

**PLANNING COMMISSION
WEDNESDAY, JANUARY 14, 2015
6:00 PM**

AGENDA

I. 6:00 PM CALL TO ORDER - ROLL CALL

Marta McGuire
Jerry Greenfield
Peter Hurley
Al Levit
Phyllis Millan
Eric Postma
City Council Liaison Charlotte Lehan

II. 6:05 PM PLEDGE OF ALLEGIANCE

III. 6:10 PM ELECTION OF 2015 PLANNING COMMISSION CHAIR AND VICE CHAIR

IV. 6:15 PM INTRODUCTION OF NEW LONG-RANGE PLANNING MANAGER, MIRANDA BATESCHELL

V. 6:20 PM CITIZEN'S INPUT

This is the time that citizens have the opportunity to address the Planning Commission regarding any item that is not already scheduled for a formal Public Hearing tonight. Therefore, if any member of the audience would like to speak about any Work Session item or any other matter of concern, please raise your hand so that we may hear from you now.

VI. 6:25 PM CITY COUNCIL LIAISON REPORT

VII. 6:35 PM CONSIDERATION OF THE MINUTES

A. Consideration Of The December 10 2014 Planning Commission Minutes

Documents: [Dec 10 2014 PC Minutes.pdf](#)

VIII. 6:40 PM WORK SESSIONS

A. Climate Smart Communities (Kraushaar)

Documents: [Jan 14 2015 Climate Smart PC SR.pdf](#)

IX. 7:40 PM OTHER BUSINESS

A. 2015 Planning Commission Work Program

X. 7:45 PM ADJOURNMENT

Time frames for agenda items are not time certain.

Public Testimony

The Commission places great value on testimony from the public. People who want to testify are encouraged to:

- *Provide written summaries of their testimony*
- *Recognize that substance, not length, determines the value of testimony*
- *Endorse rather than repeat testimony of others*

Thank you for taking the time to present your views.

For further information on Agenda items, call Linda Straessle, Planning Administrative Assistant, at (503) 570-1571 or e-mail her at straessle@ci.wilsonville.or.us.

Assistive Listening Devices (ALD) are available for persons with impaired hearing and can be scheduled for this 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 call the Planning Administrative Assistant at (503) 682-4960



City of Wilsonville

PLANNING COMMISSION WEDNESDAY, JANUARY 14, 2015

VII. CONSIDERATION OF THE MINUTES

- A. Consideration of the December 10, 2014 Planning Commission minutes

DRAFT

PLANNING COMMISSION
WEDNESDAY, DECEMBER 10, 2014
6:00 P.M.

Wilsonville City Hall
29799 SW Town Center Loop East
Wilsonville, Oregon

Minutes

I. CALL TO ORDER - ROLL CALL

Chair Altman called the meeting to order at 6:01 p.m. Those present:

Planning Commission: Ben Altman, Eric Postma, Peter Hurley, Al Levit, Jerry Greenfield, and City Councilor Susie Stevens. Marta McGuire and Phyllis Millan were absent.

City Staff: Chris Neamtzu, Barbara Jacobson, Nancy Kraushaar, Daniel Pauly, Mike Ward

II. PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was recited.

III. INTRODUCTION OF NEW LONG-RANGE PLANNING MANAGER, MIRANDA BATESCHELL

Long-Range Planning Manager, Miranda Bateschell was unable to attend due to an out of town emergency.

IV. CITIZEN'S INPUT - This is an opportunity for visitors to address the Planning Commission on items not on the agenda.

Jan Johnson stated that she has lived on Landover Dr for one year. She previously lived in West Linn for 33 years where she retired from being a realtor. She and her husband both loved Wilsonville, so they decided to move to Wilsonville when they scaled down. She had nothing against development or homes, but she was very disappointed when she discovered more apartments were proposed for Frog Pond. When she was in real estate, Wilsonville was known to have more apartments than West Linn and Lake Oswego; she could think of about four off the top of her head located on Wilsonville Rd.

- She was also upset that businesses were proposed in the Frog Pond area, which was a beautiful area. She and her husband chose to live in Wilsonville because people were so friendly, and the downtown was charming and gave a very charming appeal to the city. She believed developing businesses beyond the downtown would take business from the downtown, which was already hurting. There were many empty buildings that needed to be taken care of and filled because most residents enjoyed the downtown atmosphere.
- She asked that the Commission consider not building so many new apartments and businesses, and instead take care of what already existed in an effort to keep the city as charming as it already was. She hoped the Commission would take that into consideration because Wilsonville needed nice homes; something in which people could enjoy the area while also maintaining the city's charm that brought her to Wilsonville.

