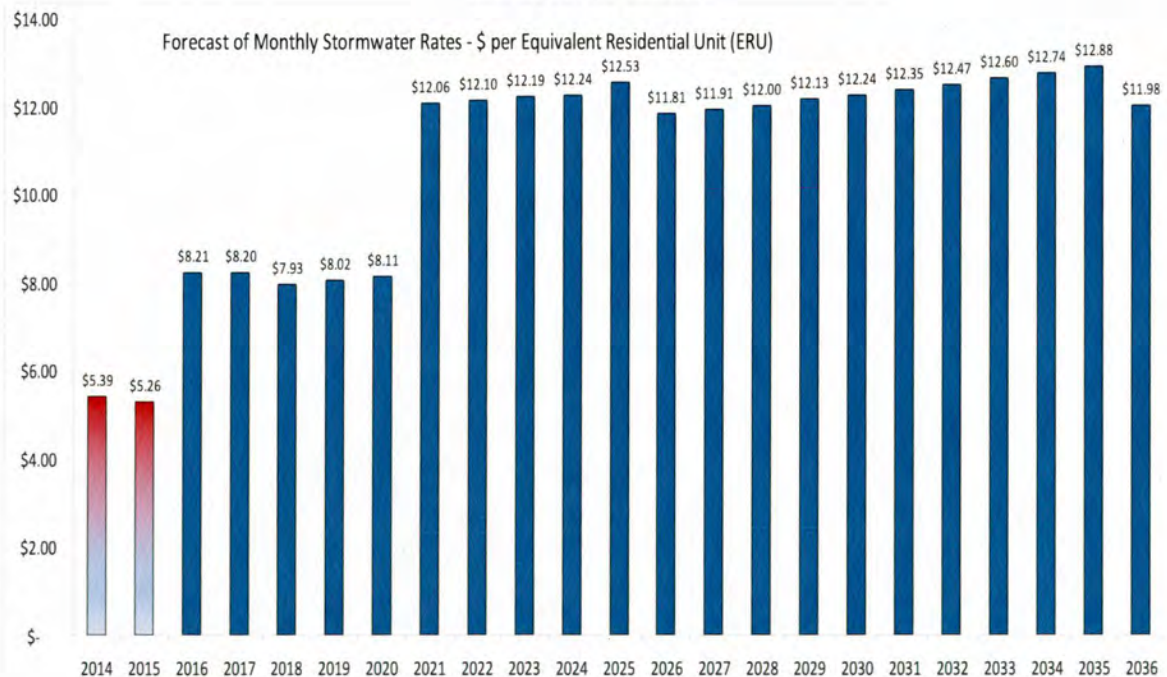
Rate Projections

The following two cases are based on the estimated revenue requirements of the Stormwater Utility over the next 20 and 30 years, respectively. Operational costs are indexed based on inflation factors consistent with Wilsonville's other enterprise funds and include the staffing additions for an engineer and utility worker. Achieving an operating fund reserve of 20% of annual operating costs is also reflected in the projections. All capital costs have been inflated for the year of planned construction and the debt service expense is as outlined above (#5).

20-Year CIP Case



30-Year CIP Case



These cases reflect the actual rate required on an annual basis. Based on Council direction regarding the preferred approach, rates can be “smoothed” by using the average rate over 3 year increments to eliminate annual fluctuation.

By way of comparison, the following table shows current monthly stormwater rates in other jurisdictions (based on a typical single family residential property):

Portland	\$24.88
Milwaukie	\$14.89
Sherwood	\$13.27
Lake Oswego	\$11.76
Oregon City	\$8.80
Newberg	\$7.30
Tualatin	\$6.75
Clackamas County (North Clackamas Service Area)	\$6.35
Hillsboro	\$6.25
West Linn	\$5.58
Wilsonville	\$5.25
Sandy	\$3.25

Direction Requested from Council

To accomplish the 5-year CIP, the rates shown for 2016-2020 will be necessary to meet bond approval criteria.

To provide a more gradual rate increase to address post-5-year CIP needs as shown by the 2021 rate forecast, Council could consider increasing rates in 2016-2020 to incrementally approach the 2021 rate.

For example, in the 30-Year CIP Case:

2015 - \$7.50; 2016 - \$8.75; 2017 - \$8.75; 2018 - \$10.75; 2019 - \$10.75; 2020 - \$12.06. Future years would be determined based on revenue needs relative to the incremental rate increases. Such incremental increases can allow the community to plan for moderate rate increases over time.

A similar rate increase alternative could be used for the 20-Year CIP Case.

It is important for the Council to select a preferred rate alternative in order to address identified stormwater maintenance needs and provide reliable infrastructure for the community in the long term. Direction is needed as to whether additional information if needed for the Council to select a preferred rate alternative that would be brought to them to consider for adoption by resolution later this year.




**Stormwater Utility
Rate Update**

City of Wilsonville

- Continued from August 4, 2014 Council Work Session -

October 6, 2014

1



Tonight's Agenda

- Council Direction from August 4 Work Session
- Capital Improvements Program (CIP) Summary & Schedule
- Rate Estimates – 20 and 30 Year CIP Schedule
- Summary and Council Discussion

2

Direction from August 4 Work Session

- Include Cost Estimates for the 3 New Willamette River Outfall Projects...\$1,401,010
- Expand the Timeframe for the Initial CIP from 3 to 5 Years...\$7,130,014
- Finance All Projects for the 5 Year CIP through a Combination of Revenue Bonding and an Interfund Loan
- Limit the Interfund Loan to \$2,000,000
- Evaluate Future Rate Impacts Using Both a 20 and 30 Year CIP Schedule

3

Capital Program – Big Picture

- Revised Master Plan CIP Identifies Project Costs of \$13,865,019
- Charbonneau Contains an Additional \$19,583,000 in “Spot and Complete Repair” Project Costs
- Total CIP Over 20 Year Forecast is \$33,448,019 (current dollars)
- SDC Eligible Capital Costs are Estimated To Be \$8,358,457 (based on 7/17/14 SDC allocation)
- Project Costs to be Funded through Rates are \$25,089,562

4

CIP Cost Summary

(current dollars)

Time Period	Master Plan Projects	Charbonneau Projects	Total Costs
Years 1 - 5	\$2,402,014	\$4,728,000	\$7,130,014
Years 6 -10	\$4,708,582	\$5,504,000	\$10,212,582
Years 11 - 20	\$6,754,423	\$9,351,000	\$16,105,423
20 Year Totals	\$13,865,019	\$19,583,000	\$33,448,019

5

Preliminary Rate Forecast – Case 1.A

*Issue Revenue Bond & Interfund Loan (years 1-5);
Pay as You Go (years 6 -20)*

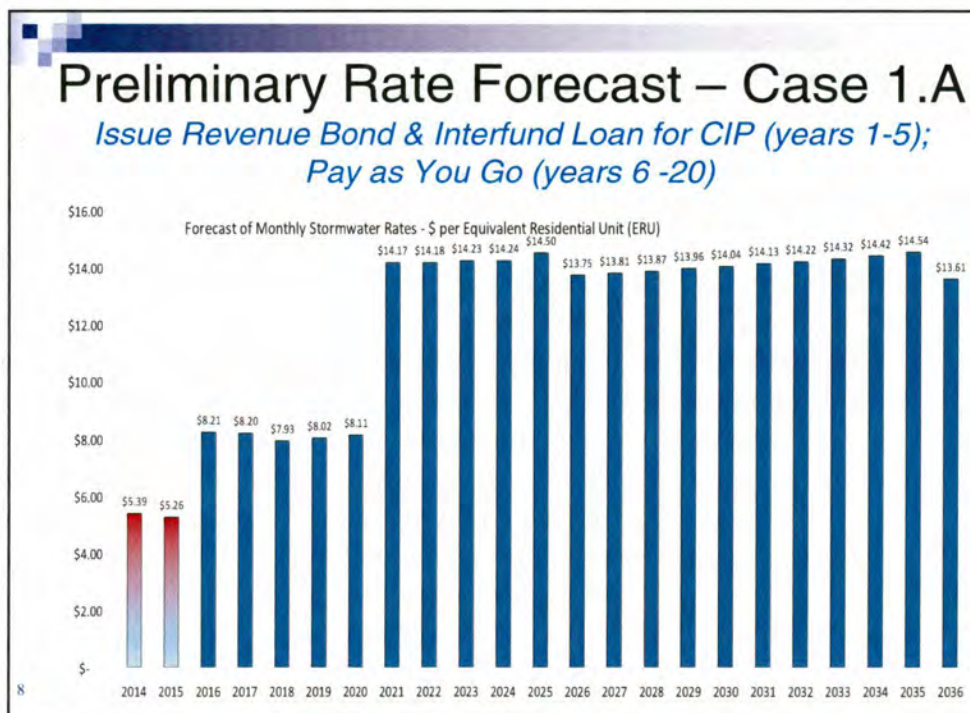
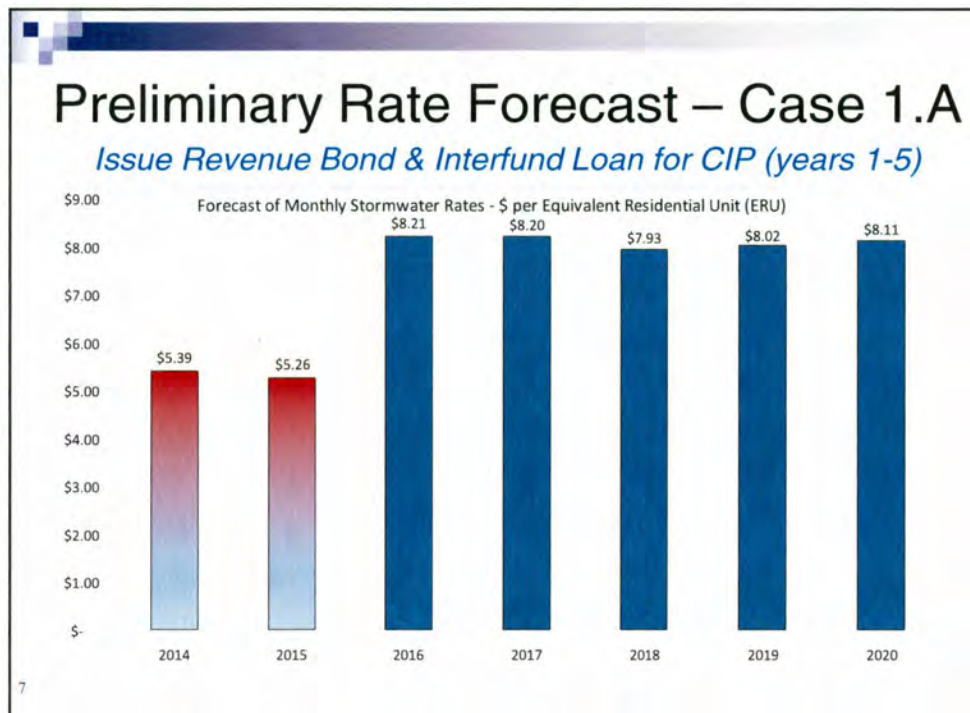
- Capital Costs Years 1 - 5 = \$7,343,914 (inflated to reflect 2016 costs)
- SDC Contributions = \$521,586
- Interfund Loan = \$2,000,000
- Revenue Bond Amount Borrowed = \$5,281,133 (with issuance & reserve expense)
- Cash Fund Each Year's CIP via Rate Adjustments Years 6 - 20
- Small Works CIP = \$200,000 per year (cash funded)
- Fund Balance = 20% of Operating Costs by FY' 17
- Other Assumptions Consistent with Sewer Rate Study
- O&M Expense Based on Budget with 2 Added FTEs

FY'16 Civil Engineer @ \$113,000 (fully burdened)

FY'25 Utility Worker @ \$76,000 (fully burdened)

6

Note: rate profile simply overlays the CIP for years 6 -20...no rate smoothing has been done via CIP adjustments at this time



Graduated Rate Increase Scenario - Case 1.A 20 Year CIP Schedule

Date	Amount of Rate Increase	New Rate	Percent Increase
Current Rate	—	\$5.25	—
Jan. 1, 2015	\$1.50	\$6.75	29%
Jan. 1, 2016	\$1.50	\$8.25	22%
Jan. 1, 2017	\$1.20	\$9.45	14%
Jan. 1, 2018	\$1.20	\$10.65	13%
Jan. 1, 2019	\$1.20	\$11.85	11%
Jan. 1, 2020	\$1.20	\$13.05	10%
Jan. 1, 2021	\$1.20	\$14.25	9%

Monthly rate per equivalent residential unit (ERU)

*= pay-as-you-go approach
note.*

Preliminary Rate Forecast – Case 1.B

*Issue Revenue Bond & Interfund Loan CIP (years 1-5);
Pay as You Go (years 6 - 30)*

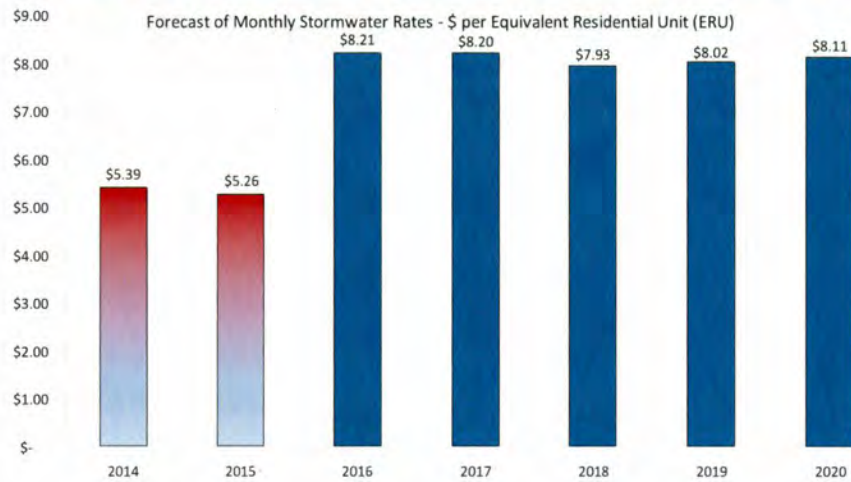
- Capital Costs Years 1 - 5 = \$7,343,914 (inflated to reflect 2016 costs)
- SDC Contributions = \$521,586
- Interfund Loan = \$2,000,000
- Revenue Bond Amount Borrowed = \$5,281,133 (with issuance & reserve expense)
- Cash Fund Each Year's CIP via Rate Adjustments Years 6 - 30
- Small Works CIP = \$200,000 per year (cash funded)
- Fund Balance = 20% of Operating Costs by FY' 17
- Other Assumptions Consistent with Sewer Rate Study
- O&M Expense Based on Budget with 2 Added FTEs

FY'16 Civil Engineer @ \$113,000 (fully burdened)

FY'25 Utility Worker @ \$76,000 (fully burdened)

Preliminary Rate Forecast – Case 1.B

Issue Revenue Bond & Interfund Loan for CIP (years 1-5);

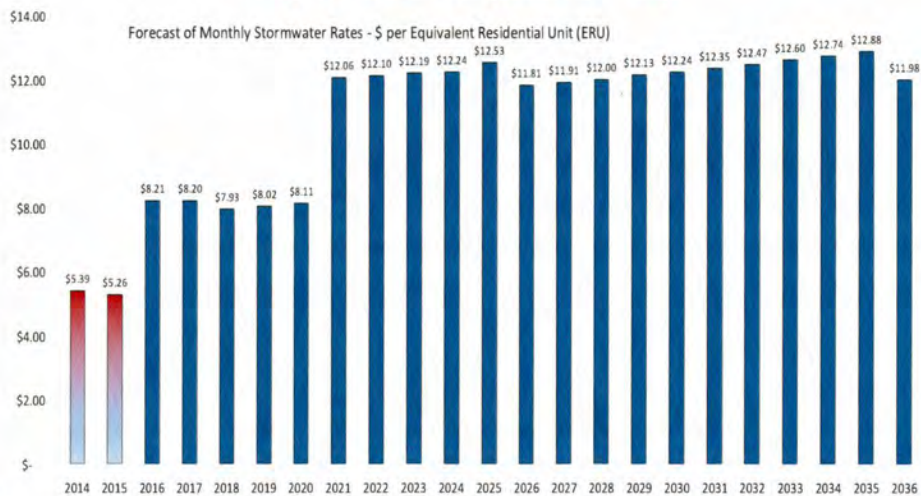


11

Preliminary Rate Forecast – Case 1.B

Issue Revenue Bond & Interfund Loan for CIP (years 1-5);

Pay as You Go (years 6 - 30)



12

Graduated Rate Increase Scenario - Case 1.B 30 Year CIP Schedule

Date	Amount of Annual Rate Increase	New Rate	Percent Increase
Current Rate	—	\$5.25	—
Jan. 1, 2015	\$1.50	\$6.75	29%
Jan. 1, 2016	\$1.50	\$8.25	22%
Jan. 1, 2017	\$.75	\$9.00	9%
Jan. 1, 2018	\$.75	\$9.75	8%
Jan. 1, 2019	\$.75	\$10.50	7.5%
Jan. 1, 2020	\$.75	\$11.25	7%
Jan. 1, 2021	\$.75	\$12.00	6.5%

13

Monthly rate per equivalent residential unit (ERU)

Stormwater Rates in Other Jurisdictions

(cost per ERU per month)

Portland	\$24.88
Milwaukie	\$14.89
Sherwood	\$13.27
Lake Oswego	\$11.76
Oregon City	\$8.80
Newberg	\$7.30
Tualatin	\$6.75
Clackamas County (North Clackamas Service Area)	\$6.35
Hillsboro	\$6.25
West Linn	\$5.58
Wilsonville	\$5.25
Sandy	\$3.25

14

Summary & Council Discussion

- Wilsonville has significant stormwater capital project needs that cannot be addressed within the current rate
- Charbonneau infrastructure is at or beyond its useful life... comprehensive replacement program is required
- The stormwater utility will need to incur debt to begin this process
- The funding approaches evaluated to date reflect the "1 City" concept
- Is the 20 or 30 year CIP schedule the preferred direction?

CITY COUNCIL MEETING STAFF REPORT

Meeting Date: October 6, 2014	Subject: TSP Project BW-08 –To Restripe Town Center Loop East from Wilsonville Road to Parkway Avenue to a Three-Lane Cross-Section With Bike Facilities Staff Member: Mike Ward, P.E., Civil Engineer Department: Community Development
Action Required <input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Information or Direction <input type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda	Advisory Board/Commission Recommendation <input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input checked="" type="checkbox"/> Not Applicable Comments:
Staff Recommendation: Council to become informed about the opportunity to implement a portion of Transportation System Plan (TSP) Project BW-08, Town Center Loop Pedestrian, Bicycle, and Transit Improvements, by restriping Town Center Loop East following the recent micro-surfacing treatment that was applied as part of the 2014 Annual Street Maintenance program.	
Recommended Language for Motion: N/A	
PROJECT / ISSUE RELATES TO: <i>[Identify which goal(s), master plans(s) issue relates to.]</i>	
<input checked="" type="checkbox"/> Council Goals/Priorities #6 – Well Maintained Infrastructure #7 – Community Amenities and Recreation	<input checked="" type="checkbox"/> Adopted Master Plan(s) Transportation System Plan Project BW-08
<input type="checkbox"/> Not Applicable	

ISSUE BEFORE COUNCIL:

Council will become informed about, discuss, and provide input on implementation of a portion of TSP Project #BW-08.

EXECUTIVE SUMMARY:

Following the micro-surfacing treatment of Town Center Loop E, the City has the opportunity to implement a portion of the Town Center Loop Pedestrian, Bicycle, and Transit Improvements that is identified in the adopted 2013 Wilsonville TSP.

DKS, the City's traffic consultant, completed an engineering study for Town Center Loop East to determine the feasibility of retrofitting the existing five-lane cross-section to a three-lane section with bike lanes. They determined that the roadway capacity in the long term is adequate with a three-lane section, and left turns at existing driveways will be sufficiently served with the remaining center turn lane. The study will be summarized in a presentation at the work session.

The addition of bike lanes on Town Center Loop West will provide a critical north-south bicycle connection for the City between Wilsonville Road and Elligsen Road via Canyon Creek Road. The restriping will also provide improved bicycle access to the Town Center area from north Wilsonville.

EXPECTED RESULTS:

The restriping of Town Center Loop East will provide continuity of bike lanes that currently exist on Memorial Drive and Canyon Creek Road, including the section under construction. Bike facilities will reach from Parkway at Memorial Drive to Elligsen Road. This will connect the Daydream Ranch, Courtside, Renaissance at Canyon Creek, and Canyon Creek Meadows and Estates neighborhoods and the following public facilities: Town Center Park, Memorial Park, the Library, City Hall.

TIMELINE:

Staff is working to schedule striping in October after the Council has been informed and provided input. Please note that permanent striping is weather dependent.

CURRENT YEAR BUDGET IMPACTS:

Staff is working with the contractor to provide a cost for the difference in striping costs for Town Center Loop East with the modification that includes bike lanes.

FINANCIAL REVIEW / COMMENTS:

Reviewed by: _____CAR_____ Date: ____9/26/14_____
Project # 4014-Street Maintenance has a current budget of \$786,600.

LEGAL REVIEW / COMMENT:

Reviewed by: MEK_____ Date: 9/26/2014_____
NA

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY (businesses, neighborhoods, protected and other groups):

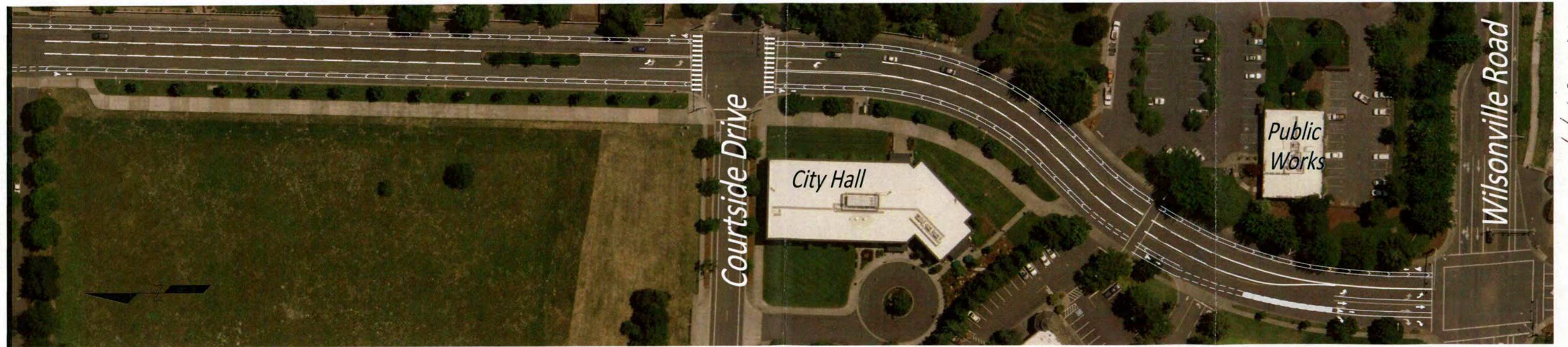
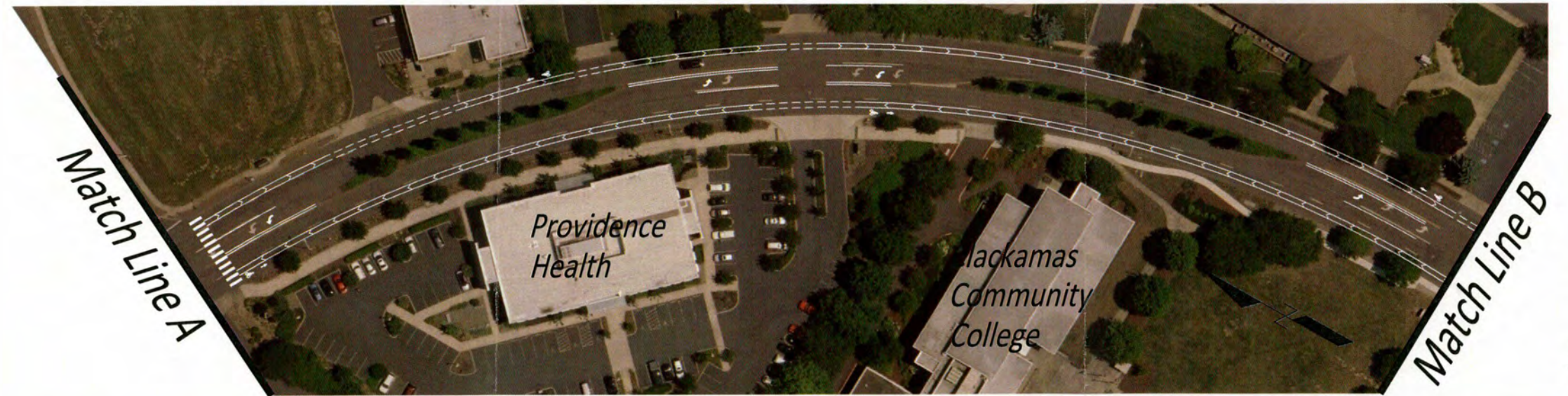
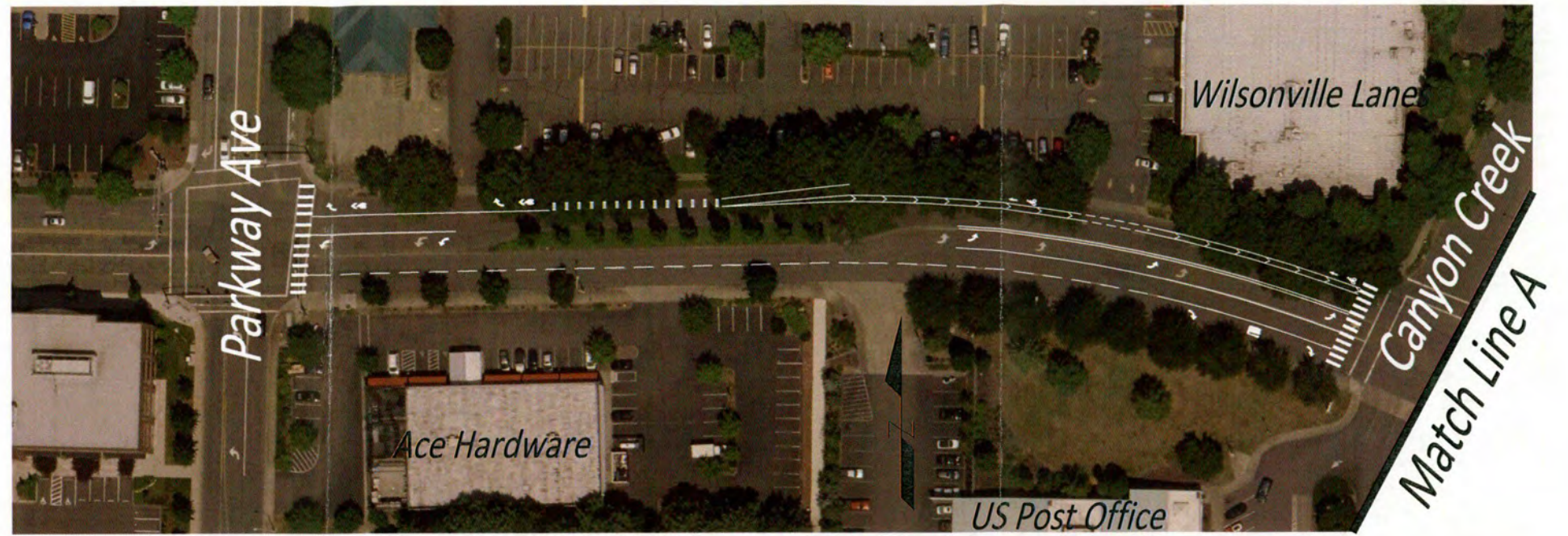
As noted above, many neighborhoods will be served by continuous north-south bicycle lanes that connect to all of the businesses, services, and public facilities along Canyon Creek Road, Town Center Loop East, and Memorial Drive.

CITY OF WILSONVILLE

Town Center Loop East

Bicycle Improvements

TSP Project BW-08



Match Line B

10/6/14 Council mtg. w.s.

PROCLAMATION

Declaring the Month of October 2014 as “Manufacturing Month”



- WHEREAS, Manufacturing is the cornerstone of Oregon's economy, accounting for 81% of the greater Portland metropolitan area's exports and representing 26% of the region's Gross Metropolitan Product, equal to \$32 billion worth of goods and services; and
- WHEREAS, Manufacturing fuels Oregon's economic growth and creates jobs in many sectors of the economy, such that for every 1 traded-sector manufacturing job in Oregon, 2.5 local-sector jobs are generated; and
- WHEREAS, The average annual wage in Oregon's manufacturing sector is \$62,170, which is 40% greater than the average \$44,229 wage across all industries; and
- WHEREAS, Advanced manufacturing technologies like full-color and 3-D printing, electronic design automation, heads-up guidance controls, infrared night-vision systems, innovative medical products and electrical components, and specialized metal products provide high-paying jobs for Oregonians and a vital economic base for our state and local community; and
- WHEREAS, The manufacturing sector provides nearly 34,500 jobs for Oregonians, including careers like engineers, computer programmers, mechanics, machine operators, information technology professionals, researchers and management professions, and much more; and
- WHEREAS, College degrees that are in demand in the manufacturing sector include engineering, computer science, software programming, business, economics, math, machine manufacturing technology, welding and more; and
- WHEREAS, Oregon Tech Wilsonville; Clackamas Community College; the Columbia-Willamette Workforce Collaborative comprised of Worksystems, Inc., the Workforce Investment Council of Clackamas County and the SW Washington Workforce Development Council in partnership with WorkSource Oregon; and the Oregon Manufacturing Extension Partnership among others strive to assure that Oregon has a well prepared and skilled manufacturing workforce that is ready to make products today and in the future while providing new and rewarding manufacturing careers in Oregon;

NOW THEREFORE, I, Tim Knapp, as Mayor of the City of Wilsonville hereby do proclaim October 2014 as:

“Manufacturing Month”

in the City of Wilsonville and encourage all residents and businesses to observe this month.

Dated this 6th day of October 2014.

Tim Knapp, Mayor, City of Wilsonville

A handwritten signature in black ink that reads 'Mayor Knapp'.

October 6, 2014

National Arts and Humanities Month (NAHM) is a coast to coast celebration of culture in America... and has helped give millions of Americans the opportunity to explore new facets of the arts and encouraged them to begin a lifelong habit of active participation.

As a representative of the Wilsonville Arts & Culture Council I'd like to read parts of President Obama's NAHM Proclamations from past few years:

"This month we pay tribute to the tremendous power of the Arts and Humanities to bring us together and expose us to new ideas that make us think and feel" President Obama 2014,

"Artistic expression and memorable ideas can resonate with us, challenge us, and teach us important lessons about ourselves and each other. All the best, great works of literature, theater, dance, fine art and music reflect something common in all of us. . . They are also vital components of our children's education. . . When children read their first book, pick up their first instrument, or perform in their first play, they demonstrate the power of the arts to ignite wonder and imagination.... If we give them the tools to create and innovate, they will do their part to challenge our perceptions, and stir us to be our best selves." President Obama, 2012

The State of Oregon was active in National Arts & Humanities Month during the 2009 Oregon Sesquicentennial as was the Wilsonville Arts & Culture Council which commissioned a play, *A Ferry Tale of Wilsonville, Oregon's Transportation Town*.

We continue to advocate for the arts and for Wilsonville arts organizations We would like to encourage you to begin or continue lifelong active participation in the arts.

Theonie Gilmore, Executive Director Wilsonville Arts & Culture Council

Wilsonville Citizens are encouraged to become members of local arts boards that will serve to raise funds for arts, culture and heritage organizations in Wilsonville.

A Strategic Plan template for Arts/Culture/Heritage - 5 strategic statements
Focus on quality of (membership) or participant experience; and the manner in which programs, structures and systems should be organized to foster long-term enjoyment and loyalty to arts organizations.

Strategic Statement #1

Inspire a Lifelong commitment to the Arts/Culture/Heritage

Strategic Statement #2

Personalize the Arts/Culture/Heritage experience

Strategic Statement #3

Assert A/C/H position as offering a valuable overall participation experience

Strategic Statement #4

Improve the business operations of Arts/Culture/Heritage

Strategic Statement #5

Cultivate partnerships to advance the mission of Arts/Culture/Heritage

CITY COUNCIL ROLLING SCHEDULE

Board and Commission Meetings 2014-15

OCTOBER

DATE	DAY	TIME	MEETING	LOCATION
10/6	Monday	7 p.m.	City Council Meeting	Council Chambers
10/8	Wednesday	1 p.m.	Wilsonville Community Seniors, Inc.	Community Center
10/8	Wednesday	6 p.m.	Planning Commission	Council Chambers
10/9	Thursday	6:30 p.m.	Parks and Recreation Advisory Board	Council Chambers
10/13	Monday	6:30 p.m.	DRB Panel A Cancelled	Council Chambers
10/20	Monday	7 p.m.	City Council Meeting	Council Chambers
10/22	Wednesday	6:30 p.m.	Library Board	Library
10/27	Monday	6:30 p.m.	DRB Panel B	Council Chambers

COMMUNITY EVENTS

ANTIQUE APPRAISAL DAY

October 11 – 10 a.m. – 2p.m., Community Center

Professional antique appraiser David Wilsonville will appraise the value of items for \$10 per item.

All proceeds raised will benefit the City's Senior Nutrition Program.

FROG POND AREA PLANNING

Frog Pond Area Plan Open House

October 16

5:30 p.m. – 8 p.m.

City Hall Council Chambers

HARVEST FESTIVAL

October 18 – 9:30 a.m. – 11:30 a.m., Stein-Boozier Barn at Murase Plaza

Pumpkin decorating, horse and wagon rides, costume parade for kids and pets at 10:15 a.m.

CHARBONNEAU ARTS FESTIVAL

October 25 – 3 p.m. to October 26 at 5 p.m., Charbonneau Country Club

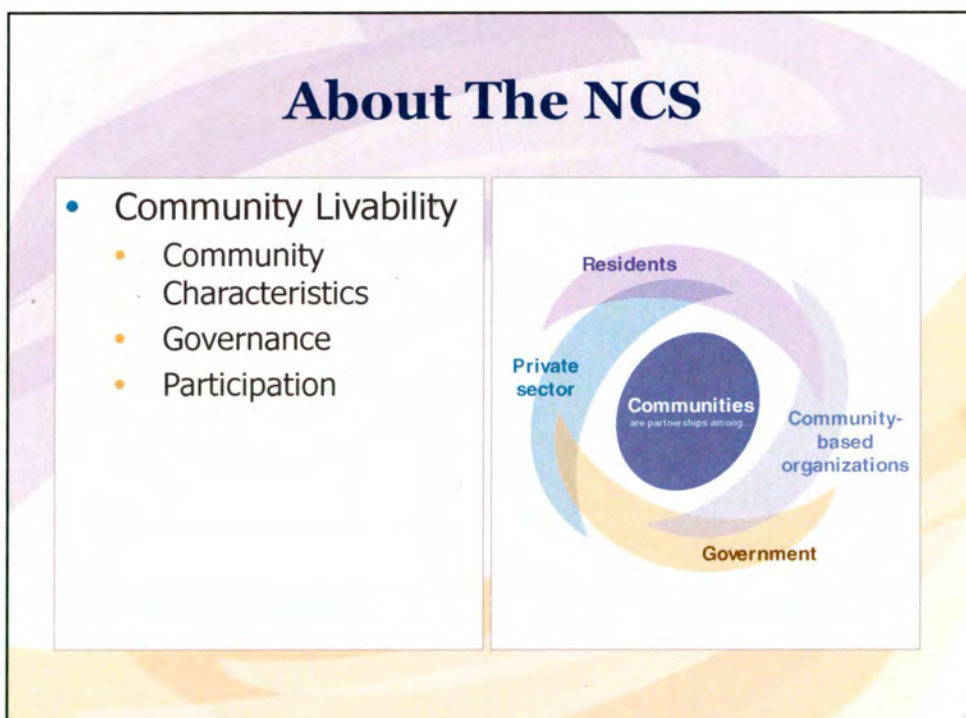
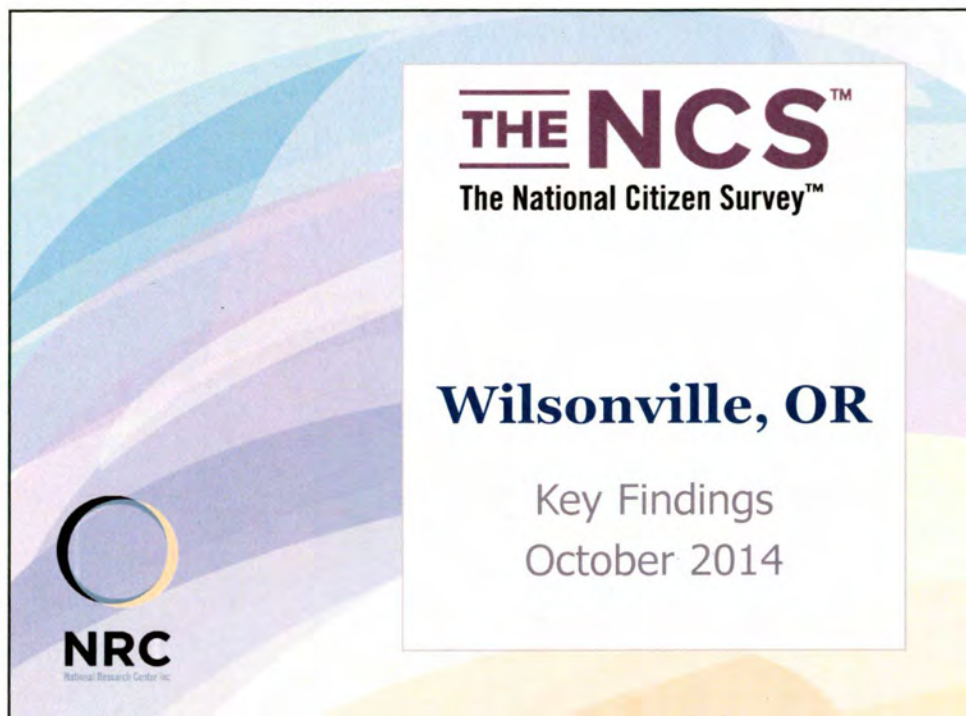
WILLAMETTE WATER SUPPLY OPEN HOUSE

October 28 – 6 p.m., Wilsonville City Hall Willamette River Room

TVWD and Hillsboro are holding a series of open houses to provide opportunities for the public to give feedback on the water transmission line route alternatives.

Visit www.OurReliableWater.org to learn more.



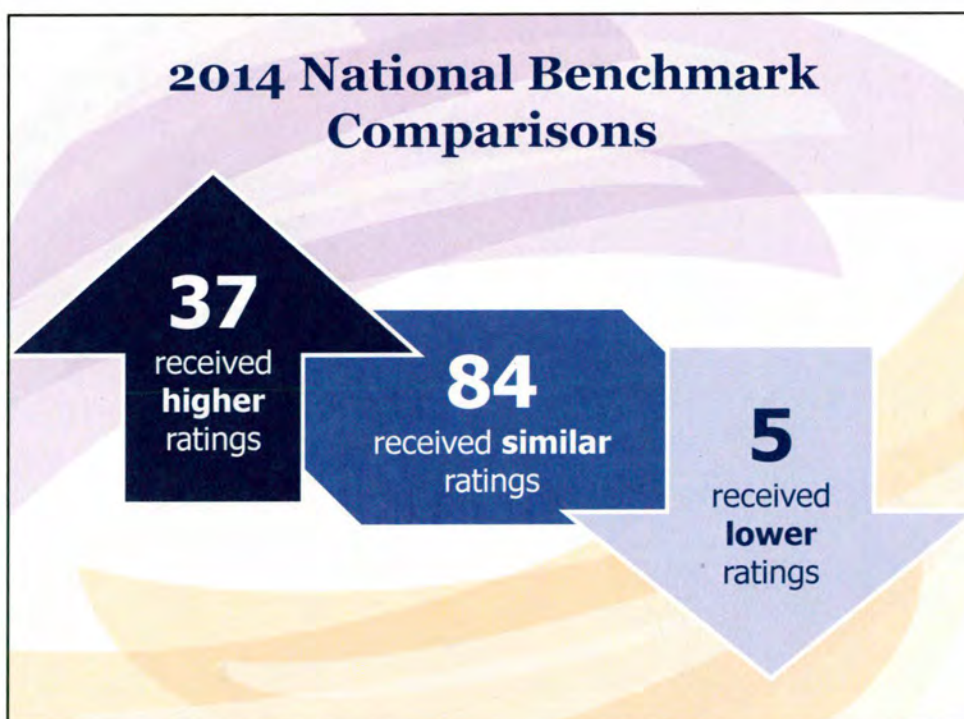
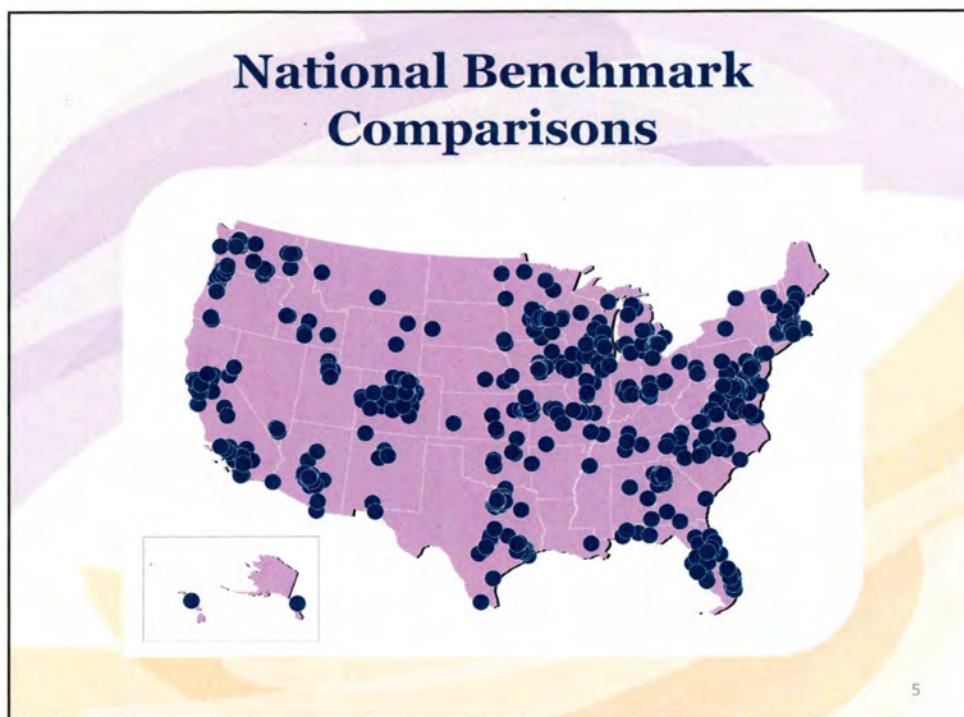


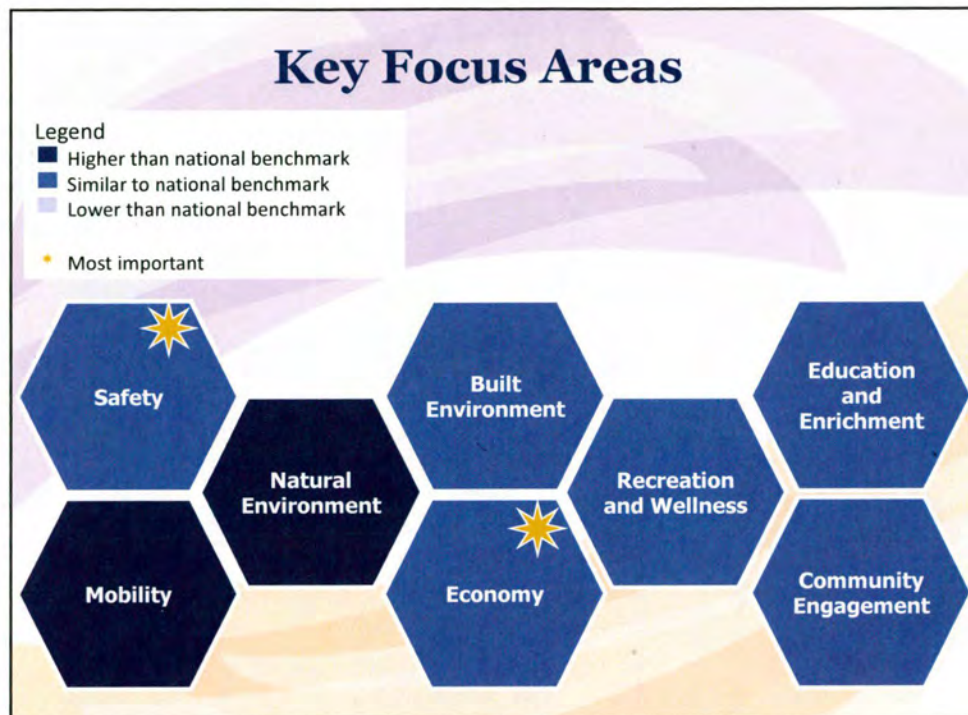
Facets of Community Livability



The NCS & Wilsonville

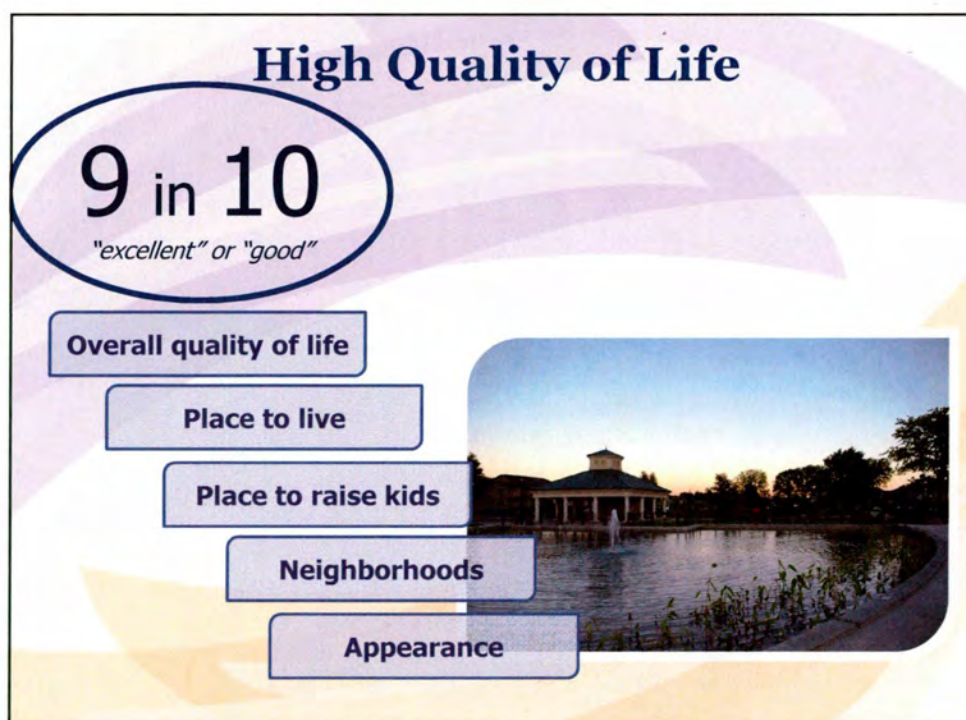
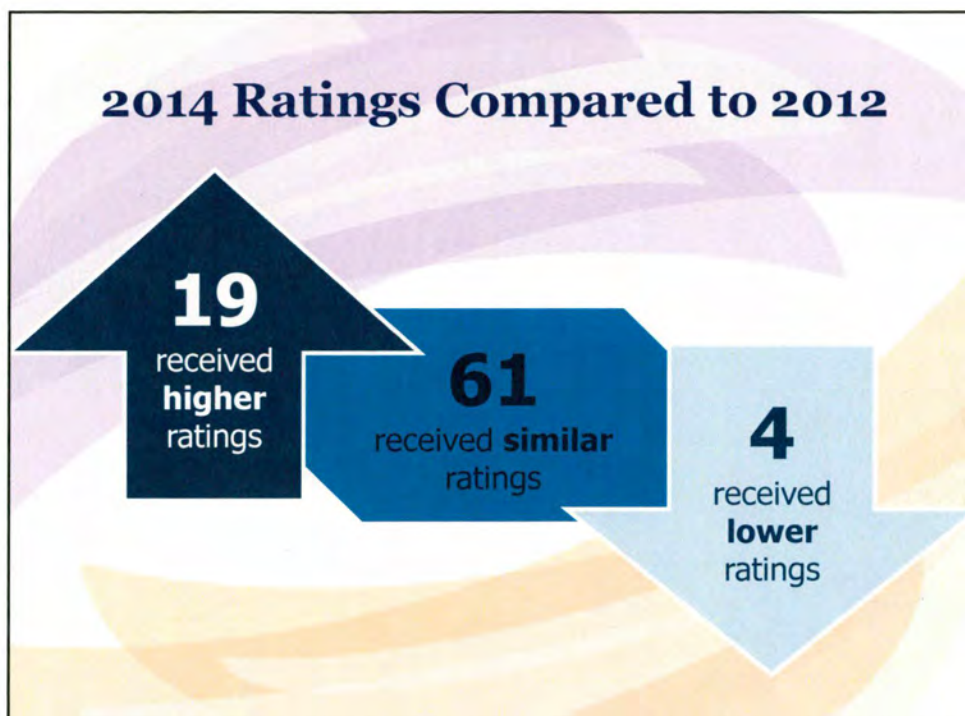
- Participant in The NCS since 2012
- Random sample of 1,200 households
 - 351 returned surveys; 31% response rate
 - $\pm 5\%$ margin of error





Key Finding #1

Residents continue to enjoy exceptional quality of life



Parks & Recreation

Strong **Majority** "excellent" or "good"

City parks

Recreation programs

Recreation centers

Recreation opportunities

Comparison to national benchmark:

■ Higher ■ Similar ■ Lower



Improved Mobility

Higher

Traffic flow

Travel by car

Travel by bicycle

Street repair

Street cleaning

Sidewalks

Light timing

Key
Finding
#2

Residents feel safe

Safety is Important



Feelings of Safety

At least **9 in 10** felt safe:

- Overall
- in **neighborhoods**
- in Wilsonville's **commercial areas**



National Research Center, Inc.

14

Safety Services

At least 4 in 5:

Fire services

Ambulance/EMS

Police services

Fire prevention

Comparison to national benchmark:

■ Higher ■ Similar ■ Lower

"excellent" or "good"

Key Finding #3

Economy is important focus area



Characteristics of Economy

Place to work

Overall economic health

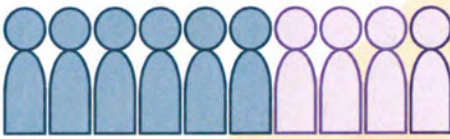
Quality of businesses

Economic development

Vibrant commercial areas

Place to visit

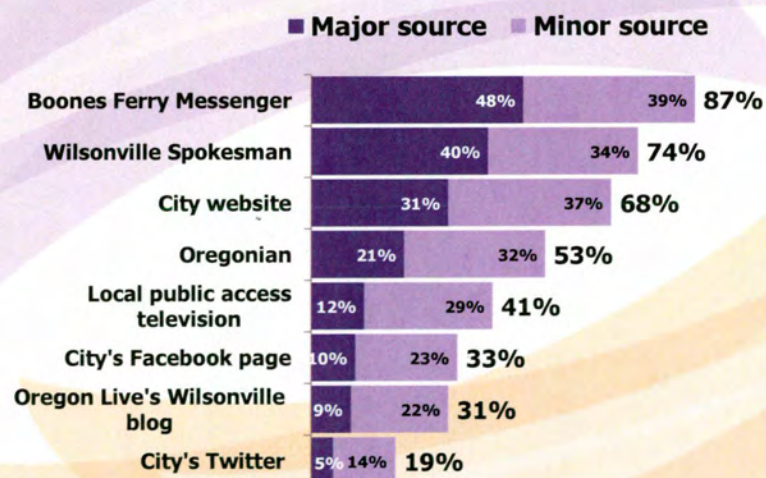
Excellent or good



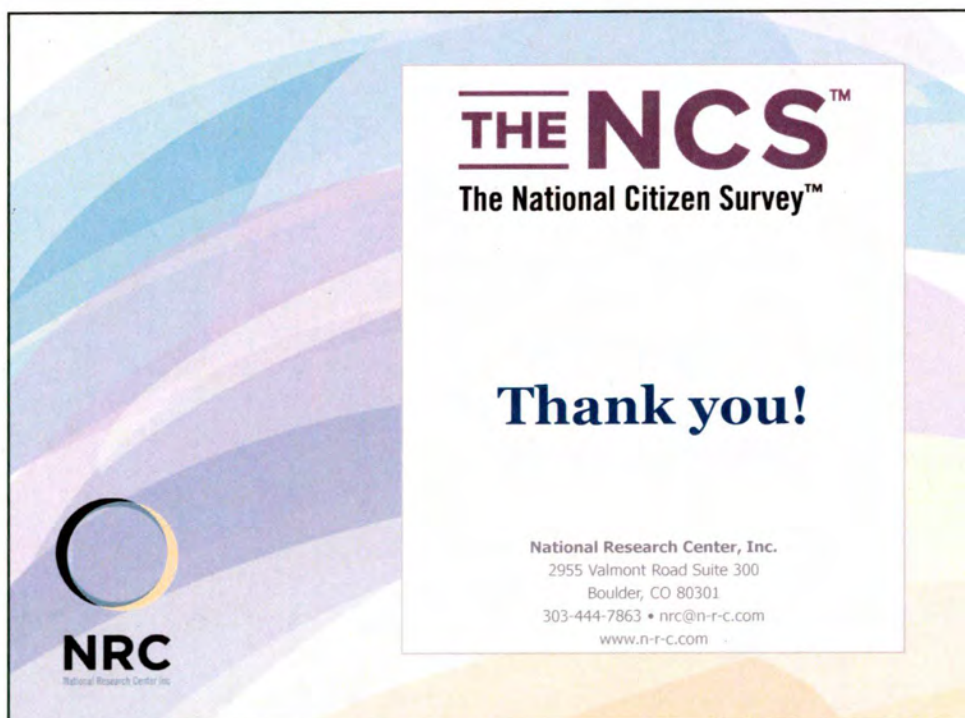
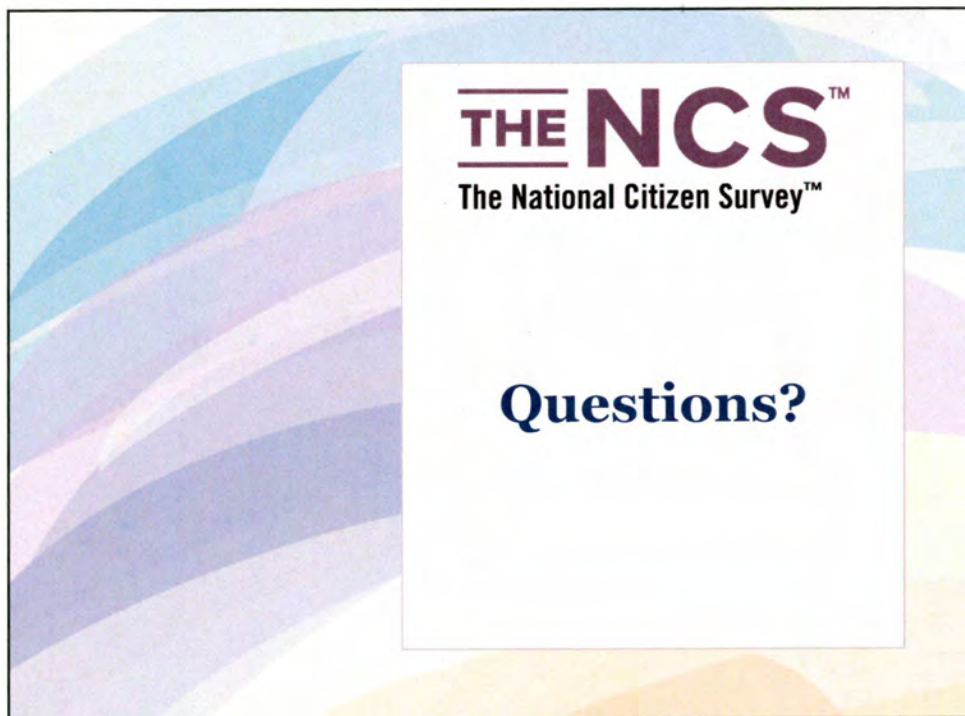
Comparison to national benchmark:
■ Higher ■ Similar ■ Lower

Special Topics

Information Sources









The National Citizen Survey™

Wilsonville, OR

Community Livability Report

2014

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The National Citizen Survey™
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www.icma.org • 202-289-ICMA

About

The National Citizen Survey™ (The NCS) report is about the “livability” of Wilsonville. The phrase “livable community” is used here to evoke a place that is not simply habitable, but that is desirable. It is not only where people do live, but where they want to live.

Great communities are partnerships of the government, private sector, community-based organizations and residents, all geographically connected. The NCS captures residents’ opinions within the three pillars of a community (Community Characteristics, Governance and Participation) across eight central facets of community (Safety, Mobility, Natural Environment, Built Environment, Economy, Recreation and Wellness, Education and Enrichment and Community Engagement).

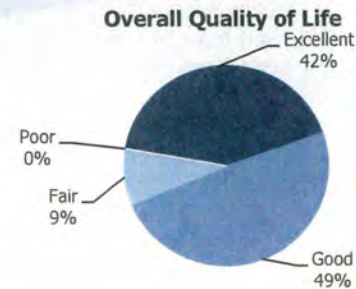
The Community Livability Report provides the opinions of a representative sample of 351 residents of the City of Wilsonville. The margin of error around any reported percentage is 5% for the entire sample. The full description of methods used to garner these opinions can be found in the *Technical Appendices* provided under separate cover.



Quality of Life in Wilsonville

Almost all residents rated the quality of life in Wilsonville as excellent or good. This was similar to the national benchmark comparison (see Appendix B of the *Technical Appendices* provided under separate cover).

Shown below are the eight facets of community. The color of each community facet summarizes how residents rated it across the three sections of the survey that represent the pillars of a community – Community Characteristics, Governance and Participation. When most ratings across the three pillars were higher than the benchmark, the color for that facet is the darkest shade; when most ratings were lower than the benchmark, the color is the lightest shade. A mix of ratings (higher and lower than the benchmark) results in a color between the extremes.



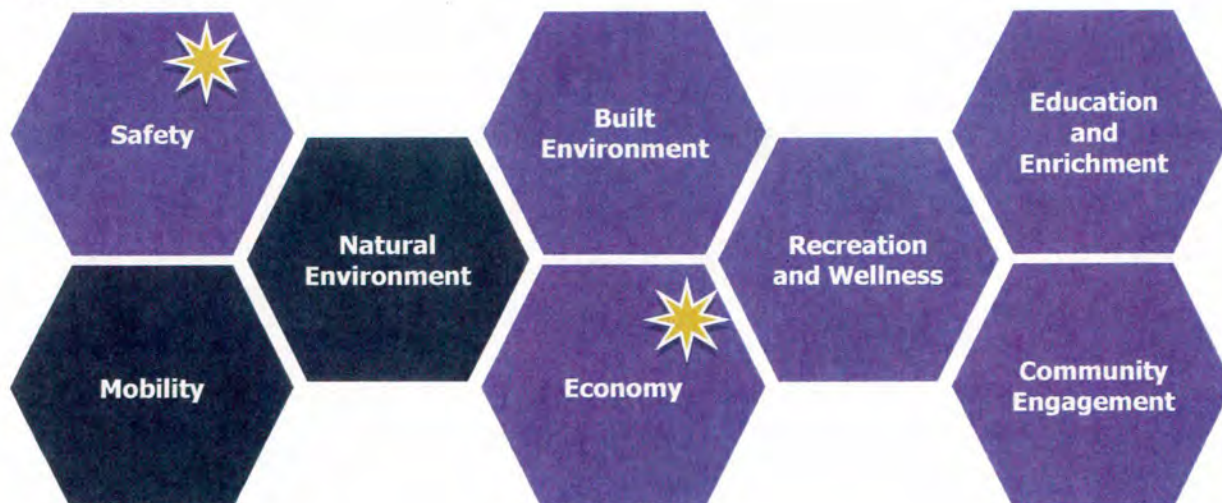
In addition to a summary of ratings, the image below includes one or more stars to indicate which community facets were the most important focus areas for the community. Residents identified Safety and Economy as priorities for the Wilsonville community in the coming two years. Ratings for Safety and Economy along with Built Environment, Recreation and Wellness, Education and Enrichment and Community Engagement were positive and similar to other communities. It is noteworthy that ratings were above the benchmark for Mobility and Natural Environment. This overview of the key aspects of community quality provides a quick summary of where residents see exceptionally strong performance and where performance offers the greatest opportunity for improvement. Linking quality to importance offers community members and leaders a view into the characteristics of the community that matter most and that seem to be working best.

Details that support these findings are contained in the remainder of this Livability Report, starting with the ratings for Community Characteristics, Governance and Participation and ending with results for Wilsonville's unique questions.

Legend

- Higher than national benchmark
- Similar to national benchmark
- Lower than national benchmark

★ Most important



Community Characteristics

What makes a community livable, attractive and a place where people want to be?

Overall quality of community life represents the natural ambience, services and amenities that make for an attractive community. How residents rate their overall quality of life is an indicator of the overall health of a community. In the case of Wilsonville, 94% rated the City as an excellent or good place to live. Respondents' ratings of Wilsonville as a place to live were similar to ratings in other communities across the nation.

In addition to rating the City as a place to live, respondents rated several aspects of community quality including Wilsonville as a place to raise children and to retire, their neighborhood as a place to live, the overall image or reputation of Wilsonville and its overall appearance. Almost all residents gave excellent or good ratings to Wilsonville as a place to raise children, the overall appearance and their neighborhoods. All of these ratings were at least similar to the benchmark. Ratings for Wilsonville's overall image or reputation, Wilsonville as a place to raise children and overall appearance were higher than in comparison communities.

Delving deeper into Community Characteristics, survey respondents rated over 40 features of the community within the eight facets of Community Livability. Most aspects were rated similar to the national benchmark, 14 were higher and none were lower than the benchmark. Across all facets, ratings tended to be positive. At least 4 in 5 respondents gave excellent or good ratings to all aspects of Safety and Natural Environment. Within Economy, aspects higher than the national benchmark were: overall economic health of Wilsonville, vibrant commercial areas, employment opportunities and Wilsonville as a place to work. Other features of the community that received ratings higher other communities in the nation were the overall feeling of safety in Wilsonville, paths and walking trails, ease of walking, travel by bicycle, travel by public transportation, overall natural environment, cleanliness of Wilsonville, overall built environment, public places and K-12 education.



Percent rating positively (e.g., excellent/good)

Comparison to national benchmark

■ Higher ■ Similar ■ Lower

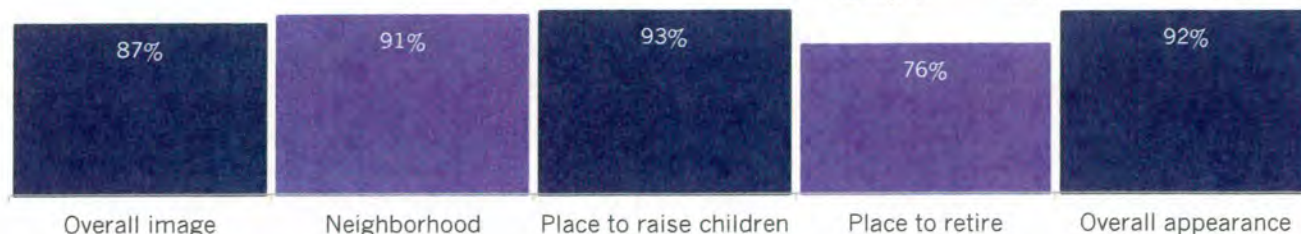
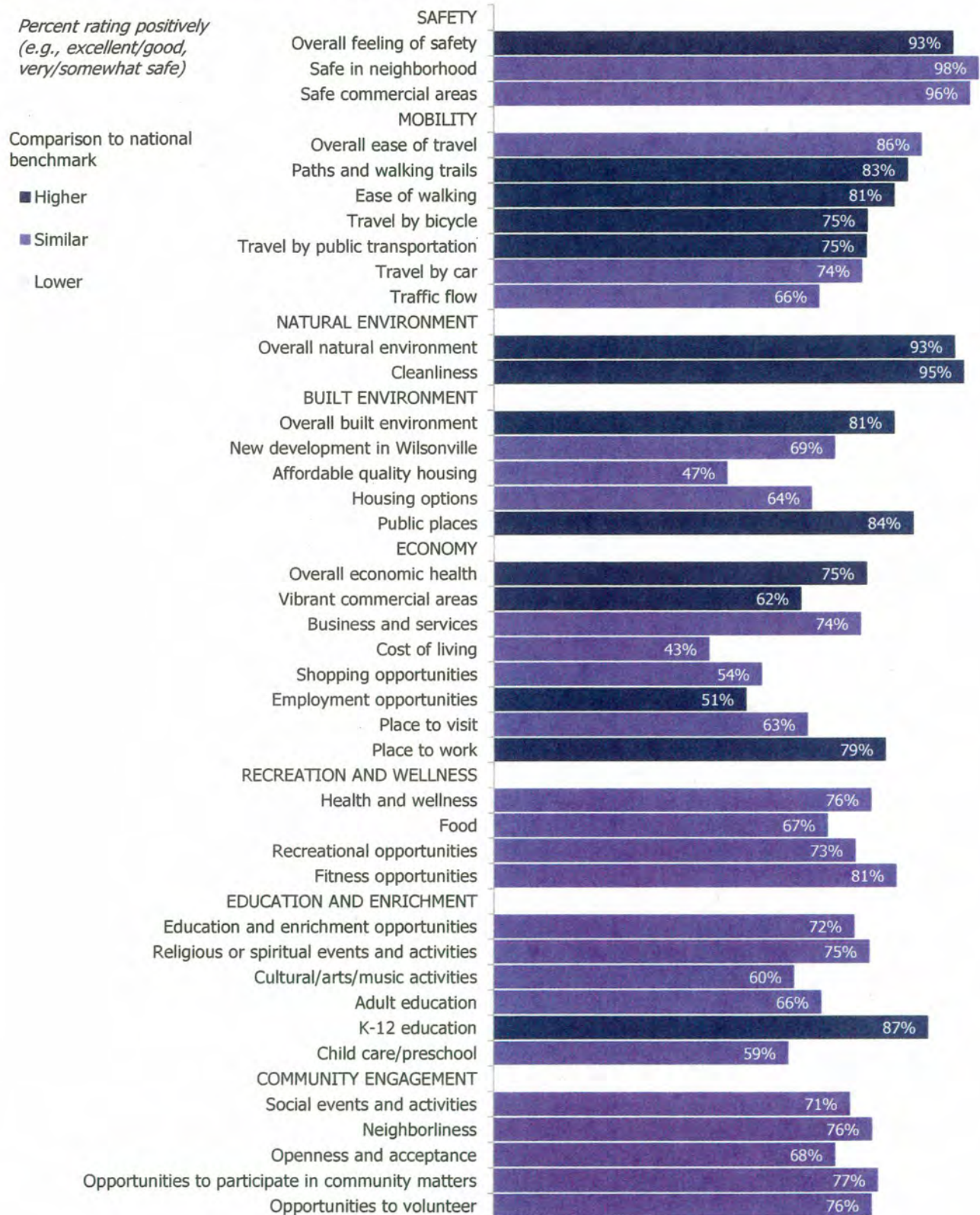


Figure 1: Aspects of Community Characteristics



Governance

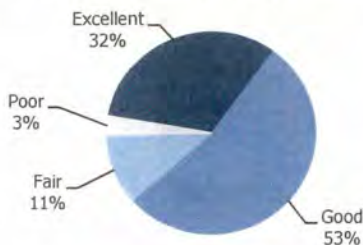
How well does the government of Wilsonville meet the needs and expectations of its residents?

The overall quality of the services provided by Wilsonville as well as the manner in which these services are provided are a key component of how residents rate their quality of life. About 86% of respondents gave excellent or good ratings to the overall quality of City services; only about half as many (43%) gave excellent or good ratings to the services provided by the Federal Government. Both of these ratings were similar to ratings in comparison communities.

Survey respondents also rated various aspects of Wilsonville's leadership and governance. About 7 in 10 respondents gave positive ratings to the value of services for taxes paid, the overall direction of Wilsonville, welcoming citizen involvement, confidence in City government, acting in the best interest of Wilsonville, being honest and treating all residents fairly. About 4 in 5 respondents gave excellent or good ratings to the overall customer service provided by City employees. All ratings were at least similar to the benchmark and ratings for welcoming citizen involvement, confidence in City government, being honest and treating all residents fairly were higher than in other jurisdictions across the nation. Additionally, ratings for the value of services for taxes paid and welcoming citizen involvement increased from 2012 to 2014 (see *the Trends over Time* report, under separate cover).

Respondents evaluated over 30 individual services and amenities available in Wilsonville. Most ratings were similar to the national benchmark, however 12 were higher and none were lower. All aspects of Governance received ratings of excellent or good by a majority of respondents. Ratings for street repair, street cleaning, sidewalk maintenance, traffic signal timing, drinking water and sewer services all increased from 2012 to 2014. Ratings that were higher than the national benchmark included: street repair, street cleaning, street lighting, sidewalk maintenance, bus or transit services, drinking water, natural areas preservation, storm drainage, code enforcement, City parks and public libraries.

Overall Quality of City Services



Percent rating positively (e.g., excellent/good)

Comparison to national benchmark

■ Higher ■ Similar ■ Lower

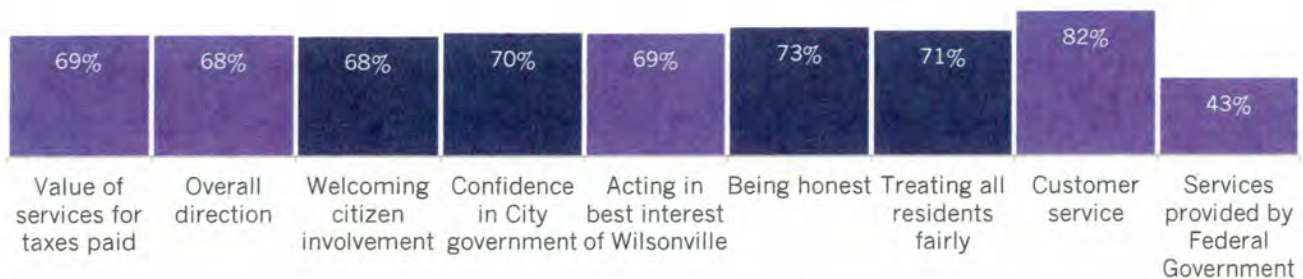
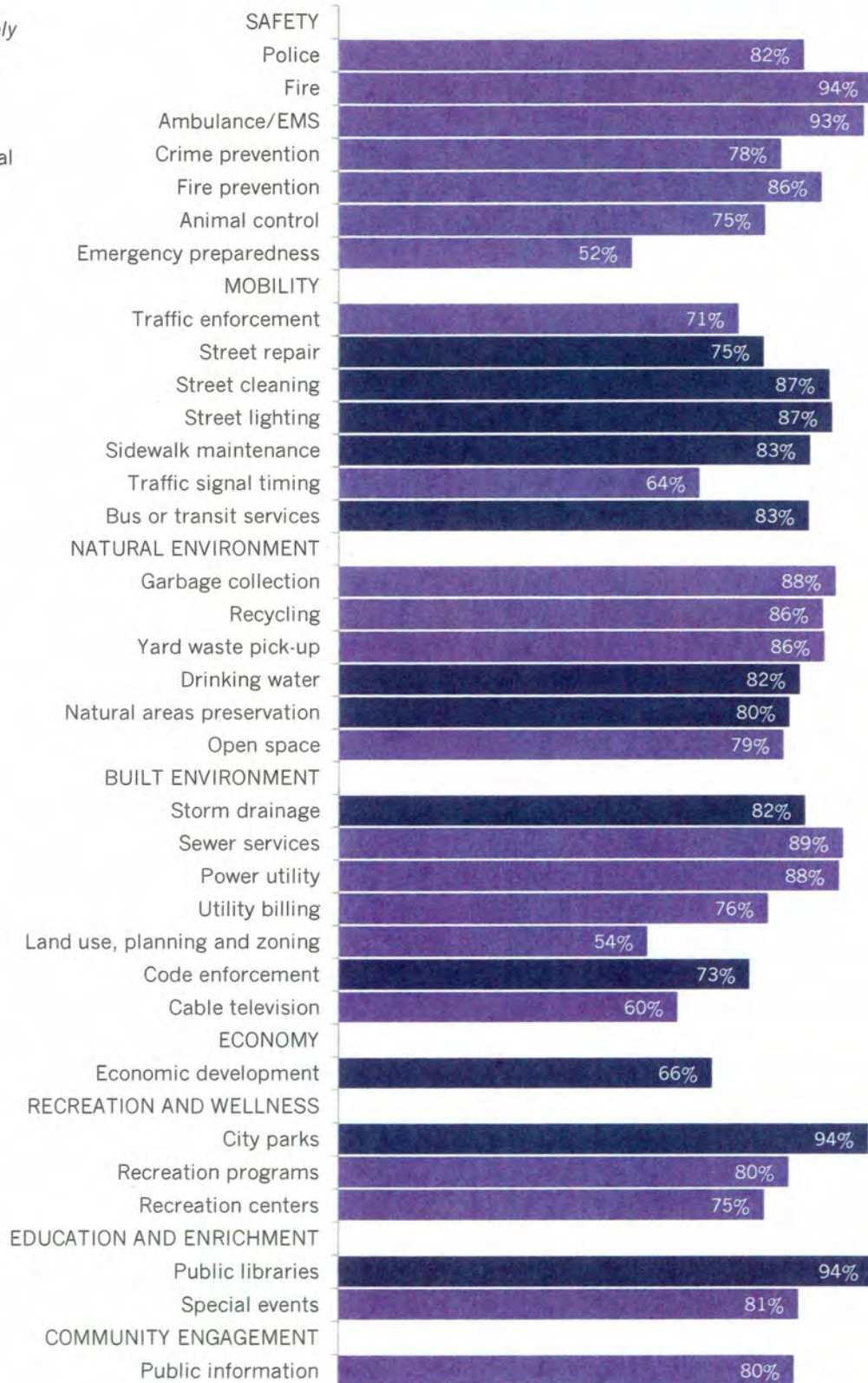


Figure 2: Aspects of Governance

Percent rating positively
(e.g., excellent/good)

Comparison to national
benchmark

- Higher
- Similar
- Lower

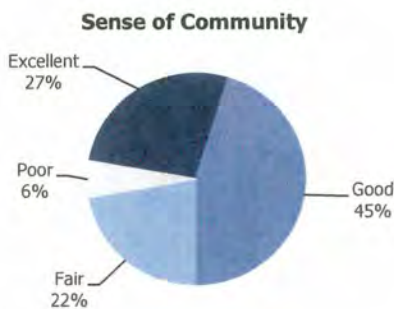


Participation

Are the residents of Wilsonville connected to the community and each other?

An engaged community harnesses its most valuable resource, its residents. The connections and trust among residents, government, businesses and other organizations help to create a sense of community; a shared sense of membership, belonging and history. About 7 in 10 respondents gave excellent or good ratings to the sense of community in Wilsonville. This rating was similar to the national benchmark and remained stable from 2012 to 2014. At least 4 in 5 respondents indicated that they were likely to recommend living in Wilsonville and remain in Wilsonville.

The survey included over 30 activities and behaviors for which respondents indicated how often they participated in or performed each, if at all. Most rates of participation were similar to those in other communities across the nation. Fewer Wilsonville residents reported working in Wilsonville, participating in religious or spiritual activities, participating in a club or watching a local public meeting. More Wilsonville residents reported that they walked or biked instead of driving, recycled at home, used Wilsonville's public libraries and did NOT observe a code violation. Most aspects of Participation remained stable from 2012 to 2014. At least 9 in 10 respondents reported that they had recycled at home, purchased goods or services in Wilsonville, visited a City park and participated in physical activity.



Percent rating positively
(e.g., very/somewhat likely,
yes)

Comparison to national
benchmark

■ Higher ■ Similar ■ Lower

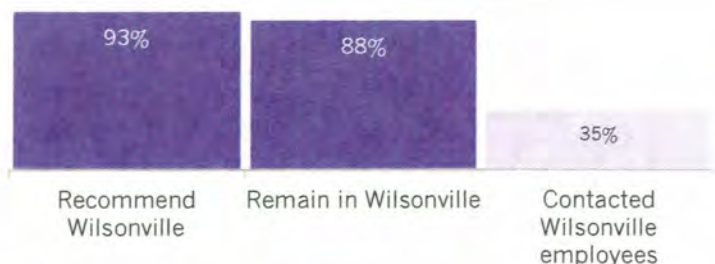
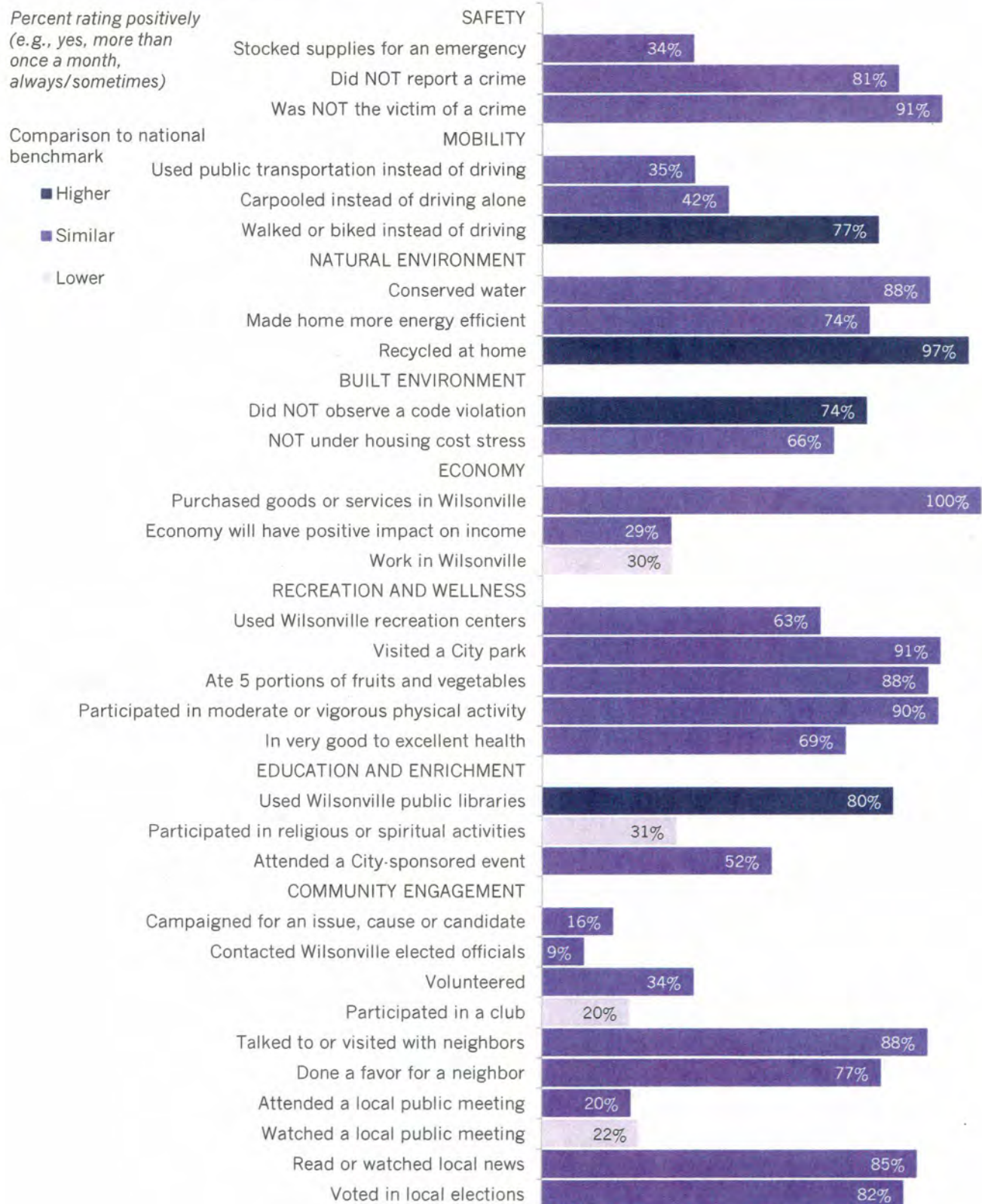


Figure 3: Aspects of Participation

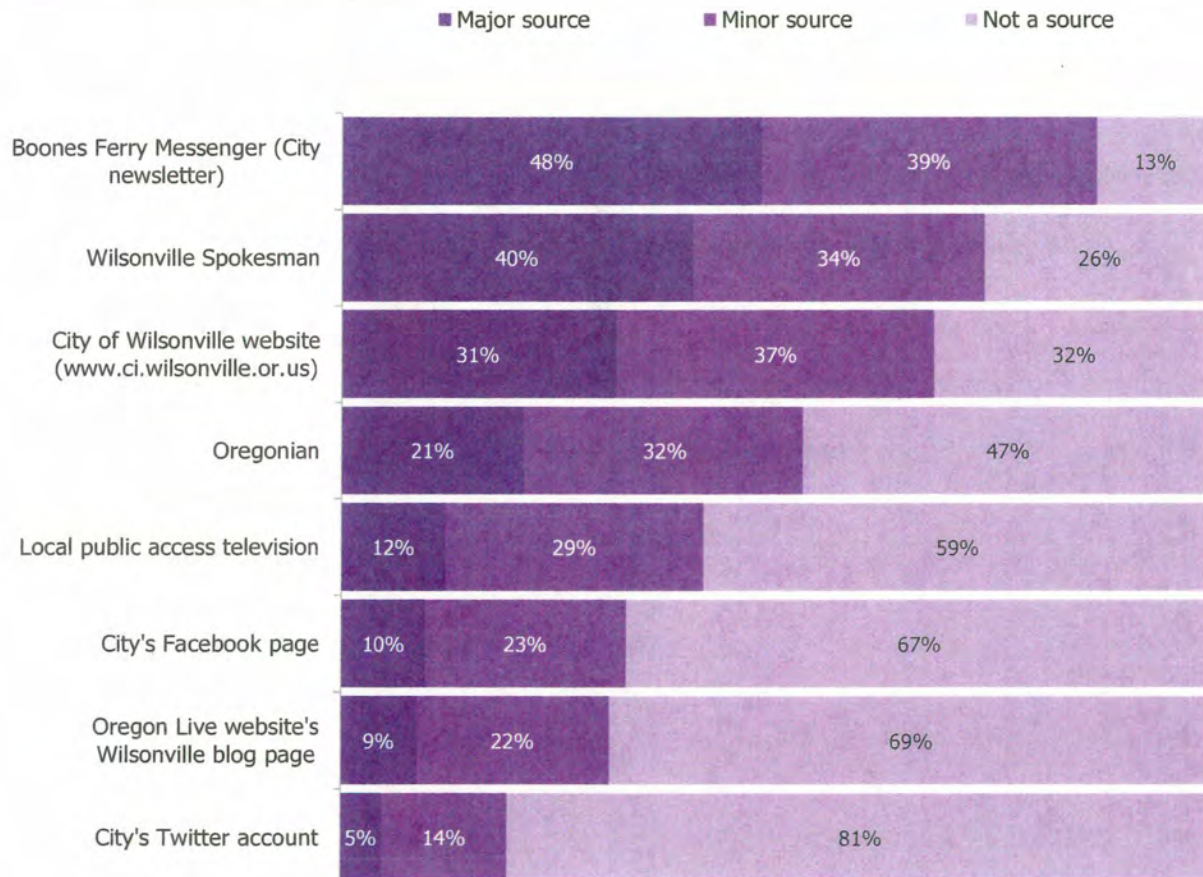


Special Topics

The City of Wilsonville included two questions of special interest on The NCS. The first question asked residents about different sources of information about Wilsonville City Government. The City newsletter (Boones Ferry Messenger) was viewed as an information source by the greatest number of respondents. A majority of respondents also indicated that the Wilsonville Spokesman, the City website and the Oregonian were a major or minor source of information regarding Wilsonville City Government. The least popular information sources were the City's Twitter account, Oregon Live website's Wilsonville blog page and the City's Facebook page.

Figure 4: Information Sources

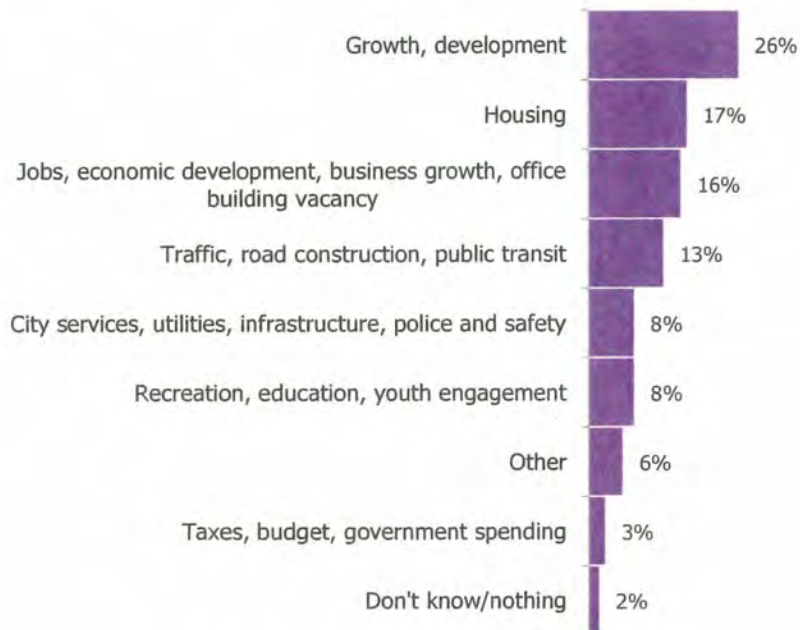
Please indicate whether each of the following is a major source, minor source, or not a source of information regarding Wilsonville City Government.



The second question was an open ended question and the respondents were asked to record their opinions about City of Wilsonville priorities in their own words (for the full verbatim responses, see the *Open End Report* under separate cover). The most commonly cited themes included growth and development, housing issues and jobs and economic development.

Figure 5: City Priorities

What do you think is the biggest priority facing the City of Wilsonville over the next five years?



Conclusions

Wilsonville residents continue to enjoy an exceptional quality of life.

Most residents rate their overall quality of life as excellent or good and at least 9 in 10 would be likely to recommend Wilsonville as a place to live to someone who asks. Almost all gave excellent or good ratings to the City as a place to live. Wilsonville's overall appearance and overall image, neighborhoods as a place to live and to raise children received high ratings by at least 4 in 5 residents. Most of the aspects that aid in community livability were rated positively and remained stable or increased from 2012 to 2014.

Residents feel safe in Wilsonville.

Safety was an important feature of the community for residents and most residents want the City to continue to provide excellent safety services and amenities. Almost all respondents feel safe overall, in their neighborhoods and in shopping areas. Residents rated safety services highly and most participants were not a victim of a crime or did not report a crime. Ratings for all aspects of Safety remained stable from 2012 to 2014.

The Economy is important to the community.

Residents believed that the economy is an important community feature to focus on over the next two years. Several aspects of Economy were higher than the national benchmarks, including: Wilsonville as a place to work, employment opportunities, vibrant commercial areas, overall economic health and economic development services. Ratings for Economy were positive and tended to remain stable from 2012 to 2014. Ratings for employment opportunities increased from 2012 to 2014; however ratings for shopping opportunities decreased.



The National Citizen Survey™

Wilsonville, OR

Open Ended Responses

2014

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Verbatim Responses	2

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Summary

The National Citizen Survey™ (The NCS™) is a collaborative effort between National Research Center, Inc. (NRC) and the International City/County Management Association (ICMA). The survey and its administration are standardized to assure high quality research methods and directly comparable results across The NCS communities. This report includes the verbatim responses to an open ended question included on The NCS 2014 survey for Wilsonville. Additional reports and the technical appendices are available under separate cover.

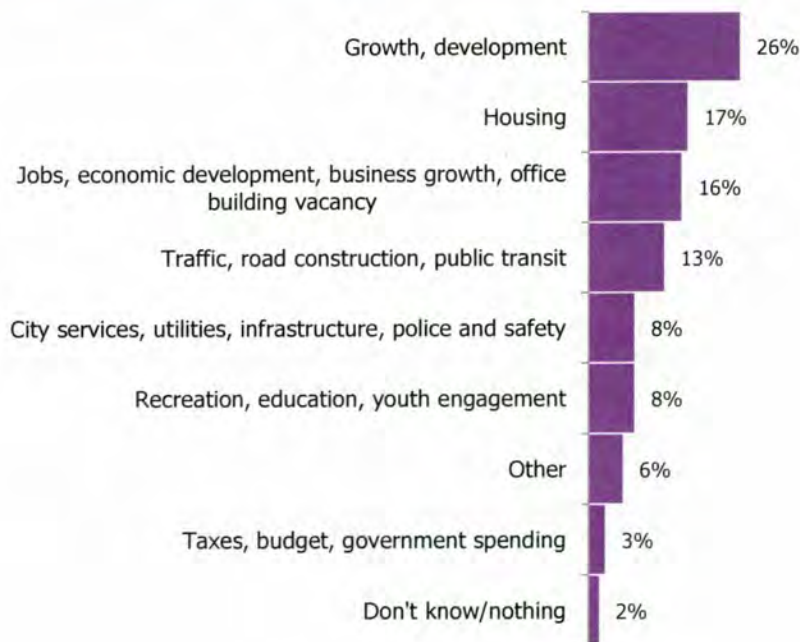
Respondents were asked to record their opinions about the City of Wilsonville's priorities in the following question:

- What do you think is the biggest priority facing the City of Wilsonville over the next five years?

The verbatim responses were categorized by topic area and those topics are reported in the following chart with the percent of responses given in each category. Because some comments from residents covered more than a single topic, those verbatim responses are grouped by the first topic listed in each comment whenever a respondent mentioned more than a single topic.

Results from the open-ended question are best understood by reviewing the frequencies that summarize responses as well as the actual verbatim responses themselves. A total of 351 surveys were completed by Wilsonville residents; of these, 256 respondents wrote in responses for the open-ended question. The themes most commonly cited by residents included growth and development issues, housing and jobs and economic development.

Figure 1: What do you think is the biggest priority facing the City of Wilsonville over the next five years?



Verbatim Responses to Open Ended Question

The following pages contain the respondents' verbatim responses written on the survey or entered in the web survey and have not been edited for spelling or grammar. Responses have been organized by coded topic areas.

What do you think is the biggest priority facing the City of Wilsonville over the next five years?

Growth, development

- Accommodating new growth
- Apparent uncontrolled growth, heavy traffic, ratio of apartments to single homes, what is our ultimate goal?
- As you continue to build housing & business establishments of a rapid rate, consider what this will do to traffic in the city. But kudos for good public transportation options!
- Avoiding the creation of a shopping mall (such as Wash. Sq.)
- Balanced development industrial vs comment retail vs. Senior housing vs. Planned developments (residential)
- Balancing growth and quality of life
- Biggest priority is definitely keeping up with the growth that is coming. Keeping the best parts of Wilsonville strong as we grow.
- Control the amount of growth Wilsonville is experiencing-do we have enough housing and service.
- Enormous housing growth which will strain infrastructure.
- First: Completing planned projects Second: hold within in costs in "check" Third: continue balanced approach to development
- Frog pond development, keeping Villebois community going (I would appreciate tennis courts in neighborhood), maintaining HEAL city recognition, continuing to have more jobs than residents, I worry there are too many new apartment complexes around town too.
- Growing the community in ways that reflect healthy, friendly and safe living. It should be fun & safe to live here.
- Growth & ability to drive or get around city w/o gridlock
- Growth in population & traffic
- Growth-apts-changes social + economic fabric- be ready for changes!
- Growth-keep public informed-get out of their little circle of who runs things pick the brains of all the public. More minds is better than a closed mind.
- Handling and having ability to handle the increase in population.
- Handling growth in population
- I fear that our little town is going to turn into a full-fledged city with more housing and commercial projects being added. It should be a top priority to maintain the small size and our sense of security
- Keeping a sense of community as we grow.
- Keeping good sense of community, safety and good schools with the significant growth within this community -Addressing mobile home housing which neighbors money's & landing as it appears very run down, poorly managed and gives feeling of unsafe when walking/running nearby-Wilsonville needs a better grocery option such as Whole Foods. New Seasons, market of choice! Regularly travel outside Wilsonville to shop at these stores.
- Keeping it clean & green-stopping over development of apartments making it animal and gender friendly
- Keeping it from getting "too" big & unsafe. (overall) Plus we need a chicken restaurant here. Maybe please a laundromat. Please
- Keeping run-away building of apartments & houses under control. The Thunderbird Park development is awful!!!
- Keeping up with rapid growth. Do not want W'ville to become another Beaverton.
- Land use (or overuse), education, conservation, recreation center

- Land use planning
- Large and extreme allowance of construction (ie apartments and housing w/out infrastructure to get in/out of area (ie) (Villebois community) large developing apartments create a "transitional" amount of people, not getting into the "small town" community sense...
- Maintaining a sense of community while more houses and apartments are added. It would help if we had a city center, but we don't. Many of us moved here because Wilsonville is a very nice small town. It would be great if it retained that identity. Well maintained, with a great library, nice parks and green spaces and easy access to Portland as well as rural areas.
- Maintaining balance between residential & commercial development. Protect residential areas.
- Maintaining high quality of life under the pressures of local and regional growth.
- Maintaining the livability of our community as our population increases. Will need more police and probably another modification to Wilsonville Rd/freeway intersection.
- Maintaining the excellent quality of life for residents. In 2013 I sold my house to move into an apartment - I chose to remain in the city because my church volunteer activity and shopping/library are excellent. I hope the city doesn't change too much. I moved from Portland NW here 20 years ago by choice all above reasons influenced our decision, my husband died during the move. Only negative is Boone's Ferry Bridge and I5 south, construction on bridge several years ago missed opportunity to redirect traffic so drivers could exit sooner to Landy and get off bridge when accidents happen, it is horrible sitting there for 2-3 hours with children and groceries! Thank you. I have lived in other states and saw viable cities die, so sad to see the deterioration. I think a survey like this may have prevented the demise of those towns and cities.
- Managing fast commercial & residential growth while still maintaining parks, natural outdoor areas, and calm/peaceful atmosphere.
- Managing growth and shopping/services to supply the increased growth.
- Managing growth in a way that protects the quality of life and safety that we all enjoy
- Managing growth of population & how it will affect the overall environment surrounding us.
- Managing population growth and consequential traffic.
- Managing the rapid growth of the city manage the over flow of Portland growth along I5
- Manufacture growth quality of life we enjoy here while supporting-growth
- Not over developing, city needs to preserve green spaces & farmland & not develop every possible place
- Not to grow too much.
- Not too much growth. Control traffic. Keep schools vibrant and funded.
- Open space-land use planning being able to stop building apartments controlling spending/costs
- Over crowding!
- Planning for growth maintaining natural areas, parks funding
- Population growth
- Population increase
- Preventing over-building crowding; fast traffic; poor-quality construction
- Proper expansion, new single family buildings
- Slow down growth!
- Slow down the rate of growth by decreasing volume of rental builders going up.
- The addition of so many high density homes/aptns/etc. in & around town-Villebois, town center, Frog Pond/Advance Rd areas! That's a lot of new people living in areas that are poorly planned for so many-look at how many people park on the street in these areas because their garages are too small, look at how full the parks are on a nice day, etc. Managing street congestion in around the Boones Ferry Road area toward I-5. It's a mess now & we're expecting more & more people! bad design, bad light timing. So much empty commercial space. A community pool with fun stuff for kids & families. Swim lessons, camps, a slide or something?
- The city is at crossroads with defining the future of the city in terms of housing. Are they going to continue to cater to outside builders with apts, townhomes, condos and small homes or are they going to go back to original master plan of mixed housing.
- The growth in this area is booming; thus, it is critical to plan for this growth so the sense of community, safety and open spaces is retained.
- The preservation of open land and keeping high density zones (apts, condo's) to a minimum. I don't want to live in a traffic nightmare after living here for 20 yrs.

- To grow and meet needs of city without contention. Be open and honest.
- To not overgrow - instead of building more new buildings. Fill the ones that have been vacant for a long time-maintain the landscaping that was planted last year and often gets filled with weeds. Its a pretty little city hope we keep it that way. Yes we do like growth but controlled
- Too much growth - (negative growth) domino effect of many other problems
- Urban sprawl
- With so much development being built around us our two main worries are: keeping the natural beauty and small city feel of Wilsonville, and the rising costs of the housing market here.

Housing

- A) Single family housing-not apartments! I know this is in the works already. B) Also, attracting major companies to Wilsonville. I originally thought the turn down of Cabella's was a mistake but I now see that it fits w/ livability, unlike Tualatin which is not as liveable in my opinion where downtown core is a mess. Sidenote: About the saving of the art fair (festival). I think it should be axed and let others who have a great thing going continue to do it, like Lake Oswego etc. About Wilsonville being a tourist attraction the horse idea is great, but this concept is a stretch and one thing that might be fun is to do tying together of all the history- Boones Ferry, founders, etc and put together a living history tour of some sort. Build a replica of Boones Ferry down at the crossing or elsewhere if we think there is interest or build a workable ferry. Have a festival called Boone's Ferry Day. 1. Thanks for sending hard copy-easier for me to get it done. 2. I hope all my comments will be copied or sent to city thanks!
- Affordability of housing and population.
- Affordable housing
- Affordable housing
- Affordable housing, affordable property taxes, affordable single family properties, (cost of living here is high personally I will not be able to afford to live here once I retire) Note: as a single person working full time w/also a part time position I have not had time to get involved in the community therefore "don't know" or "not at all" is not negative but reflects the fact that I am not aware or have not used the services.
- Affordable housing. not to overkill on signs & lights flashing on pedestrian cross walks it gets confusing & distracting. I'm from NYC. you cross w/ the light or look to see if a car is coming -that includes bikes too-common sense. More common sense- less meetings! Christ changed the world he didn't set up huge branches of gov't, something to think about.
- Affordable, single family, one story housing
- Apartments. They introduce a short term transient population which skews the snapshot of diversity studies and they consume a disproportionate quantity of government (fire police etc) resources. They also seem to be the source of loud speedings cars. 1 moves out, 2 move in. My next house may be in West Linn due to the high density apartments developments here.
- Build truly affordable housing, not rental of condos, but individual houses that are small and affordably priced. This was promised while Villebois was under development, but did not materialize. Welcome more retail establishments. The city made it really hard for Fred Meyer to come to the city, for example. It would be great to have a much broader selection of retailers in Wilsonville.
- Continuing to manage live ability, as regards to housing neighborhoods, transportation
- Encouraging more single family home construction vs more multifamily construction.
- Establishing more housing opportunities we love living here, but pay twice as much to rent 3-bedroom apartment as I used to pay to rent nice 3-bedroom house elsewhere. A disc golf center would be nice, too. I would love to buy a house here, but they are all around \$300,000!
- Expansion of housing
- Getting more senior housing & not being snobby about getting a source of employment as well as taxes from a great national store like Cabelas!!
- Home values going down due to the crazy ratio of apartments to homes in Wilsonville, why was this ok'd? Clearly better cities in Oregon have less apartments. I think we need some, but why do we need the most of any city.
- Housing design. To many apartments and low income housing with no job opportunity locally. High density housing brings lots of problems along with max & light rail.