Rhoda Wolff said she has lived on Wagner St in Landover since 1997. As a runner, she was drawn to Wilsonville, and especially the beauty of the rural areas right around her on SW Advance Rd and Boeckman Rd. She was very concerned about the development and agreed with Ms. Johnson's comments that many apartments already existed on Wilsonville Rd and added that recently, a lot of apartment development had taken place in Wilsonville. It seemed like Wilsonville was becoming unbalanced with the number of apartments and homes.

- She had noticed traffic on Wilsonville Rd seemed to be a lot worse in the past six months, as she worked in Lake Oswego and needed to add about 10 to 15 minutes of time to her commute.

- She was very opposed to adding retail in the Frog Pond area and believed utilizing the many existing vacant buildings would help support the downtown, while also creating the sense of a downtown, which was very important for the future of Wilsonville when considering the younger population; to have a city center instead of a sprawl.

Fran Hitt stated she was new to Wilsonville and had just moved to Oregon last July to be close to her family. She really enjoyed Wilsonville and was attracted by the rural nature of the city, in addition to a nice downtown. She did not want to see commercial buildings developed in the Frog Pond area because she believed the downtown needed support. She also noted many apartments already existed and more were being built on the west side. She agreed with previous comments made by Ms. Johnson and Ms. Wolff.

Lori Loen, who lives on Wagner St in Wilsonville, noted when she planned to testify she did not realize that her letter to Council and the Mayor was included at the back of the meeting packet (Page 81 of 83). She agreed with the previous comments, adding she believed the character and natural feel that attracted most residents to purchase in Wilsonville and Frog Pond would be lost.

- The plan was obviously maximizing the land and she understood high density was needed to pay for infrastructure. She also understood and assumed that building apartments and retail helped justify bringing that land into the Urban Growth Boundary (UGB) to Metro. She was not sure if that was a great idea and she was very opposed to it.
- She believed if some thoughtful time were taken to review the plan, something could be done to build on the natural scape of the land. For example, putting open space along the sides of the roads instead of putting a park in the middle of Frog Pond, or planting hazelnut trees. The Frog Pond plan should be made productive in a way to make Wilsonville a truly green city, utilizing what was already naturally available instead of taking what was available and putting blocks on it. She did not want to live in Beaverton, Hillsboro, Tigard, or Villebois; if she wanted to, it was only 50 percent built out, so she could move there.
- She wanted the city's leaders to take the natural assets of the available land seriously and implored them to rethink the plan. The City only had one chance to develop the 500 acres and she believed a mistake was being made.

Chair Altman noted a work session for the Frog Pond Planning Area was scheduled for later in the meeting and while the public was welcome to stay, they were not obligated to do so. He noted that the Frog Pond plan was an ongoing process, and was still in rough draft form, so this was a good time for public input and many more opportunities for input were coming up.

V. CITY COUNCIL LIAISON REPORT

Councilor Stevens reported that at its last meeting, City Council:

- City Staff updated the Council during the work session on the Basalt Creek Concept Plan, which was only in the beginning stages of what would be a long process.
 - She noted that the following evening, a Joint Council meeting with the Tualatin City Council was held in which a more robust presentation of the Basalt Creek Concept Plan took place and many questions were addressed by the consultant and Staff.
 - In an effort to determine who would be responsible for paying for infrastructure, a discussion was held regarding whether the temporary boundary made by Staff would change and, if so, where it should be located. Some of the discussion seemed like a cart before the horse scenario, but the conversation was ongoing and another Joint Council meeting with Tualatin was scheduled to take place in February.
- Unanimously approved the Feasibility Study for the French Prairie Pedestrian and Emergency Bridge, and engineering and survey work would hopefully get underway fairly soon.
- Adopted several housekeeping Code amendments, including some related to Stormwater.