- It would be great to see more affordable homes w/nice backyards. We would love to stay in Wilsonville, however, we don't want to buy a house w/out a yard or right on I-5. Our son has asthma and we don't feel it is a safe place (air quality wise) to continue to live at our current location. More homes w/yards in the 250 range for from the highway would be great! More space for bilingual classrooms. We are a bilingual family and it would be great for our son to attend a bilingual school.
- Keeping cost of living down with affordable housing.
- Keeping the values of the city. Keeping the home values up. 60% of our city is apartments I don't understand it!!
- Limiting apartment building!
- Limiting the # of multifamily, apartments & limiting # of section 8 housing. Tax base is impacted when fewer homeowners are in Wilsonville. We as a community need to maintain a town that will continue to grow & bring tax pay families and businesses. Taxes are high now and with fewer single family households the higher the tax bill becomes for the existing homeowners.
- Making fewer apartments.
- More affordable housing and apartments. Law enforcement prepared and ready for city growth and to not become like Gresham & Hillsboro!!
- More affordable housing -More opportunities for employment -Traffic under I-5 (Wilsonville Road!)
- More diverse housing rental & sales for families, not just apartment living more ease to zoning changes, more open to new businesses community events outside of Villebois, there is much more to this town than just that one, new community. Perhaps the farmers market could vary its location thru the summer. Thank you.
- More single family homes w yards that are affordable
- Need to limit apartment explosion to combat reputation of "apartmentville" property taxes are very high we need a public pool!
- No more apartments! land use. police department needs to treat residents/community w/respect and dignity, not arrogance. No more crosswalk dibacles. Should of given warnings and education. Not tickets and fines!
- Over building of apartments leading to lower quality of living due to transient households & lack of community.
- Slowing down the amount of housing complexes being built and also the increase of crime in the area.
- To much multi family developement!
- Too much high density housing. We need more planned neighborhoods like Villebois and more high-end single family houses.
- We need to focus more on growth of single family residences. There are far too many apartments. I believe the transient nature of apartment dwellers will adversely affect the sense of community that makes Wilsonville a special place to live.
- Wilsonville has allowed for too many apartments to be built. They will require and use far more services than they pay for at the cost of property tax paying homeowners. I will likely not purchase another property in Wilsonville.
- Wilsonville is an excellent city to live in the worst thing I can think of is the cost of housing.

Jobs, economic development, business growth, office building vacancy

- 1) There are way too many commercial buildings that are sitting empty. They are building retail spaces & shops that then sit vacant for years- on Main Street across from Red Robin 2 next to the Regel movie theatre 3 by Fred Meyer's 4 Across from Fred Meyer's gas station, etc. Why do they build more, when there are many vacant shops available? 2 We live near Memorial Park & walk there their daily. We saw someone dumping large bags of trash in the dumpster & told him to quit-he said no sign that says it is not allowed! Told park dist & talked to police officer with the dumpers license suggest that all park dumpsters be locked when not in use. Simple way to stop unwanted dumping at our beautiful parks
- 1) Rumors of Jiggles coming into the Kravens location. If this happens, we and many of our neighbors will move out of Wilsonville after 20+ years. If the city allows that after refusing an anchor business like Cabelas, it would be a travesty. Wilsonville has an opportunity to change its image for the better but these rumors are already causing people and businesses to look elsewhere. Please do not allow this to happen to our community.
- A concentrated downtown area instead of shopping malls scattered too far to stroll through.

- Become a place to do more than sleep. I leave Wilsonville for everything I do except grocery shopping-work, socialize, shop. More Dar Essalam, high-quality local restaurants; less chain restaurants. Widen Wilsonville Road & increase speed limit. There's no reason or major commercial thoroughfare should be 25 mph.
- Better quality retail, more variety of stores
- Bring more business to Wilsonville
- Bringing in increased diversity of products/shops for consumers. And housing for middle & low income citizens.
- Bringing in more businesses and restaurants, while still leaving space for parks and recreation areas.
- Commercial growth/new businesses for local employment; education-many young families; more fitness facilities-LA Ditness need to allow zoning to build a new facility. A new LA Fitness would bring/keep current employment and more people into Wilsonville to shop, restaurants, etc.
- Continue making good choices for economic and urban development
- Create environment to attract employees from disfunctional high cost Portland. A community requires families, families thrive when there are quality jobs. All those rental units should have people with local jobs with a future. Let the private sector do health & wellness. Companies locate where the people with skills are. Silicon Valley has programmers. What skills does the Wilsonville community offer? Create a concentration of skills and employers will come.
- Creating a desire for tourists to visit.
- Creating a downtown that is more community oriented and pleasing to the eye
- Economic development and attracting new employers to the city-what incentives can the city provide that differs from other cities?
- Economic growth-bringing quality businesses to area. They need to stop building apartments & low income housing. We have enough. If too many rentals then those people have no real stake in the community. We need home owners
- Economic stability, safety, affordable single family housing, expanded community rec opportunity (pool)
- Economy, growth-without over-populating keeping a sense of safety & welfare
- Employments single family dwellings. Increase shopping opportunities so dependents don't have to go to other areas.
- Encourage retail development...restaurants, businesses...maintaining and improving on the quality of living in this area while getting the outrageous property taxes under control!!!!
- Encouraging business to come here.
- Getting more restrants eating places-plus-bus and other local transportation.
- Getting a washateria business in town.
- Getting business into all the empty buildings, not building more, bring more stores such as Kohl's, Walmart, Home Depot etc, so we don't have to go elsewhere so often. More nice eating places & less fast food.
- Growing the economy in Wilsonville-employment opportunities
- I am continually stunned by the lack of shopping opportunities. Boutique clothing, bookstores, shoe stores, art galleries, etc. No yarn stores, and no low cost business incubators for artists, musicians, or other small businesses. I appreciate the obvious emphasis on the "built" environment but wonder if the time and costs associated are too high a bar for small businesses.
- Job development
- Jobs & Housing Balance
- Jobs and economic development.
- Jobs!
- Jobs, Traffic and schools
- Job's-Wilsonville had an opportunity to have a large retails and distribution control. The mayor decided we did not need those "types of jobs" well who the hell is he to decide-would have been nice to have that retailer and all that would have brought. Now its up the road in Tualatin. Nice
- Letting new businesses in to the city
- Livability-strong jobs environment & pleasant place to live.
- Maintaining economic & fiscal sustainability Balance housing options balance more food offerings vs fast food
- More shopping/things people here can afford
- Need more mom & pop businesses and more cafes for meeting friends-not just Starbucks. Hope there will be no increases in urban renewal tax we pay twice as much do family members in NE Portland.

- Reducing carbon foot print, filling empty office bldgs, adding to stock of affordable housing
- Stop the anti-business tactics the council engages in. Dragging your feet with pointless "studies" to keep business growth stagnant while you waste city funds on your bullshit galas to pretend that Wilsonville is business friendly.
- Support local businesses!!! (less chains, healthier dining out options please) & shopping Bike lanes should be continuous (and safely designed) to the college campuses. Also safety of all bike lanes-especially at key intersections-should be addressed. Some cities paint the "danger areas" green for example so drivers are more aware of the bike lane. Biking is very dangerous on parkway between Napa & Bockman (esp southbound!) To me, Wilsonville is lacking a downtown there isn't a central meeting location with locally-owned businesses/green space and thus will never have a real feeling of community. This is the biggest reason my family is moving away.
- The economy
- Wilsonville said 'No' to Ikea! Worst mistake ever! Wilsonville said no to Cabelas... who does that? Wilsonville needs to court and woo: Trader Joe's Lowes Home Depot New Seasons Winco Bi-mart. Wilsonville must reach out to as many retailers as possible. That is all.

Traffic, road construction, public transit

- (1) (eg handling growth w/ traffic) keeping city services able to meet increasing demand (2) Get good internet/wireless availability to everyone.
- 1) Traffic control on I-5 2) Continue planned development of growth.
- 1. Getting a pedestrian, bicycle, emergency bridge across the Willamette river. 2. Aquatic center.
- 1. The left turn light on the intersection of Wilsonville Rd and town center loop west is always ran by cars and I've not once seen a cop there to hand out tickets or warnings for it. 2. The police to stop running red lights at the intersection by the library & police station.
- City traffic-congestion
- Dealing with traffic congestion north & southbound during rush hour.
- Develop better roads for better traffic flow.
- Finishing up needed through roads-Barber, Canyon Creek, Kinsman -Slow down building permits for apartments -need more mid priced homes. It's too expensive for many workers to live here.
- Flow of traffic, controlling property taxes controlling H2O cost diversity in Villebois housing.
- Getting from one side if I-5 to the other. poor layout of town. promoting emergency awareness (floods-storms etc)
- Hiking and bicycling trails. That will connect with Tualatin/Tigard trails.
- I would like to see a walking/biking bridge across the Wilamette. The hodge-podge of city development makes no sense & walking difficult. There is no cohesive center. I go elsewhere to shop. I love the new plantings & artwork on Wilsonville Road.
- Mid-day bus reserve to Portland
- Not sure how it can be done, but its crazy how long it takes to get from the high school to Fred Meyer in Wilsonville
- Over crowding, especially Villebois. Volume of traffic on Brown Road & the police ignoring speeders! Someone is going to get hit! Very poor street planning for the volumes of traffic coming in & out of Villebois.
- Public transit-light rail north & south
- Public transportation. The limited bus schedule/times for busses traveling out of Wilsonville no weekend services other than the one bus on Saturday only through Wilsonville.
- Resource logistics and traffic control in response to large multi family residential development that is occuring.
- Start Sunday bus service in south Wilsonville.
- To manage traffic and land use planning better in the next five years than you have in the last fifteen years. Frankly, there have been some very poor choices made in the recent past.
- Growth, traffic congestion ,crime
- Traffic
- Traffic
- Traffic

- Traffic & water treatment plant (smell/awful) probably too small for the city.
- Traffic (trucks, motorcycles, speeding, etc.)
- Traffic and street planning for growing population moving in.
- Traffic at the two freeway crossings especially peak hours and Friday afternoons and maybe sewage treatment, worried that we would have to deal with that awful odor problem again. Which would drive people away.
- Traffic concerns with I-5 leads to less than desirable liveability. We need to develop the pedestrian walk bridge over the Willamette.
- Traffic congestion as city grows.
- Traffic congestion during commutes.
- Traffic control
- Traffic control
- Traffic flow to avoid congestion
- Traffic flow-it too often takes 20-30 minutes to go from (N) Wilsonville to Charbonneau!! Consider a foot/bicycle crossing over the river so that the bike/park paths can be accessed w/o risk from highway. more non chain restaurants
- Traffic jams on Wilsonville Rd during rush hours.
- Traffic on I-5 accidents in Wilsonville area of freeway.
- Traffic problem going on to I-5 from Wilsonville Blvd south I 5.
- Transportation on the main arteries needs to be expanded. Traffic patterns during peak hours need adjustment. We have more than enough affordable housing. We need to maintain a ratio that leans the other way, towards single family dwellings and not more apartments.
- Watching the speed and traffic growth on SW Wilsonville Road. Traveling West, pass the Walgreens area intersection, continue to monitor speed near Morey's Landing subdivision. Possibly consider a speed camera near that point.
- Wilsonville road has become a drag strip-on the east side-plus 18 wheel trucks using it as a short cut from I-5 to I-205 we have parks/schools/kids someone is going to get run over water all the speeding. Zero police patrol!
- With all the bldg-concern for traffic flow on Wilsonville Rd

City services, utilities, infrastructure, police and safety

- City government needs to focus on essential public services and restrain itself from trying to touch or control every aspect of life. Also, most of this survey could have included a column to indicate its importance thank you.
- Clean, safe, accessible affordable housing for seniors/disabled. Waiting lists are a year long or more, I experienced this challenge recently in looking for housing for my mother.
- Control of vandalism
- Cost of public services and getting people to vote for them.
- Crappy housing (Villebois) that is destroying the environment. That housing complex is a ghetto waiting to happen with houses that are 2 ft apart & no yard. The development destroyed at least 1 bald eagle's nest-birds that are federally protected! Affordable housing and decent housing to purchase (e.g. 3 bd house with a fenced yard) is a joke. No one wants to live in New York style brownstones listening to their neighbor's activities. Wilsonville has a ban on drive thru coffee places, yet we have a Redneck Sharis, bowling alley & a Goodwill. We are not Bridgeport Village, but we fare a bit better than Woodland. Wilsonville will be nothing more than an overpriced suburb of Portland with not much to offer residents. Only live here because I work here & refuse to commute. Mayor Tim had a prime opportunity to develop Wilsonville into an outstanding city (look at Davis, Calif as an example)-yet he sold out to greedy developers like Villebois, I hope they all burn in hell & karma is swift.
- Health, safety and education, please do not over expand Wilsonville's city limits, its getting over crowded please keep drugs out of Wilsonville, and smoking
- Keep Wilsonville feeling safe & yet growing the economy bringing jobs to the city. As a senior I want to live in my home but taxes may become too much, if we don't do something.
- Keeping crime under control. I would also like to see the city be more welcoming to large business. We missed out on a great opportunity to have Cabelas here.

- Keeping it safe and clean
- Keeping Wilsonville livable & safe
- Land use-maintaining natural environment
- Liveability
- Maintaining the quality of public services and utilities/transportation systems.
- Police services land use planning build bike/pedestrian bridge over Willamette river
- Public safety
- Public safety
- Public safety planning managing you over budget
- Reducing the price of living & water sewer services. It's getting outrageous. Also increase the police force. These teenagers are getting out of control. I'm starting to see an increase in gang related active located at Hathaway park.
- Safety! As this city grows, and with our access to interstate 5, safety is the biggest priority for this city!
- The quality of land use planning. The ratio of single family dwellings to apartments (we have too many apartments) Bring more small business to Wilsonville for shopping.
- The quality of water sources to the public. And developing roads that can accumulate traffic issue with growing population.
- We have lived in Wilsonville for 5 years and been pulled over by police 3 times for trivial things. I once was pulled over for having a headlight out during the day! I think the police in Wilsonville are a little ridiculous. For the 10 years prior to moving to Wilsonville neither me nor my wife were ever pulled over. We haven't changed. Only the police have changed. The Wilsonville police need to tone it down a bit.
- Wish something could be done about people who let their cats room outside all the time! Just want to say the underpass at I-5 Wilsonville road is beautiful

Recreation, education, youth engagement

- 1. Public swimming pool/facility. 3. Add concession stand to Memorial Park to attract sports tournaments 2. Would like to see a regional sports complex that baseball/softball/soccer/lacrosse fields.
- ADA access to parks and rec. I am a single parent of 4 kids and use a wheel chair. I can't get to the swings at Memorial Park to push my 7 year old. There is no ramp and wood chips don't allow me to roll through. More ADA access for parks play areas, and trails please!
- Aquatic center-keeping Wilsonville a community where you feel safe and like everyone is your neighbor-bike walking path over Boones Bridge to get to Charbonneau.
- Building another middle school. Building a public swimming pool. Offering classes in trades to the high school curriculum.
- Education
- Education quality traffic
- Education, both child and adult
- Getting a community swimming pool. Auto access over the Willamette River! (not I-5) maintain the library & its programs.
- Getting the high school scenes back on track, more single family units b/c the home ownership rate in Wilsonville is too low for sustainability.
- Insuring high quality schools!
- Looking into the feasibility of a municipal pool. It's the only thing missing.
- Overcrowding of schools. Need for swimming center. With provision for kids swim lessons.
- Pool parks and fields
- Pool? It would be great!
- Public pool. Spanish speaking catholic church
- Quality of middle school education and environment.
- Teenagers.
- With the huge increase in rental citizens, maintaining a high quality school system will be a challenge.

Other

- 1) Removing political affiliations from the city council. 2) Lobby for WES or Next Generation Rail to expand to Eugene via Salem, Albany, Corvallis, Woodburn if possible. Wilsonville was historically part of the Oregon electric line which ran 28 trains from Portland to Eugene a day. 3) Improving weekend and evening transportation buses and WES. To reduce traffic on Wilsonville road, minimize rush hour traffic and encourage economic growth. Allow OIT and CCC to expand their offering 4) MAJOR-real affordable housing for people to live where they work. Housing options where monthly rent is under \$900 a month. Anything over that is unaffordable for families and individuals with a working salary. Family incomes have "flat lined" \$60,000 doesn't mean anything 5) A local recreation center similar to the Gabriel Park recreation center. This would allow all families in Wilsonville to have access to low cost/affordable recreation and health improving activities including a swimming pool, skate park and all weather walking course. This would also make us a destination and help cover some of the costs. Thinks both outside the box and the ruts.
- Airport!!! I will in part sell my home and leave Wilsonville if this is not addressed. The quality of life in this city is about to be destroyed! Density of apartments quickly becoming an issue
- An effective city council where differences are acknowledged, debated, and dealt with honestly, rather than by ideological or political power coalitions. Appropriate role for churches in carrying out religious mission without trying to shape political civic agenda.
- Finding a way for private citizens to sell land as they need, but still keep the zoning.
- For the city to be livable, honest & affordable.
- Global takeover by the city government. If everywhere was like Wilsonville it would be an amazing world. Legalize something controversial to get us on the news.
- Improving diversity and maintaining long-term livability for citizens of all ages and interests. Also improving job growth to reduce commuting.
- Keeping the city an attractive place for retired people to live.
- Overall quality of natural environment Wilsonville!
- Please bring in a clinic that accepts Care Oregon. It is a huge hassle to have to go to Canby, Glad Stone, and Oregon City for my families needs.
- Preservation of the environment.
- Survey needs to be shorter, & more concise.
- Treating all people the same
- What a stupid waste of art to put that ceramics piece in the underpass. It's a beautiful piece, but deserves a better location. Then you blotted out the view with the decorative railing. Besides, that, it is unsafe - ogling it while negotiating the traffic lanes where people cut across lanes all the time is a hazard. What should we say? "Come to Wilsonville to tour our excessively decorated underpasses." It's ridiculous.
- Wilsonville city hall needs to treat homeowners as equal to developers. Not as 2nd class citizens. Just because we are new home owners does not give the city the right to ignore important input from its citizens on development issues. The city needs to change its attitude.

Taxes, budget, government spending

- 1) Getting the cost of water down in this city. People cannot effort these high costs. If we move the cost of water will be one big reason. 2) Building no more apartments we have so many now and it can cause so much traffic and we don't want our city out of balance. We don't want to become Tigard or Beaverton!!!
- Balanced budget-no deficit spending
- Budget reduction.
- Don't raise my taxes. Govern within your means, prioritize needs & expenses
- Efficient, wise spending of taxpayers money including limiting size city gov. growth, focusing on the basics of education (3r's) limiting school size of administration (3-4 principles @ W'ville high school!?) Clackamas County property taxes are going to drive us out of this area that we really love!
- Fair property taxes. We moved in from Beaverton (Washington County) last year. The property taxes in Wilsonville is really high. We hope the city control weeds at a dog park and sidewalks more.
- Honesty with citizens regarding how money is being spent on future citizens rather than current citizens. Common sense approach to building budgets reflecting private sector economic duress, Slowing the cost of services verses protecting city employee wage/benefit package. Enough!

- Keeping taxes at current level.
- Lower taxes
- Reduce size & cost of city government.
- Rent and property taxes more expensive here.

Don't know/nothing

- All is great. Keeping it beautiful
- City is on track and the biggest priority will be to continue on track without wandering off track
- Continue as is
- Don't know-just moved here in April 2014.
- I have no clue
- Keep on getting it done
- Maintaining good quality of living.
- No opinion comment: section 7: # 3 item & section 10: code enforcement: solicitors ignore our "no soliciting" sign on house, understand & permit from city needed to do so. True? Issue needs clarification as solicitors for business, products either do not know or ignore.
- Not my problem
- Not sure.



The National Citizen Survey™

Guide to Understanding and Using Your Reports

2014

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Purpose of the User Guide

As a participant in The National Citizen Survey™ (The NCS™), you are among an elite group of communities that conduct resident surveys. Communities often use the results of The NCS to:

- **Envision** Make strategic plans and set goals
- **Engage** Partner with residents, other governments, private sector and community-based organizations
- **Earmark** Alter budgets, personnel or services
- **Educate** Communicate and reach out to residents to inform, educate and advocate
- **Enact** Create, alter and remove policies to promote community strengths
- **Evaluate** Track strengths and problems, dig more deeply and evaluate progress

The purpose of this User Guide is to provide you with an overview of the various products you have received related to your survey results, and to describe how to dive in and understand the data that are provided in these products.

Your community, including the elected officials and government staff, should dig into data relevant to their missions, discuss the findings and create action plans. Residents expect their leaders to act on the survey results they receive. By acting on survey results, community leaders build credibility with residents. This credibility leads to heightened public trust which, in turn, makes it more likely that residents will support expenditures and resource allocations recommended by their councils, commissions or staff. Proper expenditure of resources leads to better communities.

The NCS Background

National Research Center, Inc. (NRC) developed The NCS as a low-cost, comprehensive, statistically valid survey solution for local governments eager to find out what their residents think about their communities. The NCS is not just a survey; it is a service that encompasses the entire survey research process - scheduling, questionnaire development, sample selection, data collection, analysis and reporting. In partnership with the International City/County Management Association (ICMA), The NCS has been administered hundreds of times in numerous U.S. cities, counties, towns, villages and boroughs.

The NCS assesses aspects of community life, local government service quality and resident participation in community activities. The results, based on resident perceptions, describe the areas where community members themselves believe things are going well and shed light on the areas that could benefit from improvement.

What Does The NCS Measure?

Broadly, The NCS measures your community's "livability." A great many definitions have been made for community livability,¹ including one from the Partners for Livable Communities, calling it "the sum of the factors that add up to a community's quality of life."² Staff at NRC examined the extensive research that has been done about community livability and many of the models that have been developed to describe the components of livable communities.³ Eight facets of community livability were distilled from our synthesis of this research: Safety, Mobility, the Natural Environment, the Built Environment, the Economy, Recreation and Wellness, Education and Enrichment and Community Engagement. The NCS questionnaire includes individual items that act as indicators of community quality within each of the eight facets – and, split in a different way, they form three "pillars" of community quality: Community Characteristics, Governance and Participation.

The Eight Facets of Livable Communities



The Three Pillars of Livable Communities



¹ Many examples are shown at http://www.camsys.com/kb_experts_livability.htm

² Source: Partners for Livable Communities, <http://www.livable.org/about-us/what-is-livability>

³ See, for example: http://livable.nonprofitsoapbox.com/storage/documents/board_resources/BOT_Meetings/2010/4ExecCommNov5/Grand_Alliance_doc_for_EC.pdf; http://www.sustainable.org/images/stories/pdf/Placemaking_v1.pdf; http://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf

Other sectors that influence community quality include the businesses, non-profit agencies, fraternal or service organizations (e.g., Kiwanis, Rotary, Lions and more) and other community groups (such as homeowners or neighborhood associations, etc.) as well as other nearby local governments or other levels of government. They are important target audiences for receiving and acting on The NCS results.

Because much of what The NCS measures is quality – quality of community life, services and connection – it is common for community leaders to conclude that their locale must excel in every facet of livability. While leaders may feel compelled to strive to be equally strong in all areas of community life, such a strategy is rarely feasible or even desirable. Different communities have different strengths and identities. These strengths and definitions of the community should be noted by all those reviewing the results. Less desirable ratings for some indicators should not automatically be seen as negative for a community, but instead a reflection of the community's resources and priorities which wisely may be spent on areas that matter more. Not all indicators that show less achievement are a call to action, just as not all indicators that are strong should become a gateway to complacency. Those viewing The NCS results, and in particular those charged with creating plans based on the results, should consider their community's essence and priorities, and should choose to make improvements or maintain excellence in areas that support the identity they desire. Meeting your definition of success in the areas deemed most important is the ultimate goal – and one that The NCS helps measure – even if all levels of success are not equal.

Using Your Reports

Report Documents

Instead of a single, heavy document that can be difficult to navigate and share, The NCS results are reported in multiple formats and lengths, each with varying levels of detail to ensure that your different stakeholder groups get the right information to meet their needs. The Basic Service of The NCS includes each of the following documents:

- Community Livability Report
- Dashboard Summary of Findings
- Technical Appendices
- Trends over Time (if you have administered The NCS before)
- At project end, a “Next Steps” overview webinar for staff and elected officials

Depending on the additional services you chose as part of your research project, you may also receive additional reports, such as:

- Demographic Subgroup Comparisons
- Geographic Subgroup Comparisons
- Report of Open-ended Questions
- Presentation slideshow (shown at in-person presentation of results and provided to you for your own uses)

This User Guide describes these reports, how to interpret the data and how to dig deeper to ensure everyone – you, government staff leadership, line staff, elected officials, residents, business owners and community organizations – get the most out of The NCS results.

Report Types

When assembled together, these reports build on and reinforce each other, while separately, they provide the flexibility for targeted reporting to specific audiences.

Community Livability Report • This report is the most universal and summarizes all the results and key findings. The Community Livability Report is brief, attractive and accessible, making it a central public document.

Dashboard Summary of Findings • This report offers a simplified (“rolled up”) quantitative view of the data, as well as comparison details for each question (the relationship to the benchmark and over time, if this is not the first iteration of the survey).

Technical Appendices • The appendices include the details about survey methods, individual response options selected for each question – with and without the “don’t know” option – and detailed benchmark results. This document speaks to the credibility of data and the most granular detail of results.

Trends over Time • This report reveals how resident perspectives and behaviors have changed across two or more administrations of The NCS. The report offers a high level view of how rankings have changed as well as relative position to the benchmark including all administrations of The NCS.

Next Steps Webinar • At the end of your project, this webinar (scheduled at your convenience for staff and elected officials) summarizes the methods and select findings and helps you identify potential actions – and provides an opportunity to ask questions of NRC researchers.

Guide to Understanding and Using Your Reports • The Guide to Understanding and Using Your Reports (this document) is written simply so that the survey sponsors receive guidance about how to understand all aspects of the reports, and also so that sponsors can explain to others how the reports are organized and what they mean.

Presentation • An in-person presentation by NRC's independent researchers will offer an engaging overview of the findings – revealing important patterns without getting lost in the detail – at a Council meeting (either formal or work session). The PowerPoint slideshow can be reused for other audiences, including civic clubs, business and non-profit organizations and the press. Presentation by the unbiased survey research team offers the neutrality that is hard to garner when staff themselves present survey findings.

Subgroup Comparisons • Both demographic and geographic comparison options are available. Such information can be especially useful as programs are considered for different parts of a community or outreach is planned to educate different community groups.

Open-ended Questions • Residents' own words add flavor to the survey results and a quantitative grouping of similarly themed comments gives a sense of common ideas.

Report Dissemination

Distributing the results and communicating the key findings engages audiences.

Audiences and Stakeholders

Residents • Make the reports available to the public via your website. Share the results at a public meeting, being sure to advertise the event. A full presentation of the results (either by NRC or your own staff) with discussion of results among elected officials highlights the transparency of findings. If independence of the findings is particularly important in your community, working with NRC to make the presentation of results will be particularly effective.

Department Managers and Line Staff • Managers and staff will examine ratings most closely aligned to their work. Make a plan to disseminate results to line staff (e.g., through a series of small group meetings). Staff should be encouraged to identify specific areas where action is suggested – including further research as well as service enhancements or partnerships outside of the organization. These suggestions could be sent to the department heads who will meet to discuss action options with the chief administrative officer.

Elected officials • Elected officials benefit most from advance distribution of survey reports prior to public presentation and discussion. Ask elected officials to read the survey documents and funnel questions to staff who then can get assistance with answers from NRC professionals, when needed. Staff should develop an approach to action that can be presented to council. This way staff will be prepared when the inevitable council question is asked of the manager, "What do you plan to do with these results so that they don't just sit on a shelf?"

Non-profits and Businesses • While local governments sponsor The NCS, it is not just for staff and elected officials. It is a document to engage the entire community. Many of the findings of the survey will be relevant to the non-profit and business sectors and many community improvements will rest on

the shoulders of these sectors as much as on government. Convene a meeting of business and non-profit leaders to release results and begin a discussion of actions to improve resident attitudes and behaviors. This could be a town hall-style meeting or a special invitation lunch with elected officials.

Press/Media • Getting in front of your results means controlling how and when results are shared with the press. Whether your relationship with the local news media is cooperative or contentious, you should declare your intentions for the results even before the survey is conducted – then reinforce those intentions once you have the results. Let the press know that there are no bad results and that your community conducts The NCS because it intends to learn and improve like the best businesses. Certainly social media outlets also permit you to express your intentions for results and to interpret the findings for any of your followers. (And do not forget to link subsequent decisions to what you learned from the survey.)

Choosing a Report Audience

You can follow or adapt to your needs NRC's recommendations for sharing The NCS reports with different stakeholder groups in your community. There is no reason to withhold any report from any individual or stakeholder group, but if targeting the right information to the right audience is seen to be of value, we believe that these distinctions among audiences will make the first pass at distributing results most effective.

Sharing The NCS Reports with Different Sectors

Report	Residents	Elected officials	Department managers and line staff	Non-profits and businesses	Press/Media
Community Livability Report	•	•	•	•	•
Dashboard Summary of Findings			•		
Technical Appendices			•		
Trends over Time	•	•	•	○	•
Next Steps Webinar			•		
Presentation of key findings	•	•	•		•
Subgroup comparisons (demographic and/or geographic)		○	•	○	
Open-ended Question Responses		○	○	○	
Guide to Understanding and Using Your Reports			•		

• = Recommended

○ = Optional

These stakeholder groups may wish to “drill down” into the results most meaningful or pertinent to their missions. Those wishing to drill down should review the questionnaire first and decide which survey items are relevant to their mission – choosing from not only specific municipality-provided services, but also those “community outcomes” that they wish to impact. The Dashboard Summary of Findings and Community Livability Report provide an overview, while the Technical Appendices provide the detailed survey responses and benchmark results. The Trends over Time can show how stakeholders’ efforts have impacted the community over the years. Demographic and Geographic Subgroup Comparisons reports can help to point out on whom and where impacts have been felt to lesser and greater degrees.

Community Livability Report

Using the model of the eight facets of community livability within the three pillars of community, The NCS Community Livability report is divided into seven sections:

- About
- Quality of Life
- Community Characteristics
- Governance
- Participation
- Special Topics
- Conclusions

About • This section provides background on The NCS and community livability with brief descriptions of the survey methods.

Quality of Life • This section of the report highlights areas of community strength and challenge, as well as identifying community characteristics most important to your residents' assessments of their quality of life. A summary of benchmark comparisons is presented by the eight community livability facets helping communities to focus on areas that may provide "bigger bang for your buck."

Community Characteristics • This section of the report describes residents' ratings of the characteristics that make a community livable, attractive and a place where people want to be.

Governance • This section of the report evaluates how well the local government delivers services and meets the needs and expectations of its residents.

Participation • This section of the report looks at how connected residents are to the community and each other.

Special Topics • This section includes the custom or special questions you may have included on your survey.

Conclusions • Your report ends with a summary of key findings.

For the most part, the "percent positive" is reported in the report's charts. The percent positive is the combination of the top two most positive response options (i.e., "excellent" and "good," "very safe" and "somewhat safe"). For question that ask about behavior (e.g., asked on a yes/no scale or frequency scale like "never," "rarely," "sometimes," "usually," or "always") we show a combination of responses that reflects at least some behavior (e.g., percent "yes" or "always" and "usually").

On many of the questions in the survey, respondents could answer "don't know," but these "don't know" responses have been excluded from the analyses shown in the report. In other words, the tables and charts display the responses from respondents who had an opinion about a specific item. Appendix A of the Technical Appendices provides the complete set of survey frequencies, with and without "don't know" responses. The User Guide section, *Understanding Survey Research* (starting on page 17) describes how and why we remove the "don't know" responses from our analyses.

Most of the charts in your Community Livability report have been color-coded to indicate how your results compare to national benchmarks, with individual survey items grouped within the eight facets of Community Livability. At a glance, you can see how your results compare to not only each other, but to




national benchmark communities, as well. Detailed benchmark results are provided in Appendix B of the Technical Appendices and include such additional information as your rank among the comparison communities. If you chose to have custom benchmark comparisons made, the results appear in this appendix as well.



Dashboard Summary of Findings

The Dashboard Summary of Findings summarizes resident ratings across the eight facets and three pillars of a livable community. The Dashboard Summary chart displays your overall performance in each facet based on each survey item's comparison to the benchmark. When most ratings were higher than the benchmark, the color is dark purple; when most ratings were lower than the benchmark, the color is the lightest purple. A mix of ratings (higher and lower than the benchmark) results in a color between the extremes.

	Community Characteristics			Governance			Participation		
	Higher	Similar	Lower	Higher	Similar	Lower	Higher	Similar	Lower
Overall	20	25	7	28	12	6	5	14	14
General	2	5	0	2	1	0	1	1	1
Safety	0	1	2	6	1	0	1	1	0
Mobility	4	2	2	2	4	2	1	1	0
Natural Environment	3	0	0	5	1	0	0	1	2
Built Environment	0	4	1	3	3	1	0	2	0
Economy	2	5	1	0	0	1	1	2	0
Recreation and Wellness	3	4	0	4	0	0	1	2	2
Education and Enrichment	3	2	0	1	0	1	0	1	2
Community Engagement	3	2	1	5	2	1	0	3	7

Legend	
	Higher
	Similar
	Lower

The Detailed Dashboard displays for each item on the survey, its comparison to the benchmark and the percent positive for the current year, and if applicable, how the current year's rating compares to the previous year's rating (higher, similar or lower). Examination of how areas are trending over time and how they compare to the benchmark can be helpful in identifying the areas that merit more attention.

	Community Characteristics	Trend	Benchmark	Percent positive	Governance	Trend	Benchmark	Percent positive	Participation	Trend	Benchmark	Percent positive
General	Overall appearance	↓	↑	74%	Customer service	↔	↑	81%	Sense of community	↔	↔	78%
	Overall quality of life	↓	↔	82%	Services provided by ABC	↔	↑	79%	Recommend ABC	↓	↔	75%
	Place to retire	↔	↔	65%	Services provided by the Federal Government	↑	↔	45%	Remain in ABC	↔	↑	83%
	Place to raise children	↓	↔	77%					Contacted ABC employees	↑	↓	51%
	Place to live	↓	↔	84%								
	Neighborhood	↓	↔	78%								
Safety	Overall image	↔	↑↑	87%								
	Overall feeling of safety	*	*	89%	Police	↔	↑↑	82%	Was NOT the victim of a crime	↔	↑	89%
	Safe in neighborhood	↓	↔	92%	Crime prevention	↔	↑	70%	Did NOT report a crime to police	*	*	82%
	Safe downtown/commercial area	↔	↔	87%	Fire	↔	↑↑	94%	Stocked supplies for an emergency	*	*	42%
					Fire prevention	↔	↑	80%				
					Ambulance/EMS	↔	↑	91%				
Mobility					Emergency preparedness	↑	↑↑	66%				
					Animal control	↓	↔	62%				
	Overall ease of travel	↔	↔	75%	Traffic enforcement	↔	↔	66%	Walked or biked instead of driving	*	*	35%
	Traffic flow	↔	↔	49%	Street repair	↓	↓↓	43%	Carpooled instead of driving alone	*	*	42%
	Travel by car	↔	↑↑	64%	Street cleaning	↔	↑↑	66%	Used public transportation instead of driving	*	*	19%
	Travel by bicycle	↓	↑	55%	Street lighting	↔	↔	60%				
	Ease of walking	↓	↑↑	66%	Snow removal	↓	↓	60%				
	Travel by public transportation	↑	↓↓	45%	Sidewalk maintenance	↔	↔	55%				
	Paths and walking trails	↓	↑↑	62%	Traffic signal timing	↔	↔	52%				
					Bus or transit services	↔	↑↑	60%				

Legend	
↑↑ Much higher	↑ Higher
↔ Similar	↓ Lower
↓↓ Much lower	* Not available

Technical Appendices

Appendix A: Complete Survey Responses

The first appendix in this document shows the responses to each question on the survey in two ways. Included first are the responses excluding any “don’t know” responses and second are the responses including the “don’t know” responses. We show both the percent of respondents giving a particular response followed by the number of respondents (denoted with “N=”). Every table in the appendix is numbered, to ease its reference in additional documentation or reports you may develop. The complete question wording that was used on the survey is also displayed in every table. This permits readers to review the results in their entirety without having to cross-reference the survey instrument.

High “don’t know” (typically 20% or greater) responses can suggest a need for additional communication or outreach in the community, especially if the high “don’t know” responses are related to underused services.

Responses excluding don't know

Table 1: Question 1

Please rate each of the following aspects of quality of life in ABC:	Excellent		Good		Fair		Poor		Total	
ABC as a place to live	47%	N=162	36%	N=125	12%	N=42	4%	N=15	100%	N=344
Your neighborhood as a place to live	45%	N=152	39%	N=132	12%	N=42	3%	N=11	100%	N=337
ABC as a place to raise children	54%	N=152	24%	N=69	18%	N=50	4%	N=12	100%	N=283
ABC as a place to work	34%	N=98	36%	N=102	22%	N=62	8%	N=23	100%	N=285
ABC as a place to visit	72%	N=214	22%	N=66	2%	N=5	4%	N=12	100%	N=297
ABC as a place to retire	40%	N=97	30%	N=72	18%	N=44	13%	N=31	100%	N=244
The overall quality of life in ABC	55%	N=187	35%	N=117	5%	N=18	4%	N=15	100%	N=337

Responses including don't know

Table 30: Question 1

Please rate each of the following aspects of quality of life in ABC:	Excellent		Good		Fair		Poor		Don't know		Total	
ABC as a place to live	47%	N=162	36%	N=125	12%	N=42	4%	N=15	1%	N=4	100%	N=348
Your neighborhood as a place to live	45%	N=152	39%	N=132	12%	N=42	3%	N=11	1%	N=3	100%	N=340
ABC as a place to raise children	46%	N=152	21%	N=69	15%	N=50	4%	N=12	13%	N=44	100%	N=327
ABC as a place to work	29%	N=98	30%	N=102	18%	N=62	7%	N=23	15%	N=52	100%	N=337
ABC as a place to visit	71%	N=214	22%	N=66	2%	N=5	4%	N=12	2%	N=5	100%	N=302
ABC as a place to retire	31%	N=97	23%	N=72	14%	N=44	10%	N=31	21%	N=64	100%	N=308
The overall quality of life in ABC	54%	N=187	34%	N=117	5%	N=18	4%	N=15	2%	N=7	100%	N=344

For some questions, respondents are permitted to select more than one response. When some respondents are counted in multiple categories, the total will likely exceed 100%. In these cases, those multiple response questions will have the appropriate notation below the table.

Table 55: Question D14

What is your race? (Mark one or more races to indicate what race(s) you consider yourself to be.)	Percent	Number
American Indian or Alaskan Native	4%	N=15
Asian, Asian Indian or Pacific Islander	6%	N=20
Black or African American	10%	N=35
White	86%	N=298
Other	15%	N=52

Total may exceed 100% as respondents could select more than one option

Appendix B: Benchmark Comparisons

What Benchmarks Are

Benchmarks are comparison data that provide context for your ratings. In Appendix B, your detailed benchmark results are displayed in a table of five columns. The first column is the survey item for which the comparisons have been provided. The second column is your community's percent positive. The third column is the rank assigned to your rating among communities where a similar question was asked. The fourth column is the number of communities that asked a similar question. The fifth and final column shows how your rating compares to the other communities in the benchmarking database. In that final column, your results are noted as being "higher" than the benchmark, "lower" than the benchmark or "similar" to the benchmark, meaning that the average rating given by residents of your community is statistically similar to or different (greater or lesser) than the benchmark. More extreme differences are noted as "much higher" or "much lower."

National Benchmark Comparisons

Table 1: Community Characteristics General

	Percent positive	Rank	Number of communities in comparison	Comparison to benchmark
The overall quality of life in ABC	83%	98	286	Similar
Overall image or reputation of ABC	84%	67	315	Much higher
ABC as a place to live	78%	118	255	Similar
Your neighborhood as a place to live	89%	80	374	Higher
ABC as a place to raise children	75%	135	325	Lower
ABC as a place to retire	72%	129	298	Much lower
Overall appearance of ABC	70%	168	354	Similar

We also provide a list of the communities included in your comparison with their population according to the U.S. Census Bureau. The communities in the national database represent a wide geographic and population range; many communities find a custom comparison that targets specific geographies or populations to be useful.

Communities included in national comparisons

The communities included in ABC's comparisons are listed on the following pages along with their population according to the 2010 Census.

Abilene city, KS.....	6,844	Cambridge city, MA.....	105,162
Adams County, CO.....	441,603	Cape Coral city, FL.....	154,305
Airway Heights city, WA.....	6,114	Cape Girardeau city, MO.....	37,941
Albany city, GA.....	77,434	Cartersville city, GA.....	19,731
Albany city, OR.....	50,158	Carver County, MN.....	91,042
Albemarle County, VA.....	98,970	Cary town, NC.....	135,234
Albert Lea city, MN.....	18,016	Casa Grande city, AZ.....	48,571
Altoona city, IA.....	14,541	Casper city, WY.....	55,316
Ambridge borough, PA.....	7,050	Castle Pines North city, CO.....	10,360
Ames city, IA.....	58,965	Castle Rock town, CO.....	48,231
Andover CDP, MA.....	8,762	Cedar Falls city, IA.....	39,260
Ankeny city, IA.....	45,582	Cedar Rapids city, IA.....	126,326

What Benchmarks Are Not

Benchmarks do not tell you what you need to fix. In this way, benchmarks are not like blood tests that carry a range, often narrow, within which you are considered to be healthy and outside of which you could be sick. A local score that is lower than scores typically seen in other places may indicate nothing more than community sentiment that resonates. For example, a suburb located near a large metropolitan center may not be seen to have as strong an economy as other places. This residential suburb's commercial areas are not seen to be as vibrant as other places, may have a higher cost of living, fewer jobs and may have ceded downtown activities to a nearby metro area that has much higher density and more entertainment opportunities. A lower benchmark rating for "economy" simply offers specifics to the community identity which residents and leaders may feel no need to ameliorate. Instead

this hypothetical community may want to focus its resources on sustaining or strengthening its image as a safe place with many recreation opportunities and ease of travel by car and light rail.

How to Use Benchmarks

Many of the charts and tables in The NCS reports have been color-coded to indicate how your results compare to national benchmarks.

Benchmark comparisons often are used for performance measurement. Communities use the comparative information to help interpret their own citizen survey results, to create or revise community plans, to evaluate the success of policy or budget decisions and to measure local government performance. Taking the pulse of the community has little meaning without knowing what pulse rate is too high and what is too low. When surveys of service satisfaction turn up “good” citizen evaluations, jurisdictions need to know how others rate their services to understand if “good” is good enough. Furthermore, in the absence of national or peer community comparisons, a jurisdiction is left with comparing its fire protection rating to its street maintenance rating. That comparison is unfair. Streets always lose to fire. More important and harder questions need to be asked; for example, how do residents’ ratings of fire service compare to opinions about fire service in other communities?

A police department that provides the fastest and most efficient service – one that closes most of its cases, solves most of its crimes and keeps the crime rate low – still has a problem to fix if the perception of residents in the community it intends to protect is not so strong. The benchmark data can help that police department – or any department – to understand how well citizens think it is doing. Without the comparative data, it would be like bowling in a tournament without knowing what the other teams are scoring. NRC recommends that citizen opinion be used in conjunction with other sources of data about budget, personnel and politics to help managers know how to respond to comparative results.

NRC’s database of comparative resident opinion is comprised of resident perspectives gathered in surveys from over 500 communities whose residents evaluated the same kinds of topics on The NCS. The comparison evaluations are from the most recent survey completed in each community; most communities conduct surveys every year or in alternating years. NRC adds the latest results quickly upon survey completion, keeping the benchmark data fresh and relevant. The Basic Service includes national benchmark comparisons. If you chose a custom benchmarks comparison as an additional service to the basic NCS, these comparison will appear in this appendix, as well.

Jurisdictions in the benchmark database are distributed geographically across the country and range from small to large in population size. Data come from tens of thousands of individual evaluations of community quality, service delivery and engagement. Despite the differences in jurisdiction characteristics, all are in the business of facilitating a high quality of life for residents, typically by providing local government services to residents. Though individual jurisdiction circumstances, resources and practices vary, the objective virtually everywhere is to help create and sustain highly livable communities.

Where Benchmarks Come From

NRC has been leading the strategic use of surveys for local governments since 1991, when the principals of the company wrote the first edition of what became the classic text on citizen surveying. In *Citizen Surveys: how to do them, how to use them, what they mean*, published by ICMA, not only were the principles for quality survey methods articulated, but both the idea of benchmark data for citizen opinion and the method for gathering benchmark data were pioneered. The argument for benchmarks was called “In Search of Standards.” “What has been missing from a local government’s analysis of its survey results is the context that school administrators can supply when they tell parents how an 80 percent score on the social studies test compares to test results from other school systems...”

Surveys in the benchmarks are conducted with typically no fewer than 400 residents in each jurisdiction, opinions are intended to represent over 30 million Americans. NRC innovated a method for quantitatively integrating the results of surveys that are conducted by NRC with those that others have conducted. The integration methods have been thoroughly described not only in the *Citizen Surveys* book, but also in *Public Administration Review* and the *Journal of Policy Analysis and Management*. Scholars who specialize in the analysis of citizen surveys regularly have relied on this work.⁴ The method described in those publications is refined regularly and statistically tested on a growing number of citizen surveys in NRC's proprietary databases. NRC's work on calculating national benchmarks for resident opinions about service delivery and quality of life won the Samuel C. May award for research excellence from the Western Governmental Research Association.

⁴ See, for example: Kelly, J. & Swindell, D. (2002). Service quality variation across urban space: First steps towards a model of citizen satisfaction. *Journal of Urban Affairs*, 24, 271-288 and Van Ryzin, G., Muzzio, D., Immerwahr, S., Gulick, L. & Martinez, E. (2004). Drivers and consequences of citizen satisfaction: An application of the American Customer Satisfaction Index Model to New York City, *Public Administration Review*, 64, 331- 341.

Trends over Time Report

If you have conducted The NCS before, you will automatically receive the Trends over Time report. In this report we show your percent positive ratings by year, how your most current results compare to your previous year's results and how you have compared to the national benchmark for each survey year.

The Trends over Time Report provides insight on the aspects of your community that may be improving or perhaps starting to decline. While trends for your national benchmark comparisons are provided for reference, the benchmark is constantly changing as communities conduct newer surveys or new communities conduct surveys and resident perspectives change. Overall, your trends represent, perhaps, the most powerful benchmark you have – a comparison of you to yourself in prior years. These trends can be a window into the impact of new policies, capital projects or programs in your community.

Table 1: Community Quality Overall

	Percent rating positively (e.g., excellent/good)			2013 compared to 2011	Comparison to benchmark		
	2009	2011	2013		2009	2011	2013
Overall quality of life	68%	74%	79%	Similar	Much lower	Similar	Similar
Overall image	76%	80%	78%	Similar	Similar	Higher	Similar
Place to live	72%	71%	82%	Higher	Similar	Similar	Much higher
Neighborhood	79%	84%	91%	Similar	Higher	Higher	Higher
Place to raise children	65%	69%	78%	Similar	Lower	Much higher	Higher
Place to retire	NA	NA	60%	NA	NA	NA	Much lower
Overall appearance	88%	87%	90%	Similar	Similar	Similar	Similar

Demographic and Geographic Subgroup Comparison Reports

An additional service many participants in The NCS choose is comparison of results by respondent characteristics. In the Demographic Subgroup Comparison Report, each survey question is cross-classified by responses from different demographic groups in your community. We typically show five demographic groupings (housing unit type, housing tenure, age, gender and race/ethnicity) so that you can see if results differ depending on the demographic category of respondent. The Geographic Subgroup Comparison Report is another optional service that compares survey responses by subgroups, in this case, based on respondents' location (e.g., district, neighborhood, ward, etc.). In order to create a report of geographic comparisons, the geographic subareas will need to be determined well before the survey mailing.

In these subgroup comparison reports, we show the percent positive rating and shade “statistically significant” differences grey. The shading is based on analysis of variance and chi-square tests of statistical significance where a “p-value” of 0.05 or less indicates that there is less than a 5% probability that differences observed among subgroups are due to chance; or in other words, a greater than 95% probability that there are differences that exist in the subgroups being compared.

Table 1: Community Characteristics General

Percent rating positively (e.g., excellent/good)	Housing unit type		Housing tenure		Age			Gender		Race/Ethnicity		Overall
	Detached	Attached	Rent	Own	18-34	35-54	55+	Female	Male	White alone, not Hispanic	Hispanic and/or other race	
The overall quality of life in ABC	58%	55%	53%	58%	55%	56%	59%	60%	54%	43%	56%	57%
Overall image or reputation of ABC	62%	55%	56%	59%	59%	56%	60%	56%	61%	58%	55%	58%
ABC as a place to live	68%	67%	64%	69%	64%	69%	69%	68%	68%	68%	67%	68%
Your neighborhood as a place to live	50%	49%	46%	51%	53%	49%	47%	50%	49%	49%	47%	50%
ABC as a place to raise children	63%	62%	62%	63%	62%	62%	65%	64%	62%	62%	55%	63%
ABC as a place to retire	60%	59%	57%	60%	60%	58%	61%	60%	58%	60%	60%	60%
Overall appearance of ABC	55%	50%	43%	56%	50%	52%	57%	52%	53%	52%	57%	53%

Table 1: Community Characteristics General

Percent rating positively (e.g., excellent/good)	District 1	District 2	District 3	District 4	Overall
The overall quality of life in ABC	53%	59%	58%	59%	57%
Overall image or reputation of ABC	50%	61%	60%	60%	58%
ABC as a place to live	60%	72%	72%	74%	68%
Your neighborhood as a place to live	45%	58%	50%	48%	50%
ABC as a place to raise children	57%	66%	65%	67%	63%
ABC as a place to retire	55%	65%	60%	65%	60%
Overall appearance of ABC	50%	52%	53%	59%	53%

Demographic subgroup comparisons can help with creating targeted communication and service campaigns to address the concerns of each group.

Geographic subgroup comparisons can help demonstrate the sense of equity felt across the community since residents in some parts of every community tend to feel better than do those in other areas about the services they receive or the livability of their neighborhood. Results from geographic subgroup comparisons will permit targeting of services, capital improvements and programs so that residents in all areas can feel that they are receiving their fair share of resources.

Open-ended Question Responses

The NCS standard questions are close-ended. A closed-ended question is one where a set of response options is listed as fixed choices on the survey and those taking the survey respond to each option listed. Open-ended questions have no answer choices from which respondents select their response. Instead, respondents must “create” their own answers and state them in their own words. The inclusion of an open-ended question is available as an additional service for The NCS that results in a separate Report of Open-ended Questions.

On the survey, respondents write, in their own words, their answer to the posed open-ended questions. In this report, the verbatim responses are categorized by topic area using qualitative coding techniques. Often, an “other” category is used for responses falling outside these coded categories. In general, a code is assigned when the number of related responses reaches a critical mass.

We will provide a table showing the frequency of each code to give a general overview of the responses.

Table 1: Question 13

What one thing do you like most about living in ABC?	2013
Location	38%
My neighborhood	16%
Quality of life in general	10%
Parks and open space	14%
Rural character	8%
Small town feel	7%
Other	7%
Total	100%

We also provide every verbatim response with its assigned code. This type of report gives you and others a chance to “hear” the voice of respondents in their own words.

Verbatim Responses

The following pages contain the respondents' verbatim responses as written on the survey and have not been edited for spelling or grammar. Responses have been organized by coded topic areas.

What one thing do you like most about living in ABC?

Location

- * Access to everything
- * Actual location
- * Close to city
- * Close to metro
- * Close to my office
- * Close to town
- * Close to work
- * Close to work and everything is handy
- * Convenience
- * Convenience
- * Convenience
- * Everything is handy and close
- * I like living south of the river
- * It's convenient to everything meaning shopping and the airport
- * Location
- * Location
- * Proximity to downtown

My neighborhood

- * Appearance of the neighborhoods
- * Friendly people next door
- * Good neighborhood
- * Great neighborhood
- * I love my neighborhood!
- * Just happy with the neighborhood I live in
- * Lots of kids in the neighborhood
- * Neighbors
- * My neighborhood

Understanding Survey Research

Survey Sampling

We systematically select households from a geocoded United States Postal Service (USPS) address list to ensure that only households located within the boundaries of a community are surveyed. Systematic sampling is a procedure whereby a complete list of all eligible addresses is culled, selecting every Nth one (a number that changes depending on the size of the population and the sample size to be selected) until the appropriate number of addresses is sampled. Not only does NRC scientifically and randomly sample households to participate in The NCS, but we also select, without bias, the household member to participate. This methodology helps ensure that the attitudes expressed by our respondent sample closely approximate the attitudes of all adult residents living in the community. Without controlling who in the household participates, it is likely that results would be biased towards those who are more sedentary and those without jobs (who may have different opinions about some services).

The Basic Service of The NCS includes mailing to randomly selected households. Though response rates across the US have dipped in recent years, the response rate for most administrations of The NCS ranges between 20% and 40%, which yields between 300 and 480 completed surveys.

Margin of Error and Confidence Intervals

It is customary to describe the precision of estimates made from surveys by a “level of confidence” and accompanying “confidence interval” (or margin of error). A traditional level of confidence, and the one used for The NCS, is 95%. The 95% confidence interval can be any size and quantifies the sampling error or imprecision of the survey results because *some* residents’ opinions are used to estimate *all* residents’ opinions. The relationship between sample size and precision of estimates or margin of error (at the 95% confidence level) is shown in the adjacent table. With a typical sample size for The NCS, this means an estimated margin of error at the 95% confidence level of plus or minus four to six percentage points.

Number of completed surveys	Margin of error
100	±9.8%
300	±5.7%
400	±4.9%
500	±4.4%
750	±3.6%

A 95% confidence interval indicates that for every 100 random samples of the same number of residents, 95 of the confidence intervals created will include the “true” population response. This theory is applied in practice to mean that the “true” perspective of the target population lies within the confidence interval created for a single survey. For example, if 75% of residents rate a service as “excellent” or “good,” then the 4% margin of error (for the 95% confidence interval) indicates that the range of likely responses for the entire community is between 71% and 79%. This source of uncertainty is called sampling error. In addition to sampling error, other sources of error may affect any survey, including the non-response of residents with opinions different from survey responders. Though standardized on The NCS, on other surveys, differences in question wording, order, translation and data entry, as examples, can lead to somewhat varying results.

For subgroups of responses, the margin of error increases because the sample size for the subgroup is smaller. For subgroups of approximately 100 respondents, the margin of error is plus or minus 10 percentage points.

Non-response Bias

Knowing that residents in single family dwellings are more likely to respond to a mail survey, NRC oversamples residents of multi-family dwellings to ensure their proper representation in the sample data. Rather than giving all residents an equal chance of receiving the survey, this is systematic, stratified sampling, which gives each resident of the community a known chance of receiving the survey (and apartment dwellers, for example, a greater chance than single family home dwellers).

Weighting

The first step in preparing the data for analysis is to weight the data to reflect the demographic profile of the residents of the community being surveyed. Weighting is the approach used by quality survey consultancies to ensure that the demographic characteristics of the sample mirror the overall population. It is an important method to adjust for potential non-response bias. NRC uses a special software program of mathematical algorithms to calculate the appropriate weights. Several different weighting “schemes” may be tested to ensure the best fit for the data.

“Don’t know” Responses

Generally, a small portion of respondents select “don’t know” for most survey items and inevitably some items have a larger “don’t know” percentage. Comparing responses to a set of items on the same scale can be misleading when the “don’t know” responses have been included. If two items have disparate “don’t know” percentages (2% versus 17%, for example), any apparent similarities or differences across the remaining response options may disappear once the “don’t know” responses are removed. Such an example is shown below.

When comparing the community as a place to live to the community as a place to work, it would appear that 76% of respondents rated the community as a place to live as “excellent” or “good” compared to just 63% for the community as a place to work. However, the community as a place to work has a much higher proportion of respondents answering “don’t know” (17% compared to 2%).

	Place to live		Place to work	
	Number	Percent	Number	Percent
Excellent	48	25%	38	20%
Good	97	51%	81	43%
Fair	23	12%	22	12%
Poor	19	10%	17	9%
Don't know	3	2%	32	17%
Total	190	100%	190	100%

If we remove the three “don’t know” responses from the community as a place to live and the 32 “don’t know” responses from the community as a place to work, the two items are actually much more similar in their evaluations: 78% “excellent” or “good” place to live compared to 75% “excellent” or “good” place to work.

	Place to live		Place to work	
	Number	Percent	Number	Percent
Excellent	48	26%	38	24%
Good	97	52%	81	51%
Fair	23	12%	22	14%
Poor	19	10%	17	11%
Total	187	100%	158	100%

Response Scale

The scale on which respondents are asked to record their opinions about service and community quality is “excellent,” “good,” “fair” or “poor” (EGFP). This scale has important advantages over other scale possibilities (very good to very bad; very satisfied to very dissatisfied; strongly agree to strongly disagree, as examples). EGFP is used by the plurality of communities conducting citizen surveys across the U.S. The advantage of familiarity was one that NRC did not want to dismiss when crafting The NCS questionnaire, because elected officials, staff and residents already are acquainted with opinion surveys measured this way. EGFP also has the advantage of offering three positive options, rather than only two, over which a resident can offer an opinion. While symmetrical scales often are the right choice in other measurement tasks, NRC has found that ratings of almost every local government service in almost every community tend, on average, to be positive (that is, above the scale midpoint). Therefore, to permit finer distinctions among positively rated services, EGFP offers three options across which to spread those ratings. With questions worded for EGFP, responses are more neutral because they require no positive statement of service quality to judge (as agree-disagree scales require) and, finally, EGFP intends to measure absolute quality of service delivery or community quality (unlike satisfaction scales which ignore residents’ perceptions of quality in favor of their report on the acceptability of the level of service offered).



The National Citizen Survey™

Wilsonville, OR

Dashboard Summary of
Findings

2014

Summary

The National Citizen Survey™ (The NCS™) is a collaborative effort between National Research Center, Inc. (NRC) and the International City/County Management Association (ICMA). The survey and its administration are standardized to assure high quality research methods and directly comparable results across The NCS communities. The NCS captures residents' opinions within the three pillars of a community (Community Characteristics, Governance and Participation) across eight central facets of community (Safety, Mobility, Natural Environment, Built Environment, Economy, Recreation and Wellness, Education and Enrichment and Community Engagement). This report summarizes Wilsonville's performance in the eight facets of community livability with the "General" rating as a summary of results from the overarching questions not shown within any of the eight facets. The "Overall" represents the community pillar in its entirety (the eight facets and general).

By summarizing resident ratings across the eight facets and three pillars of a livable community, a picture of Wilsonville's community livability emerges. Below, the color of each community facet summarizes how residents rated each of the pillars that support it – Community Characteristics, Governance and Participation. When most ratings were higher than the benchmark, the color is the darkest shade; when most ratings were lower than the benchmark, the color is the lightest shade. A mix of ratings (higher and lower than the benchmark) results in a color between the extremes.

Ratings for Mobility (within the pillars of Community Characteristics and Governance), Natural Environment (Community Characteristics), Built Environment (Participation), Economy, (Community Characteristics and Governance), Education and Enrichment (Governance) and Community Engagement (Governance) were particularly strong and tended to be higher than the benchmark comparison. All other ratings were strong and similar to communities across the nation. This information can be helpful in identifying the areas that merit more attention.

Figure 1: Dashboard Summary

	Community Characteristics			Governance			Participation		
	Higher	Similar	Lower	Higher	Similar	Lower	Higher	Similar	Lower
Overall	17	30	0	16	28	0	4	27	5
General	3	4	0	0	3	0	0	2	1
Safety	1	2	0	0	7	0	0	3	0
Mobility	4	3	0	5	2	0	1	2	0
Natural Environment	2	0	0	2	4	0	1	2	0
Built Environment	2	3	0	2	5	0	1	1	0
Economy	4	4	0	1	0	0	0	2	1
Recreation and Wellness	0	4	0	1	2	0	0	5	0
Education and Enrichment	1	5	0	1	1	0	1	1	1
Community Engagement	0	5	0	4	4	0	0	9	2

Legend	
	Higher
	Similar
	Lower

The National Citizen Survey™

Figure 2: Detailed Dashboard

	Community Characteristics	Trend	Benchmark	Percent positive	Governance	Trend	Benchmark	Percent positive	Participation	Trend	Benchmark	Percent positive
General	Overall appearance	↔	↑	92%	Customer service	↔	↔	82%	Recommend Wilsonville	↔	↔	93%
	Overall quality of life	↔	↔	91%	Services provided by Wilsonville	↔	↔	86%	Remain in Wilsonville	↔	↔	88%
	Place to retire	↔	↔	76%	Services provided by the Federal Government	↔	↔	43%	Contacted Wilsonville employees	↔	↓	35%
	Place to raise children	↔	↑	93%								
	Place to live	↔	↔	94%								
	Neighborhood	↔	↔	91%								
	Overall image	↔	↑	87%								
	Overall feeling of safety	*	↑	93%	Police	↔	↔	82%	Was NOT the victim of a crime	↔	↔	91%
	Safe in neighborhood	↔	↔	98%	Crime prevention	↔	↔	78%	Did NOT report a crime	*	↔	81%
	Safe commercial areas	↔	↔	96%	Fire	↔	↔	94%	Stocked supplies for an emergency	*	↔	34%
Safety					Fire prevention	↔	↔	86%				
					Ambulance/EMS	↔	↔	93%				
					Emergency preparedness	↓	↔	52%				
					Animal control	*	↔	75%				
	Traffic flow	↑	↔	66%	Traffic enforcement	↔	↔	71%	Carpooled instead of driving alone	*	↔	42%
Mobility	Travel by car	↑	↔	74%	Street repair	↑	↑↑	75%	Walked or biked instead of driving	*	↑	77%
	Travel by bicycle	↑	↑	75%	Street cleaning	↑	↑	87%	Used public transportation instead of driving	*	↔	35%
	Ease of walking	↔	↑	81%	Street lighting	↔	↑↑	87%				
	Travel by public transportation	*	↑	75%	Sidewalk maintenance	↑	↑↑	83%				
	Overall ease travel	*	↔	86%	Traffic signal timing	↑	↔	64%				
	Paths and walking trails	↔	↑	83%	Bus or transit services	↔	↑↑	83%				
Natural Environment	Overall natural environment	↑	↑	93%	Garbage collection	↔	↔	88%	Recycled at home	↔	↑	97%
	Cleanliness	↔	↑	95%	Recycling	↔	↔	86%	Conserved water	*	↔	88%
					Yard waste pick-up	↔	↔	86%	Made home more energy efficient	*	↔	74%
					Drinking water	↑	↑	82%				
					Open space	*	↔	79%				
Built Environment					Natural areas preservation	↔	↑	80%				
	New development in Wilsonville	↓	↔	69%	Sewer services	↑	↔	89%	NOT experiencing housing cost stress	↔	↔	66%
	Affordable quality housing	↔	↔	47%	Storm drainage	↔	↑	82%	Did NOT observe a code violation	*	↑	74%
	Housing options	↔	↔	64%	Power utility	↔	↔	88%				
	Overall built environment	*	↑	81%	Utility billing	*	↔	76%				
	Public places	*	↑	84%	Land use, planning and zoning	↔	↔	54%				
					Code enforcement	↔	↑	73%				
					Cable television	*	↔	60%				

Legend

↑↑ Much higher ↑ Higher ↔ Similar ↓ Lower ↓↓ Much lower * Not available

The National Citizen Survey™

	Community Characteristics	Trend	Benchmark	Percent positive	Governance	Trend	Benchmark	Percent positive	Participation	Trend	Benchmark	Percent positive
Economy	Overall economic health	*	↑	75%	Economic development	*	↑	66%	Economy will have positive impact on income	↔	↔	29%
	Shopping opportunities	↓	↔	54%					Purchased goods or services in Wilsonville	*	↔	100%
	Employment opportunities	↑	↑	51%					Work in Wilsonville	*	↓	30%
	Place to visit	*	↔	63%								
	Cost of living	*	↔	43%								
	Vibrant commercial areas	*	↑	62%								
	Place to work	↔	↑	79%								
Recreation and Wellness	Business and services	↔	↔	74%								
	Fitness opportunities	*	↔	81%	City parks	↔	↑	94%	In very good to excellent health	*	↔	69%
	Recreational opportunities	↑	↔	73%	Recreation centers	↔	↔	75%	Used Wilsonville recreation centers	↑	↔	63%
	Food	↔	↔	67%	Recreation programs	↔	↔	80%	Visited a City park	↔	↔	91%
	Health and wellness	*	↔	76%					Ate 5 portions of fruits and vegetables	*	↔	88%
									Participated in moderate or vigorous physical activity	*	↔	90%
Education and Enrichment	K-12 education	↔	↑	87%	Public libraries	↔	↑	94%	Used Wilsonville public libraries	↔	↑	80%
	Cultural/arts/music activities	↑	↔	60%	Special events	*	↔	81%	Participated in religious or spiritual activities	↓	↓↓	31%
	Child care/preschool	↑	↔	59%					Attended a City-sponsored event	*	↔	52%
	Religious or spiritual events and activities	↔	↔	75%								
	Adult education	*	↔	66%								
	Overall education and enrichment	*	↔	72%								
Community Engagement	Opportunities to participate in community matters	↑	↔	77%	Public information	↔	↔	80%	Sense of community	↔	↔	72%
	Opportunities to volunteer	↔	↔	76%	Overall direction	↔	↔	68%	Voted in local elections	↔	↔	82%
	Openness and acceptance	↔	↔	68%	Value of services for taxes paid	↑	↔	69%	Talked to or visited with neighbors	*	↔	88%
	Social events and activities	↑	↔	71%	Welcoming citizen involvement	↑	↑	68%	Attended a local public meeting	↔	↔	20%
	Neighborhoodness	*	↔	76%	Confidence in City government	*	↑	70%	Watched a local public meeting	↔	↓	22%
					Acting in the best interest of Wilsonville	*	↔	69%	Volunteered	↔	↔	34%
					Being honest	*	↑	73%	Participated in a club	↔	↓	20%
					Treating all residents fairly	*	↑	71%	Campaigned for an issue, cause or candidate	*	↔	16%
									Contacted Wilsonville elected officials	*	↔	9%
									Read or watched local news	*	↔	85%
									Done a favor for a neighbor	*	↔	77%

Legend

↑↑ Much higher ↑ Higher ↔ Similar ↓ Lower ↓↓ Much lower * Not available



The National Citizen Survey™

Local Government
Playbook of
Strategies to
Improve
Communities

National Research Center, Inc. | Boulder, CO
International City/County Management Association | Washington, DC

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The National Citizen Survey™
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Introduction

Think of this guide as a helium balloon that will help lighten the burden of determining how to put your survey results to work for your community. Most community leaders are buried in information, because running local government requires knowing a lot about your own organization, the organizations of other entities that can inhibit or facilitate your success and your residents' perspectives about what is and ought to be happening. The National Citizen Survey you recently conducted has provided you with reliable reconnaissance about your residents' opinions and activities that you can get from no administrative records or discussions with managers or elected officials. Although the information in your survey is uniquely valuable, knowing what to make of it – as in, what to do with it – benefits from some assistance.

First, Take a Deep Breath

Pressure mounts to use data wisely. People are saying that data are money. Everyone is talking about how data help managers make the right decisions – to reduce crime, improve the housing stock, expand the tax base, sell bonds. It is true that being data driven does increase the likelihood that your decisions will be better for the community, but we recommend that as managers or elected officials are exposed to valid information about resident perspectives about the local quality of life, governance and reports of residents' engagement in the community, it is best to take off your leader hat and just listen to what the report says. Forget how data driven you must be and appreciate the survey results like you might your favorite music. Take the time to feel your own reaction to what you hear. Rather than pretend that management decisions are made strictly by the numbers and that emotion plays no part in the power of data, the first question a leader should ask of his survey data is not “do they make sense?” but “do they feel right?”

Once you've noticed which survey results resonate most with you, then examine them. Do they square with other data you have? Do they confirm what you and others have observed? Finally, as you think about what the survey results mean to you, remember that you are not alone. There are some, probably many, staff who have more direct experience with the areas reported on in the survey. Convene them to participate in the debrief, which may include the one you have with the researchers at National Research Center, Inc. if you have conducted The National Citizen Survey. In that debrief, you will

get a sense of how NRC recommends you move forward to put your results to use.

Where the Action Is

Putting your results to work is precisely why you conducted the survey, so taking the time to absorb the results is the beginning, not the end of the survey process. This Playbook of Strategies provides you with recommendations about how to move forward with your survey results. It includes vignettes of how other jurisdictions used their survey results to improve their communities to help you get started with navigating toward building successful outcomes in your community. The local governments highlighted in this playbook include:

- Cartersville, Georgia
- Winter Garden, Florida
- Paducah, Kentucky
- Noblesville, Indiana
- Park City, Utah
- Boulder, Colorado
- Hamilton, Ohio
- Puget Sound Clean Air Agency (King, Kitsap, Pierce and Snohomish Counties, Washington)
- Ankeny, Iowa
- Fort Collins, Colorado
- Greeley, Colorado
- Pocatello, Idaho
- Livermore, California
- Peoria, Arizona
- Longmont, Colorado
- Westminster, Colorado
- Littleton, Colorado

Creating Livable Communities

The Many Faces of “Livability”

Most leaders charged with running local governments seek to create “livable communities.” However, the phrase has been used to cover so much territory that it no longer is clear what anyone really means by it. For the literal minded, a livable place is, redundantly, where people reside and, if a place were not livable, it would be empty, save for passers-by – including those who arrive temporarily for commerce. However, by livable, most people mean something symbolic. The phrase “livable community” evokes a place that is not simply habitable but that is desirable. It is not only where people do live, but where they want to live.

Awards are given for the most livable places in America and the winners are chosen, often by magazines, based on many quality of life criteria like safety, affordability and beauty. Because livability means so many things to different people, researchers and community organizations have explored just about every window into the meaning of the term. For some, livability has to do with the built environment – a place that hews to land conservation, avoids sprawl and funnels activity into pedestrian-friendly space with low rise buildings and attractive greenery (Kunstler, 1993). Proper land use in a livable place results in the “spirit of community,” (Fischer, 2000) where neighbors trust and rely on each other and turn to each other for help. One organization reminds us that livability should not be the aspiration of only well off communities: “livability extends to economic dynamism and career opportunities as well as recreational, aesthetic, cross-generational and cultural activities.” (Community Research Connections in <http://crrresearch.org/case-studies/case-studies-sustainable-infrastructure/land-use-planning/what-makes-a-city-liveable>).

A livable community not only attracts people because its infrastructure represents good planning principles, it may also provide expansive opportunities like those of great cities. One simple characteristic of a great city that intersects with livable communities is the creation of a place where people want to spend time outside (<http://ecolocalizer.com/2009/07/08/what-is-a->

[good-city/](#)). A more elaborate set of amenities comes from the mid-twentieth century, when Lewis Mumford described this way what exceptional cities provide: “The chief function of the city is to convert power into form, energy into culture, dead matter into the living symbols of art, biological reproduction into social creativity.” This is a tall order but one that some believe would contribute to a city becoming “livable.”

Below is a word cloud of definitions of livability that came from 18 articles reviewed by the National Association of Regional Networks (NARC).¹ It demonstrates the salience of Transportation and Community Quality as well as the diversity of other terms used to describe “livability.”

Figure 1: Livability Word Cloud



¹ Livability Word Cloud Including Scholarly and Practitioner Definitions (www.wordle.net) in LIVABILITY LITERATURE REVIEW: A SYNTHESIS OF CURRENT PRACTICE. National Association of Regional Councils and U.S. Department of Transportation 2012, Washington, D.C.

Figure 2: The Eight Facets of Livable Communities



Cross-cutting Management for Livability

While more and more local governments seek to create livable communities, the management tool they most often rely on is an engine comprising individual departments, each charged with providing targeted services, like police, library, parks, economic development, streets and many more. As much as the directors of these departments sit together at the executive table, they also confront unique service delivery issues that force a focused rather than peripheral view of their territory, so interconnection of work effort is hard to achieve. The difficulty of integrating the plans and actions of individual departments is the reason that local government (in fact any level of government and any large business) struggles to become a finely tuned, efficient and high powered machine. Nevertheless, the delivery of a livable community requires a honed engine with strong connection among all departments because the characteristics that make communities livable are not the territory of individual units (or even the government alone, as noted above).

Solutions to local challenges will come most easily from an integrated drive to improve. For example, a high crime rate in a jurisdiction is unlikely to be solved only by police or court action. Crime may be the result of conditions related to jobs, schools, street lighting, community connectedness, public trust, location of parks and more. Likewise, pedestrian friendly streets can be developed best with a partnership of planning, parks, utilities, police, fire, efforts to encourage community

engagement and participation of the private sector and faith-based organizations.

The NCS Helps Manage “Livability”

The National Citizen Survey™ has been designed to gather resident perspectives about community livability and to report to elected officials, local managers and community stakeholders those areas of livability that are doing well and those that merit improvement. The results of The NCS are reported in eight facets of community livability – natural environment, economy, built environment, recreation and wellness, safety, education and enrichment, mobility and community engagement. For each facet, residents report their perspectives about three aspects of livability – what we call the pillars of community life – the quality of community, quality of services and related resident activities.

With The NCS, the vague definitions of livability disappear because the report offers quantified metrics that indicate how livable the community is overall and within each domain. These measures will help leaders identify areas of strength and need and evaluate progress toward improvement. The emphasis on livability makes for a strategic approach to community quality and arms local leaders with critical information they need to help move the community where residents want it to be.

The Es of Action

NRC researchers have identified six kinds of action that can be considered as response to your citizen survey results. These categories of action have been gleaned from studying how jurisdictions have used their resident opinions to improve their communities and they are shown in the graphic, below. Don't feel obliged to identify interventions in each of the six categories, but appreciate them as suggested areas where important movement in community quality can be, and has been, made.



Envision: Results of The National Citizen Survey often are used by communities as part of goal setting and strategic or comprehensive planning. By understanding what residents think are the characteristics of the community that are most important to protect or improve, by knowing what is working and what remain challenges, local leaders can be guided toward planning for a community that builds on its strengths and improves in the areas that matter the most.

Earmark: Jurisdictions use The National Citizen Survey results most often to allocate or redistribute resources based on the aspects of community that residents find wanting. When mobility is important but not easily available or delivered with obstacles to accessibility, it may be wise to invest more in transit, roads, bicycling or walking paths. If ratings of the community's recreation and wellness are not strong or resident participation in civic volunteer opportunities are weak, wise reallocation of limited resources to enhance those facets of community will help move you forward.

Educate: Getting the word out about community amenities, services and opportunities to let residents and leaders of other organizations understand what you do well and what they may not understand about your community is one of the most common uses of survey findings. Whether marketing existing

programs or communicating a new community brand, education about what seems to be misunderstood or what may remain little known is a great way to use The NCS results.

Engage: Engagement can come in two essential forms – engagement with individuals or partnership with groups. In both cases, the results of your survey are relevant to the community overall and are not simply a comment on local government. Livable communities grow from the connection of businesses, non-profits, the government and residents working together. Engagement with individuals may mean little more than inviting residents to comment and work on The NCS findings; partnership with organizations can even start with your own employees and then spread to work with other levels of government, hospitals, schools and the Chamber of Commerce. When civic life is understood to be everyone's purview, the questions that arise from The NCS aren't only, "how can government improve?" They include, "how can we all contribute to making things better?"

Enact: Across the country, hundreds of millions of dollars have been raised or saved based on findings of The National Citizen Survey. These successes are created by findings that indicate support for possible bond raising ballot questions or that identify a need for new services, like recycling or transit, that could save time and money or simply improve the quality of life. Enacting new policies or establishing new programs often are the actions that follow attention to what residents report on their citizen survey.

Evaluate: The act of using The NCS is itself an evaluation of community, but beyond that single use of the survey, repeated use permits leaders to determine if the programs, policies or personnel changes they enact have had their intended effects. Other kinds of evaluation can come from The NCS. Often clients want to understand more about a finding of a survey, so they seek information from a more in-depth survey on fewer topics or by listening to groups of stakeholders through guided discussions. Performance measurement – comparing this administration's results to earlier administrations of the survey in your own jurisdiction or to benchmark jurisdictions – is a kind of evaluation that is linked to survey results when resident responses are tracked along with other performance data about service activities and costs.

Not every action must reflect each of the Es listed above. Your use of the Es of Action can be effective relying only on one theme. Nevertheless, this

example from Cartersville, GA embodies parts of each of the action themes.

A Case Study in Resident-friendly Recycling

Cartersville, Georgia

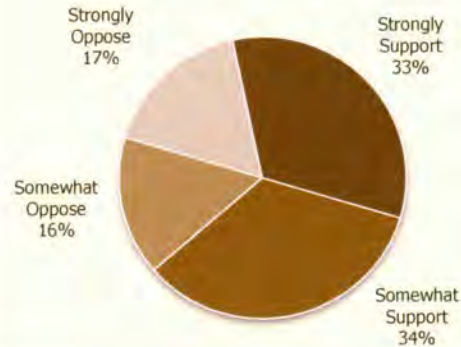
The City of Cartersville, GA had a robust program in place for garbage collection and disposal. Since the mid-1970s, standard services such as curbside pick-up, large item pick-up, and dumpster services had been augmented by extras like bulk leaf vacuuming and grass clipping removal. The City had conducted a pilot recycling program in the late 1990s, but low participation and high costs made further implementation prohibitive. Although there was a rising sense that the city should provide recycling services, staff were concerned that recycling would require a rate increase that could upset customers and cause further difficulty. In 2009, Cartersville added a question about recycling to its fourth administration of The National Citizen Survey. The survey revealed that 67% of residents were supportive of including recycling in the city's waste disposal program, even if that change required an additional cost. Based on results from The National Citizen Survey, Cartersville decided the time was right to implement a recycling program, and set a goal to have the program in place by the beginning of 2012. Before implementing the new recycling program, Cartersville went through a multi-step planning and implementation process to ensure its success.

Envision: The City first identified seven major questions that would need to be resolved: How will recyclable materials be received? What type of containers do you want to use? What type of vehicle will it take? Can our regular collection routes be utilized? How much manpower will it take? How much will this program cost, and how will we pay for it?

The Public Works department met with its processing partner, Bartow County Solid Waste, to answer the first question. It was determined that a dual stream collection system – with one stream for paper and a separate stream for containers – could be easily integrated into the current structure and would also be sustainable for the foreseeable future.

The City also looked at its current five-day pick-up schedule and determined that a biweekly pick-up schedule would enable the City to implement recycling pick-up with minimal additional staff.

The 2009 National Citizen Survey asked residents of Cartersville, "To what degree do you support or oppose adding a curbside recycling program, even if it meant an additional collection fee?"



Earmark: Next, the City needed to determine what type of collection containers should be used. Instead of choosing the standard 18-gallon open tubs, Cartersville opted for a container that would be easier for residents and collection staff to handle. The City decided on a smaller version of their garbage collection containers in two colors – dark blue for containers and light gray for paper. Because recycling was scheduled for collection every other week, the bins selected were large enough to hold two weeks' worth of recycling for the average household. A complementary recycling vehicle was selected for its ability to dump these units into a divided body for paper and containers.

Educate: The public was informed that recycling would be available to all residents on an opt-in basis, and they were encouraged to sign up to receive the collection bins. Information about the new program was distributed in the City's newsletter and sent to residents along with their garbage bills.

To facilitate ease of use, a sticker displaying the full year's collection schedule was displayed on the top of each container. This way, residents would only have to glance at the top of their trash bins to determine their next date for pick-up.

Engage: Cartersville's Solid Waste Fund operates as an enterprise fund, and is therefore solely dependent on funds collected within that department to operate. Public Works increased fees by a reasonable \$2 per month to generate the funds needed to implement the program.

To add value for this increase, the City also developed and publicized a program called "Reside with Pride." The program includes specific times each year in which solid waste customers can leave

items from their home or yard curbside for pick-up free of charge – eliminating waste that might have accumulated over several weeks or months.

Evaluate: In February 2012, Cartersville successfully launched its first recycling program. Residents signing up to receive the service exceeded the City's original estimate of 2,000 households.

	2013	2011
Approval rating	83%	50%
Comparison to Benchmark	Above	Much below

As a follow-up, the City included additional questions about the program in its 2013 administration of The National Citizen Survey. Quality of recycling services went from “much below” both the national and southeast United States benchmarks to “above” the benchmark in each area. Sixty-three percent of Cartersville residents indicated that they had recycled at least once in the past twelve months.

In the following chapters, each of the six Es is further defined and is accompanied by case studies of local governments that have used survey results from their residents to help strengthen their communities. These studies are intended to inform and inspire other local governments not only to understand but to act on survey data.



Envision

Every organization plans. Some plans happen on the fly when meetings seem to be veering off track but in most local governments, managers are trained to plan. Most plan to plan, by scheduling and distributing relevant materials in advance of meetings to create plans. Strategic, master, comprehensive or long range plans most often are created out of discussions with elected boards, councils or commissions. In an analysis of strategic plan success, it was found that more than 70% of plans fail. The research also found that a critical key to success in strategic planning was understanding stakeholder opinions:

Without an objective and unbiased understanding of “what’s going on here,” you’re not likely to come up with strategies that will be very effective. Take a hard look at what’s happening externally and internally and pay special attention to the needs of your stakeholders. As John Dewey once said, “A problem well defined is a problem half solved.”²

These plans always benefit from starting with credible information about the status of the community and issues that resonate with residents. We often liken the use of citizen survey results in the planning context as building a platform on which all stakeholders can stand and look at the same horizon. This way, there will be much less opportunity for individuals to claim they speak for the entire community when they offer the perspectives of a vocal minority or merely claim to know what all taxpayers are thinking.

Although strategic planning can vary significantly in terms of time and resources, there are a number of characteristics that help create more successful strategic plans in local governments.

Characteristics of Successful Strategic Plans

- Set an appropriate scope, timeframe and resource allotment
- Play to organizational strengths
- Align with your organizational culture
- Has actionable, tangible steps
- List expected outputs and outcomes
- Assign responsibility

² Leo Bottary. Top 10 Attributes Of Successful Strategic Plans <https://www.openforum.com/articles/top-10-attributes-of-successful-strategic-plans/>

- Are revisited (progress against goals are regularly monitored and considered).³⁴

Two case studies highlight the use of survey data in strategic planning. Winter Garden, Florida used The NCS data, first to help develop its strategic plan, and now continues to use survey data as performance measures when revisiting the strategic plan.

Case Studies in Strategic Planning

Winter Garden, FL

In Winter Garden, Florida, elected commission and senior staff identified the need to create a budget that reflects the values of the community. Winter Garden, with a previous tagline, “a charming little city with a juicy past” (referring to its history in the orange industry), has a historic downtown with bike and pedestrian connections to surrounding towns via its 22 mile West Orange Trail. A city west of Orlando, this gem of a small community relies on resident perspectives to assure that the community is steering in the right direction.

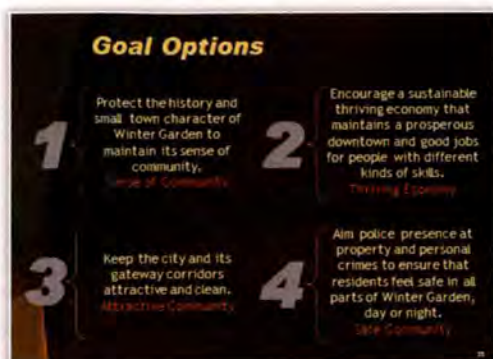
The experiences and preferences of stakeholder groups were collected through a survey of residents, focus groups, a town hall meeting and interviews. With a mission of becoming the best small city in Florida, staff then augmented findings with other sources of data and observations.



Results were synthesized to describe the community’s vision, values and goals. Research results and the strategic plan help guide the City in decision-making, budget allocation performance measurement.

³ Colorado Trust OCA

⁴ Leo Bottary. Top 10 Attributes Of Successful Strategic Plans. August 2011. <https://www.openforum.com/articles/top-10-attributes-of-successful-strategic-plans/>



Winter Garden monitors its strategic plan using performance data from The NCS. Throughout its annual budget document, Winter Garden publishes, along with operational indicators, customer service indicators from The NCS and other sources. Since the city conducts The NCS every other year, targets are set for years when the survey is to be repeated.

Key Performance Indicators: Customer Service Indicators	FY 09/10 Actual	FY 10/11 Actual
Safety from Property Crime Survey Index	51%	71%
Crime Prevention Survey Index	60%	83%
Average Safety in Your Neighborhood Survey Index	80%	89%
Safety in Downtown Winter Garden After Dark Survey Index	68%	82%

Paducah, Kentucky

Paducah is in far western Kentucky, bordering Illinois. I-24 swoops through the city of 25,000. Paducah is a river city located at the confluence of the Ohio and Tennessee Rivers. Besides housing West Kentucky Community and Technical College and Murray State University's Paducah Campus, Paducah is home to two hospitals, a bustling shopping area, and numerous art galleries and cultural venues including the Luther F. Carson Four Rivers Performing Arts Center and the National Quilt Museum of the United States.

Paducah also is an employment hub for the region with jobs in health care and the river industry. West of the city is the Paducah Gaseous Diffusion Plant, a facility that began enriching uranium in 1952 and one of the area's largest employers. Just before our planning session with Paducah leaders, USEC, which leases the plant from the Department of Energy, announced plans to cut jobs. The plant currently is in a transition phase with the DOE negotiating with

Global Laser Enrichment for the enrichment and sale of depleted uranium tails at the plant.

NRC conducted a full day workshop with Paducah's top staff and City commission to identify key survey findings. Notably, the local press attended this meeting and the journalist on assignment was invited to participate in the discussions. In the community visioning, participants were asked to



specify what was unique about Paducah as well as what they wanted for Paducah in the coming years. Survey results clearly showed that residents were not enthusiastic about the economic condition of the City. The imminent cut back in jobs at USEC did not help matters. In the discussion about the future, leaders identified this vision: A downtown hotel, high-paying quality jobs, economic development, population growth, sustained economy, more businesses/employer infill and more shopping. In small groups, jobs and economic development were seen to be top priorities.

But The NCS also identified public trust as an area that concerned residents, and that concern resonated with leaders. Therefore, from their small group discussions, leaders identified public image and community pride as areas for attention in addition to the local economy. These conclusions led to a set of action plans. To bolster community pride and reputation, the city would develop a marketing and community engagement strategy and increase its focus on neighborhood revitalization.

Economic development was to include developing a matrix to identify the types of businesses to incent depending on anticipated return on investment, creating a more development-ready infrastructure, and educating the public on building inspection policies to help encourage new development and the expansion of existing industries.

Paducah leaders will track the action plans and readjust as needed before The NCS is conducted again in two years.

Engage

Modern government might be better viewed as a social network rather than “the cockpit from which society is governed.” The more modes of opportunity that allow direct citizen engagement, the more accurately government represents public consensus about decisions and priorities.⁵

Dynamic partnerships can dramatically increase the effectiveness and buy-in for government programs. Your largest partner in governing is your residents. Partnerships also involve the private sector, community-based organizations and other government organizations. Partnerships allow actors to learn from each other’s experiences with the effect of increasing efficiency and ultimately improving the breadth and quality of a community. By collaborating with others, government can garner a broader range of resources.

Partnering with Your Residents

Residents are the heart of any community. By contributing their time, energy and talents, resident volunteers pump the life blood of thriving towns and cities. Residents who donate their time serve in many roles – neighborhood organizers, park volunteers, senior center ride providers, and more. However, although all communities have a wide range of sources for volunteers, volunteers often are an untapped resource, in many instances simply because residents are not asked to contribute. Volunteers can benefit government outside of direct service also. Volunteers create community ownership and generate public support for government by sharing their positive experiences with others in their community. Studies have found that levels of public trust are higher in communities with higher levels of civic engagement.⁶

Maximizing the benefits of volunteers takes commitment, planning, time, and organization. Governments should spend time considering whether and why they want to work with volunteers and develop a philosophy for the overall engagement of volunteers. Volunteers should never be considered “free help” but rather extensions of paid staff engaged in the fulfillment of a government’s mission. Although there are no guarantees that all volunteers will be beneficial for an organization,

these best practices should increase the likelihood of success. Particularly important are initial and periodic assessments of whether and how volunteers should be used.

More intensive collaboration may involve using a “Train-the-Trainer” model whereby local government staff train residents to go out into the community and share information and skills with other residents. Resident behaviors are strongly correlated with sustainability, community safety and emergency preparedness, health and wellness, community inclusivity and more. Pro-social attitudes and behaviors can be significantly strengthened through community outreach, training and organizing.

The development of local non-government leadership also has been a strategy used in many community health initiatives. Identifying and promoting a local “champion” lends a strong hand in helping residents adopt behaviors to strengthen communities.

Strategies for Successful Use of Volunteer Resources

- Conduct a periodic organizational assessment to determine whether and in what ways volunteers should be used and the organizational capacity for effective use of volunteers
- Develop plans around the appropriate skills, expertise, uses and roles of volunteers
- Identify effective recruiting strategies to attract capable people
- Have policies and procedures for volunteers, including risk management procedures, rules and regulations, and expected time commitment
- Screen and interview applicants for volunteer positions
- Place volunteers where they will be most effective in terms of the organization’s needs and the volunteer’s skills and available time
- Orient and train volunteers, not only on specific tasks, but on the organization’s mission, vision and goals.
- Provide meaningful volunteer jobs and roles in the organization
- Have a designated manager to supervise volunteers
- Empower volunteers by encouraging them to take initiative and ask questions
- Periodically assess volunteer performance and staff support for volunteers
- Track volunteer hours
- Regularly show appreciation and recognition of volunteers

⁵ What I Learned: An Insider’s Guide to Improving Local Government Modest proposals for fixing local government in America by James G. Kostaras AIA, AICP / Summer 2011: Government (Volume 14 n2)

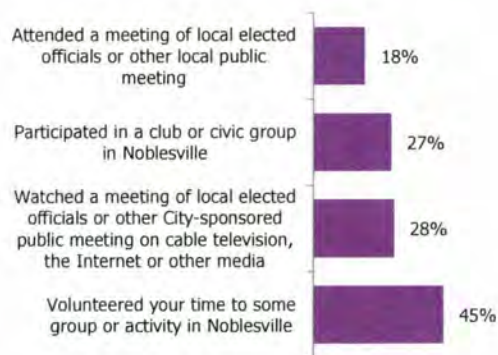
⁶ ASPA Task Force on Civic Education in the 21st Century and Putnam, R.B. Bowling Alone, America’s Declining Social Capital. Journal of Democracy.

A Case Study in Civic Engagement

Noblesville, Indiana

Civic engagement has been a passion of the mayor of this fast growing Indiana city since he took office on January 1, 2004. Mayor John Ditslear wasn't yet mayor when the Community Vision for Excellence initiative started in 1993. Its mission was to measure progress on a variety of indicators so that Noblesville would continue to be a great community for residents and visitors. The goals of Vision Noblesville (as it is now called) include helping all residents find meaningful employment, a healthy lifestyle, life-long learning opportunities, social services assistance when needed and available volunteer options.

Noblesville's 2010 National Citizen Survey was instrumental in alerting Mayor Ditslear of the need to enhance community volunteerism. According to the survey findings that year, participation in clubs or civic groups was not as strong as it was in other communities. The same was true for attending or watching public meetings and the number of Noblesville residents that volunteered was not remarkably high.



Percent of respondents who did each at least once in last 12 months

Being able to analyze the Citizen Survey data about this issue helped the mayor plan solutions. "We learned from the 2010 citizen survey that residents wanted more volunteer opportunities," said Mayor Ditslear.

To create a solution, he began a one year part-time pilot program that focused on increasing opportunities for and participation in volunteerism. This resulted in the creation of a volunteer program

for community special events which has been very successful and continues to grow. This was followed by hiring a full-time manager of Vision Noblesville. Vision Noblesville has brought together a wide variety of community members to review long-term issues for the city and determine the best way to address these issues. Data are intentionally combined with community stories to help craft solutions which engage all sectors – government, business, education, and nonprofits. Currently, Vision Noblesville has 16 teams whose participants represent 72 different community organizations and businesses. These teams are working on issues ranging from enhancing the arts and creating more environmentally sustainable practices to improving the local workforce and services provided to families in need. All Vision Noblesville team members volunteer their time and expertise.

In the coming years, new Citizen Survey results along with other data will help the committees measure their success in achieving each of their established goals, including the goal of increasing volunteerism and civic engagement.

Case Studies in linking Civic Engagement for Fund Raising with Measurement

Park City, Utah and Boulder, Colorado

Foundations can't just snap their fingers and expect money to rain from the sky. Often, potential donors want information to help them understand where limited funds ought to be contributed. Kind of like a stock prospectus, only prettier, the Boulder County Trends Report, a publication of The Community Foundation for Boulder County, and the Park City Mile Post – modeled after the Boulder report –



published by The Park Record in cooperation with The Park City Foundation, offer an array of indicators about community from administrative sources and survey research. The Boulder County Trend Report touts “150 ways to gauge the state of our community and be inspired.” Each publication focuses on annual highlights. The Park City Mile Post is focused on three areas: growth and development, connectivity and the economy. In the Connectivity section of the report, social connections and civic engagement are covered.

The Boulder County Trends report highlighted the economy, education, the environment and the Latino community at the same time that it also offered up to date indicators of community engagement⁷.

Percent of Boulder County Residents Who Say We're Very Open or Open to the Following Groups

Families with young children	81%
Young adults without children	68%
Gay and Lesbian people	51%
Senior citizens	58%
Recent college grads	51%
Racial and ethnic minorities	45%
Immigrants from other countries	43%

Source: TCF Survey 2014

In their data reports, both Park City and The Community Foundation of Boulder County offer examples of how residents and businesses can support the community not only through monetary donations but through donations of time like reading to children in school, becoming a tutor, volunteering for an after school program, making sure your business supports parents with children in school, using alternative modes of travel, becoming more active and more.

Partnering with Other Organizations

Your creativity in finding strong and even uncommon partners that are outside the sector in which you operate can be an enormous asset for local government. An unlikely nonprofit partner may hold the solution to a problem you have faced for a long time. Partners from the private sector may be especially powerful allies. You cannot succeed doing everything on your own, hidden from the goodwill of potential partners.

Engaging in meaningful partnerships takes motivation and a plan, and not all partnerships and

collaborations are successful. Research has found that successful partnerships have certain practices in common. Consider how you can implement some of these strategies, or add to the ones you already are using, as you strengthen your network of partner organizations and volunteers.

Strategies to Promote Successful Partnerships

- Identify service needs and organizational gaps that could be filled by partners
- Strategically identify partnerships that will be most beneficial to your organization
- Create a partnership plan that describes the purposes and activities that will link the partners over the coming 12 to 24 months
- Partner with diverse types of organizations, both for-profit businesses and nonprofits, private and public
- Provide meaningful roles and engaging activities for partners
- Work with partners to leverage community resources in order to achieve goals
- Communicate regularly with partners – sharing information on each others' activities, successes, and challenges, as well as community needs and resources
- Co-sponsor activities with partners
- Participate in grant writing activities together
- Periodically publish evaluation findings in communications aimed at a wide variety of stakeholders, including partners
- Create community events with partners not only to familiarize the public with each program but also to show the links between program partners

Hamilton, Ohio is featured to demonstrate the importance of public-private partnerships.

A Public-Private Partnership to Energize the Urban Core

Hamilton, Ohio

Even as the great recession was receding, Hamilton, Ohio, like many cities and towns across the U.S. continued to suffer economically. Ratings from The National Citizen Survey described a community that felt job growth was too slow, shopping opportunities were not good and Hamilton was not a great place to work. On top of that, ratings for economic development were subpar.

⁷ In, “Our civic participation and giving” (p. 85, Boulder County Trends 2013, Community Foundation of Boulder County)

The specific and weak ratings of these economy-related community characteristics and services were enlightening even as the general sentiments were not news to city leaders. Knowing the economic challenges they faced, Hamilton leaders had put in place a rigorous public-private partnership program to grow the economic base of the community – even before the national economic meltdown in 2008.

The Hamilton Community Foundation, with cooperation of the city, sold the Hamiltonian Hotel to Concord Hospitality Enterprises, developer of Marriott Hotels. With favorable financial arrangements, the redevelopment of the old hotel into a Courtyard by Marriott created great opportunities for riverfront redevelopment – a boon to community quality as well as to the Hamilton budget. There is now an ambitious strategic plan for “Energizing Hamilton’s Urban Core” (<https://www.hamilton-city.org/Modules/ShowDocument.aspx?documentid=4707>) that includes housing for workers, commercial and industrial development, upgraded infrastructure and enhanced entertainment opportunities. This extensive redevelopment effort should affect resident perceptions about the economic vitality of Hamilton and the next iteration of the citizen survey will demonstrate if this aspiration is being met.

Partnerships for Sustainability

Partnerships found to be most effective often involve multiple partners from multiple sectors. Areas commonly addressed through collaboration of private, public and non-profit groups focus on sustainability and food security. Advocates working on community food security have been one of the most innovative groups in terms of forming partnerships to address community needs. For more information on these partnerships, please see the following web pages.

- American Planning Association: Helping local, regional, and state governments address food system challenges
<http://www.planning.org/nationalcenters/health/briefingpapers/foodcouncils.htm>
- Nuener Kailee, Kelly Sylvia and Samina Raja. Planning to Eat? Innovative Government Plans and Policies to Build Healthy Food Systems in the United States. September 2011.
http://cccfoodpolicy.org/sites/default/files/resources/planning_to_eat_sunybuffalo.pdf

Partnerships with other government organizations also are becoming a necessity of modern government. Issues related to sustainability, mobility and economic development often are addressed best through a regional model.

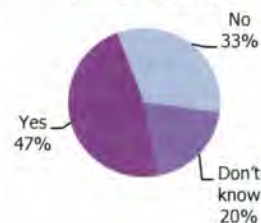
A Case Study in Intergovernmental Cooperation

Puget Sound Clean Air Agency

Wood burning devices (fireplaces and wood stoves) rank as one of the top air pollution offenders in the Puget Sound area of Washington. Although these devices create light, warmth and atmosphere, they are harmful to the environment and the health of area residents. Pollution levels from these sources were higher than the goals established by the Clean Air Agency’s Board of Directors.

The Puget Sound Clean Air Agency’s mission is to protect the health of residents who reside in King, Kitsap, Pierce and Snohomish Counties and to improve air quality by adopting and enforcing air quality regulations, sponsoring voluntary initiatives to improve air quality, and educating people and businesses about clean-air choices. The four-county Puget Sound region spans an area of 6,300 square miles and is home to approximately 3.4 million people. The Board understood that collaboration with educational, governmental, non-profit and corporate entities was key to facilitating awareness and behavior change among residents.

Do you think a gas or propane stove, fireplace insert, or fireplace could meet your needs as well as your wood stove, wood-burning insert, or wood-burning fireplace?



To understand if there would be resistance to modifying wood burning sources, the Board commissioned a survey to gather information about the use of wood-burning devices in households in the Puget Sound region. Information from this survey was combined with scientific data to create an emissions inventory and determine policies for the region.

Educate

Education and outreach are essential elements for strengthening and extending the work of local governments. They can take many forms, including marketing and public relations; community education and advocacy; collaborations, alliances, and partnerships; networking and more. Outreach is the mechanism for building a base of support. Increased networking and greater outreach mean access to more people. Without effective outreach efforts, organizations may limit their access to resources and fail to establish a positive image or reputation within the community.⁸ Public outreach is more than just broadcasting to residents. Good outreach should target diverse audiences:

- Community-based organizations such as schools, faith communities and community associations
- Business associations for possible partnerships, volunteers, donations and media access
- Volunteer groups
- Local media

Public Outreach and Education

Public outreach can be more than getting the word out. It can educate your audiences about broader issues like the need for water conservation or decreased use of motorized vehicles in your community.

The advances of technology have increased government's ability significantly to communicate with residents in cost-efficient, time sensitive manners. Most local governments now have web pages useful for educating residents and visitors. Some web pages also allow interaction such as ability to pay bills, ask questions, and communicate with other public officials and residents about community issues. Many cities provide 311 platforms where residents can report problems in their neighborhoods. Some local governments have established their own Facebook pages and communicate with citizens regularly using Twitter and YouTube (see Ankeny case study). Online Town Meetings also are becoming more commonplace (see Fort Collins case study).

For more information on social media use in local governing, see ICMA's Social Media Playbook

[http://icma.org/en/Page/100423/Social Media Local Government Playbook](http://icma.org/en/Page/100423/Social_Media_Local_Government_Playbook).

For examples of using technology for civic engagement, see:

<http://knightfoundation.org/features/civictech/>

Key Strategies in Public Outreach⁹

- Have a strategic communication plan in place
- Develop one or more core messages
- Identify appropriate audiences
- Identify and train staff members to talk with media and the general public
- Target key media for regular outreach
- Have some combination of web, printed, and video materials to inform the media and the public
- Develop events that will showcase your community and its goals to the media and the public
- Work with stakeholders and partners on joint education and outreach efforts

A Case Study in the use of Social Media

Ankeny, Iowa

The City of Ankeny, Iowa is one of the fastest-growing communities in the state of Iowa. Results from all administrations of The National Citizen Survey going back ten years describe a community that is consistently revered by its fifty some thousand residents. Residents give the city ratings that exceed those of other communities for quality of life, quality of service delivery, housing costs, land use planning, safety and just about every other important community characteristic. In Ankeny, more residents are visiting the city website and more here than elsewhere across the U.S. believe that public information services are top notch. One of the few characteristics of the community that was not considered exemplary compared to ratings from residents in other places was "value of services for the taxes paid to Ankeny." As much as it was a strong rating, unlike other ratings, this one was not above those given in comparison communities. Furthermore, the rating for opportunities to attend cultural activities was lower than elsewhere. Finally, the number of residents having interaction with the city continued a decade long slide.

⁸ Building Capacity in Nonprofit Organizations. Edited by Carol J. De Vita and Cory Fleming. Copyright © April 2001. The Urban Institute. http://www.urban.org/uploadedpdf/building_capacity.pdf.

⁹ www.coloradotrust.org/attachments/0000/3848/OrganizationalCapacityAssessmentTool.pdf

Because The NCS indicated that 3 in 4 residents had access to social media such as Twitter and Facebook, City staff proactively launched a social media campaign called 'Wednesday Walkabout' – a video series promoted through the City's social media channels to help inform residents both old and new alike about the history and different amenities in their community.

In addition to this social media outreach campaign, Ankeny publishes an interactive site to let residents learn about the results of The National Citizen Survey on the City website (www.ankenyiowa.gov).

A Case Study in Online Resident Outreach and Communication

Fort Collins, Colorado

Fort Collins has been conducting biennial citizen surveys for more than a decade. Clearly the voice of residents is intended to help steer the direction of the city. Biennial budget documents are salted with scores of references to the citizen surveys among many measures that managers use to set targets for improving community quality. By putting residents central in the strategic direction of the city, Fort Collins takes the risk that unscripted "reviews" and resident perspectives may not match the preferences of staff or elected officials. Such is the nature of democracy at its best.

Besides its rich history with citizen surveys, the City of Fort Collins has partnered with Mindmixer™ to create a website to promote civic engagement online called Idea Lab (<http://idealab.fcgov.com/>). They operate the website as a "town meeting" allowing residents to respond at a time and place convenient. After creating an account, residents can share ideas, join discussions and help local government and other community organizations take action around an issue through shaping decisions, impacting policy and spreading awareness.

This virtual town hall has posts about sustainability, transportation, community engagement, diversity, and quality of life to name a few. Conversations occur between residents, city staff and community organizations.

The screenshot shows a press release from the City of Ankeny dated August 7, 2013, titled "Ankeny showcases slice of life with social media campaign". It includes contact information for Deb Dyar, City of Ankeny, and a quote from the National Citizen Survey (NCS) indicating that 3 in 4 residents have access to social media. Below the press release is a screenshot of the "National Citizen Survey" website. The website features a title "National Citizen Survey" with options to "Font Size", "Share & Bookmark", and "Print". It explains that surveying citizens is a fundamental method for communication between the public and local government. It lists four key benefits of conducting a survey every two years: 1. The survey measures opinions of residents on city services and quality of life issues over time which is important to prioritizing services and focusing attention on any issues needing addressed. 2. The City gains benchmark comparisons from local governments across the country. 3. The survey is used as an internal management tool for improvement and monitoring. 4. The survey is used for community planning and resource allocation, program improvement and policy making. It also mentions that the statistically valid survey is conducted by the National Research Center, Inc., an independent research organization based in Boulder, Colorado. At the bottom, it states: "According to the 2013 Citizen Survey, 95% of respondents rated Ankeny as a great place to live." There are also icons for free viewers required for some of the attached documents.

The screenshot shows a post on the Idea Lab website titled "Widen our sidewalks and incorporate them into the trail system." The post is by "Margo E." and dated "Aug 10 10:11 AM". The text of the post says: "Sidewalks along busier streets like Timberline and Lemay should be widened to encourage biking for the many of us that aren't comfortable riding in the bike lanes." There are 2 comments. The first comment is by "grrry sawyer" and says: "Maybe a little obvious, but having an annual block party is a great way for neighbors to get to know each other. We have a group that does the planning which builds extra connections." The second comment is by "grrry sawyer" and says: "Great idea! And you can always apply for grant money from Neighborhood Services to help offset costs. fcgov.com/neighborhoodgrants". The user "grrry sawyer" is identified as an "Administrator".

Marketing and Advocacy

Public outreach can also be about branding. With traditional marketing outlets and the advent of social media, local governments are now choosing to

promote their communities and the work they do to visitors and residents alike. Reimaging or branding is an increasingly popular approach for cities and counties to highlight their unique attributes in a strategic voice.

A Case Study in Community Branding

Greeley, Colorado

Greeley, Colorado has a rich agricultural history of sugar beets, produce, corn and cattle as well as a highly-regarded university. However, as the longtime home of a meat processing facility, Greeley grew to have a reputation inside and outside the city as a place that featured some of the less attractive attributes of agriculture. A simplistic summary of a complex community, this stereotype, born out of the city's agrarian heritage, seemed to have a tail wind that blew into all parts of Colorado until City leaders had had enough. It was time for this city, with a population just shy of 100,000, to allocate resources to define the problem more clearly, gather and analyze data, set baselines for future comparisons and, most importantly, to take action.

The citizen survey results confirmed what everyone knew, but the survey put a number to it: two-thirds of Greeley residents thought that the community's image was not good.



The cultural scene is weak.

No, not by any means!

The Greeley Philharmonic just celebrated its 103rd season, making it one of the oldest symphony orchestras in the nation.

The new Creative District highlights the people, galleries and activities that make Greeley's creative class glad they're here www.greeleycreativedistrict.org.

However, about the same percent felt that more effort should be put into improving the community image through "communication, marketing and image building with residents and external audiences, community appearance, etc."

This and other data gave Greeley's leaders the information they needed to move forward. It clearly showed that the city had grown and evolved from its early agricultural roots and that people were fed up

with the old misperceptions. A partnership was formed by Greeley City government with the Greeley Chamber of Commerce, University of Northern Colorado, Aims Community College and others to improve the city's image.

With financial and civic support, Greeley embarked on an aggressive marketing and image initiative to show the state – and even local residents – that Greeley was far more than its distant history. The advertising campaign within the initiative, named "Greeley Unexpected," includes photos, conversations, traditional advertising, social and traditional media engagement and multi-media placements that highlight the great things about Greeley that too many people did not know or ignored.

These images, from the Greeley Unexpected campaign, help tell the story of a diverse and creative community and generate enthusiasm for the little known facts that Greeley is home to a variety of interesting individuals and businesses, from internationally known musicians to a special effects house that creates animatronic horrors for Hollywood.

For more information about the Greeley Unexpected campaign, a Flickr gallery of Greeley scenes, and more, visit: <http://www.greeleyunexpected.com>.

For more information on local government branding, see ICMA's Knowledge Network Community Branding Resources: http://icma.org/en/BlogPost/529/Knowledge_Network_Community_Branding_Resources



Earmark

By “earmark,” we simply mean “use resources.” Those resources could be finance, personnel or facilities but reallocation of resources is one common use of The NCS results and those decisions often are linked to the budget. Sometimes direct questions of residents tell you whether there is support for a bond issue or tax increase and sometimes the ratings you receive about the characteristics of your community suggest that new resources are needed to boost flagging opinion.

A Case Study in Earmarking

Pocatello, Idaho

In Pocatello, Idaho some residents brought to council’s attention the sore state of the existing animal shelter and the need for a new place. Because city council members were careful stewards of the public treasury, they were reluctant to forge ahead with a new expenditure, even if it was for wayward pets. Pocatello, Idaho used survey results to determine if there was enough resident support to include a ballot initiative in a local election. Clearly, as you see in the table of results, below, there was!

Now, the question did not include a price or a payment structure, but the overwhelming sentiment in favor showed that there was an opportunity to move forward (even with the expected decline in support once costs were identified) and that clear opportunity helped council make a decision to put the shelter’s construction on the ballot.

To what extent would you support or oppose the construction of a new Animal Shelter to improve and expand the facility?	Percent
Strongly support	47%
Somewhat support	40%
Somewhat oppose	7%
Strongly oppose	6%
Total	100%

In the words of one city administrator, “... on the last survey, we had one question asking about support for replacing the city’s animal shelter. The response on that particular question was so strong that a very conservative council was nonetheless motivated to put the question on the ballot for a \$2.8M bond (in Idaho, cities cannot go into long-term debt without a vote of the citizens and it has to be 2/3 YES (66%) in order for a general obligation bond to pass). The bond passed with 72%. I’ve pointed to this result as

an example of why surveys are useful. You think there is no support and has no chance in a bond election? The survey suggested otherwise and in fact it was otherwise. I’m fairly certain that without the survey, the question never would have made it to the ballot, let alone pass. So there you are.”

You can see a great video about the Pocatello Animal Shelter and how the bond measure helped them achieve their goals on their website:

<http://www.pocatello.us/animal/>.

A more recent trend in governing relates to the use of performance-based budgeting (see Fort Collins’ “Budgeting for Outcomes”

<http://www.fcgov.com/citymanager/budget.php>) or priority-based budgeting (see Boulder’s “Priority Based Budget”

<https://boulder.colorado.gov/budget/priority-based-budgeting>). Performance budgeting is based on an organization’s mission, goals and objectives. It is a way to allocate resources and link the distribution of fund to measured results.¹⁰ Because the key outcome or “result” of local governing is resident satisfaction, surveys are often used to include residents in the budgeting process. Many local governments are now using resident opinion to help evaluate resource allocations made based on performance-based budgeting. Organizations that are using Priority Based Budgeting, first seek clarification about what community goals should drive resource allocation. Not only are elected officials asked what community goals should be, but The National Citizen Survey includes questions to assess community values that provide empirical evidence of what residents feel is most important for funding. (See <http://www.pbbcenter.org/> for more on Priority Based Budgeting.)

Following is a verbatim description from one of the Livermore, California managers showing how Livermore uses The NCS results in a comprehensive budgeting process.

¹⁰ K. Carter, The Performance Budget Revisited: A Report on State Budget Reform - Legislative Finance, Paper #91, Denver, National Conference of State Legislatures, pp. 2-3

A Case Study in Strategic Budgeting

Livermore, California

Quickly, let me outline the budget process as we developed it in Livermore. I see the various parts of it as a "mosaic", which when put altogether create an overall, coherent picture.

"First, we conduct The NCS every other year to use as a basic "report card" to gauge how residents feel about city services."

"Next staff prepares proposed work plans around services which take into consideration the results of The NCS. These two elements, the results of The NCS and the proposed work plans, are then sent to the City Council as background input for the annual City Council Goal Setting session as they develop priorities for the two-year budget. The Council then lists the proposed priorities (their own, ones from the proposed work plan which could be modified by the Council) on big newspaper sheets. Each Council member is given five colored dots to stick on their favorite items. The 5 items getting the most "votes" become the City Council priorities for the next two years. Obviously, this does not mean that other matters would not come up or be addressed during the two years, but does give clear FOCUS on what the staff and Council want to accomplish over the next two years. It is also helpful in avoiding leaping onto some big, new idea during the two years, because staff outline for the Council how assigning resources to the work on the "new idea" would delay or eliminate work on the Council's major Two Year Goals."

"Next, The NCS results, the newly minted Council goals, and the subsequently revised work plan are then used by the CM and Department Heads, along with their own professional views, to prepare a Preliminary Budget. The City Manager and Assistant City Manager meet in a Department Head Team meeting to hammer out a budget - this is a true team meeting where every Department Head hears, presents, and considers their budget request to every other Department (this is quite different than the traditional approach where the CM and ACM would meet with each Department Head separately). The Team approach means that the Police Chief has to "defend" the PD requests to the likes of the Library Director and Human Services Director! Although the CM has ultimate veto power (which we have never once had to actually use), the Team works until it develops a plan that everyone

can support (in fact the Budget Transmittal letter sent to the Council is always signed not only by the CM but every Department Head!)."

"Next the Preliminary Budget is sent to the Council for presentation, review, public comment, and eventual Council adoption. So the "mosaic" is created from the following pieces: The NCS results, the staff proposed work plan, the Council Goal Setting Session, the Council approved revised work plan, the staff proposed Preliminary Budget, public hearings, and finally Council adoption."

A Case Study in Strategic Budgeting

Peoria, Arizona

Another example of local government altering services based on resident preferences as stated in The National Citizen Survey is Peoria, Arizona. As the recession was biting into Peoria's dwindling budget, the idea to close city operations one day a week and to consolidate 40 hours into 4 days was tested among staff and council. Before moving forward on the idea, leaders wanted to assess the interest of residents in four 10 hour days instead of five 8 hour days. The 2009 citizen survey for Peoria had this question:

To save money, the City of Peoria is considering closing City Hall on Fridays, but extending the hours of service counters (for utility payments, building permits, etc.) from 7a.m. to 6 p.m. Monday through Thursday. Other city services, such as libraries, Rio Vista Recreation Center, fire and police would not be impacted by this change. To what extent would you support or oppose this change?	
	Percent
Strongly support	54%
Somewhat support	37%
Somewhat oppose	3%
Strongly oppose	5%
Total	100%

Support for the shift was extensive, so in 2010, the government shifted its hours of operation to help offset revenue shortfalls.

Enact

One of the greatest strengths of local government is its ability to shape communities using policies and laws. Systems-level change is often easiest achieved through changes in local policy. The principal activities of local government legislation are to develop, introduce, reform, and implement policies, and ensure that policies that are implemented do strengthen communities and address areas of weakness or need. Policies enacted by local governments can:

- Tax
- Subsidize/grant/loan
- Alter economic conditions
- Regulate
- Structure rights
- Generate information, keep records, disseminate information
- Fund government service
- Provide jobs
- Build and maintain infrastructure
- Reform the government itself ¹¹

Whether it is adoptions to design codes, the limitation of parking spaces, utility rebates provided to older adults, or business relocation incentives, local officials have significant power to address the deepest community needs. Fort Collins, Colorado is featured in the case study below for its work in sustainability and climate change.

A Case Study in Surveys for Policy

Fort Collins, Colorado

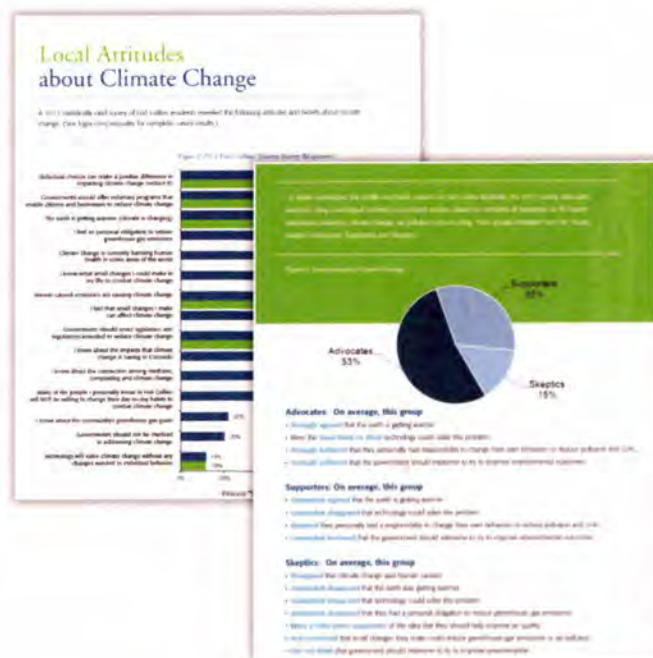
Policies built on broad-based resident perspectives will receive stronger community support than policies created with only special interest input and the perspectives of residents with easiest access to council. Knowing that community values supported air quality programming, in 2011, the City contracted with National Research Center, Inc. to conduct a survey of its residents about climate attitudes and policies. The survey was designed to help local leaders create policies that best reflected resident preferences and the survey helped policy-makers create plans to address the concerns of different

resident groups using a population segmentation approach with survey results.

From the Fort Collins Climate Status Report, 2012: “Fort Collins has long been committed to reducing the community’s carbon footprint.” City staff identified the number one reason to have a community-wide air quality action plan as this: “First, city residents have high expectations for a clean environment. Residents have identified the Air Quality Program as being the single most important program for protecting their future quality of life, according to the City of Fort Collins 2003 Citizen Survey.” (in Fort Collins Air Quality Plan, May 2011. p.1 <http://www.fcgov.com/airquality/pdf/2011-AirQualityPlan-Final-LowRes.pdf>).

The 2011 survey demonstrated that residents were broadly committed to government's role in reducing greenhouse gases and, with the cluster analysis of survey results, the survey showed what drove supporters, skeptics and advocates. The survey also showed that skeptics amounted to only 1 in 6 Fort Collins adults while supporters and advocates comprised over 80% of the population.

For other examples of policies enacted by local governments in terms of climate change, see <http://www.epa.gov/statelocalclimate/local/local-examples/case-studies.html>



¹¹ People's Policy Institute: Participatory Policy Analysis: Achieving Systems Level Change Through CBPR
http://depts.washington.edu/ccph/pdf_files/CCPH_call_slides_10-21-09_bxw.pdf

Evaluate

"We must, in other words, become adept at learning. We must become able not only to transform our institutions, in response to changing situations and requirements; we must invent and develop institutions which are 'learning systems', that is to say, systems capable of bringing about their own continuing transformation." (Donald Schon 1973: 28)¹²

The concepts of "learning organizations" and, more recently, "data driven communities" have been influencing governments to improve by tracking performance. If you have recently completed The NCS or any type of citizen survey, you have begun the process of becoming a learning organization. A key is learning how to use data to assess needs and then evaluate the results of actions taken to address the needs.

What is evaluation?

Evaluation can be defined in a variety of ways, but the following is a definition that may be most relevant to local governments:

Evaluation is the systematic way that data are assembled into a picture of (1) how well an organization is delivering its services and (2) the impact of those services on the target population.¹³

There are three major categories of evaluation best used in local government, and all three can provide meaningful evidence of service quality and impacts.

Needs assessments provide a picture of a community's or a community group's (like older adults or government employees) strengths and needs.

Outcome evaluations measure the results of government service or activity and generally include questions about the process by which outcomes are achieved (like police quality as one service delivery process attempting to achieve the outcome of a sense of public safety).

Performance measurement tracks service delivery efficiencies and resident opinion about the success of service delivery. (Such performance tracking can be

done in the service of an outcome evaluation for specific community values or goals.) Local governments benefit from all three types of evaluation to become learning organizations.

Including the Voice of the Resident

Most government staff and elected officials believe they are in touch with residents' points of view. But understanding what residents want and what works can't come only from anecdotes or chance conversations with a few residents or staff. Valid and convincing assessment requires a grasp of evaluation principles and use of evaluation methods that bring in the voices of a representative sample of residents and offers robust empirical evidence about governing effectiveness. Although some needs assessments and evaluation are done without including the voice of the resident, it is best to include your greatest stakeholder.

Needs Assessments

The first step in improving community livability is to understand the strengths and needs of the community. The NCS or any citizen survey serves as a valuable needs assessment tool because it lets community leaders understand what residents themselves find working and what opportunities lie ahead. Needs assessments also can be conducted on specific issues such as older adult community livability, transportation or parks and recreation. Surveys or focus groups for particular topics are important and efficient ways to collect additional information before spending extensive resources on new activities or strategies.

A Case Study on Use of Deeper Investigation

Longmont, Colorado

Longmont did annual citizen surveys for years and then its managers realized they wanted to understand more about some of those survey findings. To do that, staff decided to alternate the general citizen survey one year with a policy exploration survey the next. This way there would be more information about the "Why's" of results.

For example, in one general citizen survey, Longmont recognized that resident ratings of snow removal were middling and stagnant. Over many years, residents gave average ratings just short of "good" on a scale of "excellent, good, fair poor."

¹² Smith, M. K. (2001, 2007) 'The learning organization', the encyclopedia of informal education, <http://www.infed.org/biblio/learning-organization.htm>.

¹³ P. H. Rossi and H. E. Freeman (1993). *Evaluation: A Systematic Approach*. Thousand Oaks, CA: Sage Publications, Inc. To order this textbook on evaluation, visit: www.sagepub.com.

Ratings of Snow Removal Service Compared by Year								
years prior to current	Average rating (0=poor, 33=fair, 66=good, 100=excellent)							
	Current	-2	-3	-4	-5	-6	-8	-10
Snow removal on major streets	64	69	67	62	65	65	63	61

Although ratings for snow removal in other places were, on average, not as good as Longmont's ratings, Longmont managers wondered if residents' perspectives about snow removal were influenced by widespread disagreement with snow removal policy.

In the policy exploration survey following the "current" year of the general survey, National Research Center asked residents about the policy that might have the biggest impact on overall ratings of snow removal. Given that big storms tend to most influence ratings of snow removal, the question asked if residents supported or opposed the policy of forbidding parking on plow routes during a snow emergency.

To what extent do you agree or disagree that during a declared snow emergency, the City of Longmont should implement and enforce a no parking policy along the approved snow plow routes in order to more efficiently plow the streets?	Percent
Strongly agree	65%
Somewhat agree	28%
Somewhat disagree	4%
Strongly disagree	2%
Total	100%

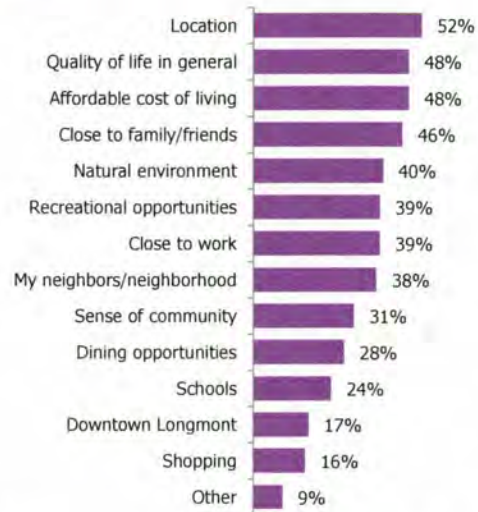
The vast majority of residents supported the policy, so no change has been planned. Although discovery that residents support the no-parking policy is unlikely to raise ratings, had policy makers unilaterally rescinded the policy and permitted parking on plow routes during big snow storms, those above average ratings likely would not have sustained.

For years, residents had been giving strong ratings to the overall quality of life in Longmont. City management and elected officials were interested in understanding what components of the community influenced those ratings. So following the biennial general citizen survey, the exploration survey sought deeper insight into community quality of life.

How would you rate your overall quality of life in Longmont?	Percent
Excellent	21%
Good	59%
Fair	18%
Poor	2%
Total	100%

In a question without response options, residents, in their own words, offered what they found to be most

appealing about life in Longmont. Results were as follows:



By learning what mattered most to residents of the community, local leaders are able to protect what seems to keep Longmont attractive – e.g. affordability and the environment – and to build on those aspects of community that may not yet be reasons to love life there (e.g. shopping and the downtown).

Performance Measurement

Most government performance measurement systems collect and report data that already reside in administrative filing cabinets and on file servers. Beyond the use of these "hard" measures, the assessment of relative performance success should also include residents' attitudes about the delivery of services and the qualities of the community that are meant to improve (in part) because of great services. Along with crime rates or road repair, assessments should include residents' evaluations of the effectiveness of local policing and the quality of community mobility. Going beyond administrative records to track performance tells local leaders how well a city or county is meeting its vision of success.

The same survey that assessed community strengths and needs can be used to reevaluate a community at a later date. The NCS and other broad citizen surveys are intended not only to serve as a community needs assessment but also as a systematic performance monitoring tool. Many communities now use survey results in their performance measurement systems. The City of Westminster, Colorado and the City of Littleton, Colorado are great examples of

incorporating resident opinions into performance systems.

Survey Results Fit Well into Performance Measures

Westminster, Colorado

Westminster, Colorado has been on the front line of measuring and reporting performance for many years. City leaders view transparency about the efficiency and effectiveness of their work as a basic condition of local government. In its most recent report about its performance, "Take a Closer Look," staff wrote this:

"Performance measurement in the City of Westminster is continuously refined to ensure that the City is 'measuring what matters.' Through constant reinforcement, the City's performance measurement program works to improve the delivery of City services and the management of resources. Ultimately, performance measurement helps determine the progress made towards achieving the City's Strategic Plan Goals and Objectives."

You can see on page 1 of that report (<http://www.ci.westminster.co.us/Portals/0/Repository/Documents/CityGovernment/CMO%20-%20Take%20A%20Closer%20Look%20Report%20-%202013.pdf>) that staff are keenly aware that measuring outputs and efficiencies are important only as they serve creation of a high quality of community. Therefore the report starts with resident perspectives about the quality of life in Westminster as reported in the most recent Citizen Survey,

conducted by National Research Center, Inc.

Beyond resident perspectives on overall quality of life, Westminster as a place to live, raise children and retire, the performance report includes resident



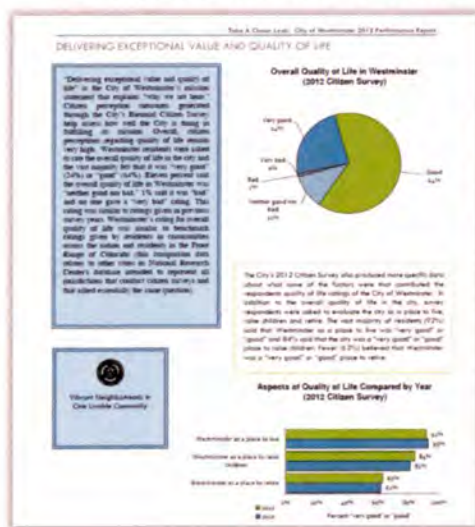
opinions about the quality of public works services. In place of cubic yards of snow plowed or linear miles of streets repaired or gallons of water treated, are resident sentiments about the quality of snow removal, street repair and water as you can see below:

MAINTAIN A HIGH QUALITY OF SERVICES FOR THE COMMUNITY

A major component of the Public Works and Utilities Department's operations is customer service. Reviewing the 2012 Citizen Survey, citizens continued to rank the importance of Public Works and Utilities key service areas as "essential" or "very important." Four of the top ten City services are within the Public Works and Utilities arena (drinking water quality, sewer services, snow removal, and street repair).

1. Drinking water quality: Citizens continued to rank the quality of drinking water highly in the 2012 Citizen Survey (81% in 2012 compared to 83% in 2010). Citizens also continue to value the importance of drinking water quality, with a slight reduction (94% in 2012 compared to 96% in 2010). Citizens continued to rate drinking water quality as "good" or "very good", maintaining an eight year trend.
2. Sewer services: This service has only been included on the survey since 2008 and citizens ranked it slightly higher in quality in 2012 over 2010 (up to 71% in 2012 from 70% in 2010). Citizens have ranked the importance of this service as increasingly "essential" or "very important" since its inclusion in the survey in 2008 (from 85% in 2008, 86% in 2010, to 87% in 2012). Staff strives to maintain the high quality of wastewater service to City residents while meeting all State and Federal regulations.
3. Snow removal: Citizens reduced their perception of this service's level of quality in 2012 (to 63% in 2012 from 69% in 2010), but have continued to rank snow removal as increasingly important in the 2012 survey (to 86% in 2012, up from 83% in 2010). Staff will analyze the changes from previous years and continue work to improve the quality of this service where possible.
4. Street repair: Quality rankings for street repair have continued to improve (53% in 2012 over 49% in 2010), with a slight reduction in the perceived importance of this service (84% in 2012, 86% in 2010).

In "Take a Closer Look," Westminster, CO. 2012 p.9



A Mix of Survey and Administrative Data in a Community Scorecard

Littleton, Colorado

The City of Littleton, Colorado produces an annual community scorecard (<http://www.littletongov.org/modules/showdocument.aspx?documentid=3278>) that presents data related to its City Council's goals. In the 2013-2014 report, performance data were presented in the following strategic areas:

- Assure a financially-sound city government
- Provide a safe community to live, work and play
- Develop and maintain the public infrastructure
- Preserve and cultivate a quality community
- Pursue a balanced and sustainable local economy
- Support environmental sustainability
- Foster community involvement, communication and trust

The report not only has hard data about sprinkler system installs, budget allocations, number of exhibits, visitors and miles traveled, but it also has resident perspectives about service quality and strategic direction directly from its citizen survey. Not only does the report include results of the survey but it shows how those results compare to results asked of residents in comparison communities.



Program Evaluation

Once you have decided to take action to improve your community, it is important to evaluate the results of your efforts. Strong governing requires both experimentation and use of evaluation data.

Strategies to Promote Successful Use of Evaluation

- Identify program goals, objectives, and performance measures well in advance of implementing their evaluation
- Regularly track service activities and outcomes
- Systematically measure service outputs (how many residents attended council meetings last year?) and outcomes (how much did their knowledge of community issues increase?)
- Regularly communicate evaluation results to staff, residents, and other stakeholders
- Use evaluation data to improve services
- Encourage organizational learning

Evaluations can be small or large, often based on the price tag of the new initiative. In the Educate section of this playbook, the reimagining campaign undertaken by Greeley, Colorado was presented. Although Greeley has only been working on this new branding initiative a short time, government staff wanted to assess its “penetration” at an early stage, so they launched a short, web-based survey to community stakeholders followed by a survey of residents of Greeley and residents in three of the state’s largest cities – Denver, Fort Collins and Colorado Springs.

A Case Study in New Program Evaluation

Greeley, Colorado

Greeley, Colorado has created a new image initiative and campaign called “Greeley Unexpected.” (See the Educate section for more information on the initiative.) The initiative did not come cheap. The intent was to go big – to change the perceptions that (at least) Coloradans had about Greeley. After the initiative had been running for several months, stakeholders were getting antsy to know if their investment was paying off and City staff needed data to help determine the direction for the 2014 campaign. So City staff, working with NRC, designed and put in the field a survey for residents and non-residents to determine the reach and effectiveness of the first year’s campaign. This research was at least as much to keep stakeholders (including funding decision makers such as the City Council) in the loop about the City’s attention to the big evaluative question (“Have perceptions of Greeley improved?”) as it was to determine the answer to the question.



The answer to the question has come with extensive and robust inquiry that has relied on surveys of residents and those from out of town.

With the results hot off the research report, this is how Greeley released the findings – a fitting way to reinforce the new brand!



Next Steps

As you consider how to strengthen your community, remember that you don't always have to blaze a new trail to get the job done. This Playbook has many examples in broad categories that reflect common and effective action areas for local governments. Build on the examples you find here that resonate with your community and dive in or give a call to National Research Center staff or the organizations we have highlighted. NRC can help you get in contact with those best equipped to help you solve the toughest problems whether related to budget, communication, ballot questions, strategic planning or citizen engagement. Quality communities are what every local government strives to encourage, but the burden cannot rest only on the shoulders of local government staff and elected officials. National Research Center can facilitate your success.

The City of Wilsonville 2014 Citizen Survey

Please complete this questionnaire if you are the adult (age 18 or older) in the household who most recently had a birthday. The adult's year of birth does not matter. Please select the response (by circling the number or checking the box) that most closely represents your opinion for each question. Your responses are anonymous and will be reported in group form only.

1. Please rate each of the following aspects of quality of life in Wilsonville:

	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>Don't know</i>
Wilsonville as a place to live.....	1	2	3	4	5
Your neighborhood as a place to live.....	1	2	3	4	5
Wilsonville as a place to raise children.....	1	2	3	4	5
Wilsonville as a place to work.....	1	2	3	4	5
Wilsonville as a place to visit.....	1	2	3	4	5
Wilsonville as a place to retire.....	1	2	3	4	5
The overall quality of life in Wilsonville.....	1	2	3	4	5

2. Please rate each of the following characteristics as they relate to Wilsonville as a whole:

	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>Don't know</i>
Overall feeling of safety in Wilsonville.....	1	2	3	4	5
Overall ease of getting to the places you usually have to visit.....	1	2	3	4	5
Quality of overall natural environment in Wilsonville.....	1	2	3	4	5
Overall "built environment" of Wilsonville (including overall design, buildings, parks and transportation systems).....	1	2	3	4	5
Health and wellness opportunities in Wilsonville.....	1	2	3	4	5
Overall opportunities for education and enrichment.....	1	2	3	4	5
Overall economic health of Wilsonville.....	1	2	3	4	5
Sense of community.....	1	2	3	4	5
Overall image or reputation of Wilsonville.....	1	2	3	4	5

3. Please indicate how likely or unlikely you are to do each of the following:

	<i>Very likely</i>	<i>Somewhat likely</i>	<i>Somewhat unlikely</i>	<i>Very unlikely</i>	<i>Don't know</i>
Recommend living in Wilsonville to someone who asks.....	1	2	3	4	5
Remain in Wilsonville for the next five years.....	1	2	3	4	5

4. Please rate how safe or unsafe you feel:

	<i>Very safe</i>	<i>Somewhat safe</i>	<i>Neither safe nor unsafe</i>	<i>Somewhat unsafe</i>	<i>Very unsafe</i>	<i>Don't know</i>
In your neighborhood during the day.....	1	2	3	4	5	6
In Wilsonville's commercial areas during the day.....	1	2	3	4	5	6

5. Please rate each of the following characteristics as they relate to Wilsonville as a whole:

	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>Don't know</i>
Traffic flow on major streets.....	1	2	3	4	5
Ease of travel by car in Wilsonville.....	1	2	3	4	5
Ease of travel by public transportation in Wilsonville.....	1	2	3	4	5
Ease of travel by bicycle in Wilsonville.....	1	2	3	4	5
Ease of walking in Wilsonville.....	1	2	3	4	5
Availability of paths and walking trails.....	1	2	3	4	5
Cleanliness of Wilsonville.....	1	2	3	4	5
Overall appearance of Wilsonville.....	1	2	3	4	5
Public places where people want to spend time.....	1	2	3	4	5
Variety of housing options.....	1	2	3	4	5
Availability of affordable quality housing.....	1	2	3	4	5
Fitness opportunities (including exercise classes and paths or trails, etc.).....	1	2	3	4	5
Recreational opportunities.....	1	2	3	4	5
Availability of affordable quality food.....	1	2	3	4	5

6. Please rate each of the following characteristics as they relate to Wilsonville as a whole:

	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>Don't know</i>
Availability of affordable quality child care/preschool	1	2	3	4	5
K-12 education	1	2	3	4	5
Adult educational opportunities	1	2	3	4	5
Opportunities to attend cultural/arts/music activities	1	2	3	4	5
Opportunities to participate in religious or spiritual events and activities	1	2	3	4	5
Employment opportunities	1	2	3	4	5
Shopping opportunities	1	2	3	4	5
Cost of living in Wilsonville	1	2	3	4	5
Overall quality of business and service establishments in Wilsonville	1	2	3	4	5
Vibrant commercial areas	1	2	3	4	5
Overall quality of new development in Wilsonville	1	2	3	4	5
Opportunities to participate in social events and activities	1	2	3	4	5
Opportunities to volunteer	1	2	3	4	5
Opportunities to participate in community matters	1	2	3	4	5
Openness and acceptance of the community toward people of diverse backgrounds	1	2	3	4	5
Neighborliness of residents in Wilsonville	1	2	3	4	5

7. Please indicate whether or not you have done each of the following in the last 12 months.

	<i>No</i>	<i>Yes</i>
Made efforts to conserve water	1	2
Made efforts to make your home more energy efficient	1	2
Observed a code violation or other hazard in Wilsonville (weeds, abandoned buildings, etc.)	1	2
Household member was a victim of a crime in Wilsonville	1	2
Reported a crime to the police in Wilsonville	1	2
Stocked supplies in preparation for an emergency	1	2
Campaigned or advocated for an issue, cause or candidate	1	2
Contacted the City of Wilsonville (in-person, phone, email or web) for help or information	1	2
Contacted Wilsonville elected officials (in-person, phone, email or web) to express your opinion	1	2

8. In the last 12 months, about how many times, if at all, have you or other household members done each of the following in Wilsonville?

	<i>2 times a week or more</i>	<i>2-4 times a month</i>	<i>Once a month or less</i>	<i>Not at all</i>
Used Wilsonville recreation centers or their services	1	2	3	4
Visited a neighborhood park or City park	1	2	3	4
Used Wilsonville public libraries or their services	1	2	3	4
Participated in religious or spiritual activities in Wilsonville	1	2	3	4
Attended a City-sponsored event	1	2	3	4
Used bus, rail, subway or other public transportation instead of driving	1	2	3	4
Carpooled with other adults or children instead of driving alone	1	2	3	4
Walked or biked instead of driving	1	2	3	4
Volunteered your time to some group/activity in Wilsonville	1	2	3	4
Participated in a club	1	2	3	4
Talked to or visited with your immediate neighbors	1	2	3	4
Done a favor for a neighbor	1	2	3	4

9. Thinking about local public meetings (of local elected officials like City Council or County Commissioners, advisory boards, town halls, HOA, neighborhood watch, etc.), in the last 12 months, about how many times, if at all, have you or other household members attended or watched a local public meeting?

	<i>2 times a week or more</i>	<i>2-4 times a month</i>	<i>Once a month or less</i>	<i>Not at all</i>
<u>Attended</u> a local public meeting	1	2	3	4
<u>Watched</u> (online or on television) a local public meeting	1	2	3	4

The City of Wilsonville 2014 Citizen Survey

10. Please rate the quality of each of the following services in Wilsonville:

	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>Don't know</i>
Police/Sheriff services.....	1	2	3	4	5
Fire services.....	1	2	3	4	5
Ambulance or emergency medical services	1	2	3	4	5
Crime prevention.....	1	2	3	4	5
Fire prevention and education	1	2	3	4	5
Traffic enforcement	1	2	3	4	5
Street repair	1	2	3	4	5
Street cleaning	1	2	3	4	5
Street lighting.....	1	2	3	4	5
Sidewalk maintenance	1	2	3	4	5
Traffic signal timing.....	1	2	3	4	5
Bus or transit services.....	1	2	3	4	5
Garbage collection.....	1	2	3	4	5
Recycling	1	2	3	4	5
Yard waste pick-up	1	2	3	4	5
Storm drainage	1	2	3	4	5
Drinking water.....	1	2	3	4	5
Sewer services	1	2	3	4	5
Power (electric and/or gas) utility	1	2	3	4	5
City of Wilsonville utility billing.....	1	2	3	4	5
City parks.....	1	2	3	4	5
Recreation programs or classes.....	1	2	3	4	5
Recreation centers or facilities	1	2	3	4	5
Land use, planning and zoning.....	1	2	3	4	5
Code enforcement (weeds, abandoned buildings, etc.)	1	2	3	4	5
Animal control.....	1	2	3	4	5
Economic development	1	2	3	4	5
Public library services	1	2	3	4	5
Public information services	1	2	3	4	5
Cable television.....	1	2	3	4	5
Emergency preparedness (services that prepare the community for natural disasters or other emergency situations).....	1	2	3	4	5
Preservation of natural areas such as open space, farmlands and greenbelts.....	1	2	3	4	5
Wilsonville open space	1	2	3	4	5
City-sponsored special events	1	2	3	4	5
Overall customer service by Wilsonville employees (police, receptionists, planners, etc.).....	1	2	3	4	5

11. Overall, how would you rate the quality of the services provided by each of the following?

	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>Don't know</i>
The City of Wilsonville	1	2	3	4	5
The Federal Government	1	2	3	4	5

12. Please rate the following categories of Wilsonville government performance:

	<i>Excellent</i>	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	<i>Don't know</i>
The value of services for the taxes paid to Wilsonville.....	1	2	3	4	5
The overall direction that Wilsonville is taking.....	1	2	3	4	5
The job Wilsonville government does at welcoming citizen involvement	1	2	3	4	5
Overall confidence in Wilsonville government	1	2	3	4	5
Generally acting in the best interest of the community	1	2	3	4	5
Being honest.....	1	2	3	4	5
Treating all residents fairly	1	2	3	4	5

13. Please rate how important, if at all, you think it is for the Wilsonville community to focus on each of the following in the coming two years:

	<i>Essential</i>	<i>Very important</i>	<i>Somewhat important</i>	<i>Not at all important</i>
Overall feeling of safety in Wilsonville	1	2	3	4
Overall ease of getting to the places you usually have to visit	1	2	3	4
Quality of overall natural environment in Wilsonville	1	2	3	4
Overall "built environment" of Wilsonville (including overall design, buildings, parks and transportation systems)	1	2	3	4
Health and wellness opportunities in Wilsonville	1	2	3	4
Overall opportunities for education and enrichment	1	2	3	4
Overall economic health of Wilsonville	1	2	3	4
Sense of community	1	2	3	4

14. Please indicate whether each of the following is a major source, minor source, or not a source of information regarding Wilsonville City Government.

	<i>Major source</i>	<i>Minor source</i>	<i>Not a source</i>
Boones Ferry Messenger (City newsletter)	1	2	3
Wilsonville Spokesman	1	2	3
Oregonian	1	2	3
Local public access television	1	2	3
City of Wilsonville website (www.ci.wilsonville.or.us)	1	2	3
City's Facebook page	1	2	3
City's Twitter account	1	2	3
Oregon Live website's Wilsonville blog page	1	2	3

15. What do you think is the biggest priority facing the City of Wilsonville over the next five years?

The City of Wilsonville 2014 Citizen Survey

Our last questions are about you and your household. Again, all of your responses to this survey are completely anonymous and will be reported in group form only.

D1. How often, if at all, do you do each of the following, considering all of the times you could?

	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Usually</i>	<i>Always</i>
Recycle at home	1	2	3	4	5
Purchase goods or services from a business located in Wilsonville.....	1	2	3	4	5
Eat at least 5 portions of fruits and vegetables a day	1	2	3	4	5
Participate in moderate or vigorous physical activity.....	1	2	3	4	5
Read or watch local news (via television, paper, computer, etc.)	1	2	3	4	5
Vote in local elections.....	1	2	3	4	5

D2. Would you say that in general your health is:

- ☐ Excellent ☐ Very good ☐ Good ☐ Fair ☐ Poor

D3. What impact, if any, do you think the economy will have on your family income in the next 6 months? Do you think the impact will be:

- ☐ Very positive ☐ Somewhat positive ☐ Neutral ☐ Somewhat negative ☐ Very negative

D4. What is your employment status?

- ☐ Working full time for pay
☐ Working part time for pay
☐ Unemployed, looking for paid work
☐ Unemployed, not looking for paid work
☐ Fully retired

D5. Do you work inside the boundaries of Wilsonville?

- ☐ Yes, outside the home
☐ Yes, from home
☐ No

D6. How many years have you lived in Wilsonville?

- ☐ Less than 2 years ☐ 11-20 years
☐ 2-5 years ☐ More than 20 years
☐ 6-10 years

D7. Which best describes the building you live in?

- ☐ One family house detached from any other houses
☐ Building with two or more homes (duplex, townhome, apartment or condominium)
☐ Mobile home
☐ Other

D8. Is this house, apartment or mobile home...

- ☐ Rented
☐ Owned

D9. About how much is your monthly housing cost for the place you live (including rent, mortgage payment, property tax, property insurance and homeowners' association (HOA) fees)?

- ☐ Less than \$300 per month
☐ \$300 to \$599 per month
☐ \$600 to \$999 per month
☐ \$1,000 to \$1,499 per month
☐ \$1,500 to \$2,499 per month
☐ \$2,500 or more per month

D10. Do any children 17 or under live in your household?

- ☐ No ☐ Yes

D11. Are you or any other members of your household aged 65 or older?

- ☐ No ☐ Yes

D12. How much do you anticipate your household's total income before taxes will be for the current year? (Please include in your total income money from all sources for all persons living in your household.)

- ☐ Less than \$25,000
☐ \$25,000 to \$49,999
☐ \$50,000 to \$99,999
☐ \$100,000 to \$149,999
☐ \$150,000 or more

Please respond to both questions D13 and D14:

D13. Are you Spanish, Hispanic or Latino?

- ☐ No, not Spanish, Hispanic or Latino
☐ Yes, I consider myself to be Spanish, Hispanic or Latino

D14. What is your race? (Mark one or more races to indicate what race you consider yourself to be.)

- ☐ American Indian or Alaskan Native
☐ Asian, Asian Indian or Pacific Islander
☐ Black or African American
☐ White
☐ Other

D15. In which category is your age?

- ☐ 18-24 years ☐ 55-64 years
☐ 25-34 years ☐ 65-74 years
☐ 35-44 years ☐ 75 years or older
☐ 45-54 years

D16. What is your sex?

- ☐ Female ☐ Male

D17. Do you consider a cell phone or land line your primary telephone number?

- ☐ Cell ☐ Land line ☐ Both

Thank you for completing this survey. Please return the completed survey in the postage-paid envelope to: National Research Center, Inc., PO Box 549, Belle Mead, NJ 08502

CITY COUNCIL MEETING STAFF REPORT

Meeting Date: October 6, 2014	Subject: Resolution No. 2490 WWTP Outfall Repair Project Staff Member: Eric Mende, Capital Projects Engineering Manager Department: Community Development
Action Required <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input checked="" type="checkbox"/> Resolution <input type="checkbox"/> Information or Direction <input type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input checked="" type="checkbox"/> Consent Agenda	Advisory Board/Commission Recommendation <input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input checked="" type="checkbox"/> Not Applicable Comments: <div style="height: 40px;"></div>
Staff Recommendation: Approve on Consent	
Recommended Language for Motion: I move to approve the Consent Agenda.	
PROJECT / ISSUE RELATES TO: <i>[Identify which goal(s), master plans(s) issue relates to.]</i>	
<input checked="" type="checkbox"/> Council Goals/Priorities Regulatory Compliance	<input type="checkbox"/> Adopted Master Plan(s)
<input type="checkbox"/> Not Applicable	

ISSUE BEFORE COUNCIL: Action is requested to approve a Resolution authorizing CH2MHILL to construct a temporary (3 to 5-year) repair to the 24-inch wastewater treatment plant outfall pipe into the Willamette River.

EXECUTIVE SUMMARY: A hole in the outfall pipe, adjacent to the riverbank, was reported by a fisherman during low water conditions in August 2013. The State Dept. of Environmental Quality (DEQ) was notified immediately and efforts were undertaken by the City and CH2MHILL to inspect the pipe to verify the observed damage, plus determine if other damage existed on the pipe from the shore to the submerged outlet (about 100'). The hole was confirmed,

and no other damage was identified. The damaged pipe is allowing treated water to bypass the specified end of pipe discharge point at the bottom of the river, which is considered a permit violation even though the water is fully treated.

Knowing a full pipe replacement/upsizing of the outlet pipe will be needed in approximately 5 years to meet increased flows, DEQ issued a letter in June 2014 directing the City to perform an interim repair by October 31, capable of lasting 3 to 5 years. Being already under contract for the WWTP Design-Build work, CH2MHILL was issued a DBO Agreement Amendment (similar to a Change Order) for \$43,840 to evaluate and design repair options, and obtain permits from the Dept. of State Lands and Corp of Engineers for the Work. An external (e.g., cut and replace) repair option was selected and pricing from subcontractors obtained. With the cost of construction, the contract price exceeds \$100,000 and therefore this contract must be approved by City Council.

EXPECTED RESULTS:

The project will reestablish WWTP discharges through the end of the pipe, in compliance with our discharge permit. A 3 to 5 year life allows planning, design, and budgeting of the full outfall replacement to occur on a normal schedule rather than an expedited schedule.

TIMELINE:

A Notice To Proceed will be issued immediately upon Council approval. The contractor is ready to go. The work will take approximately seven (7) work days, but may take a couple extra days if river levels rise. Per the DSL / Corp of Engineers Permit for the work, the work must be completed before the end of the Willamette River In-Water-Work-Window, which ends October 31, 2014.

CURRENT YEAR BUDGET IMPACTS:

The project is budgeted. (FY 14/15 budget of \$333,000) No additional funding is needed.

Note: Two quotes were received for the work. The higher price for which Not To Exceed authorization is being requested \$267,018 conservatively assumes a higher river level and longer time period to complete. If river levels stay below RL 14.0, the price will be less \$232,458.

FINANCIAL REVIEW / COMMENTS: *[Item must be sent to Finance for review and comment.]*

Reviewed by: CAR Date: 9/24/14

Proj #2095, WWTP Outfall Repair/Replacement, is budgeted as noted for FY14/15 at \$333,000.

LEGAL REVIEW / COMMENT:

Reviewed by: MEK Date: 9/22/2014

The Resolution is approved as to form.

COMMUNITY INVOLVEMENT PROCESS: N/A

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY:

Continued compliance with our discharge permit benefits all businesses and residents.

ALTERNATIVES:

An interior fix to the pipe was also evaluated, utilizing a high density plastic sleeve. This alternative requires high pressure power cleaning of the inside of the pipe. The price was only 5% less than the cut-and-replace fix, and staff considered the potential for additional damage to the old pipe from the pressure washing to be too high to warrant the minor savings in cost.

CITY MANAGER COMMENT:**ATTACHMENTS:**

- A. Resolution 2490
- B. DBO Agreement Amendment (DAA) 003 Revision 001
- C. DAA Request with backup documentation (Scope and Cost)

RESOLUTION NO. 2490

A RESOLUTION OF THE CITY OF WILSONVILLE APPROVING A DESIGN-BUILD-OPERATE AGREEMENT AMENDMENT WITH CH2M HILL TO CONSTRUCT A TEMPORARY REPAIR TO THE CITY'S WASTEWATER TREATMENT PLANT OUTFALL PIPE

RECITALS

WHEREAS, the CITY and CH2MHILL (the Company) entered into a Design-Build-Operate (DBO) Agreement in July 2011 for improvements to the City's Wastewater Treatment Plant (WWTP); and

WHEREAS, the Company completed the improvements to and is now operating the ("WWTP") for the City pursuant to the above referenced DBO Agreement; and

WHEREAS, the above referenced DBO Agreement contains provisions for amending said Agreement to perform additional or unforeseen work; and

WHEREAS, the outfall pipe from the WWTP is a component of the assets under the Company's day to day operational management and for which they are responsible to maintain compliance with the City's Discharge Permit; and

WHEREAS, the outfall pipe is damaged and the City has been directed by the Oregon Department of Environmental Quality to effect repairs to the pipe to ensure continued compliance with the City's discharge permit; and

WHEREAS, the Wilsonville City Council adopted a Capital Improvement Project for the outfall repairs that included a FY 2014/2015 appropriation of \$333,000.00 for the project, which exceeds the Company's proposed not-to-exceed cost of \$267,018

NOW, THEREFORE, THE CITY OF WILSONVILLE RESOLVES AS FOLLOWS:

1. The City Council acting as the Local Contract Review Board finds and concludes:
 - a. The recital of findings above is incorporated by reference herein.
 - b. The Company's not to exceed proposed cost is deemed responsive and reasonable, and the Company is qualified to perform the work under the auspices of the current Operating Agreement with the City.

2. The City Manager is hereby authorized to execute a DBO Agreement Amendment for completion of the outfall repair work in the not to exceed amount of \$ 267,018.
3. This resolution is effective upon adoption.

ADOPTED by the Wilsonville City Council at a regular meeting thereof this 6th day of October, 2014, and filed with the Wilsonville City Recorder this date.

TIM KNAPP, MAYOR

ATTEST:

Sandra C. King, MMC, City Recorder

SUMMARY OF VOTES:

Mayor Knapp	_____
Council President Starr	_____
Councilor Goddard	_____
Councilor Fitzgerald	_____
Councilor Stevens	_____

Attachments:

DBO Agreement Amendment (DAA) 003 Revision 001
DAA Request with Backup documentation (Scope and Cost)

Revised DBO AGREEMENT AMENDMENT (DAA)

CITY OF WILSONVILLE	
PROJECT: Wilsonville Wastewater Treatment Plant Improvements DBO	
COMPANY: CH2M HILL Engineers, Inc.	
CONTRACT NO.: 2082	
DBO AGREEMENT AMENDMENT NO.: 003 REVISION NO.: 001	

CONTRACT TERM: 9/20/11 - 9/20/26	ORIGINAL CONTRACT YEAR OPERATING CHARGE FOLLOWING ACCEPTANCE:	\$ 1,871,365.00
TERMINATION PRIOR AMENDMENT: N/A	PRIOR AMENDMENT(S):	
TERMINATION THIS AMENDMENT: N/A	AMOUNT THIS AMENDMENT:	\$ -
	REVISED CONTRACT YEAR OPERATING CHARGE FOLLOWING ACCEPTANCE:	\$ 1,871,365.00
	PREVIOUS EXTRAORDINARY ITEM (Not To Exceed one-time adjustment)	\$43,840
	REVISED EXTRAORDINARY ITEM (Not To Exceed one-time adjustment)	\$267,018

DBO AGREEMENT AMENDMENT (DAA) No. 003 Revision 001

RECITALS

- A. **WHEREAS**, the CITY and the COMPANY (the "Parties") entered into the DBO Agreement referenced above;
and
- B. **WHEREAS**, the Company has designed and built substantial improvements to, and is now operating, a wastewater treatment plant ("WWTP") for the City pursuant to the above referenced DBO Agreement; and
- C. **WHEREAS**, an existing outfall pipe ("Outfall Pipe") that serves the WWTP was not included as part of the Managed Assets as defined in the DBO Agreement; and
- D. **WHEREAS**, said Outfall Pipe is now in need of expedited repairs and is an essential operational component of the WWTP; and
- E. **WHEREAS**, the Parties executed DAA #003 on July 23, 2014, related to the permitting and design of interim repair work and ongoing maintenance to an existing outfall pipe ("Outfall Pipe") that serves the WWTP; and
- F. **WHEREAS**, as authorized by the terms of the DBO Agreement and envisioned by DAA #003, the Parties have agreed to revise DAA #003 to include the scope and budget for the physical construction of the interim repair work. This DAA 003 Revision 001 replaces DAA 003 in it's entirety.
- G. **WHEREAS**, given the terms of the DBO Agreement, the Parties have now determined that the repair and ongoing maintenance of the Outfall Pipe should be included under the DBO Agreement pursuant to the terms of this DAA #003 Revision #001.

NOW THEREFORE, incorporating the above Recitals as if fully set forth below, the Parties agree as follows:

AGREEMENT

Section 1 Definitions. Unless otherwise differently defined herein, the definitions set forth in the DBO Agreement shall apply. The definition of Managed Asset Sites is revised as follows:

"Managed Asset Sites" means the WWTP Site and the adjacent easement within which the Outfall Pipe is located, the Lift Stations Sites and the Capital Improvements Sites.

Section 2 Capital Modification. Pursuant to Article XIII, Section 13.8 of the DBO Agreement, the Parties wish to add the existing Outfall Pipe from Manhole-E (but not including Manhole-E) to the Outfall Pipe terminus to the Managed Assets and have employed the protocol for implementing a Capital Modification, as set forth in Article XIII, Section 13.8 of the DBO Agreement.

Section 3 Scope of Capital Modification. The revised scope of the Capital Modification is set forth on **Exhibit A**, attached hereto and incorporated by reference herein ("Scope of Work"). The Scope of Work sets forth all tasks to be performed by the Company with respect to designing, permitting, and constructing an interim repair of the Outfall Pipe within the time schedule set forth within the Scope of Work.

At such time as the repairs are completed, the Outfall Pipe from Manhole-E to the Outfall Pipe terminus will be considered a Managed Asset and the Company will monitor the operation of the Outfall Pipe to ensure no further leakage and will advise the City promptly if any leakage is discovered. The Company will be responsible to repair any subsequent leakage of the Outfall Pipe if caused due to the Company's design or repair work pursuant to the Scope of Work. If new or additional leakage is caused by further aging and degradation of the Outfall Pipe, the Company will not be responsible for repair or replacement but will be responsible to promptly notify the City and the Oregon Department of Environmental Quality (DEQ) of any such leak or failure and take reasonable measures to manage and mitigate any potential permit violations that might result from a future leak. The Company shall also not be responsible for any costs for any future internal monitoring, for other internal investigation required, or for Major Maintenance, Repair and Replacement on the Outfall Pipe.

Section 4. Price. The City agrees to pay the Company a **not to exceed price** of Two Hundred and Sixty Seven thousand eighteen dollars (\$267,018) for performance of All Tasks as identified on Exhibit A. The entire Scope of this DAA #003 Revision #001, shall be paid for as an Extraordinary Item (one-time adjustment) in accordance with Article IX, Section 9.5 of the DBO Agreement. Any subsequent changes to the scope or price associated with this DAA will be negotiated in accordance with the requirements of the DBO Agreement.

Section 5 Future Replacement of Outfall Pipe. Pursuant to public contracting requirements, nothing contained herein or in the DBO Agreement shall prevent the City from hiring other consultants or contractors, at some time in the future, to design and construct a complete replacement of the Outfall Pipe and, at that time, any new outfall pipe will not be covered by the DBO Agreement unless the Parties otherwise agree to its inclusion.

Section 6. No Other Modifications to DBO Agreement. Except as expressly set forth herein, no other modifications to the DBO Agreement are made hereby and all other provisions of the DBO Agreement remain in full force and effect. Specifically, it is agreed that this Scope of Work is newly assigned work and is not part of the Design Build Work required to be completed to achieve Final Completion and Acceptance, as defined in the DBO Agreement.

IN WITNESS WHEREOF, this DBO Agreement Amendment No. 003 Revision #001 is hereby approved.

APPROVED:

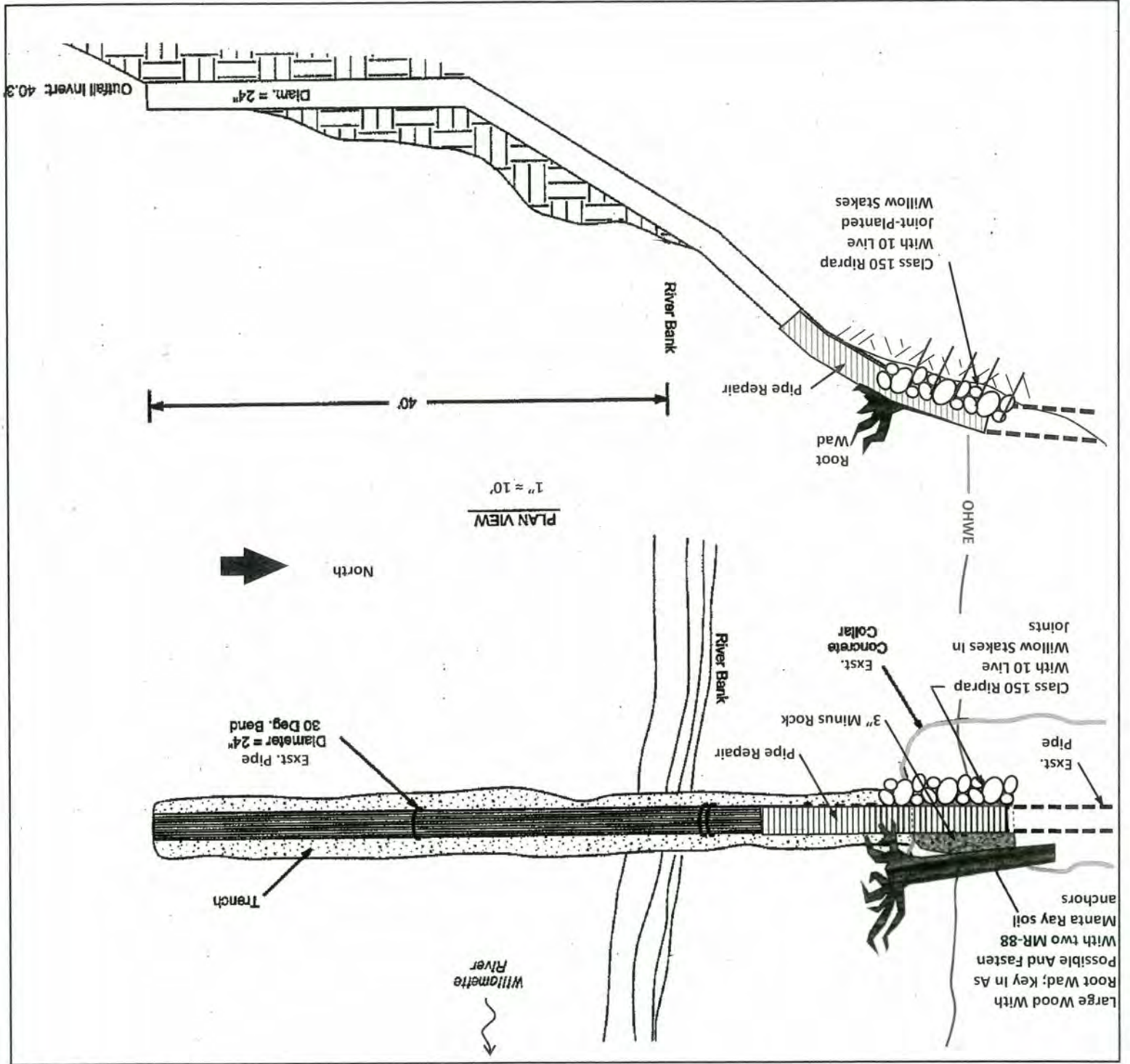


Bryan Cosgrove

10/6/14

Date

FIGURE 7.
Outfall Repair Plan and Profile
Wilsonville Wastewater Treatment Plant



**CH2MHILL****DBO AGREEMENT AMENDMENT (DAA) REQUEST**

Project:	Wilsonville WWTP Improvements DBO	DAAR Number:	003 Rev.1	DAA Number:	003 Rev.1
To:	Bryan Cosgrove	From:	Robert Pieper		
Wilsonville Reference:	Project No. 2082	CHE Project Number:	425034		

This DBO Agreement Amendment (DAA) contains an itemized quotation for changes in the components of the Service Fee (if applicable) in response to proposed modifications to the Contract Documents as further summarized below:

Description of Proposed Change:

In accordance with Article XIII, Section 13.8 of the DBO Agreement, the City directed the Company to develop a revised scope and price for an interim repair of damage to the existing outfall pipe at the WWTP which will be performed as a Capital Modification under the terms of the DBO Agreement except as otherwise noted. This DAA Request is a revision to the previously executed DAA-003 and replaces DAA 003 in its entirety. The Scope of Work and Lump Sum Price(s) are described in Attachment A.

Reason for Change:

The City of Wilsonville received a Warning Letter from DEQ on June 4, 2014 for the WWTP concerning a damaged outfall pipe that allows effluent to bypass the permitted discharge location (end of pipe). The Warning Letter requires the City to design and install interim improvements to repair the damaged outfall pipe such that it will function as required by the City's NPDES Permit for 3 to 5 years, until a permanent replacement can be designed and installed. DAA 003 was executed on July 23, 2014, and included 5 Tasks, including engineering, permitting, management services during construction, construction, and project management. Tasks 3 (services during construction) and Task 4 (construction) were specifically identified as Tasks for which an amended price would be needed after engineering and permitting were completed. This revised DAA Request addresses and incorporates the Construction Phase (Tasks 4) and the Services During Construction (Task 3) of the previously executed DAA-03

The City has determined that it is in the City's best interest, and allowable per applicable law, that this interim repair work be conducted as a design-build project by the Company under the terms of the DBO Agreement as a Capital Modification in accordance with Article XIII, Section 13.8 and to pay for this Scope of Work as an Extraordinary Item in accordance with Article IX, Section 9.5 of the DBO Agreement. In doing so, this Scope of Work will be paid for as a one-time Lump Sum adjustment to the Service Fee for Management Services rather than as a component of the Design-Build Price.

DBO Agreement Section(s) or Subsection(s) affected:

Article IX, Section 9.5

Article XIII, Section 13.8

Does proposed Change involve a change in any component of the Service Fee that may be itemized?

☒ YES ☐ NO

If YES: Proposed Change to Operating Charge:

\$0.00

Proposed Change to Capital Maintenance Charge:

\$0.00

Proposed Not To Exceed Change to Extraordinary Items Charge or Credit:

Task 1: Engineering

\$21,680.00

Task 2: Natural Resource Permitting

\$18,800.00

Task 3: Engineering Services During Construction

\$12,690.00

Task 4: Construction (LS Price Water Level Below Elev. 14.00)

\$170,888.00

Task 4: Construction (LS Price Water Level Above Elev. 14.00)

\$205,448.00

Task 5: Project Management

\$8400.00

Total NTE Price (Water Level Below Elev. 14.00)**\$ 232,458.00****Total NTE Price (Water Above Below Elev. 14.00)****\$ 267,018.00**

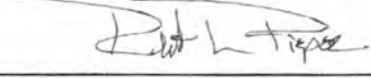
Attachments: None.

Exhibit A – Wilsonville WWTP Interim Outfall Repair Project – Scope of Work and Not-To-Exceed Fee

Attachment A – Wilsonville WWTP Interim Outfall Repair Project – Task 4 Cost Breakdown

Attachment B – Wilsonville WWTP Interim Outfall Repair Project – MIC Proposal

Submitted by:



Date:

09-18-2014

CH2M HILL Engineers, Inc.

Accepted by:



Date:

09-23-2014

City of Wilsonville, OR

Exhibit A (Amended 09-12-14)
City of Wilsonville, Oregon
Wilsonville WWTP Interim Outfall Repair Project
Scope of Work and Not-To-Exceed Fee

Background

The City of Wilsonville (City) requires engineering, permitting, and construction services to comply with the June 4, 2014 Warning Letter from Oregon Department of Environmental Quality (DEQ) for the Wilsonville WWTP concerning a damaged outfall pipe that allows effluent to bypass the permitted discharge location (end of pipe). The Warning Letter requires the City to design and construct an interim repair to the damaged outfall pipe such that it will function as required by the City's NPDES Permit for 3 to 5 years, until a permanent replacement can be designed and installed. The timeline imposed by DEQ for the interim repair work is very limited – the City is directed to complete this work within the 2014 Oregon Department of Fish and Wildlife (ODFW)-preferred in-water work timing window (June 1 to October 31) if possible.

In accordance with Article XIII, Section 13.8 of the DBO Agreement, the City has elected to enroll CH2MHILL as a design-build contractor to deliver the interim repair work as a Capital Modification under the terms of the DBO Agreement, with exceptions noted.

Scope of Work

CH2MHILL will develop engineering design documents in conjunction with potential construction contractors, and lead the natural resources permitting effort for the required interim repair work to the City of Wilsonville's outfall pipe. This Scope of Work, as amended, includes construction, and assumes that CH2MHILL will deliver the physical construction of the required interim repair work as a sole source design-build contractor. CH2MHILL may hire a third party to perform construction services. The scope below assumes a design deliverable as further defined in Task 1.2, based on extensive coordination with selected suppliers/contractors to define the preferred repair solution. It also assumes that permitting by the U.S. Army Corps of Engineers (Corps) and by the Oregon Department of State Lands (DSL) is required prior to construction. Once permits are received, it is assumed that CH2MHILL will contract directly with the supplier/contractor to complete the work prior to October 31, 2014.

It is understood that if the City determines permits cannot be obtained in time to allow the interim repair work to be completed in 2014, the City may cancel or otherwise modify this DAA at their discretion.

Task 1. Engineering

Task 1.1. Evaluation and Selection of Repair Approach

Review existing data and investigations. Conduct site visit to observe deficiency, site conditions, access options, etc.

Evaluate options for internal and external repair. Contact marine contractors and pipe lining manufacturers/installers to identify options and costs, determine the necessary timeframe(s) and the contractor's availability to construct interim repair work.

Develop preliminary (30% design level) cost estimates of at least two feasible options to complete the interim repair work, identifying costs associated with ancillary activities (such as access, erosion control, subgrade restoration, bypass pumping, etc.)

Meet with City staff to review the alternatives developed, to review CH2MHILL's recommended approach and to obtain City concurrence with the recommended approach.

Assumptions:

- Contractors/suppliers will provide budgetary cost estimates for their major scope of labor and material, and tentative schedules to complete the interim repair work.
- A temporary repair, meeting DEQ requirements (3-5 years of functionality) is feasible using minimally invasive construction methodologies such as an internal lining or external patch.
- CH2MHILL will define alternative design and construction approaches, including a recommended approach and prepare materials for City review, including cost estimates and schedules. The City retains the right to reject any alternative approaches including the recommended approach. After the City provides concurrence on a preferred approach, CH2MHILL will select appropriate suppliers/contractors to perform the interim repair work.

Deliverables:

- Contractor budget and schedule estimates for at least two feasible options.
- Meeting notes capturing recommendation, City concurrence and review comments, and path forward.

Task 1.2. Preparation of Design Materials

CH2MHILL will work as the design-build contractor utilizing the selected third party supplier/contractor to define details of design to a 60% level of detail. Anticipated design deliverables include:

- Performance requirements for repair, including a schedule for completion.
- Drawings conveying 60% design details for repair, technical specifications, quantities and types of materials for construction, construction method to be used and testing requirements.
- Drawings and documents conveying site conditions and constraints, access and bypass pumping requirements and ancillary improvements (e.g. subgrade support details).

The City retains the same rights related to design reviews as outlined in Appendix 9, Section 9.4 of the DBO Agreement for the 30% and 60% design documents.

Deliverables: Design Documents

Assumptions:

- Selected supplier/contractor will be under contract throughout the duration of this task.
- City will participate in meetings with CH2M HILL and the supplier/contractor to the extent desired.
- Bid documents will not be required. The design documents will support development of a Purchase Order between CH2MHILL and supplier/contractor that clearly defines work and basis of cost, and schedule.
- Teleconference meetings will be held with the City on a weekly basis during this effort to communicate status.

Task 2. Natural Resource Permitting

Engage permitting agencies to define permitting requirements for the interim repair work. Develop permit application documents and provide design documents to the agencies as appropriate and required by the agencies to facilitate approval. Permitting effort will be integrated with design activities, with the goal of structuring repair activities to be consistent with the most expeditious and predictable permitting pathways, including those based on previously approved projects and allowed construction practices.

Conduct one-on-one meetings with the Corps and DSL to introduce need for the project and discuss parameters, constraints, and timelines. Review project design and construction approach, and assess acceptable means and methods for outfall improvements within regulatory constraints.

Provide support and consultation to City staff as the design effort progresses. Adapt the permitting effort to accommodate new information during design development. Provide supplemental environmental and design information to the permitting agencies, as requested.

Develop permit application materials on behalf of the City for submittal to federal and state agencies for applicable in-water work permits. Meet with agencies as appropriate to facilitate the permit approval process.

Deliverables:

- Meeting notes
- Permit application(s) with supporting documents

Assumptions:

- The following regulatory requirements are assumed under this task: federal Clean Water Act Section 404, and Rivers and Harbors Act Section 10 permits from the U.S.

Army Corps of Engineers (Corps); state removal/fill permit from the Oregon Department of State Lands (DSL).

- Assume up to 2 meetings with permitting agencies in Portland
- Wetlands delineation, compensatory wetlands mitigation plans, or compensatory mitigation of wetlands will not be needed, and are not included.
- Consultation with NMFS or ODFW is not required.
- No local land use (City of Wilsonville) permits and approvals are required for the project.
- Budget includes fees associated with a DSL permit application. No other fees are assumed.
- To the extent possible strategies will be undertaken to avoid undue permitting review and approval delays, however, there is no guarantee that the City will be able to obtain the necessary permits in time for the 2014 in-water work construction season.

Task 3. Engineering Services during Construction

Engineering services during construction include the following:

- Submittal review
- RFI review and responses
- Issue field instructions, orders or similar documents during construction as necessary
- Authorize minor variations in the work which do not involve an adjustment in the Contractor's contract price nor time for construction and are not inconsistent with the intent of the contract documents.
- Participate in construction meetings
- Onsite inspection of installation (assume four days).
- Preparation of record documentation

Task 4. Construction

CH2M HILL shall deliver physical construction of the required interim repair work as a sole source design-build contractor. CH2M HILL will procure the services of a marine contractor to execute the work. CH2M HILL will provide construction management and oversight and ultimately be responsible for the installation. The details of the proposal are defined in Attachment A.

Task 5. Project Management

Prepare progress reports and progress billings in a format approved by the City's project manager. Project management responsibilities associated with Tasks 1 and 2 include managing the contract; directing and managing the work performed by the consultant team; scheduling, coordinating and communicating with the City, supervising project work; and developing two written project statuses, including budget and invoicing.

Not-To-Exceed Budget

CH2M HILL will perform the work for Tasks 1, 2, 3 and 5 on a time and material Not-To-Exceed basis. The estimated budget for these tasks are \$61,570, as shown below. Estimate is based on best available information at the time and relies heavily on the assumptions defined above. Actual fees shall be based on the unit labor and other direct costs identified in Table 1.

Table 1				
	Staff Category	Hours	Billing Rate	Total
Task 1: Engineering				
Dan Buonnadonna	Project Engineer	4	\$160	\$640
Jim McWade	Senior Advisor	40	\$225	\$9,000
Vince Rybel	Senior Engineer	50	\$210	\$10,500
Janis Freeman	Project Assistant	12	\$95	\$1,140
Reimbursable Expenses				\$400
Task 2: Natural Resource Permitting				
Steve Mader	Senior Scientist	80	\$225	\$18,000
Permit Fees				\$800
Task 3: Engineering Services During Construction				
Vince Rybel	Senior Engineer	16	\$210	\$3,360
Diana Worthen	Engineer	50	\$135	\$6,750
Travis Laney	CAD	8	\$105	\$840
Janis Freeman	Project Assistant	12	\$95	\$1,140
Reimbursable Expenses				\$600
Task 5: Project Management				
Michelle Burkhart	Project Manager	40	\$210	\$8,400
TOTAL				\$61,570

Lump Sum Budget

CH2M HILL will perform the work for Task 4 on a lump sum basis (except as modified by time-and-material basis for bypass pumping). Attachment B defines the basis for this lump sum proposal.

The budget for Task 4 is \$170,888.00 - (Base Price), if work is executed with water level below Elev. 14.00.

The budget for Task 4 is \$ 205,448.00 - (Option 2), if work is executed with water level at Elev.14.00 or above.

Schedule

Task 1.1 shall be completed and delivered to the City Project Manager within 21 calendar days of receiving Notice to Proceed.

Draft Deliverables for Task 1.2 shall be completed and delivered to the City Project Manager within 21 calendar days after receiving City concurrence of the preferred approach from Task 1.1.

Final Deliverables for Task 1.2 and submittal of the final permit application to the agencies under Task 2 shall be completed within 14 calendar days of receiving City review comments on the Draft Deliverable for Task 1.2.

The City shall issue the Notice to Proceed for Tasks 3 and 4 only after the required permits for execution of the work has been approved by the regulatory agencies.

Tasks 3 and 4 shall be completed prior to October 31, 2014.

Table 1 - CH2M HILL 2014 Labor Rate and Expense Schedule

2014 Staff Cost Schedule	
Staff Category	Billing Rate (hourly)
Program Director-Senior Advisor-Senior Scientist	\$225
Project Manager-Senior Engineer	\$210
Mid-Level Engineer-Scientist	\$185
Project Engineer-Scientist	\$160
Engineer-Scientist-Senior Technician	\$135
Staff Engineer-Scientist-Technician	\$105
Project Assistant	\$95
Office	\$85

Unit Labor Rates are all - inclusive, and include all direct and indirect charges; overhead; computers, software, and other equipment; administration; and profit; unless listed separately as an Other Direct Cost.

Other Direct Cost Schedule	
Expense Category	Rate
Personal Vehicle Use	\$0.55/mile
Postage/Freight	Cost
Permit Fees	Cost
Field Equipment and Supplies	Cost



**DBO AGREEMENT AMENDMENT (DAA) REQUEST
ESTIMATING COST - LUMP SUM FIX PRICE**

Job Name Wilsonville WWTP Primary Job No. 425034 Date: 18-Sep-14
Work Performed For: City of Wilsonville
Description of Work: DAA3, Addendum 1: Outfall Repair Work
Base Price Water Level Below 14.00

Subcontractors

Description	Quantity	Unit	Unit Price	Amount
Marine Industrial - Base Bid	1	LS	\$ 81,250	\$ 81,250
Marine Industrial - Bypass**	1	LS	\$ 18,357	\$ 18,357
Marine Industrial Bond	1	LS	\$ 1,317	\$ 1,317
Signage & Public Trail	1	LS	\$ 250	\$ 250
				\$ -
				\$ -

** Time and Materials

Subtotal Material \$ 101,174
Total Subs \$ 101,174

Labor

Description	Quantity	Unit	Unit Price	Amount
Operations Manager	0	hr	\$ 101	\$ -
Project Manager - Preconstruction	36	hr	\$ 196	\$ 7,062
Project Manager - Construction	100	hr	\$ 196	\$ 19,616
Accounting Setup & Support	16	hr	\$ 62	\$ 998
Contract Administrator	32	hr	\$ 106	\$ 3,381
Safety - FSI	8	hr	\$ 107	\$ 857

Subtotal Labor \$ 31,914
Total Labor: \$ 31,914

Material Costs

Description	Quantity	Unit	Unit Price	Amount
				\$ -
Safety - Site Visit by HS&E	1	LS	\$ 2,500	\$ 2,500
SWPPP Plan (Not applicable)			\$ -	\$ -
				\$ -
				\$ -

Subtotal Material \$ 2,500
Total Material \$ 2,500

Expenses Cost

Description	Quantity	Unit	Unit Price	Amount
				\$ -
Miscellaneous Expenses	1	LS	\$ 200	\$ 200
Expenses Project Manager While on Site	8	Days	\$ 250	\$ 2,000
Project Manager Trips to Site	2	EA	\$ 650	\$ 1,300
				\$ -
				\$ -

Subtotal Expenses \$ 3,500
Total Expenses \$ 3,500

Submitted by: _____

CH2M HILL Engineers Representative

Approval: _____

Customer Representative

Subs: \$ 101,174
Labor: \$ 31,914
Material: \$ 2,500
Expenses: \$ 3,500
Subs: \$ 101,174
Subtotal (1): \$ 139,088
Contingency (5%): \$ 6,954
Subtotal (2): \$ 146,043
Overhead & Profit (15%): \$ 21,906
Bond & Insurance (1.75%): \$ 2,939
Grand Total: \$ 170,888

GRAND TOTAL: \$ 170,888



**DBO AGREEMENT AMENDMENT (DAA) REQUEST
ESTIMATING COST - LUMP SUM FIX PRICE**

Job Name Wilsonville WWTP Primary Job No. 425034 Date: 18-Sep-14
Work Performed For: City of Wilsonville
Description of Work: DAA3, Addendum 1: Outfall Repair Work
Water Level at 14.00 or Above

Subcontractors

Description	Quantity	Unit	Unit Price	Amount
Marine Industrial - Base Bid	1	LS	\$ 104,955	\$ 104,955
Marine Industrial - Bypass**	1	LS	\$ 18,357	\$ 18,357
Marine Industrial Bond	1	LS	\$ 1,317	\$ 1,317
Signage & Public Trail	1	LS	\$ 250	\$ 250
				\$ -
				\$ -

** Time and Materials

Subtotal Material \$ 124,879
Total Subs \$ 124,879

Labor

Description	Quantity	Unit	Unit Price	Amount
Operations Manager	0	hr	\$ 101	\$ -
Project Manager - Preconstruction	36	hr	\$ 196	\$ 7,062
Project Manager - Construction	120	hr	\$ 196	\$ 23,539
Accounting Setup & Support	16	hr	\$ 62	\$ 998
Contract Administrator	32	hr	\$ 106	\$ 3,381
Safety - FSI	8	hr	\$ 107	\$ 857

Subtotal Labor \$ 35,838
Total Labor: \$ 35,838

Material Costs

Description	Quantity	Unit	Unit Price	Amount
				\$ -
Safety - Site Visit by HS&E	1	LS	\$ 2,500	\$ 2,500
SWPPP Plan (Not applicable)				\$ -
				\$ -
				\$ -

Subtotal Material \$ 2,500
Total Material \$ 2,500

Expenses Cost

Description	Quantity	Unit	Unit Price	Amount
				\$ -
Miscellaneous Expenses	1	LS	\$ 200	\$ 200
Expenses Project Manager While on Site	10	Days	\$ 250	\$ 2,500
Project Manager Trips to Site	2	EA	\$ 650	\$ 1,300
				\$ -
				\$ -

Subtotal Expenses \$ 4,000
Total Expenses \$ 4,000

Submitted by: 

CH2M HILL Engineers Representative

Approval: _____

Customer Representative

Subs: \$ 124,879
Labor: \$ 35,838
Material: \$ 2,500
Expenses: \$ 4,000
Subs: \$ 124,879
Subtotal (1): \$ 167,217
Contingency (5%): \$ 8,361
Subtotal (2): \$ 175,577
Overhead & Profit (15%): \$ 26,337
Bond & Insurance (1.75%): \$ 3,533
Grand Total: \$ 205,448

GRAND TOTAL: \$ 205,448



MARINE INDUSTRIAL CONSTRUCTION, LLC
9495 SW Wilsonville Road
Wilsonville, OR 97070
Phone: (503) 682-9925 Fax: (503) 783-6100

Friday, September 12, 2014

Vince Rybel
Ch2M-Hill
Re: Wilsonville Outfall Repairs

Mr. Rybel,

Marine Industrial Construction (MIC) is pleased to provide you with the following consolidated proposal for the City of Wilsonville Outfall Repairs.

MIC has visited the jobsite at the request of Ch2M-Hill and we feel comfortable with the aforementioned plan for repairs we are proposing.

Should you have any questions and or comments please feel free to call me anytime.

MIC thanks you for the opportunity to provide you with a quote for this work.

Sincerely,

Project Manager / Estimator
Marine Industrial Construction, LLC.
503-682-9925 Office
360-635-7208 Mobile



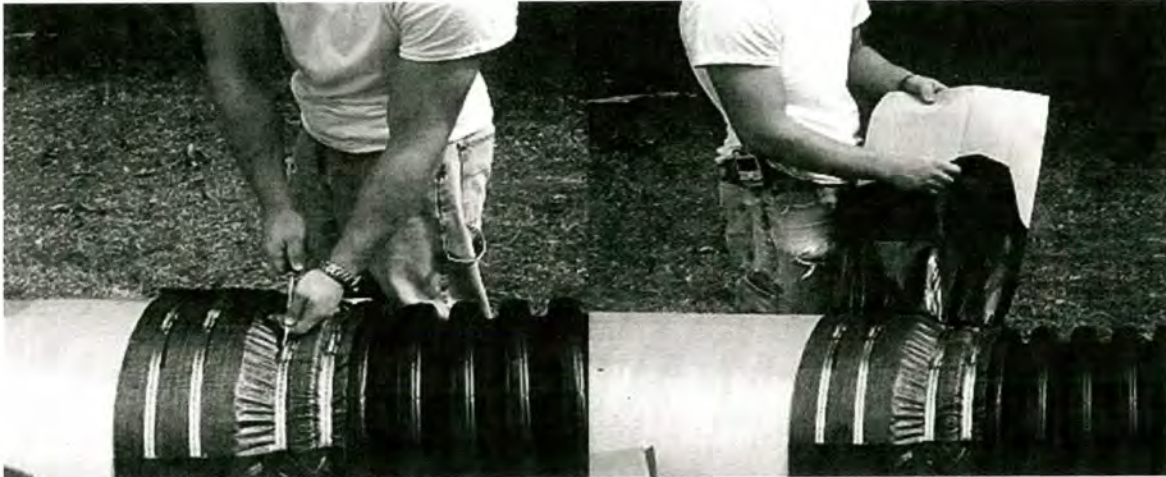
1. **SCOPE OF WORK**

- MIC will walk our Kobelco 220 excavator (with thumb) onto a flat deck barge which is currently staged at our Wilsonville location a mere 1/2 mile upriver of the outfall. The flat deck barge will also act as a working platform for the repair pieces. The barge will be secured to derrick barge number one and will be positioned and spudded down offshore of the repair location. Care will be taken not to spud down on the existing outfall. The barge will be secured offset of the derrick barge with the derrick barge slightly upstream of the outfall. A silt curtain will be placed around the work area as a precaution of agency requirements.
- The excavator will break up the existing concrete cap with the bucket and will place the debris on the flat deck barge for recycling at the WCP plant. The excavator will then precisely dig around the existing pipe. Divers will have to be used to get under the pipe in order to rig and remove the damaged pieces. The note on the drawing shows that the pipe is buried in a trench 18 inches deep.
- One exposed, divers will cut the underwater portion and topside crews will cut the topside CMP out and place the outfall on the flat deck barge.
- Precise measurements will be taken and a new CMP section will be fabricated on the barge and will be flown in by the excavator or crane barge. The pipe will consist of a RCP to CMP pipe adapter with a Mar Mar outer adapter over the RCP to CMP adapter to assist with sealing on the upstream (land side). The RCP to CMP adapter will have a mastic seal. A 45 degree adapter with a mastic seal will be connected to the pipe and another straight section of CMP will be used to connect the new CMP to the existing CMP underwater. The underwater CMP adapter will also have a mastic seal. All repairs will be recorded on DVD for record purposes.



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- Below is a picture of the Mar Mar adapter. This adapter help seal and hold the pipe together.



- After the pipe is put back together and tested the trench will be backfilled with a base rock layer and then refilled with a mix of native material and rip rap rock provided by the City. Concrete and debris will be recycled at the WCP plant.
- Once the bedding and rip rap has been placed a total of 20 native willows will be planted and a 18 inch diameter x 15 foot long conifer root wad will be installed. The root wad will be anchored with two MR-88 Manta Ray Anchors driven to a minimum of 5 feet and secured by a 3/8 inch galvanized cable.

2. PROJECT PRICING SUMMARY

<u>Task</u>	<u>Description</u>	<u>Total</u>
Mobe and Demobe	Mobe and Demobe - Crew and equipment to and from the jobsite, towing of barges and specialized equipment / material acquisitions, per trip, round trip	\$ 9,271.10
Demo Outfall	Demo Outfall – Remove concrete cover and dig around outfall to remove the broken section of pipe.	\$ 25,020.00
Reinstall Outfall	Reinstall Outfall – Labor to reinstall new sections of CMP pipe, rock base and rip rap cover.	\$ 30,458.90
Bypass Pumping	Bypass Pumping – Labor and equipment to bypass pump the outfall for the duration of the work	\$ 18,357.35
Root Wad and Plantings	Install a conifer root wad with Manta Ray Anchors and a total of 20 native willow plantings	\$ 15,185.00
	Subtotal with bypassing	\$ 98,292.35



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Additional Days for Water over Elevation 14	Two additional days for water over elevation 14 - Crane services labor and equipment including subcontracted divers – per 10 hour day (non-overtime rate)	\$ 25,020.00
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3. Breakdown of Costs

Mobe / Demobe Total = \$ 9,271.10

Labor to gather up rock and rip rap with loaders and crane \$ 2,500.00

Walk excavator on and off the barge and secure, job prep \$ 6,771.10

Demo Outfall = \$ 25,020.00

Crane / Barge and Tug (no labor) - two days \$ 2,250.00 = \$ 4,500.00

Labor (operator and deckhands) = \$ 9,520.00

Divers - two days \$ 5,500.00 per day = \$ 11,000.00 Total

Reinstall Outfall = \$ 30,458.90

Crane / Barge and Tug (no labor) - two days \$ 2,250.00 = \$ 4,500.00

Labor (operators and deckhands) = \$ 9,520.00

Divers - two days \$ 5,500.00 per day = \$ 11,000.00 Total

Materials - \$ 5,438.90

Silt Curtain \$ 1,965.00

RCP to CMP Adapter \$ 163.75

CMP Pipe \$ 1,225.11

45 degree adapter \$ 318.72

CMP to CMP Adapter \$ 673.81

Restraint and Mastics \$ 393.00

Freight and handling \$ 699.51

Bypass Pumping = \$ 18,357.35

Rental / Set Up \$ 15,333.35

Fuel for the week - \$ 3,024.00

Woody Debris Installation = \$ 15,185.00 to Be Done on Straight Time

Crane / Barge and Tug (no labor) - one day \$ 2,250.00 = \$ 2,250.00

Labor (operators and deckhands) = \$ 4,760.00

Divers – one day \$ 5,800.00 per day = \$ 5,800.00 (included hydraulics)

Materials - \$ 2,375.00

Conifer Root Wad = \$ 1,500.00 (includes delivery)

Manta Ray Anchors - \$ 150.00

Manta Ray Anchor Drive Steel - \$ 550.00 (monthly rental)

Cable, Cable Clamps and Rigging - \$ 75.00

Willow plantings - \$ 100.00



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Additional Days For Water over Elevation 14.0 = \$ 25,020.00

Crane / Barge and Tug (no labor) - two days \$ 2,250.00 = \$ 4,500.00

Labor (operator and deckhands) = \$ 9,520.00

Divers - two days \$ 5,500.00 per day = \$ 11,000.00 Total

4. EXCLUSIONS

- Engineering
- Permitting
- Sales taxes, if any
- Bonds (if required add \$ 1,036.20 if no bypass and \$ 1,316.70 with bypass)
- Rip Rap Rock to be provided by the City. MIC will load onto barge
- Diving services to dredge out the interior portions of the pipe (if there is a blockage)
- On-Hook riggers liability
- Warranty for more than 12 months on labor after substantial completion
- Internal inspection and dye testing of pipe. Inspections will be completed by visual only and will be recorded on DVD by divers.

5. TERMS

- Net 30 upon receipt.
- Rates are good Monday thru Friday between the hours of 07:00 and 17:00, NO weekends and or holidays unless specifically quoted.
- Quote is good for 30 days and will become void if not accepted in writing or by contract.
- This proposal is based on the execution of a contract with mutually acceptable terms.
- Pricing includes prevailing wages with certified payrolls for public works projects.
- Public works bond included.
- Proposal is based on a USGS river level of 14.00. In the event the river rises higher than 14.00 day rates for crane barge and subcontracted divers will apply. Based on river levels over the past few years October and November have been below 14.00



MARINE INDUSTRIAL CONSTRUCTION, LLC
9495 SW Wilsonville Road
Wilsonville, OR 97070
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ACCEPTANCE OF PROPOSAL

Marine Industrial Construction (MIC) respectfully requests written acceptance of our proposal. MIC shall submit invoices for not more than the work actually performed and Company shall make payment for all undisputed portions of any invoice within thirty (30) calendar days after receipt of the invoice. If Company reasonably disputes any portion of an invoice, Company shall notify MIC in writing of the amount in dispute and the reasons thereof within fifteen (15) calendar days from the date of receipt of such invoice. If Company fails to make payment on any undisputed portion of any invoice within thirty (30) calendar days after receipt of the invoice, interest shall be due on the unpaid amount at the rate of 2% per month, or part thereof until payment is made. Company shall pay interest at the rate of 2% per month beginning 30 calendar days after the receipt of the original invoice.

Authorization:

(COMPANY)

A. THORNTON, ESTIMATOR

(Signature)

(Print Name)

(Title)

(Date)

Marine Industrial Construction

A. THORNTON, ESTIMATOR

(Signature)

(Print Name)

(Title)

(Date)

MIC thanks you for the opportunity to provide you with a quote for this work.

Should you have any questions and or comments please feel free to call me anytime.

Project Manager / Estimator
Marine Industrial Construction, LLC.
503-682-9925 Office
360-635-7208 Mobile

CITY OF WILSONVILLE CITY COUNCIL MEETING MINUTES

A regular meeting of the Wilsonville City Council was held at the Wilsonville City Hall beginning at 7:00 p.m. on Monday, September 4, 2014. Mayor Knapp called the meeting to order at 7:14 p.m., followed by roll call and the Pledge of Allegiance.

The following City Council members were present:

Mayor Knapp
Council President Starr
Councilor Goddard - absent
Councilor Fitzgerald
Councilor Stevens

Staff present included:

Bryan Cosgrove, City Manager
Jeanna Troha, Assistant City Manager
Mike Kohlhoff, City Attorney
Sandra King, City Recorder
Stephan Lashbrook, SMART Director
Mark Ottenad, Government Affairs Director
Cathy Rodocker, Assistant Finance Director
Nancy Kraushaar, Community Development Director
Kristin Retherford, Economic Development Director
Kerry Rappold, Natural Resources Manager
Steve Adams, City Engineer
Zach Weigel, Engineering

Motion to approve the order of the agenda.

Motion: Councilor Starr moved to approve the order of the agenda. Councilor Stevens seconded the motion.

Vote: Motion carried 4-0.

MAYOR'S BUSINESS

A. Upcoming Council meetings were announced.

Mayor Knapp acknowledged the Boy Scouts in the audience. Joseph Wilde introduced his Troop mates from Troop 135; the boys are working on a communications merit badge and one of the requirements is to attend a council meeting.

The Mayor mentioned the upcoming City Council election where there will be two vacancies. Two candidates have filed for office, incumbent Scott Starr, and former Mayor Charlotte Lehan. He spoke about the business round table co-hosted by Oregon Tech and the City of Wilsonville where the discussion focused on science and engineering education.

COMMUNICATIONS

**CITY OF WILSONVILLE
CITY COUNCIL MEETING MINUTES**

- A. Ron Adams, Chair, Clackamas Community College (CCC) Board of Education, Bond Measure Support

Ron Adams introduced Bob Cochran of CCC, and distributed information on what Ballot Measure 3-447 will achieve if it is successful. The goals of the bond measure are to:

- increase local access to affordable education programs that would allow students to transfer to four-year universities or obtain training for family wage jobs;
- train students in high-demand careers such as nursing, engineering and manufacturing; and
- update and modernize equipment, labs and facilities so students are adequately trained to meet current industry standards.

Mr. Adams distributed Endorsement Statement for County Voters' Pamphlet forms should the Council wish to complete them.

CITIZEN INPUT & COMMUNITY ANNOUNCEMENTS

This is an opportunity for visitors to address the City Council on items *not* on the agenda. It is also the time to address items that are on the agenda but not scheduled for a public hearing. Staff and the City Council will make every effort to respond to questions raised during citizens input before tonight's meeting ends or as quickly as possible thereafter. Please limit your comments to three minutes.

There was none.

COUNCILOR COMMENTS, LIAISON REPORTS & MEETING ANNOUNCEMENTS

Council President Starr – (*Park & Recreation Advisory Board Liaison*) reported the Parks and Recreation department has moved into their new offices in Town Center Park.

The Economic Development team of the Urban Renewal Task Force will be meeting September 23rd to discuss next steps. The Councilor spoke with a West Linn Wilsonville School Board member who was impressed with the facilities and offerings OIT provided in Wilsonville. He thought the cost per credit at both Clackamas Community College and OIT was an extraordinary value.

Councilor Starr noted during work session Council discussed the addition of the phrase “and businesses” to the Old Town Neighborhood sign located on Boones Ferry Road.

Motion: Councilor Starr moved to make the adjustment to the *Old Town Neighborhood* sign by adding the term “and businesses”. Councilor Fitzgerald seconded the motion.

Mr. Cosgrove stated Council had the option of directing staff to bring a staff report to the next Council meeting allowing public input; or direct the City Manager to add the language.

**CITY OF WILSONVILLE
CITY COUNCIL MEETING MINUTES**

Mayor Knapp asked if it was Councilor Starr's intent to have the City Manager move forward with the sign change. Councilor Starr indicated that was his intent and the seconder agreed.

Mayor Knapp abstained from the vote because he owns business property in the Old Town area.

Vote: Motion carried 3-0-1
 Mayor Knapp abstained

Councilor Fitzgerald – (*Development Review Panels A & B Liaison*) talked about the discussions that took place with the business leaders in high technology at OIT recently. She reinforced the need for an education that includes trades, manufacturing and the arts. She suggested including students at the next discussion. Councilor Fitzgerald reported on the upcoming meeting dates and approvals made by the DRB Panels. DRB Panel A approved the application by Sage Group to build six carriage homes in Villebois, and Panel B approved an application to remodel of the former Kraven's building.

Councilor Stevens – (*Planning Commission; CCI; Wilsonville Seniors Liaison*) announced the water features in Murase Plaza and Town Center Park will close September 14th. She noted an Open House for the new Parks and Recreation Department offices will be held on September 11th with a ribbon cutting at 12:30 p.m.

The Wilsonville Seniors met and adopted their annual budget. They are hosting two fundraisers for the Senior Nutrition Program; Spa Saturday set for October 4th and on October 11th the community may come to have their antiques professionally appraised.

Councilor Stevens noted the Planning Commission meeting for September has been cancelled. An open house for the Frog Pond Area development will take place October 16th at City Hall from 5-8 p.m.

CONSENT AGENDA

Mr. Kohlhoff read the titles of the Consent Agenda items into the record.

- A. **Resolution No. 2488**
 A Resolution in Support of Clackamas Community College Bond Measure 3-447.

- B. **Resolution No. 2483**
 A Resolution Of The City Council Of The City Of Wilsonville Acting As The Local Contract Review Board, Authorizing The South Metro Area Regional Transit Department (SMART) To Purchase Two Compressed Natural Gas Powered Cutaway Vans Through A Section 5308 Federal Clean Fuels Grant.

- C. **Resolution No. 2487**
 A Resolution Of The City Of Wilsonville Authorizing The I-5 Sound Wall Landscape Screening Project.

**CITY OF WILSONVILLE
CITY COUNCIL MEETING MINUTES**

D. Minutes of the August 4, 2014 Council Meeting.

Motion: Councilor Fitzgerald moved to approve the Consent Agenda. Councilor Starr seconded the motion.

Vote: Motion carried 4-0.

NEW BUSINESS

Mr. Kohlhoff read the title of Resolution No. 2486 for the record.

A. **Resolution No.2486**

A Resolution Of The City Of Wilsonville Approving Addendum No. 5 To The Development Agreement Between The City Of Wilsonville, The Urban Renewal Agency Of The City Of Wilsonville, Villebois LLC, And State Of Oregon Department Of Administrative Services Relating To The Addition Of Polygon Northwest Company, L.L.C. As A Party To The Development Agreement And Authorizing Certain Changes Relating To Development Of Property Known As Tonquin Woods 4-7, Located Within The Villebois Village Development.

The staff report was prepared and presented by Mr. Kohlhoff. The report is included for clarity. Addendum No. 5 sets out the respective responsibilities for designing, constructing, and financing infrastructure for the development of Tonquin Woods 4 through 7 and Regional Park 4 (RP-4), and to plan for Regional Park 5 (RP-5), within the Villebois Village Master Plan Area. It has been vetted through the respective engineering, planning, parks, and legal representatives of the parties. Polygon NW has purchased the property and has filed for development approval of a 73 lot subdivision known as Tonquin Woods 4 & 5, and an additional 42 lot subdivision known as Tonquin Woods 6 & 7. The development approval has received the Design Review Board's (DRB) recommendation for Council approval for Tonquin Woods 4 & 5, and staff is recommending approval of Tonquin Woods 6 & 7 to the DRB. The matter of the Council's authorization of Addendum 5 is scheduled for Resolution adoption on September 4, 2014. The URA meeting for Board action to authorize the URA into entering into Addendum No. 5 is scheduled to follow the Council meeting.

There are four key issues Addendum No. 5 addresses: (1) it amends Addendum 4 to avoid double charging for the earlier collected Supplemental Street SDCs and the Master Planner's portion of the Master Plan Fee; (2) it recognizes that developer financing responsibility for infrastructure costs have been transferred due to several land transfers; (3) it recognizes the ability to shift UR financing among certain parks under a previous Development Agreement amendment in 2006; and (4) it provides for shifting of UR funding to RP-4, subject to further agreement by the new property owner in SAP-Central, RCS Villebois Development, LLC. The funding is being shifted from Montague Park, whose amphitheater facility is being reduced due to lack of parking. The reason that RP-5 needs additional time to negotiate is the site involves three separate ownerships: the URA, Polygon, and the Chang family, with the latter needing more time to communicate given some family members are located in mainland China.

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Development of quality infrastructure for the subdivision and for the City, which, in turn promotes the economic development goals of the City, the URA, and the property owner/developer.

Portions of the infrastructure will be completed within the 2014-15 time period, with the remainder in 2015-16.

Motion: Councilor Stevens moved to approve Resolution No. 2486. Councilor Fitzgerald seconded the motion.

Vote: Motion carried 4-0.

CONTINUING BUSINESS

Mr. Kohlhoff read Ordinance No. 745 and Ordinance No. 746 into the record by title only on second reading. He noted the vote on the ordinances should be taken individually.

- A. **Ordinance No. 745** – 2nd reading
An Ordinance Terminating The 9805 SW Boeckman Road Urban Renewal Plan Adopted By Ordinance 726, And The 29899 SW Boones Ferry Road Urban Renewal Plan Adopted By Ordinance 729, And Amending The Urban Renewal Legal Descriptions And Boundary Maps For The 26755 SW 95th Avenue Urban Renewal Plan Adopted By Ordinance 725, The 27255 SW 95th Avenue Urban Renewal Plan Adopted By Ordinance 728, And The Building 83 – 26440 SW Parkway Avenue Urban Renewal Plan Adopted By Ordinance 730.

Mayor Knapp commented these TIF zones were part of the City's economic development incentive program put into place during the economic downturn to encourage businesses and manufacturing to locate in Wilsonville. Since that time three of the large buildings have been occupied by owner/users or long term lessors and there is little merit in continuing those incentive plans on the occupied properties. The incentive program will remain on the three unoccupied buildings.

Councilor Stevens expressed her appreciation for the Mayor's message in the Boones Ferry Messenger explaining the TIF program, and the reasons for rolling back three of the zones.

Councilor Starr agreed with the previous comments. The TIF Zones served the need for the City to extend a welcome to the business community. Another reason to close the TIF zones is to save the expense of keeping the properties in the TIF zones.

Mayor Knapp was of the same opinion. He thought citizens expected the Council to be proactive and responsive as economic conditions change and to provide an environment amenable to the private sector business.

Motion: Councilor Starr moved to approve Ordinance No. 745 on second reading. Councilor Fitzgerald seconded the motion.

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Vote: Motion carried 4-0.
Council President Starr - Yes
Councilor Goddard - Absent
Councilor Fitzgerald - Yes
Councilor Stevens - Yes
Mayor Knapp - Yes

- B. **Ordinance No. 746** – 2nd reading
An Ordinance Terminating The 25600 SW Parkway Center Drive Urban Renewal Plan
Adopted By Ordinance 727.

Motion: Councilor Starr moved to approve Ordinance No. 746 on second reading.
Councilor Fitzgerald seconded the motion.

Vote: Motion carried 4-0.
Council President Starr - Yes
Councilor Goddard - Absent
Councilor Fitzgerald - Yes
Councilor Stevens - Yes
Mayor Knapp - Yes

PUBLIC HEARING

- A. **Resolution No. 2484**
A Resolution Authorizing A Transfer Of Budget Appropriations Within Certain Funds
For Fiscal Year 2014-15.

Mr. Kohlhoff read the titles of Resolution No. 2484 and 2485 into the record for public hearing. He noted the public hearing on the two resolutions may be held concurrently, however, the votes on the resolutions must be taken separately.

Mayor Knapp opened the public hearing on Resolution No. 2484 and Resolution No. 2485 at 8:06 p.m. and read the hearing format.

Ms. Rodocker, Assistant Finance Director, prepared and presented the staff report. Oregon's Local Budget Law allows the Council to amend the adopted budget for an occurrence or condition that was not known at the time the budget was adopted. A transfer resolution moves expenditures from one category to another within a specific fund and does not increase the overall budget that was approved during the annual budget process. A supplemental budget adjustment will impact the budget by increasing revenues and/or expenditures. The supplemental adjustment can also recognize expenditures that exceed 10 percent of the adopted budget expenditures or 15 percent of the funds' adopted contingency.

At its June 2, 2014 City Council meeting, the Council adopted the Fiscal Year 2014-15 budget. The resolutions being presented with this staff report, a budget transfer and a budget adjustment

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will provide the required budget authority for capital projects that were either not completed at the end of fiscal year 2014 or that have been added to the CIP Program since July 1, 2014.

Transfer Resolution – Resolution No. 2484

It is important to note that the Transfer Resolution recognizes only the funding side of the projects, which is recorded as an expense, “Transfers to other funds”, and an offsetting reduction to contingency.

Projects that were not completed by June 30, 2014 and require budget authority for FY15 include:

- Water Project: West Side Level B Reservoir
- Sewer Projects: Flow Monitoring Stations and final payouts for the Wastewater Treatment Plant Rehabilitation
- Road Projects: ADA Compliance and Villebois SDC Street Reimbursements
- Stormwater Projects: Stormwater Rate and SDC Study, Storm System Improvements of Grahams Ferry Rd.
- Parks Project: Recreation/Aquatic Center Update

New projects included in the transfer resolution include:

- Road Projects: I-5 Sound Wall Landscaping and Wilsonville Road Median Improvements – Landover
- Park Project: Villebois Regional Park #4 Reimbursement

Adjustment Resolution – Resolution No. 2485

The adjustment resolution recognizes the actual estimated costs of the projects in the appropriate CIP funds as well as the revenues, “Interfund transfers in”, from the various funding sources. In addition to the projects noted above, the resolution also includes projects that were not completed by June 30, 2014 and require budget authority for FY15 that are funded by the General Fund and the Street Light Operating Fund:

- | | |
|---|-----------------------------------|
| • City Wide Public Facility Master Plan | • Parks & Rec Tenant Improvements |
| • Fall Arrest System | • Forest Shelter Roof Replacement |
| • HVAC Replacement: Library | • Street Light Infill Project |
| • Fiber Connectivity Project | |

The City is following Oregon Local Budget Law and its Fiscal Management Policies in amending the annual budget. As required by Local Budget Law, a notice for the public hearing was published in the *Wilsonville Spokesman* on Wednesday, August 27, 2014. Adoption of the Supplemental Budget Adjustments and Budget Transfers are required prior to the end of the fiscal year, June 30, 2015.

Mayor Knapp indicated he had asked a question earlier about Regional Park Four, and he understood staff had not anticipated that park would be completed this budget year; however, it looks like it will be. Therefore, the City is reimbursing the developer for work he has done and was not obligated to do. This Regional Park will provide additional park capacity since it will be

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serving those outside of the subdivision the developer is building.

Mayor Knapp called for public testimony on the two resolutions, hearing nothing; he closed the public hearing at 8:12 p.m.

Motion: Councilor Fitzgerald moved to approve Resolution No. 2484. Councilor Stevens seconded the motion

Vote: Motion carried 4-0

B. Resolution No. 2485

A Resolution Authorizing A Supplemental Budget Adjustment For Fiscal Year 2014-15.

Motion: Councilor Stevens moved to approve Resolution No. 2485. Councilor Starr seconded the motion

Vote: Motion carried 4-0

C. Ordinance No. 747 – 1st reading

An Ordinance Of The City Of Wilsonville Adopting The City Of Wilsonville Public Works Standards – 2014 To Update And Replace Public Work Standards- 2006 And Repealing That Portion Ordinance 610 Adopting Prior Public Works Standards -2006.

Ordinance No. 747 was read by title only for the record by the City Attorney.

Mayor Knapp opened the public hearing at 8:14 p.m. and read the hearing procedure.

The Staff report was presented by Kerry Rappold, Natural Resources Manager; Zach Weigel and Steve Adams, City Engineers.

The City of Wilsonville Public Works Standards (Standards) provide design requirements, material specifications, construction procedures, testing standards, and acceptance and maintenance requirements for construction of public infrastructure, including roadways, pathways, and stormwater, sanitary, and water systems. The Standards are a technical civil engineering document used to convey the City's required design and construction information to developers, design engineers, and contractors.

These Standards ensure that the publicly maintained infrastructure is designed and constructed to current industry practices necessary to provide robust and reliable service to Wilsonville residents, protecting the general health, welfare, and safety of the public while minimizing maintenance costs and legal liability.

The current adopted Standards were last updated in 2006. Periodic updates to the Standards are needed to reflect changes in industry practice, regulatory requirements, Federal and State laws, technological advances, and City Master Plans and Policy amendments. Over the last year, staff has been working to update and revise the Standards to reflect such changes since the last update.

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The resulting document is comprised of six sections:

Section 1 – General Construction Requirements and Administrative Provisions

Section 2 – Transportation Design and Construction Standards

Section 3 – Stormwater and Surface Water Design and Construction Standards with Appendices A and B (Section 3 to be bound separately)

Section 4 – Sanitary Sewer Design and Construction Standards

Section 5 – Water System Design and Construction Standards

The proposed amendments to the Transportation Design and Construction Standards reflect recent policy changes associated with the City's adopted 2013 Transportation System Plan. Transportation facilities, including roadways, sidewalks, and pathways, design and construction standards have been updated to provide more emphasis on bike and pedestrian facilities. Also, roadway and pathway design standards have been amended to reflect recent changes in Americans with Disability Act requirements.

Mr. Weigel pointed out:

- New road and pathway lighting standards were added to insure the lighting provided meets a nationally recognized standard.
- In addition to the asphalt and concrete allowed standards, segmental concrete pavers design and construction standards were added.
- Key changes to sewer system standards include clarification to existing standards for engineers and contractors.
- Pump station design standards were expanded to make sure they were designed and operated in a consistent manner.
- Standards have been added to properly abandon sewer systems once they have been replaced, including pipes that are 48 inches below ground surface.
- Changes to the water system standards are similar to the changes to the sewer system changes; consisting of clarifications, abandonment standards, and the removal of pipes twenty-four inches below ground.
- Water valves must now meet AWWAC515 standards.

Minor changes to both Sanitary Sewer and Water Design and Construction Standards are proposed. The majority of these amendments are to help clarify and provide additional detail to engineers and contractors to address common misunderstanding or misinterpretations of the Standards since the last update.

Mr. Rappold addressed the amendments made to the stormwater standards.

The majority of the proposed amendments occur as part of the Stormwater and Surface Water Design and Construction Standards. These amendments reflect the policies adopted with the 2012 Stormwater Master Plan and permit requirements associated with the City's 2012 National Pollutant Discharge Elimination System (NPDES) discharge permit. Low impact development (LID) – an approach to stormwater management that mimics or preserves natural drainage processes – provides the basis for most of the amendments. LID emphasizes on-site infiltration of stormwater through the use of vegetated stormwater facilities, such as rain gardens, planter

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boxes, and green roofs. Many of these types of facilities have been installed, or have been specified with City street improvement projects, including Boones Ferry Road by Fred Meyer, Boeckman/Tooze Roads between Boberg and Grahams Ferry Road, Barber Street by the WES station, and Canyon Creek Road.

Mr. Rappold provided photos of low impact development found in Wilsonville, including: porous pavement, green roofs, stormwater planters, rain gardens, vegetated swales, and vegetated filter strips. He spoke about the site assessment process and source control assessment which charge the applicant with looking at these requisites from the beginning of the design process. The site assessment is submitted with the development permit application and contains a checklist of design objectives such as: storm water management strategy, facility selection and sizing, or limiting site conditions. The Impervious Area Threshold Determination form allows the subtraction of the number of square feet of porous pavement, number of trees that are planted, green roofs etc. from the impervious area calculation.

The Public Works Standards update was primarily performed in-house by City staff. Costs associated with this effort were limited to staff time. In addition, staff contracted with Brown & Caldwell (\$11,400 from the adopted 2013-14 Community Development budget) for technical assistance to complete the update to the stormwater standards. The consultant completed a review of standards developed by Water Environment Services of Clackamas County, and provided a revised version of these standards that has been incorporated into the proposed amendments.

Staff contacted several engineering consultants and developers who often work in Wilsonville to request their interest in reviewing and commenting on the draft standards. These companies included Polygon Northwest, Legend Homes, Lennar Homes, Renaissance Homes, Pacific Community Design, SFA Design, Westlake Consultants, GHD Consultants, Group Mackenzie, Otak, and OBEC. Three consultants and one developer requested copies of the standards for their review.

Adoption of the updated Public Works Standards will ensure that the City's public infrastructure is designed and constructed in accordance with current industry practice, regulatory requirements, State and Federal laws, and City policies. These Standards are necessary to provide robust and reliable service to Wilsonville residents and businesses and to protect the general health, welfare, and safety of the public while minimizing maintenance costs and legal liability.

Mr. Cosgrove asked if the Stormwater Standards had been vetted by public works staff in terms of maintenance issues.

Mr. Adams responded the public works staff has reviewed the proposed stormwater and surface runoff standards.

Councilor Fitzgerald asked if periodic updates would be done to the plan as standards change and technology methods improve over time. She also wanted to know what would be done should a contractor want to work above the Standards in the plan.

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Regarding periodic updates, Mr. Adams explained the detailed drawings take precedence over the standards and the detailed drawings may be changed with the approval of the Community Development Director or himself. This allows the City to keep up with technology standards and changes in patterns by changing the detailed drawings. When major changes occur the Standards will be brought back to Council for updates. A contractor is allowed to go over and above the Public Works Standards; the Standards are a minimum level the City will accept.

Councilor Starr referred to the Impervious Area Threshold Determination Form, and wanted to know if additional methods can be added to the allowed list.

Mr. Adams suggested making the form a detailed drawing to allow additional methods and changes.

Mayor Knapp invited public input, hearing nothing he closed the hearing at 8:41 p.m.

Motion: Councilor Fitzgerald moved to adopt Ordinance No. 747 on first reading.
Councilor Stevens seconded the motion

Mr. Kohlhoff suggested adding to the motion, "together with the change to the Shared-Use Path Lighting; and the direction regarding Table 3.2 Impervious Area Threshold Determination Form", and staff can come back on the second reading with those changes in the document.

Amended Motion: Councilor Fitzgerald amended her motion to include the suggestion made by the City Attorney. Councilor Stevens accepted the amendment.

Vote: Motion carried 4-0.

CITY MANAGER'S BUSINESS

Mr. Cosgrove reported the City solicited requests for proposals in conjunction with the Council Goal for Branding and Marketing and received three good responses. Interviews were held with each of the three firms and one firm was selected. A contract with the selected firm is in the process of being negotiated. The City received a very positive letter from Standard & Poor on the City's credit worthiness rating of AA+. This information will be made part of the budget message next year to help respond to questions about the amount of reserves the City has in place. The Urban Renewal Task Force will be meeting September 23rd to receive additional feedback prior to adoption of the UR Strategic Plan.

LEGAL BUSINESS

There was no report.

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ADJOURN

Mayor Knapp adjourned the Council meeting at 8:47 p.m.

Respectfully submitted,

Sandra C. King, MMC, City Recorder

ATTEST:

Tim Knapp, Mayor

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A regular meeting of the Wilsonville City Council was held at the Wilsonville City Hall beginning at 7:00 p.m. on Monday, September 15, 2014. Mayor Knapp called the meeting to order at 7:00 p.m., followed by roll call and the Pledge of Allegiance.

The following City Council members were present:

Mayor Knapp
Council President Starr - excused
Councilor Goddard
Councilor Fitzgerald
Councilor Stevens

Staff present included:

Bryan Cosgrove, City Manager
Mike Kohlhoff, City Attorney
Sandra King, City Recorder
Zach Weigel, Engineering
Kerry Rappold, Natural Resources Manager
Mark Ottenad, Government Affairs Director
Jon Gail, Community Relations Coordinator
Chris Neamtzu, Planning Director

Motion to approve the order of the agenda.

Motion: Councilor Fitzgerald moved to approve the order of the amended agenda.
Councilor Stevens seconded the motion.

Vote: Motion carried 4-0.

MAYOR'S BUSINESS

The Mayor announced the date for the next Council meeting. He reported the Ad Hoc Mayor's Committee endorsed the top five legislative priorities resulting from the League of Oregon Cities state-wide survey; and that he participated in a meeting with Greater Portland Inc.

COMMUNICATIONS

- A. PGE Green Power Challenge, Annette Mattson, PGE Government Affairs.
This item will be rescheduled for 2015.

CITIZEN INPUT & COMMUNITY ANNOUNCEMENTS

This is an opportunity for visitors to address the City Council on items *not* on the agenda. It is also the time to address items that are on the agenda but not scheduled for a public hearing. Staff and the City Council will make every effort to respond to questions raised during citizens input before tonight's meeting ends or as quickly as possible thereafter. Please limit your comments to three minutes.

Theonie Gilmore, Executive Director of Wilsonville Arts and Culture Council, expressed her desire to see children's art programs become a part of the Parks and Recreation Department

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offerings. She was concerned the Culture and Arts Alliance has dissolved due to a lack of volunteers.

Peter Deklaver, a local photographer and videographer presented a video he shot in Wilsonville which displayed the beauty in the area and noted he has worked with Ms. Gilmore on the Arts Festival event and found it rewarding.

Mr. Cosgrove pointed out the new Parks and Recreation Director will be working on a strategic plan for his department. One area that will be reviewed is what the City does for arts in the community.

COUNCILOR COMMENTS, LIAISON REPORTS & MEETING ANNOUNCEMENTS

Councilor Goddard – (*Library Board Liaison*) reported on upcoming community events including the Antique Appraisal Day and the Harvest Festival at the Stein Boozier Barn at Murase Plaza. He announced the date of the next Library Board meeting.

Councilor Fitzgerald – (*Development Review Panels A & B Liaison*) announced the results of the last DRB Panel A meeting and the next meeting dates for both panels. She invited the community to attend the Spa Saturday fundraiser whose proceeds will go to the Senior Nutrition Program. The Councilor announced the Willamette Water Supply open house set for October 28th.

Councilor Stevens – (*Planning Commission; CCI; Wilsonville Seniors Liaison*) noted the next meeting date of the Planning Commission. She invited the public to attend the Frog Pond Area meetings and open house. The Wilsonville Community Seniors met to discuss additional fundraising efforts to help seniors and Center activities. The Wilsonville Quilters Group applied for an opportunity grant which would allow them to sew 24 quilts they will donate to local area hospitals. Councilor Stevens announced the Charbonneau Arts Festival beginning October 25. All proceeds of the Art Festival will go towards the Art Programs at Wilsonville and Canby high schools.

Mayor Knapp announced the upcoming Urban Renewal Task Force meeting set for September 23rd. In addition the Aquatic Task Force will meet at 5 pm on the same date.

CONTINUING BUSINESS

Mr. Kohlhoff read Ordinance No. 747 into the record by title only on second reading.

A. **Ordinance No. 747** – 2nd Reading

An Ordinance Of The City Of Wilsonville Adopting The City Of Wilsonville Public Works Standards – 2014 To Update And Replace Public Work Standards- 2006 And Repealing That Portion Ordinance 610 Adopting Prior Public Works Standards -2006.

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Mr. Rappold stated in response to suggestions made during the first reading of the Ordinance, the Impervious Area Threshold Form has been made a detail rather than being imbedded in the document.

Motion: Councilor Stevens moved to approve Ordinance No. 747 on second reading. Councilor Goddard seconded the motion.

Vote: Motion carried 4-0
Councilor Starr - excused
Councilor Goddard - Yes
Councilor Fitzgerald - Yes
Councilor Stevens - Yes
Mayor Knapp - Yes

PUBLIC HEARING

- A. **Ordinance No. 748** – 1st Reading
An Ordinance of the City of Wilsonville Establishing a Tax on the Sale of Marijuana and Marijuana-infused Products in the City of Wilsonville and adding a New Wilsonville Municipal Code Section.

Mr. Kohlhoff read Ordinance No. 748 into the record on first reading.

Mayor Knapp opened the public hearing at 7:32 p.m. and read the hearing format. The staff report was presented by Mr. Kohlhoff and is included here in its entirety to provide clarity.

Begin Staff Report.

The Ordinance on this agenda for first reading imposes a gross receipts tax on the sale of medical marijuana, recreational marijuana (should it be legalized by Oregon voters in November) and marijuana-infused products. The Ordinance, which is similar to marijuana taxation ordinances passed by the cities of Hillsboro and Ashland, imposes a lower tax rate on medical marijuana (5%) than that imposed on recreational marijuana (10%). The Ordinance applies to all retailers of marijuana and medical marijuana. The Ordinance allows the seller to retain five percent (5%) of taxes collected to defray the costs of bookkeeping and remittance. The tax would apply to legal and illegal operations. In order for this Ordinance to be timely enacted prior to the November election, the Ordinance must come before Council for a second reading as well. Two readings at one Council meeting are allowed if both pass by a unanimous vote of all Council members.

Oregon voters legalized medical marijuana via initiative petition in 1999. Shortly thereafter, medical marijuana dispensaries began opening around the state. These dispensaries essentially served as a middle-man for marijuana growers and medical marijuana patients. While these dispensaries were at least arguably legal, they were unregulated and the source of controversy in many communities.

The 2013 Oregon Legislature passed House Bill 3460, which created regulatory and licensing

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requirements for medical marijuana dispensaries. To date, there are approximately 198 approved and 115 provisionally approved dispensaries in Oregon. The City of Wilsonville passed Ordinance No. 740, which effectively bans medical marijuana dispensaries in Wilsonville during the legislatively allowed moratorium period, which ends May 1, 2015. Additionally, the City's business license Ordinance remains in effect and prohibits the operation of any business in Wilsonville that by its very nature violates federal law. This Ordinance therefore effectively bans all marijuana businesses from Wilsonville, with no sunset date, as long as sale and possession of marijuana remains illegal under federal law.

Signature-gathering is currently underway for a ballot measure that would legalize the sale of recreational marijuana in Oregon and prohibit local jurisdictions from taxing its sale. This measure is likely to appear on the November ballot. At this point in time, however, there is nothing in current Oregon law that prohibits a local government from taxing marijuana.

The Ordinance presented for Council consideration is a gross receipts tax on the sale of recreational marijuana, medical marijuana and marijuana-infused products. A gross receipts tax is applied to the total gross taxable revenues of a business. It is similar to a sales tax except that it is levied on the seller rather than the purchaser. The seller is responsible for maintaining accurate records of its gross revenues from taxable goods and services and then remitting a percentage to the taxing entity. Many businesses that are subject to a gross receipts tax will show the tax on the bill of sale they present to the customer, but it is nonetheless the business that is responsible for paying the tax.

Staff elected not to recommend a taxation scenario in which growers and processors are also taxed, for a number of reasons. First, under Oregon law, growers and grow sites must register with the state, but their locations and identities are confidential. City staff would have no way of identifying them in order to apply a tax. Further, City staff has no experience with administering a value added tax, which is essentially what this would be, and is reluctant to even attempt to create the administrative structure for such a tax. In addition, all taxes, regardless of where they are assessed in the supply chain, are ultimately passed on to the consumer. Therefore, the gross receipts of a business would reflect all of the costs incurred along the supply chain and a gross receipts tax would capture tax revenue from each of those elements. How to disperse that tax liability within the supply chain would be left to the growers, processors, and retailers, rather than to the City. Finally, the proposed ballot measure specifically prohibits a tax on growers. Thus, if our Ordinance contained a tax on growers, it would be in direct conflict with the enacted law and therefore more subject to challenge under the proposed measure's Section 58, which contains language repealing conflicting charters and ordinances.

As stated above, there is nothing in current Oregon law that prohibits the City from taxing marijuana, but it should be noted that the marijuana initiative most likely to be considered by the voters in November contains the following express language:

“SECTION 42. State has exclusive right to tax marijuana. No county or city of this state shall impose any fee or tax, including occupation taxes, privilege taxes and inspection fees, in connection with the purchase, sale, production, processing, transportation, and delivery of marijuana items.”

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Because the above language does not specifically repeal a local marijuana tax in effect at the time of the measure's passage, and because this language could be interpreted to read "No county or city of this state shall [after the effective date of this measure] impose any fee or tax..." it can be argued that this language would not be in conflict with the ballot measure and that the ballot measure does not preempt this taxation Ordinance, if the Ordinance is adopted by the Council before passage of the ballot measure. Alternatively, the language can be interpreted by the Legislature or Courts as "No county or city of this state shall [be allowed at any time to] impose any fee or tax..." As such, absent adjudication in a state court, there is no guarantee that a local tax imposed prior to passage of this initiative would survive beyond the effective date of the initiative, unless the initiative language is modified by the Legislature or the initiative fails.

Taxing marijuana could limit the number of sellers in the Wilsonville area, with such sellers electing instead to operate in cities without such a tax. On the negative side, taxability has been argued to lead to more black market unlicensed sales and these sellers are harder to catch and tax.

Passage must occur before the November election to give the Ordinance a better chance of being upheld as not being in direct conflict with the ballot measure, should it become law.

The ordinance may add some revenue, but legalization will create additional law enforcement costs, so this is not anticipated to be a large revenue generator. It is anticipated that passage of the ordinance will reduce the number of retail sales of marijuana within the City of Wilsonville.

Council may decide not to impose the tax now, but wait until after the November election allowing the voters to decide.

The second reading will need to occur before October 5, 2014; thought we could have the two readings tonight, but that is not possible with one councilor excused.

End of Staff Report

To meet the timeline Mr. Cosgrove said Ordinance No. 748 was placed on the agenda after the Council received their agenda packet materials. He recommended holding the public hearing and leaving it open to allow for any written comments to be included in the record. Since all Council members were not at the meeting, Council will need to select a special meeting date for the second reading of the Ordinance. Councilors agreed on September 29, 2014 at 5:30 p.m. for their special meeting.

Councilor Stevens wanted to know if the tax could be used to fund law enforcement should Ballot Measure 91 pass. The City Attorney stated any taxes collected would go into the City's General Fund.

Councilor Goddard asked what the purpose of the Ordinance was, and whether the City imposed a privilege tax on businesses that sell alcohol and tobacco products.

Mr. Cosgrove indicated the State imposed taxes on alcohol and tobacco and the City is prevented from imposing such taxes. If a city was trying to make it less attractive to sell marijuana having

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a tax would provide a deterrent to someone from opening a dispensary in Wilsonville. Ordinance No. 748 is a preemptive "place saving" ordinance should Ballot Measure 91 pass in November. Council has the discretion to review or repeal any ordinance adopted.

Mr. Kohlhoff explained the Council will not have the opportunity to pass an ordinance imposing a tax on the sale of marijuana should Ballot Measure 91 pass in November. Such an ordinance cannot be adopted by emergency and would need 30 days after the second reading of the ordinance and adoption to become effective. That is why the second reading needs to be prior to October 6th. The deadline to adopt such a preemptive ordinance is November 4.

Councilor Goddard queried why the City would not look to the Attorney General's office for guidance on the issue.

Mr. Cosgrove held the City was not acting counter to the Attorney General's office, City Staff is saying if Council want the right to impose a tax on marijuana dispensaries the Council needs to pass the ordinance prior to the election.

Councilor Goddard questioned the appropriateness of applying a privilege tax on what would be an illegal business and why the City did not wait to let the voters decide. Then look to the Attorney General's office to provide guidance on what the State's position is going to be regarding defense of the state law with the Federal government or what cities can or cannot do to limit the transactions within their city limits.

Mr. Cosgrove explained the Council can do what Councilor Goddard spoke of; however, once the November election is completed the City cannot go back and decide to impose a tax.

Mr. Kohlhoff noted the State Attorney General has taken the position the State has the authority to go forward with the marijuana dispensary law; however, that has been called into question under the issue of Federal preemption. If Federal preemption does apply the whole dispensary law would be illegal. Secondly, an employment case is being appealed to the Court of Appeals who held there was Federal preemption and there was no right to use medical marijuana in an employment area. In Southern Oregon the Circuit Court upheld against the State of Oregon under the Federal Substance Abuse Act the city's ability to disallow medical marijuana dispensaries. There is the dueling law and how it is being enforced which clouds the issue; however, Ordinance No. 748 is being provided as an alternative to have the authority to impose the tax.

Councilor Fitzgerald clarified once Ballot Measure 91 passes, Section 42 of the Ballot Measure declares that only the state has the right to tax marijuana. It would be the same taxing situation as alcohol and tobacco wherein the city would not be able to impose a Wilsonville tax on those two products. But, at the moment the city is not preempted from imposing a city tax on marijuana. The Councilor noted marijuana is still a federally controlled substance and to change that status would need an act of congress; because of that fact the banking system is still not authorized to accept cash from dispensaries.

**CITY OF WILSONVILLE
CITY COUNCIL MEETING MINUTES**

Mr. Cosgrove thought Colorado, the frontrunner on the matter, has found a way to accept cash from marijuana dispensaries and still meet the federal regulations. He would provide additional information to the Council on that side of the topic.

Mayor Knapp invited public testimony.

Peter Deklaver, 8550 Ash Meadows Road, thought there are pros and cons to marijuana use, and the tax would discourage the sale of marijuana in the City. He wanted to know how the ordinance could be repealed or whether a sunset clause could be added should Measure 91 not pass.

Staff advised if the Measure did not pass this time it most likely would in two years, and cities would find themselves in the same position. It would take a simple ordinance to repeal Ordinance No. 748 should a future Council want to do so.

Mayor Knapp closed the public hearing at 8 p.m.

Motion: Councilor Fitzgerald moved to approve Ordinance No. 748 on first reading. Councilor Stevens seconded the motion.

Councilor Fitzgerald moved the ordinance because she thought it was a good option to have available and provides an option on the way marijuana is being managed in the state. There are a lot of unknowns, and this ordinance allows the option of imposing the tax if necessary.

Councilor Stevens agreed it is an opportunity and option; whatever the Council wants to do afterwards can be decided later.

Councilor Goddard took the position that rather than imposing a privilege tax on legal businesses for the purpose of shifting that business to another community, the Council should let voters decide in November. If the law does not provide sufficient guidance to cities then they should look to the Attorney General's office for legal direction.

Mayor Knapp stated the Mayors' Ad Hoc group discussed the issue and ordinances were being adopted in Hillsboro, Gresham, Tigard and Tualatin. He suggested in the absence of taking an action in Wilsonville those other cities will be shifting those businesses from their jurisdictions into Wilsonville. The Mayor heard Gresham may be considering enacting an ordinance with a zero percent tax rate because they have the option to modify an existing ordinance at a later date. Other cities are considering a one hundred percent tax as a discouragement to anyone who wanted to sell in their city. The question is whether the City can maintain autonomy to make decisions after the scenarios become clear. The League of Cities argues that under Home Rule Charter cities have a right to prohibit medical marijuana dispensaries even if Measure 91 passes; however, this is not a certainty. There is a valid argument that imposing a tax mitigates future costs of setting up licensing, inspection and enforcement programs. The Mayor asked if there would be home based businesses should the Measure become legal.

**CITY OF WILSONVILLE
CITY COUNCIL MEETING MINUTES**

Mr. Cosgrove said there are requirements placed on home occupations to mitigate the impact on surrounding residences. Staff is reviewing the City's zoning regulations to locate dispensaries in reasonable places.

Staff stated in states where marijuana is legal, those states set up regulations on where those products can be sold, similar to the OLCC licensing. In addition to reasonable zoning regulations there are reasonable nuisance regulations.

Mr. Cosgrove indicated the public hearing should remain open to receive public comment at the special Council meeting of September 29, 2014.

Mr. Kohlhoff suggested adding to the motion on first reading the phrase "to leave the record open to continue to receive public comment and written testimony until the meeting of September 29, 2014 at 5:30 p.m."

Amended Motion: Councilor Fitzgerald amended her motion to reflect the suggestion of the City Manager to keep the record open and receive public testimony for further comments until the meeting on September 29th at 5:30 p.m. Councilor Stevens agreed with the amendment.

Vote: Motion carried 4-0

A special meeting for the second reading of Ordinance No. 748 has been set for September 29 at 5:30 p.m.

CITY MANAGER'S BUSINESS

Mr. Cosgrove invited Justin Carpenter from Scout Troop 194, to talk about his progress to becoming an Eagle Scout. Mr. Carpenter stated attending a Council meeting was one requirement for receiving the Communications Badge.

LEGAL BUSINESS - There was no report.

ADJOURN

Mayor Knapp adjourned the Council meeting at 8:16 p.m.

Respectfully submitted,

Sandra C. King, MMC, City Recorder

ATTEST:

Tim Knapp, Mayor


**CITY COUNCIL MEETING
 STAFF REPORT**

Meeting Date: October 6, 2014	Subject: Ordinance No. 749 Dog Control Staff Member: Barbara Jacobson and Chief Jeff Smith Department: Legal	
Action Required <input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input checked="" type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input type="checkbox"/> Resolution <input type="checkbox"/> Information or Direction <input type="checkbox"/> Information Only <input checked="" type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda	Advisory Board/Commission Recommendation <input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input checked="" type="checkbox"/> Not Applicable Comments:	
Staff Recommendation: N/A		
Recommended Language for Motion: I move to approve Ordinance No. 749 on first reading.		
PROJECT / ISSUE RELATES TO: <i>[Identify which goal(s), master plans(s) issue relates to.]</i>		
<input type="checkbox"/> Council Goals/Priorities	<input type="checkbox"/> Adopted Master Plan(s)	<input checked="" type="checkbox"/> Not Applicable

ISSUE BEFORE COUNCIL:

The issue before City Council is as follows: Whether to adopt the amended Clackamas County Dog Control Ordinance, containing 2014 amendments intended to more precisely address what constitutes excessive dog barking, for which a dog owner may be cited, as well as provide clarification to some definitional terms. See new language, attached hereto as **Exhibit A**. The Clackamas County Sheriff has requested that the City re-adopt the revised Ordinance which contains the changes, as attached hereto, in order to give Clackamas County law enforcement the authority to enforce these new provisions in Wilsonville.

EXECUTIVE SUMMARY:

In 2006, the City adopted the Clackamas County Dog Control Ordinance pursuant to Resolution No. 1977, which contained provisions to address barking dogs. Since adoption, the combination of funding cutback and an unclear definition of what constitutes a continuous barking dog offence have hindered law enforcement officials from enforcing the dog barking portion of the Clackamas County Dog Control Ordinance. As a result, in 2014 Clackamas County amended that Ordinance to more clearly define when a dog's barking constitutes a continuous annoyance that is a citable offense in terms of time and frequency. The Clackamas County Sheriff has therefore asked the City of Wilsonville to re-adopt the Ordinance to incorporate these new amendments. All changes except those related to continuous annoyance (barking dogs) are effective as of October 29, 2014. Changes related to the barking dogs offense, are effective as of January 5, 2015. As with the recently enacted changes to the City's Code regarding leash and scooping, Ordinance No. 737, the Police Chief has stated that the deputies will be instructed to start with warnings and education of the public before issuing any citations and imposing the related fines. Finally, the Ordinance provides that future amendments to the Clackamas County Dog Control Ordinance may be adopted pursuant to Resolution in lieu of the more cumbersome and protracted Ordinance process.

EXPECTED RESULTS:

The proposed Ordinance is expected to give law enforcement clearer authority to address continuing barking dog complaints.

TIMELINE:

Immediate, although the primary changes to the Clackamas County Ordinance will not actually go into effect until January 5, 2015.

CURRENT YEAR BUDGET IMPACTS: None.

FINANCIAL REVIEW / COMMENTS:

Reviewed by: CAR Date: _____

LEGAL REVIEW / COMMENT:

Reviewed by: MEK Date: 9/22/14

The legal department provides this Ordinance in concert with the Chief of Police.

COMMUNITY INVOLVEMENT PROCESS:

None, other than the Ordinance First Reading process.

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY:

The goal is that this Ordinance will help to make the community a quieter place for people and pets.

ALTERNATIVES:

The Council has the following options for consideration of this Ordinance:

- 1) To approve Ordinance No. 749, as written;

- 2) To not approve Ordinance No. 749, thereby not adopting the recent changes to the Clackamas County Dog Control Ordinance.

Option 1 is the recommended option based on citizen complaints and lack of enforcement ability under the Code, as previously written. This change will give Wilsonville officers the ability to educate the public and to enforce the Ordinance, if education fails.

CITY MANAGER COMMENT:

ATTACHMENTS

- A. Clackamas County Code, Title 5
- B. Ordinance No. 749

ORDINANCE NO. 749

AN ORDINANCE OF THE CITY OF WILSONVILLE AMENDING CHAPTER 10 OF THE WILSONVILLE CODE BY AMENDING SECTION 10.240 CONTROL OF DOGS TO ADOPT 2014 CHANGES TO CLACKAMAS COUNTY CODE 5.01

WHEREAS, on October 4, 2010, pursuant to City Council Resolution No. 2255, the City granted consent to Clackamas County to administer the County's dog control and licensing ordinance, Clackamas County Code Chapter 5.01, within the City; and

WHEREAS, the foregoing consent remains in place but Clackamas County recently amended Chapter 5.01 to, among other things, add new provisions regarding control of barking dogs, which is an ongoing issue in the County and the City; and

WHEREAS, the City is in concurrence with the above-referenced changes, a copy of which changes are attached hereto and incorporated by reference herein; and

WHEREAS, to assist Wilsonville law enforcement officers in educating the public and in enforcing responsible dog control, as warranted, the City believes it in the best interest of the public for the City to continue to allow Clackamas County law enforcement to enforce Chapter 5.01 within the City;

NOW THEREFORE, THE CITY OF WILSONVILLE ORDAINS AS FOLLOWS:

1. **Chapter 10 ANIMALS** is hereby amended by adding the following:

Section 10.240(5) (amended text is shown in *italics*).

“(5) Additional provisions concerning Control of Dogs, as set forth in Clackamas County Code Chapter 5.01, *as amended in 2014*, will continue to apply, are enforceable within the City, and are incorporated by reference herein. *Future amendments to Section 5.01 may be approved for enforcement within the City by Resolution of the City Council.*”

2. The City Recorder is directed to amend Wilsonville Code **Section 10**, as approved above.
3. Except as set forth above, **Section 10** of the Wilsonville City Code remains in full force and effect, as written.

SUBMITTED to the Wilsonville City Council and read for the first time at a meeting thereof on the 6th day of October, 2014, and scheduled for second reading on _____, commencing at the hour of 7 p.m. at the Wilsonville City Hall, 29799 SW Town Center Loop East, Wilsonville, Oregon.

Sandra C. King, MMC, City Recorder

ENACTED by the City Council on the ____ day of _____, 2014, by the following votes: Yes: ____ No: ____

Sandra C. King, MMC, City Recorder

DATED and signed by the Mayor this ____ day of _____, 2014.

TIM KNAPP, MAYOR

SUMMARY OF VOTES:

Mayor Knapp
Council President Starr
Councilor Goddard
Councilor Fitzgerald
Councilor Stevens

Attachments: Clackamas County Code, Title 5

TITLE 5
ANIMALS
Summary

5.01 ANIMAL LICENSING, SERVICES AND ENFORCEMENT.....1

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TITLE 5
ANIMALS

5.01 <u>ANIMAL LICENSING, SERVICES AND ENFORCEMENT</u>.....	1
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Chapter 5.01

5.01 ANIMAL LICENSING, SERVICES AND ENFORCEMENT

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5.01.010 Enactment; Authority

The County is authorized by Oregon Revised Statutes (ORS) 203.035 to regulate matters of County concern. The Board of County Commissioners finds that dog licensing and services within the County is a matter of County concern that impacts the health and safety of the people of Clackamas County. ORS 609.015, ORS 609.135 and ORS 153.030 recognize the authority of the County to enact and enforce regulations and procedures that vary from related state law provisions. The Board of County Commissioners adopts the following dog licensing and services regulations and procedures pursuant to ORS 203.035. Matters that concern crimes of abuse, neglect, or abandonment of dogs and other animals regulated by this code will be investigated and prosecuted under state law. [Codified by Ord. 05-2000, 7/13/00; Amended by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10]

5.01.020 Definitions; Exclusions; Fines and Fees

A. Definitions. Terms used but not defined shall have their plain meaning.

1. ANIMAL means any nonhuman mammal, bird, reptile, amphibian or fish as defined in ORS 167.310 or ORS 167.374.
2. ANIMAL RESCUE ENTITY means an individual or organization, including but not limited to an animal control agency, humane society, animal shelter, animal sanctuary or boarding kennel not subject to ORS 167.374, but excluding a veterinary facility, that keeps, houses, and maintains in its custody 10 or more animals and that solicits or accepts donations in any form.
3. BITE, BITING, BITTEN means the breaking of the skin of a person, domestic animal, or livestock by the teeth of a dog.
4. CONDITIONAL RELEASE means a security or non-security release of an impounded dog which imposes regulations and conditions on the activities and keeping of the dog pending final disposition of a violation of this chapter, including appeal.
5. CONTINUOUS ANNOYANCE means any dog that unreasonably causes annoyance, alarm or noise disturbance to any person by barking, whining, screeching, howling or making other sounds which may be heard beyond the boundary of the owner's or keeper's property, either as an episode of continuous noise lasting for a minimum period of thirty (30) minutes or repeated episodes of intermittent noise lasting for a minimum period of 45 minutes within a 24-hour period.
6. COSTS mean any monetary assessment, other than fines and fees ordered by a Hearings Officer, including but not limited to, costs for veterinarian care, restitution, prosecution and attorney fees.
7. DANGEROUS DOG means any dog that menaces, bites, injures or kills a person, domestic animal, or livestock.

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TITLE 5 - 2

8.	DOG means the common dog (<i>Canis familiaris</i>) and <u>also includes</u> any animal claimed by its owner to be a wolf-hybrid unless the owner provides written verification from a licensed veterinarian that the animal is a wolf-hybrid and not a dog.	Deleted: 5
9.	DOG AT LARGE means a dog that is off or outside the dog owner's property and not under the immediate control of a person.	Deleted: 6
10.	DOG OWNER means the following, however any presumption of ownership raised in this section may be rebutted by proof to the contrary:	Deleted: 7
	a. Any person in whose name a dog license has been issued;	
	b. Any person who has a possessory property right in a dog;	
	c. Any person who without regard to any ownership interest, shelters a dog or has a dog in that person's care, possession, custody or control, or knowingly permits a dog to remain on property occupied by that person for more than 30 days,	Deleted: In a family situation the adult head(s) of household shall be jointly and severally presumed to be the owner(s). d.
	d. In all three circumstances described above, it is understood that in a family situation the adult head(s) of household shall be jointly and severally presumed to be the owner(s).	Deleted: who Deleted: who Deleted: shall be presumed to be the owner
11.	DOG SERVICES means Clackamas County Dog Services.	Deleted: 8
12.	DOG SERVICES OFFICER means a person employed by or contracting with Clackamas County who is authorized to investigate violations and issue citations as provided in this chapter.	Deleted: 9
13.	DOMESTIC ANIMAL means any nonhuman mammal, bird, reptile, amphibian or fish as defined in ORS 167.310.	Deleted: 0 Deleted: has the meaning provided
14.	ENFORCING AGENCY means Clackamas County.	
15.	EUTHANASIA means the putting to death of an animal in any humane manner permitted under ORS 609.405.	Deleted: 1 Deleted: of a dog
16.	EXPENSES mean expenditures incurred by Dog Services during impoundment, keeping and disposition of a dog.	Deleted: 2
17.	HEARINGS OFFICER means any authority appointed by the Board of County Commissioners to hear and determine violations of this chapter.	Deleted: 3
18.	IMPOUND means taking physical or constructive custody of a dog. A dog shall be considered impounded from the time Dog Services staff or a peace officer takes physical custody of the dog or serves an owner with a Notice of Impound and Conditional Release in accordance with this chapter.	Deleted: 4
19.	LIVESTOCK has the meaning provided in ORS 609.125.	Deleted: 5
20.	MANAGER means the Clackamas County Dog Services Manager or his/her designee.	Deleted: 16
21.	MENACE means lunging, growling, snarling, chasing, attacking, or other behavior by a dog that would cause a reasonable person to fear for the person's safety, the safety of another person or the safety of a domestic animal or livestock.	Deleted: 17
22.	MINIMUM CARE means <u>care sufficient to preserve the health and well-being of a dog and, except for emergencies or circumstances beyond the reasonable control of the owner, includes but is not limited to, each of the following requirements:</u>	Deleted: 18 Deleted: but is not limited to, Deleted: food Deleted: maintain Deleted: dog's
	a. Food of sufficient quantity and quality to allow for normal growth or maintenance of body weight.	

TITLE 5 - 3

- b. Open or adequate access to potable water in sufficient quantity to satisfy the dogs' needs. Access to snow or ice is not adequate access to potable water.
- c. Access to adequate shelter. For a dog other than one engaged in herding or protecting livestock, this requires access to a barn, dog house or other enclosed structure sufficient to protect the animal from wind, rain, snow or sun with adequate bedding to protect against cold and dampness.
- d. Access to adequate bedding, which is defined as bedding of sufficient quantity and quality to permit a dog to remain dry and reasonably clean and to maintain a normal body temperature.
- e. Veterinary care deemed necessary by a reasonably prudent person to relieve the dog's distress from injury, neglect or disease.
- f. Continuous access to an area:
- with adequate space for exercise necessary for the health of the dog;
 - with air temperature suitable for the dog; and
 - that is kept reasonably clean and free from excess waste or other contaminants that could affect the dog's health.
23. PEACE OFFICER has the meaning provided in ORS 161.015.
24. PHYSICAL INJURY has the meaning provided in ORS 167.310.
25. SECURE ENCLOSURE means any of the following:
- A fully fenced pen, kennel or structure that is in compliance with applicable County codes, that will remain locked with a padlock or combination lock, and which has secure sides at least five feet high. The County may also require that the structure have a secure top and/or floor attached to the sides, or require that the sides be embedded in the ground no less than one foot; or
 - A house or garage that has latched doors kept in good repair to prevent the escape of the dog. A house, garage, patio, porch or any part of the house is not a secure enclosure if the structure would allow the dog to exit the structure of its own will; or
 - For a dangerous dog, a fully fenced pen, kennel or structure at least six feet in height that is either anchored beneath the ground or is in concrete and which prevents the dog from digging under it. The enclosure must be of a design that prevents entry of children or unauthorized persons and also prevents those persons from extending an arm or leg inside the enclosure. The enclosure must remain locked with a padlock or combination lock when occupied by the dog. A County approved sign must remain posted at all entry points of the dog owner's property that informs both children and adults that the dog is dangerous.
26. TETHERING means to restrain a dog by tying the dog to any object or structure by any means. Tethering does not include using a handheld leash for the purpose of walking a dog.
27. VIOLATION means any violation of this chapter for which a fine, condition, restriction, or other sanction may be imposed.
28. WOLF-HYBRID means an animal that is either the result of cross-breeding a purebred wolf and a dog, an existing wolf-hybrid with a dog, or any dog declared by its owner to be a wolf-hybrid. A wolf-hybrid will be considered to
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- Deleted:** 19 MULTIPLE DWELLING means any building or portion thereof that is designed, built, rented, leased, let or hired out to be occupied, or which is occupied as the home or residence of two or more families living independently of each other in separate units
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be a dog under this chapter unless the owner provides written verification from a licensed veterinarian that the animal is a wolf-hybrid and not a dog.

B. Exclusions.

This chapter does not regulate kennel operators or pet shop owners who for a period of not more than 90 days maintain on their property dogs owned by other persons.

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C. Fines and Fees.

All fines and fees associated with this chapter shall be set by the Board of County Commissioners.

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[Codified by Ord. 05-2000, 7/13/00; Amended by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10]

5.01.030 Licensing; Vaccinations

A. License.

1. Individual Dog License.

- a. A person must be at least 18 years old to obtain a license for a dog.
- b. Every dog owner shall license a dog by the time the dog has a set of permanent canine teeth or is six months old, whichever comes first, or within thirty (30) days of acquiring the dog.
- c. A dog owner who has moved to Clackamas County and does not have a current dog license from another Oregon city or county, shall obtain a dog license within thirty (30) days of moving into Clackamas County unless the dog has not yet reached six months of age. A dog with a current dog license from another Oregon city or county shall not require licensing under this chapter until expiration of the current license, if within thirty (30) days of moving into Clackamas County the owner notifies Dog Services of the dog's description, license number, city or county of issuance, and Clackamas County address.
- d. A dog license is not transferable to another dog. The license number shall be assigned to the particular dog and shall remain with that dog for the life of the dog.

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2. Multiple Dog License.

- a. Qualification; Application; Inspection. When an owner has more than one dog, the owner may obtain or renew a multiple dog license after submitting a completed, qualifying Multiple Dog License Application and after either 1) submitting an inspection certification from a veterinarian licensed in the state of Oregon; or 2) a County inspection of the applicant's premises to determine that the owner is in compliance with minimum care standards as provided by this chapter.
- b. Denial. Causes for denial of a multiple dog license application may include, but are not limited to, denial for any person currently under active investigation or prosecution for any animal-related crime, persons under parole or probation following a conviction for any animal-related crime, or any person for which ownership, keeping or responsibility for animals would be a violation of any rule, regulation or law, either civil or criminal.
- c. Transfer. A multiple dog license may be transferred to another holder with prior written approval of Clackamas County, provided that the

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transferee qualifies to hold the license in all ways that an applicant for a new multiple dog license must qualify.

- d. Appeal of Denial of Multiple Dog License. An owner may appeal the denial or a new multiple dog license or denial of a transfer of a multiple dog license to a Hearings Officer by delivering a written request to Dog Services within seven (7) days of the mailing date of the written notice denying the license. A hearing will follow the same procedures set forth in this chapter for a hearing on a violation, except that the burden of proof will be on the owner to prove that the denial was improper.
 - e. Land Use Approval. Issuance of a multiple dog license does not constitute approval of a particular land use or indicate compliance with any zoning or land use planning restrictions that may apply. Applicant may be required to demonstrate compliance with city or county zoning or land use planning restrictions prior to issuance.
 - f. To ensure that minimum care standards are continually being met, an owner can either 1) submit an inspection certification from a veterinarian licenses in the state of Oregon or 2) allow a County inspection of the premises to determine that the owner is in compliance with the minimum care standards as provided for by this chapter.
3. Licensing of Animal Rescue Entities:
- a. Licensing Requirement. An animal rescue entity shall comply with the following license requirements:
 - i. Obtain a license issued by the enforcing agency in accordance with this section; and
 - ii. Pay a reasonable fee for a license or an annual renewal of the license.
 - b. Issuance and Renewal of License. The enforcing agency may not issue or renew a license under this section unless the animal rescue entity demonstrates it is in compliance with this chapter and with applicable state and local law.
 - c. Record Keeping. An animal rescue entity shall maintain a record for each animal that identifies:
 - i. The animal's date of birth or, if the date of birth is unknown, the animal's approximate age;
 - ii. The date possession, control or charge of the animal was acquired and the source of the animal;
 - iii. The number of offspring the animal has produced, if applicable;
 - iv. The disposition of each animal, including the date of disposition, manner of disposition, and the name and address for any individual or organization taking possession, control or charge of an animal;
 - v. Sex, breed type and weight of the animal at intake; and
 - vi. A photograph of the animal taken within 24 hours of intake.
 - d. Inspections. The following inspections of animal rescue entities by the enforcing agency shall be permitted:
 - i. Inspection of the records required by this section.
 - ii. Furnish reports and information required by Section 5.01.030(C)(1)-(6) and by state and local law.

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- iii. Conduct an on-site investigation of the premises whenever the enforcing agency has reason to believe that the animal rescue entity is operating without a license. The purpose of an investigation under this section is to determine whether the animal rescue entity is subject to the requirements of this chapter.
- iv. At any reasonable time, an on-site investigation of the premises may be conducted to determine whether the animal rescue entity is in compliance with this section.
- v. An on-site investigation if a credible and serious complaint has been received that the animal rescue entity has failed to comply with the requirements of this section. The investigation shall be limited to determining if the animal rescue entity has failed to comply with the requirements of this chapter.
- vi. If during the course of an inspection made under this section, the enforcing agency finds evidence of animal cruelty in violation of ORS 167.310 to 167.351, 167.355 or 167.360 to 167.372, the enforcing agency shall seize the evidence and report the violation to law enforcement.
- e. Transfer of License. An animal rescue entity may transfer a license issued under this section to another person with the written consent of the enforcing agency, provided that the transferee otherwise qualifies to be licensed as an animal rescue entity and does not have a certified unpaid debt to the state. The transferee shall submit a signed release to the enforcing agency permitting the performance of a background investigation of the transferee, and the enforcing agency shall conduct the background investigation.
- f. Violations. A violation of any provision in this section may be prosecuted by the enforcing agency, as provided by section 5.01.070 of this chapter, and may result in the imposition of fines and civil penalties, or other restrictions or remedies as provided in this chapter.

B. Dog Rabies Vaccination

1. Individual or multiple dog licenses will not be issued without evidence of one of the following for each dog to be licensed:
 - a. A rabies vaccination certificate issued by a licensed veterinarian that is valid for the license period; or,
 - b. A written statement signed by a licensed veterinarian stating that for medical reasons the rabies vaccination cannot be administered to the dog.
2. A dog that does not have proof of a current rabies vaccination, exemption from vaccination, or current Oregon county or city license, shall be apprehended and impounded at the owner's expense.
3. A veterinarian performing a rabies vaccination of any dog must transmit a copy of the vaccination certificate or written documentation that includes information contained on the certificate to Dog Services within 30 days of the vaccination. In the alternative, a veterinarian may issue a dog license in accordance with the rules adopted by this Chapter, and submit proof of license to Dog Services within 30 days of the vaccination.

C. License Term; Renewal; Fine

1. A license will be valid for one, two or three years from the date of issuance at the option of the dog owner, based on the license fee paid by the owner, and requires a rabies vaccination certificate for the licensing period.
2. Renewal of a license shall not be due until the last day of the month in which the license expires. If a person fails to renew a license prior to its expiration date, a fine may be assessed at the time the license is renewed.

D. Identification Tags.

1. At the time an individual dog license is issued, the County will issue a free identification tag that is to be fastened to a collar or harness and kept on the dog at all times when the dog is not in the immediate possession of the owner.
2. When a multiple dog license is issued, the owner may obtain identification tags for each dog in his possession upon payment of a fee.
3. If a dog license tag is lost, the owner may obtain a duplicate tag from Dog Services upon payment of a fee.

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E. License Fees Exemptions.

1. No license fee will be required for the following:
 - a. Any dog that meets the definition of an "assistance animal" as defined in ORS 346.680, provided that the license applicant has filed a statement with Dog Services indicating that the dog is an "assistance animal" for a person who has a physical impairment in one or more of their daily life activities and resides in the applicant's household.
 - b. Any dog in training to be an "assistance animal" as defined in ORS 346.680, in affiliation with a recognized organization for the training or placement of assistance animals, provided the trainer files a statement with Dog Services verifying that the dog is an assistance animal.

[Codified by Ord. 05-2000, 7/13/00; Amended by Ord. 05-2003, 3/13/03; Amended by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10; Amended by Ord. 08-2012, 8/2/12]

5.01.040 Control of Dogs

- A. Duties of Owners. For the purposes of this chapter, a dog owner is responsible for the behavior of the dog regardless of whether the owner or another person allowed the dog to engage in the behavior that is the subject of the violation.

B. Violations.

1. It is unlawful to permit a dog to be a public nuisance. A dog is a public nuisance if it:
 - a. Menaces, bites, injures or kills a person, domestic animal, or livestock. It is a defense to this section if the dog engages in such behavior as a result of a person wrongfully assaulting the dog or owner, or other similar provocation, or when the dog's behavior was directed towards a trespasser or other extenuating circumstances that establishes that the dog does not constitute an unreasonable risk to life or property;
 - b. Is a dog at large. It is a defense to this section that the dog was a working dog wearing a locating device and temporarily separated from the person in control of the dog;
 - c. Chases a vehicle while off the dog owner's property;
 - d. Damages or destroys property of another person while off the dog owner's property;
 - e. Scatters garbage while off the dog owner's property;

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- f. Is a female in heat (estrus) and is a dog at large.
2. It is unlawful to fail to comply with the requirements of this chapter that apply to keeping a dangerous dog.
 3. It is unlawful to permit any dog to leave the confines of any prescribed quarantine area and/or fail to comply with any other condition of quarantine.
 4. It is unlawful to interfere with an identified County employee or peace officer who is enforcing any provision of this chapter by intentionally acting in any manner that prevents, or attempts to prevent, a County employee or peace officer from performing their lawful duties.
 5. It is unlawful to knowingly provide false information to a County employee or peace officer enforcing any provision of this chapter.
 6. It is unlawful to permit a dog to be confined within a motor vehicle at any location under such conditions as may endanger the health or well-being of the dog.
 7. It is unlawful to permit a dog to be unrestrained in an open portion of a vehicle.
 8. It is unlawful to fail to reclaim an impounded dog.
 9. It is unlawful to fail to comply with any fine, fee, cost, expense, condition, restriction or other order imposed by a Hearings Officer under this chapter.
 10. It is unlawful to fail to surrender a dog for apprehension to the County when required by this chapter.
 11. It is unlawful to fail to license a dog or renew a license as required by this chapter.
 12. It is unlawful for an owner to fail to immediately notify Dog Services when the owner's dog has bitten a person, domestic animal or livestock.
 13. It is unlawful to keep a dog in a manner that does not meet minimum care standards of this chapter.
 14. It is unlawful to fail to maintain a current rabies vaccination.
 15. It is unlawful for a person who has been bitten by a dog, or a parent/guardian of a bitten minor, to fail to immediately notify Dog Services when required by this chapter.
 16. It is unlawful for a dog owner to fail to follow any condition of release pending final disposition of a violation of this chapter, including appeal.
 17. It is unlawful to permit any dog to cause continuous annoyance as defined in Section 5.01.020(5).
 18. It is unlawful to permit any dog to be tethered in any manner as provided below:
 - a. with a tether that is not a reasonable length given the size of the dog and available space and that allows the dog to become entangled in a manner that risks the dog's health or safety;
 - b. with a collar that pinches or chokes the dog when pulled;
 - c. for more than 10 hours in a 24-hour period;
 - d. for more than 15 hours in a 24-hour period if the tether is attached to a runner, pulley or trolley system;It is not a violation of this section if for any dog to be tethered:
 - e. while the dog remains in the physical presence of the person who owns, controls or otherwise has charge of the dog;
 - f. pursuant to the requirements of a campground or other recreational area;
 - g. for the purpose of engaging in an activity that requires licensure in this state, including but not limited to hunting;
 - h. to allow transport of the dog; or

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- i. if the dog is kept for herding, protecting livestock or dog sledding.
19. It is a violation for a veterinarian performing a rabies vaccination on a dog to fail to report the rabies vaccination as provided in 5.01.030(B)(3).
20. It is unlawful to operate an animal rescue entity without proper licensing and compliance with requirements outlined in 5.01.030(A)(3).

C. **Lost Dogs; Duties of Finders.** Any person who finds and shelters a dog without knowing the dog owner's identity shall be subject to the responsibilities provided in ORS 98.005, ORS 98.025 and ORS 609.100.

[Codified by Ord. 05-2000, 7/13/00; Amended by Ord. 05-2003, 3/13/03; Amended by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10; Amended by Ord. 08-2012, 8/2/12]

Deleted: shall notify Dog Services within three days with a description of the dog. A finder may surrender the dog to Dog Services, or retain possession subject to surrender upon County request.

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5.01.050 Biting Dogs; Dangerous Dogs

A. **Reporting Biting Dogs.**

1. The owner of a dog that bites a person, domestic animal or livestock shall immediately notify Dog Services of the time and circumstances of the bite along with a description of the biting dog, its rabies vaccination status, the owner's name and address, and if known the name and address of the person who was bitten or the owner of the bitten domestic animal or livestock.
2. Any person who is bitten by a dog, is the parent/guardian of a bitten minor, or owns a domestic animal or livestock bitten by a dog shall immediately notify Dog Services of the time and circumstances of the bite along with his/her name and address, a description of the biting dog, and if known the name and address of the dog owner.

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B. **Quarantine of Biting Dogs.**

1. A dog suspected of biting a person will be quarantined at the owner's expense until the tenth day following the bite in accordance with state law.
2. At the discretion of the County, a dog that has proof of a current rabies vaccination, exemption from vaccination, or a current Oregon county or city license may be quarantined at the premises of a licensed veterinarian or at the premises of the owner providing the dog is kept within a secure enclosure or with approved restraint deemed adequate to prevent contact with any person or other animal, and is kept in accordance with any other conditions set by the County as permitted by this chapter or required by state law. It shall be a violation of this chapter if during home quarantine the dog leaves the confines of a prescribed quarantine area for any reason or otherwise violates the conditions of quarantine.
3. Dogs that have bitten a person and do not have proof of a current rabies vaccination, exemption from vaccination, or a current Oregon county or city license shall be apprehended and impounded as resources allow.

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C. **Dangerous Dogs.**

1. **Classification of Dog as a Dangerous Dog.** A dog may be classified by the Hearings Officer as a dangerous dog when it has menaced, bitten, chased, injured or killed any person, domestic animal or livestock.
2. **Notice of Classification; Hearing.**
- a. **Notice.** Prior to a dog being classified as dangerous, the owner shall have a right to a hearing before a Hearings Officer. The County shall send a Dangerous Dog Notice to the dog owner by certified mail or

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personal ~~service~~. If sent by mail, the date of mailing will be considered the date of service. The notice shall inform the owner of:

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- i. A description of the alleged incident and specific behavior that supports classification of the dog as dangerous.
- ii. The regulations that may be imposed following a dangerous dog classification, including the requirement of a dangerous dog certificate.
- iii. An opportunity to request a hearing.
- iv. Information that the dog owner must request a hearing within seven (7) days from the date of service by delivering a written request to Dog Services.
- v. Information that if the dog owner does not make a timely request for hearing, the dog owner shall be deemed to have waived his/her right to a hearing. Thereafter, following proof of sufficient evidence that the dog is dangerous, the Hearings Officer may so classify the dog and impose regulations consistent with this chapter.

b. Hearing.

- i. Following a timely request for hearing, the County will notify the dog owner and Hearings Officer of the date and time of the hearing. The hearing shall follow the procedures set forth in this chapter for a hearing on a violation.
- ii. The Hearings Officer may refrain from classifying a dog as dangerous upon a finding that the behavior was the result of a person wrongfully assaulting the dog or owner, or other similar provocation, or when the dog's behavior was directed towards a trespasser, or other extenuating circumstances that establishes that the dog does not constitute an unreasonable risk to life or property.
- iii. A hearing on classification of a dangerous dog may be consolidated with a hearing on any underlying violation for which the dog owner has been cited.

3. Regulation of Dangerous Dogs; Microchip Identification. When a dog has been classified as dangerous, the dog shall be microchip identified at Dog Services at the expense of the owner, as provided in ORS 609.168. In addition, a Hearings Officer may order the following regulations:

- a. That the dog be kept in a secure enclosure;
- b. That the dog owner obtain and maintain proof of public liability insurance;
- c. That the dog owner not permit the dog to be off the owner's premises unless the dog is muzzled and restrained by an adequate leash and under the control of a competent person;
- d. That the dog owner successfully complete a County approved pet ownership program;
- e. That the dog successfully complete obedience training certified by the American Temperament Testing Society or other similar County approved program;
- f. That the dog be spayed or neutered;

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- g. After consideration of the factors set forth in ORS 609.093, require euthanasia when a dog has bitten or killed a person, domestic animal, or livestock. The Hearings Officer may also consider the public nuisance violation history of the dog and owner to include all known determinations by any court, governing body, official or agency of any local or state government without regard to where or when the incident occurred.
4. Certificate of Registration; Secure Enclosure; Notice to New Owner
- a. Certificate of Registration. Within seven (7) days after a dog has been classified as dangerous, the owner must license the dog, if not already licensed, and obtain a dangerous dog certificate of registration to be renewed annually until the dog is declassified or dies. The County will only issue certificates of registration and renewals to persons who are at least 18 years of age and who present sufficient evidence of:
- i. A rabies vaccination certificate which will remain in effect for at least one year from the date the certificate of registration is issued;
 - ii. A secure enclosure to confine the dangerous dog;
 - iii. A clearly visible County-approved warning sign to be posted and remain at all entry points of the owner's property that informs both children and adults that the dog is dangerous;
 - iv. Microchip identification as provided in ORS 609.168; and,
 - v. Payment of an annual dangerous dog registration fee.
- b. Secure Enclosure. The owner of a dog classified as dangerous shall confine the dog in a secure enclosure. The owner must immediately notify Dog Services when a dangerous dog is at large, or has bitten a person, domestic animal or livestock. A dangerous dog shall not be permitted to leave the confines of a secure enclosure unless the dog is muzzled and restrained by an adequate chain or leash and under control of a competent person.
- c. Notice to New Owner. Prior to a dangerous dog being sold or given away, the owner shall provide notice to the new owner that the dog has been classified as a dangerous dog and provide the County with the name, address and telephone number of the new owner whether or not the new owner resides in Clackamas County. If the new owner resides in Clackamas County, he/she must comply with all dangerous dog regulations imposed unless and until the dog is declassified or dies.
5. Declassification of Dangerous Dog.
- a. Declassification. Following an owner's written request, the County may declassify a dog as dangerous and terminate the regulations ordered at the time of classification, except for microchip identification and secure enclosure, when the following conditions have been met:
- i. For two years from the date of classification the dog has had no further incidents of behavior that would make it a dangerous dog;
 - ii. For two years from the date of classification there have been no violations of the regulations imposed;
 - iii. The dog owner has obtained a certificate of satisfactory completion of obedience training for the classified dog.
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- b. **Appeal of Declassification Denial.** A dog owner may appeal to a Hearings Officer the denial of a request to declassify a dangerous dog by delivering a written request for appeal to Dog Services within seven (7) days of the mailing date of the County's written notice denying declassification.
- i. The County's written denial shall include information on how the dog owner may appeal the denial.
 - ii. On appeal the Hearings Officer shall determine whether the dog meets the criteria for declassification and shall either uphold the County's denial or order declassification.

[Codified by Ord. 05-2000, 7/13/00; Amended by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10]

5.01.060 Impoundment; Release; Adoption

A. Impoundment

1. Any Dog Services Officer or peace officer may impound an animal that is in violation of this chapter, or when a Dog Services Officer or peace officer reasonably believes the animal requires medical assistance or care, or when ordered by a court or Hearings Officer.
2. If a person refuses to allow a Dog Services Officer or peace officer to enter the premises to apprehend and impound an animal as authorized by this chapter, the County may request the assistance of the local law enforcement official to obtain and execute a search warrant as authorized by law to search for and seize the animal subject to impound.
3. Any Dog Services Officer or peace officer is authorized to remove the animal from a motor vehicle to apprehend and impound the animal when the officer reasonably believes it is confined in a manner that endangers its health or well-being, including but not limited to dangerous temperature, lack of food, water or attention. A written notice of impoundment will be left on or in the vehicle with information on how to reclaim the animal.
4. Any person may immediately apprehend and hold for impoundment any animal that has trespassed upon the property of that person or another in violation of this chapter, or has menaced, bitten, injured or killed a person, domestic animal, or livestock.
5. Animals other than dogs that are seized by Dog Services Officers will be taken to facilities that are appropriate for the holding or keeping of those animals. Release of such animals will be subject to State law as well as any rules or procedures for the facility where the animal is being kept.

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B. Impound Holding Periods. Unless otherwise provided in this chapter or reclaimed sooner by the owner, dogs that have been impounded will be held for the following minimum time periods;

1. Dogs not wearing a license tag shall be held for at least three consecutive business days, not including the day of impoundment.
2. Dogs wearing a license tag shall be held for at least five consecutive business days, from the date of notification of impoundment. If notification is by mail, the date of mailing shall be considered the date of notification.

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C. Release of Animals Impounded, at County Dog Shelter; Conditional Release.

1. Release.

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- a. Release Prohibited. Unless otherwise ordered by a Hearings Officer or court of competent jurisdiction, an impounded dog may not be released until final disposition of any violation alleging that the dog has killed a person, or when a dog is pending classification or has been classified as a dangerous dog.
- b. Release Permitted. Unless prohibited by this chapter prior to final disposition of a violation or pending appeal, an impounded animal may be released subject to release conditions in subsection 5.01.060(C)(2)(a) and upon posting security in the amount equal to 50% of the base fine for each violation and payment of fees and costs owed to date including prior outstanding balances, except upon showing of good cause.
2. Conditional Release.
- a. Conditions. As permitted by this chapter pending final disposition of a violation or appeal, the County or Hearings Officer may conditionally release an impounded animal to its owner and may impose any of the following release conditions, including but not limited to a requirement that the animal owner:
- Obtain and provide proof of a rabies vaccination within a designated time, if applicable;
 - Provide proof of license within a designated time, if applicable;
 - Restrain the dog on the dog owner's property by means of a secure enclosure;
 - If the animal is a dog, control the dog on a leash that is no longer than six (6) feet, and at all times handled by an adult who is able to control the dog;
 - If the animal is a dog, muzzle the dog at all times when the dog is off the dog owner's property;
 - Obtain veterinary care for the animal within a designated time;
 - Comply with minimum care standards consistent with this chapter;
 - Keep the animal indoors during certain hours.
- b. Revocation of Conditional Release; Violation; Security Forfeited.
- Revocation. Upon reasonable ground to believe that a release condition has been violated, the County may revoke release, and apprehend and impound the subject animal pending final disposition of the underlying violation or appeal.
 - Violation. At the time of revocation the animal owner, or the owners, operators or managers of animal rescue entities shall be cited for failure to follow condition(s) of release. A hearing on revocation may be made in accordance with section 5.01.070 of this chapter and consolidated with a hearing on the underlying violation(s).
 - Security Forfeited. The security amount posted on conditional release shall be forfeited upon a finding that one or more conditions of release were violated or if no timely hearing is requested.
3. If a dog owner, or the owners, operators or managers of animal rescue entities, has been cited for a violation(s) of this chapter, and a Hearings Officer finds that
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no violation(s) occurred, then impoundment and board fees shall not be assessed until the first business day after notice of the Hearings Officer's Final Order.

4. An owner must reclaim an animal within five (5) business days after notice of a Hearings Officer's Final Order unless otherwise ordered or unless stayed by a court of competent jurisdiction.

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D. Failure to Reclaim.

1. If an owner fails to reclaim an animal as provided in this chapter, the animal will be deemed abandoned and shall become the property of the County without compensation paid to the owner.

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2. An owner that fails to reclaim an animal will be civilly liable to the County for all penalties, fines, fees, costs and expenses authorized by this chapter, which may be collected in the same manner as any other debt allowed by law.

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- E. Diseased or Injured Animal. A dog owner, or the owners, operators or managers of animal rescue entities shall be liable to the County for costs paid for medical treatment during impoundment. If the County determines an animal is seriously injured or seriously ill or its health condition causes a threat to public health or safety, the animal may be immediately euthanized without compensation paid to the owner.

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F. Release for Adoption.

1. Fees. Adoption fees will be assessed consistent with this chapter.
2. Standards. The Dog Services Manager shall have the authority to develop and enforce adoption policies and procedures.

[Codified by Ord. 05-2000, 7/13/00; Amended by Ord. 05-2003, 3/13/03; Amended by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10; Amended by Ord. 08-2012, 8/2/12]

5.01.070 Citation; Complaint; Hearing Process

A. Issuance of Citation.

1. Any Dog Services Officer or peace officer may issue and serve a dog owner, or the owners, operators or managers of animal rescue entities with a citation when there are reasonable grounds to believe that a violation of this chapter has occurred. The citation shall serve as the County's complaint and may include a fine that is payable to Clackamas County.
2. A citation shall be served by personal service or by certified mail with return receipt requested, no later than six (6) months from the date the alleged violation occurred. When mailed the date of mailing shall be considered the date of service. The failure of any person to receive notice properly given shall not invalidate or otherwise affect proceedings under this chapter.

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- B. Inspection and Investigation. In determining whether to issue a citation, a Dog Services Officer may request entry onto any real property in order to investigate a suspected violation of this chapter.

C. Form of Citation.

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1. The citation shall include:

- The name and address of the person cited;
- The date(s) the alleged violation(s) occurred;
- The number and title of the chapter section(s) violated;
- A description of the animal(s) involved;
- The base fine, to be equal to the minimum fine, along with the maximum fine for each violation as authorized by this chapter;

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- f. A statement providing notice of the penalties that could be imposed by the Hearings Officer, including penalties and keeping restrictions provided in Section 5.01.080 of this chapter.
- g. Whether appearance before a Hearings Officer is optional, or if mandatory, the date, time and place at which the person is to appear;
- h. The procedure for the person to follow to admit the violation and pay the fine, or to contest the citation and appear before a Hearings Officer;
- i. A statement that if the person fails to pay the fine within the time allowed, or fails to appear before the Hearings Officer when required, the person shall have waived his/her right to contest the citation and the Hearings Officer may enter a judgment against the person for an amount up to the maximum fine, in addition to any fees, costs or expenses, conditions or restrictions authorized by this chapter;
- j. A statement that when appearance before a Hearings Officer is mandatory the person cannot pay the fine in lieu of appearance.
2. An error in transcribing information into a citation, when determined by the Hearings Officer to be non-prejudicial to the defense of the cited person, may be corrected prior to or at the time of the hearing with notice to the cited person. Except as provided in this subsection, a citation that does not conform to the requirements of this section shall be set aside by the Hearings Officer upon motion of the cited person before any other proceedings at the hearing. Minor variations in the form of citation shall not be a basis for setting aside a citation. Nothing prohibits the Hearings Officer from amending a citation in the Hearings Officer's discretion.
- C. Response to Citation
1. Unless an appearance before a Hearings Officer is mandatory, a dog owner, or the owners, operators or managers of animal rescue entities who has received a citation may respond by:
- Appearing personally before the Hearings Officer on the cited appearance date and either admit or deny the violation; or
 - Prior to the appearance date return a signed copy of the citation to Dog Services admitting the violation, along with a check or money order payable to Clackamas County for the total base fine amount. Admission and payment does not relieve the dog owner, or the owners, operators or managers of animal rescue entities of the requirement to correct the violation; or
 - Prior to the appearance date, return a signed copy of the citation to Dog Services denying the violation and requesting a hearing. Dog Services will set a time and place for the hearing and notify the Hearings Officer, and the dog owner, or the owners, operators or managers of animal rescue entities.
2. **Mandatory Appearance.** Personal appearance before a Hearings Officer at the time and place indicated on the citation shall be mandatory:
- When a dog owner, or the owners, operators or managers of animal rescue entities has received a citation three (3) times or more within a twelve (12) month period or the issuing officer has determined the appearance should be mandatory;
 - For violation of Failure to Surrender an Animal;
 - For violation of Interfering with a County employee or Peace Officer;
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- d. For violation of Providing False Information to a County employee or Peace Officer;
 - e. For violation of Failure to Comply with Conditions of Quarantine;
 - f. For violation of Failure to Comply with any Fine, Fee, Cost, Expense, Condition or Restriction authorized by this chapter;
 - g. For violation of Dog as a Public Nuisance when a dog kills a person, domestic animal or livestock;
 - h. For violation of Failure to Comply with the Requirements of Keeping a Dangerous Dog.
 - i. For failure to reclaim an impounded animal.
 - j. For failure to meet minimum care standards.
3. Failure to Respond to Citation. If a person cited fails to respond to a citation as required by this chapter, then the person shall be deemed to have waived his/her right to contest the citation. Following proof of sufficient evidence that the person has committed the cited violation(s), the Hearings Officer may enter a Final Order against the person for an amount up to the maximum fine, in addition to any applicable fees, costs or expenses, and any other imposition consistent with this chapter. A copy of the Final Order shall be sent to the person cited by regular mail.

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D. Hearing Process.

- 1. Informal Disposition. The County and the dog owner, or the owners, operators or managers of animal rescue entities may agree to an informal and final disposition of any violation before a Hearings Officer issues a Final Order.
- 2. Burden of Proof. The burden will be on the County to prove that the violation occurred by a preponderance of the evidence.
- 3. Testimony of Witnesses and Parties. The Hearings Officer shall have the authority to administer oaths or affirmations and take testimony of and question witnesses and parties. Parties may offer witness testimony on their own behalf. Written testimony must be submitted by sworn affidavit and may be admitted into the record subject to exclusion by the Hearings Officer and objections by the opposing party.
- 4. Cross-Examination of Witnesses. The person cited and attorneys may examine or cross-examine witnesses.
- 5. Evidence. Reliable and relevant evidence shall be admitted subject to the rules of privilege recognized by law. Records developed, kept and maintained during the normal course of business, including but not limited to, law enforcement reports and veterinary records, shall be admissible provided the party offering the records establishes the authenticity of the records through written or oral testimony. The burden of presenting evidence to support a fact or position shall be on the offering party. The Hearings Officer may establish procedures for the presentation of evidence to ensure that the hearing record reflects a full and fair inquiry into the facts necessary to determine the matter alleged. The Hearings Officer shall have the discretion to exclude any material or testimony that is accumulative, repetitious, irrelevant or immaterial.
- 6. Objections. Objections to admission of evidence shall be noted in the record and will be considered with respect to the weight to be given the particular evidence offered. The Hearings Officer shall have the discretion to admit or exclude any evidence presented and may reserve the ruling on the admissibility or exclusion of evidence until the time the Final Order is issued.

7. Subpoenas. The Hearings Officer may issue subpoenas to parties when a request is supported by a showing of general relevance and reasonable scope of the evidence sought. Witnesses appearing pursuant to subpoena, other than the parties, peace officers or employees of the County, shall be paid the same witness fees and mileage as allowed in civil cases from the party requesting the subpoena to be paid at the time the subpoena is issued. The party requesting the subpoena will be responsible for its service in accordance with the Oregon Rules of Civil Procedure.
8. Representation. The person cited may represent him/herself or may be represented by counsel at personal expense. The County may be represented at the hearing by any employee of the County. If the employee is not an attorney, the employee shall not present legal argument, examine or cross-examine witnesses, present rebuttal evidence or give legal advice to the Hearings Officer conducting the hearing.
9. Record. A verbatim record shall be made of all hearings. The record may be transcribed at the request of a party upon payment in advance of the cost of transcription.
10. Final Order. At the conclusion of the hearing, the Hearings Officer shall issue a Final Order based upon reliable, relevant and substantial evidence which shall be the County's final determination. A Final Order shall be effective on the date that it is issued unless otherwise provided by the Hearings Officer. The order may be oral or written, but in all cases must be recorded in the record of the proceeding. The Hearings Officer may impose fines, fees, costs, expenses, conditions or restrictions and any other imposition authorized by this Chapter. Monetary obligations are due and payable on the effective date of the Final Order unless otherwise provided.
11. Judicial Review. Review of a Final Order of the Hearings Officer may be made by any party by writ of review as provided in ORS 34.010-34.100.
12. Enforcement of Final Order. The County may maintain civil proceedings in law or equity in a court of competent jurisdiction to enforce any provision of a Hearings Officer's Final Order.

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F. Process when Citation is for Dog as Continuous Annoyance. When the County receives a complaint of a dog causing a continuous annoyance, all of the procedures in this chapter shall apply and the following additional procedures shall also be required:

1. First Complaint. The county will not investigate or issue a citation, but will provide assistance to the complainant and the dog owner to help them resolve the issue between themselves.
2. Second Complaint. The complainant and the dog owner will be referred to mandatory mediation:
 - a. If the complainant fails to participate in mediation, no citation will be issued to the owner, the county will not investigate the complaint and not further complaints will be considered until and unless the complainant participates in mediation.
 - b. If the owner fails to participate in mediation, the county may conduct further investigation into the complaint, may issue a citation and may take other steps that it determines are reasonable in the circumstances.
3. Complaints Following Mediation Where All Parties Have Participated. If mediation is conducted wherein both the owner and complainant participate, upon receipt of further complaints the County may conduct further investigation

into the complaint, may issue a citation and may take other steps that it determines are reasonable in the circumstances.

4. After Citation Issued. After a citation is issued by the County, all standard procedures and provisions in this chapter shall apply.

[Codified by Ord. 05-2000, 7/13/00; Amended by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10; Amended by Ord. 08-2012, 8/2/12]

5.01.080 Penalties

A. Fines, Fees, Costs; Expenses.

1. Upon a finding that the dog owner or the owners, operators or managers of animal rescue entities has violated this chapter, a Hearings Officer may impose fines, fees, costs and expenses, which shall become a debt owing to Clackamas County and may be collected in the same manner as any other debt allowed by law. If fines, fees, costs or expenses are not paid within sixty (60) days after payment is ordered, the County may file and record the Final Order for payment in the County Clerk Lien Record as authorized by ORS 30.460.
2. If the Hearings Officer finds that the alleged violation did not occur, the County shall reimburse the owner for any fines, fees, costs and expenses previously paid by the owner for the alleged violation.
3. The Hearings Officer may order payment of the County's attorney fees and prosecution costs to include staff time for any violation of this Chapter.

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B. Conditions and Restrictions; Restitution; Euthanasia.

1. Upon a finding by the Hearings Officer that a dog owner, or the owners, operators or managers of animal rescue entities has violated a provision of this chapter, in addition to and not in lieu of any fine, fee, cost or expense, the Hearings Officer may impose restitution, euthanasia, and reasonable conditions and restrictions, including but not limited to:
 - a. Suspend the owner's right to own or keep any animal in Clackamas County for a period not to exceed five (5) years;
 - b. Upon sufficient proof order restitution to any person who has suffered actual monetary loss as a result of a violation of this chapter, including but not limited to expenses incurred for veterinary care, burial and memorial expenses, repair or replacement of damaged property, or medical bills;
 - c. Require the owner to spay or neuter the animal;
 - d. Require the owner to remove the animal to a location where the animal does not present a threat to persons, domestic animals or livestock;
 - e. Require the owner to surrender the animal to the County;
 - f. After consideration of the factors set forth in ORS 609.093, require euthanasia when an animal has bitten or killed a person, domestic animal, or livestock. The Hearings Officer may also consider the public nuisance violation history of the animal and owner to include all known determinations by any court, governing body, official or agency of any local or state government without regard to where or when the incident occurred;
 - g. Require that the owner comply with any other condition or restriction reasonably designed to abate any future violation of this chapter;
 - h. Require that the owner obtain microchip identification for the animal;

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- i. Require the owner to reduce the number of animals on the owner's premises.
2. Any condition or restriction imposed by a Hearings Officer must be complied with immediately unless otherwise ordered. The County may request that an owner provide proof of compliance by a date certain. If proof is not provided, or proof is insufficient, then a rebuttable presumption will exist that the owner has failed to comply and the owner may be cited for the violation of Failure to Comply in accordance with this chapter.
3. An owner shall be responsible for all costs incurred in complying with any condition or restriction imposed.
4. Upon a finding that an owner is guilty of a violation set forth in this chapter, regarding the same animal for the third time in a twelve (12) month period, the Hearings Officer may order that the owner surrender the animal to the County, without compensation paid to the owner.
5. When an animal has been ordered surrendered and the County has determined that the animal qualifies for adoption, the County may give placement preference to any person who had prior contact with the animal, including but not limited to the former owner's family members or friends who reside separately from the former owner and whom the County has determined will provide adequate care and follow all conditions or restrictions imposed by the Hearings Officer in order to maintain control of the animal.

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[Codified by Ord. 05-2000, 7/13/00; Amended by Ord. 05-2003, 3/13/03; Amended by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10; Amended by Ord. 08-2012, 8/2/12]

5.01.090 Authority of Dog Services Manager

In accordance with the provisions of this chapter the Dog Services Manager shall have the authority to:

- A. Collect fines, fees, costs and expenses.
- B. Authorize an owner to keep a licensed dog that has been impounded and quarantined, at the premises of the owner during the period of quarantine.
- C. Declassify a dog as dangerous in accordance with the provisions of this chapter.
- D. Require a dog owner, or the owners, operators, or managers of animal rescue entities to provide proof of compliance with a Hearings Officer's Final Order.
- E. Inspect premises of a dog owner, or of an animal rescue entity to ensure compliance with this chapter;
- F. Develop and enforce policy, procedures and standards to ensure the effective administration of this chapter.

Deleted: D Request the assistance of local law enforcement officials officers to obtain and execute a warrant authorized under state law and this chapter for the search and seizure of property ¶ E

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[Added by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10]

5.01.100 Transition

[Added by Ord. 01-2004, 4/8/04; Repealed by Ord. 08-2012, 8/2/12]

5.01.110 Severability

If any clause, section or provision of this chapter is declared unconstitutional or invalid for any reason or cause, the remaining portion of this chapter shall remain in full force and effect and be valid as if the invalid portion had not been incorporated herein.

[Added by Ord. 01-2004, 4/8/04; Amended by Ord. 05-2010, 7/1/10]

5.01.120 Enforcement of Other Laws

- A. Enforcement of Dogs. Pursuant to ORS 203.035; 153.030; 609.015 and ORS 609.135, this chapter supersedes enforcement in the County of the following state statutes regarding control of dogs: ORS 609.030 and 609.035 to 609.110; 609.155; 609.158; 609.165; 609.170; 609.180; 609.190.
- B. Enforcement of Rabies Control. Rabies control shall be enforced by the Clackamas County Health Officer in cooperation with the Dog Services Manager in accordance with the provisions of ORS 433.340 through 433.390.
- C. Enforcement of Violations Involving Livestock. When a dog is determined to be a Public Nuisance under this chapter for menacing, biting, injuring or killing livestock, in addition to all other provisions and regulations of this chapter the following state statutes apply: ORS 609.125; 609.156; 609.161; 609.162; 609.163; 609.167; 609.168.
- D. Enforcement of Possession of Dogs. The number of dogs possessed by a person shall be limited as provided in ORS 167.374. In addition to all other provisions and regulations of this chapter, ORS 167.374 shall apply.
- E. Other Laws Apply. Except as expressly provided in this chapter, this chapter shall in no way be a substitute for or eliminate the necessity of conforming with any and all state and federal laws, rules and regulations, and other ordinances which relate to the requirements provided in this chapter.

[Added by Ord. 05-2010, 7/1/10; Amended by Ord. 08-2012, 8/2/12]

King, Sandy

From: Angela Roccograndi <angela_roccograndi@frontier.com>
Sent: Thursday, September 25, 2014 6:53 AM
To: Mayor; richardgoddard2010@gmail.com; scottstarr97070@gmail.com; Fitzgerald, Julie; Stevens, Susie
Subject: Unleashed Cats

Wilsonville City Mayor and Councilors,

I'm writing you today to voice a complaint about the number of unleashed and unattended cats in my neighborhood. Cats wander through my neighborhood and property on a regular basis. They defecate and vomit hairballs in my yard and recently we also had one stuck in our tree in our fenced in backyard. When cats wander through our neighborhood, our dogs in our house, go crazy - barking and jumping on the windowsills in response. I find it discriminatory that Ordinance No. 737 applies only to dogs. I think it should be amended to include cats. Cat owners should be held to the same level of responsibility as dog owners. Cats should not wander unattended and their owners should pick up after them the same way that dog owners are expected to.

I have a work conflict the evening of October 6, 2014 and cannot attend the city council meeting. I hope you can consider my concerns just the same.

Sincerely,
Angela Roccograndi
Wilsonville resident

CITY COUNCIL MEETING STAFF REPORT

Meeting Date: October 6, 2014	Subject: Wilsonville Citizens Academy Staff Member: Jon Gail/Angela Handran Department: Administration
Action Required <input type="checkbox"/> Motion <input type="checkbox"/> Public Hearing Date: <input type="checkbox"/> Ordinance 1 st Reading Date: <input type="checkbox"/> Ordinance 2 nd Reading Date: <input type="checkbox"/> Resolution <input type="checkbox"/> Information or Direction <input checked="" type="checkbox"/> Information Only <input type="checkbox"/> Council Direction <input type="checkbox"/> Consent Agenda	Advisory Board/Commission Recommendation <input type="checkbox"/> Approval <input type="checkbox"/> Denial <input type="checkbox"/> None Forwarded <input type="checkbox"/> Not Applicable Comments:
Staff Recommendation: This is for Council information.	
Recommended Language for Motion: NA	
PROJECT / ISSUE RELATES TO: <i>[Identify which goal(s), master plans(s) issue relates to.]</i>	
<input checked="" type="checkbox"/> Council Goals/Priorities Welcoming, Engaged and Satisfied Residents	<input type="checkbox"/> Adopted Master Plan(s)
<input type="checkbox"/> Not Applicable	

ISSUE BEFORE COUNCIL: This is for Council information.

EXECUTIVE SUMMARY:

The Wilsonville Leadership Academy is a six month program, meeting once per month on the third Thursday from 6-9pm here at City Hall. The program will strengthen leadership skills, improve community engagement between city staff and the public, and prepare participants for city leadership position. Applications are being accepted until October 31, 2014, and the program will run from January – June 2015.

EXPECTED RESULTS:

- Prepare participants for city leadership positions
- Develop participant leadership skills
- Develop participant communication skills
- Learn public meeting requirements
- Network with city leaders and class participants
- Improve community engagement between city staff and the public
- Learn about city staff responsibilities and services

TIMELINE:

Applications will be accepted until October 31, 2014. Review of the applications will begin on November 7, 2014, with the class of 2015 participants chosen at that time by the selection committee. On December 1, 2014 the City will announce the participant selections; staff will come back to Council at the December 1, 2014 meeting for an update.

CURRENT YEAR BUDGET IMPACTS:

The cost of the academy has been budgeted into the 14/15 year budget, and has been designated as outlined below:

Meals - \$2,700
Books - \$450
Graduation gifts - \$750
Consultant (Greg McKenzie) - \$5,000
Misc. - \$900
Total: \$9,800

FINANCIAL REVIEW / COMMENTS: *[Item must be sent to Finance for review and comment.]*

Reviewed by: _____ Date: _____

LEGAL REVIEW / COMMENT: *[Item must be sent to City Attorney for review and comment.]*

Reviewed by: _____ Date: _____

COMMUNITY INVOLVEMENT PROCESS:

The Wilsonville Leadership Academy has been promoted on the City's webpage, www.ci.wilsonville.or.us/academy, the BFM, the Community Report, the City's Facebook page, and a press release was issued on September 24, 2014. In addition, staff has promoted the academy at numerous City sponsored events and a personal email was sent out to all current board and commission members inviting them to apply.

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY (businesses, neighborhoods, protected and other groups):

The program will grow City ambassadors who will be educated in leadership and local government. The participants of the program will have the opportunity to develop their

communication skills which will lead to more engaged citizens who are able to effectively connect their thoughts with positive actions for the betterment of the City. The Wilsonville Leadership Academy will create dynamic citizens who actively look for ways to enhance the livability of their Community.

ALTERNATIVES:

N/A

CITY MANAGER COMMENT:

ATTACHMENTS

A. Wilsonville Leadership Academy Brochure

Wilsonville Leadership Academy Outcomes

- Prepare participants for city leadership positions
- Develop participant leadership skills
- Develop participant communication skills
- Learn public meeting requirements
- Network with city leaders and class participants
- Improve community engagement between city staff and the public

Open to residents of the City of Wilsonville. If space is available a limited number of spots will be made available to local business owners or employees who live outside of Wilsonville, but who work within the City limits. One spot is reserved for a Wilsonville High School senior.

Applications available online at

www.ci.wilsonville.or.us/academy

For more information, contact Angela Handran at 503.570.1503, or email handran@ci.wilsonville.or.us



Never doubt that a small group of thoughtful, concerned citizens can change world. Indeed it is the only thing that ever has.

—Margaret Mead

City of Wilsonville

29799 SW Town Center Loop E
Wilsonville, Or 97070

Phone: 503.570.1503
Fax: 503.682.1015
e-mail: handran@ci.wilsonville.or.us

City of Wilsonville

Wilsonville Leadership Academy



City of Wilsonville

29799 SW Town Center Loop E
Wilsonville, Or 97070

Phone: 503.570.1503
Fax: 503.682.1015
e-mail: handran@ci.wilsonville.or.us

Wilsonville Leadership Academy



Are you looking to strengthen your leadership skills? Take a more active role in local government and your community? Engage in positive change with like minded individuals? If so then the Wilsonville Leadership Academy is the place for you!

Leadership

"In order for Wilsonville to continue to thrive, we need community members who are ready, able and interested in taking leadership roles in local government. The Wilsonville Leadership Academy is designed to create leadership capacity within Wilsonville", said Mayor Tim Knapp.

Curriculum and Schedule

Welcome to Wilsonville Leadership Academy! Meet your City leaders and learn their roles.	January 15
Role of City, municipal operations and Public Works.	
Where people become a community and not just residents.	February 19
Parks and Recreation and Library	
The engine of the city, and how to keep it running smoothly.	March 19
Community Development, Economic Development, and Planning.	
Finance 101.....and beyond. What does a City budget process really look like?	April 16
Finance	
Getting around your City and surrounding areas.	May 21
Public safety involves more than just the police.	
Transportation, Smart, and Public Safety	
How to remain actively engaged in your community and participant graduation ceremony.	June 18

Applications available online at

www.ci.wilsonville.or.us/academy

For more information, contact Angela Handran at 503.570.1503, or email handran@ci.wilsonville.or.us

The 2015 Leadership Academy runs from January to June, all meetings are held at City Hall, from 6-9pm.

There is no cost to participate in the Leadership Academy, but we do ask that participants commit to attending each session, and be active participants



If your actions inspire others to dream more, learn more, do more and become more, you are a leader.

—John Quincy Adams

City of Wilsonville

29799 SW Town Center Loop E
Wilsonville, Or 97070

Phone: 503.570.1503
Fax: 503.682.1015

King, Sandy

From: Cosgrove, Bryan
Sent: Friday, September 19, 2014 11:26 AM
To: Fitzgerald, Julie; Mayor Tim Knapp; richardgoddard2010@gmail.com; scottstarr97070@gmail.com; Stevens, Susie
Cc: Adams, Steve; Wallenberg, Sadie; Kraushaar, Nancy; King, Sandy
Subject: FW: Council concern - TC Loop E micro seal

All,

Please see below the discussion of **micro vs slurry seal on city streets**. If council desires more information than what is provided below, please let me know at the next Council meeting what additional information you'd like to have.

Bryan Cosgrove,
City Manager

503.570.1504 (work)
503.754.0978 (cell)
cosgrove@ci.wilsonville.or.us
29799 SW Town Center Loop
Wilsonville, Oregon 97070

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"A man is happy so long as he chooses to be happy."
— Aleksander Solzhenitsyn

-----Original Message-----

From: Adams, Steve
Sent: Friday, September 19, 2014 9:49 AM
To: Cosgrove, Bryan
Cc: Kraushaar, Nancy
Subject: FW: Council concern - TC Loop E micro seal

Bryan,

Following is an explanation regarding the micro-seal placed on Town Center Loop E.

Please let me know the Mayor or Council have any further concerns.

Thanks, Steve

Steve R. Adams, P.E.
Development Engineering Manager
City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, OR 97070

ph: 503-682-4960
email: adams@ci.wilsonville.or.us

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-----Original Message-----

From: Ward, Mike
Sent: Wednesday, September 17, 2014 8:48 AM
To: Adams, Steve
Cc: Kraushaar, Nancy
Subject: RE: Council concern - TC Loop E micro seal

1) Hillboro awarded a contract this summer with both slurry and micro surfacing, the cost of slurry was \$1.29/SY and the cost of micro surfacing was \$3.15/SY. Our 2" grind and overlay cost \$10.00/SY, which is the least expensive I have seen awarded. It typically runs closer to \$14. As a note, we received the same price for our micro surfacing as Hillsboro.

2) Slurry seal is a much thinner product. Because we anticipate that cracks will reflect up through a seal, we apply crack seal prior to placement. On roads where we have slurry sealed, such as Willamette Way East, the crack seal is visible below the slurry. On Town Center Loop E the micro surfacing is able to be applied in a thicker mat because of the additional polymers in the emulsified asphalt, and subsequently the crack seal is not visible on that road. My recollection of our supplier (who provides both) was an estimate that a slurry seal will last between 5 - 7 years on a neighborhood street and micro surface will last between 7 - 10 years on collector roads. In 2007 the City applied a Type III Slurry to the asphalt sections of Boeckman Road. The slurry wore off within two years and leaves a rutted appearance. This has discouraged the City from installing slurry on other collectors or arterial roadways.

3) There are different "Types" of slurry/micro surfacing, which pertains to the size of the aggregate in the seal, with Type III having larger aggregate. The City has used Type II Slurry in its applications with the exception of Boeckman Road, however this is a Type III micro surface. As an example a Type II would have 90% - 100% passing a #4 sieve, whereas Type III only has 70% - 90% passing. The larger aggregate is recommended by the International Slurry Surfacing Association for use on "Interstate and Primary Roads" and the smaller on "Urban and Residential". The ISSA describes the types as such:

Type II. This aggregate gradation is used to fill surface voids, address more severe surface distresses, seal, and provide a durable wearing surface.

Type III. This aggregate gradation provides maximum skid resistance and an improved wearing surface.

As such the skid resistance is considered to be the same between slurry and micro surface with the difference being the type of aggregate gradation chosen. I am unable to locate a coefficient of friction on the associations website to compare against asphalt.

Mike Ward, PE
Civil Engineer
City of Wilsonville
29799 SW Town Center Loop East
Wilsonville, OR 97070
Direct: 503-570-1546
Fax: 503-682-7025

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-----Original Message-----

From: Adams, Steve
Sent: Monday, September 15, 2014 6:00 PM
To: Ward, Mike
Cc: Kraushaar, Nancy
Subject: Council concern - TC Loop E micro seal

Well tonight the mayor brought up his dissatisfaction with the finish look and roughness with TC Loop E. I spoke for several minutes and we have been asked to provide additional info on the product:

- 1 what is cost of slurry seal vs micro seal? (I told them that micro is 20% that of a grind and overlay).
- 2 how well and long does slurry seal hold up if used on higher traffic roads vs. micro seal?
- 3 what is coefficient of friction for slurry vs micro vs AC?

Thanks

Sent from my iPhone

King, Sandy

From: Cosgrove, Bryan
Sent: Wednesday, October 01, 2014 12:17 PM
To: Fitzgerald, Julie; Mayor Tim Knapp; richardgoddard2010@gmail.com; scottstarr97070@gmail.com; Stevens, Susie
Cc: King, Sandy
Subject: FW: Willamette River Water Supply Update - Response to Council Questions
Attachments: 10-01-2014 TVWD Wilsonville Final Follow Up Memo.pdf

All,

Another follow up item.

Bryan Cosgrove,
City Manager

503.570.1504 (work)
503.754.0978 (cell)
cosgrove@ci.wilsonville.or.us
29799 SW Town Center Loop
Wilsonville, Oregon 97070

DISCLOSURE NOTICE: Messages to and from this E-mail address may be subject to the Oregon Public Records Law.

"A man is happy so long as he chooses to be happy."

— Aleksander Solzhenitsyn

From: Kraushaar, Nancy
Sent: Wednesday, October 01, 2014 11:26 AM
To: Cosgrove, Bryan
Cc: Handran, Angela; King, Sandy; Kohlhoff, Mike; Kerber, Delora
Subject: Willamette River Water Supply Update - Response to Council Questions

Bryan: Attached is a letter from Todd Heidgerken, of Tualatin Valley Water District, that provides responses to questions asked by our City Council at the last Willamette River Supply Program update at the September 1 Work Session. Could you please distribute it to them? Otherwise, if you prefer, I can provide them hard copies at the October 6 meeting. Thank you. -Nancy

Nancy Kraushaar, PE
Community Development Director
City of Wilsonville
29799 SW Town Center Loop E
Wilsonville, OR 97070
503.570.1562 (office)

Willamette Water Supply

Our Reliable Water

Memo

To: Nancy Kraushaar, PE, Community Development Director, City of Wilsonville

From: Todd Heidgerken, Willamette Water Supply Program Manager, TVWD

Date: October 1, 2014

Re: Willamette Water Supply Program Follow Up to the Wilsonville City Council

Thank you for collaborating with us to update the Wilsonville City Council on the Willamette Water Supply Program on September 4, 2014. We wanted to provide you with some information in response to the questions that were asked during and after that briefing. Here are those questions and our responses for you to share with the Council members and others.

Thank you again. Please let me know if you need any additional information.

Q: Have above ground or over water (Coffee Creek wetlands) pipeline routes been ruled out? Reasons such as vandalism, etc.?

A: Willamette Water Supply Program staff are developing plans for a robust, reliable and cost effective water supply system. Due to the large pipe diameter (approximately 6'), installation of the transmission main above ground was not considered because of potential for vandalism, visual impacts and potential impacts to wildlife habitat.

Q: Will there be any redundancy for the transmission pipe?

A: One of the primary objectives of the Willamette Water Supply Program is to increase resiliency and reliability in the region's water supply. The Willamette River will be an additional source of high quality water for Hillsboro and Tualatin Valley Water District providing reliability and redundancy following a disaster or other service interruptions. The facilities are being designed to be operational after a major earthquake. Although the sizing of the pipe is still being determined, it will be sized to meet demands well into the future.

Q: How do you maintain or repair the pipeline in a tunnel under Wilsonville Road?

A: The pipeline will be designed such that maintenance or repairs will be infrequent. If repairs are needed, the pipeline under Wilsonville Road will have access hatches that allow it to be repaired from inside the pipe. Maintenance workers will be able to access the pipe through these access shafts located at each end of the tunnel. To help prevent breaks, the pipeline will be installed inside a metal casing that will cross under the roadway to protect the pipe during a large earthquake.

Q: What are the Our Reliable Water website statistics?

A: As with any new website, the initial traffic is pretty limited until there are more community events and publicity. We believe we will see a significant increase in activities once information about the open houses is distributed. To date, below are some of the statistics regarding website visits:

Willamette Water Supply Program Follow up to the Wilsonville City Council

Thursday, September 25, 2014

Page 2

- 792 unique (different IP addresses) visits since site launch in early May
- 1,112 sessions total (includes visitors that have visited more than once)
- 2.4 pages per session average at 2 minutes 15 seconds of view time
- 30% of total traffic are return users
- 956 total hits on the home page (includes repeat visits)
- Next most frequently hit page is <http://www.ourreliablewater.org/our-future-water-supply/> at 57 hits (followed closely by program updates and FAQs)
- Biggest traffic day was May 23rd with 67 unique visitors

City of Wilsonville
October 6, 2014 City Council Meeting

Advocates for Nat'l Arts
& Humanities Month

SPEAKER CARD

NAME: Therrie Gibmore

ADDRESS: 34242 SW Gay Rd

TELEPHONE: 503 638 6933 E-MAIL: Therrie@WilsonvilleArts.org

AGENDA ITEM YOU WANT TO ADDRESS: National Arts & Humanities
Month - October

Please limit your comments to 3 minutes. Thank you.

**City of Wilsonville
City Council Meeting
October 6, 2014 Sign In Sheet**

[illegible]