- Approved purchasing new play equipment at Murase Park to make the equipment safer and, she believed, much more palatable for the children who played there and the families who used the facility. Having Parks and Recreation Director Stan Sherer on board was good for the community because he came with some good ideas, background and information about that kind of equipment.
- A joint City Council meeting was scheduled with the West Linn/Wilsonville School District for Monday, December 15, during the work session following some regular business. A joint meeting was done last year and she believed people really felt good because the schools were such an integral part of the city, so having that dialogue with the school board and the superintendent was really helpful to Council in terms of what the District saw as priorities, what the City could help with, and how they could partner together.
- Also on the agenda was a briefing on the Recreation and Aquatic Center Task Force information by Parks Director Stan Sherer. Council would find out what that task force was bringing forth as an idea and concept to the Council. She was excited about the briefing and looked forward to hearing the information.
- She thanked Chair Altman for his service to the City over the years, in so many areas and ways.

VI. CONSIDERATION OF THE MINUTES

A. Consideration of the October 8, 2014 Planning Commission minutes

The October 8, 2014 Planning Commission minutes were approved 4 to 0 to 1 as presented with Peter Hurley abstaining.

VII. PUBLIC HEARING

A. Waste Water Collection System Master Plan Update (Kraushaar/Ward)

The Waste Water Collection System Master Plan is a City-wide plan that guides waste water collection policies and project schedule.

Planning Commission decisions are in the form of a recommendation to City Council.

The public hearing was opened at 6:20 pm. Chair Altman read the conduct of hearing format into the record and called for the Staff report.

Chris Neamtzu, Planning Director, noted the applicable approval criteria, which respond to statewide planning goals, Oregon Revised Statutes, and Comprehensive Plan citations, were included in the Staff Report. He introduced the project team, noting Associate Planner Daniel Pauly and Civil Engineer Mike Ward, the Project Manager, had prepared the findings. He noted there had been a bit of a challenge obtaining citizen input on the project, and he hoped the citizens in attendance would share some of their thoughts about the plan.

- While the Commission had seen the presentation before, it was being presented again because it was important to get all of the information on the record. For anyone who might be new and watching from home, or for those who had not yet heard the presentation and were not familiar with the topic, the project team would go through the slides one more time. He appreciated the Commission's patience and indulgence.

Mike Ward, City Civil Engineer, introduced Michael Carr and Shad Roundy, consultants with Murray, Smith & Associates, who would brief the Commission on the work that had been done.

Shad Roundy, Murray, Smith & Associates, presented the Waste Water Collection System Master Plan via PowerPoint with these key additional comments:

- He described the purposes for the Master Plan, which included identifying potential deficiencies in the system, based on existing and future conditions, as well as identifying system improvements and their costs, so the City could budget making those improvements over a 20-year period.

- The Master Plan itself was also a tool to inform the public, City leaders, Staff, and customers about the City's plans for the collection system and facilitated a logical decision process in implementing each of the improvements.
- The Study Area included areas within the existing urban growth boundary (UGB) that would develop as well as a potential expansion of the UGB to some urban reserves identified by Metro.
- The existing collection system included all of the piping and pump stations that convey wastewater to the treatment plant, but not the treatment facility itself. The map on Slide 4 showed the various basins where the flow was collected; the major piping system, called interceptors or trunk lines; some smaller piping; and the pump stations, which collect flow from a low elevation and convey it to a higher elevation.
- Various components of flow that impacted the collection system were defined as follows:
 - Dry Weather Flow (DWF): A base flow of wastewater collected from residents as well as commercial and industrial businesses.
 - Groundwater Infiltration (GWI): As the groundwater table rose, groundwater could infiltrate into the piping and contribute to the flow in the pipe.
 - Wet Weather Flow (WWF): Although the collection system was not intended to take in a lot of rainwater, it would receive some contribution from rainfall because of cracks and defects in the piping, so some contribution from a precipitation event had to be accounted for.
- A number of things were done to determine flow in the existing system and plan for the future system including flow monitoring which looked at existing contributions from customers as well as what occurred during a rain event. To determine future flows, a range of planning densities and land uses within the areas that had not developed were used to produce three scenarios that considered varied densities and the difference in the potential improvements required for the range of future growth density.
 - The table on Slide 6 described the range of the existing densities and the future flows based on different land use classifications.
- Capacity and condition evaluation criteria used to determine what deficiencies exist (Slide 7).
 - A capacity deficiency occurs when the flow exceeds the capacity of the pipeline and a surcharge condition is created where the water rises up in the manholes and a risk of overflow exists.
 - The top left profile showed a pipe with adequate capacity, where all of the water was contained within the pipe itself. The lower profile showed a pipe that did not have enough capacity, so as one went further upstream in the pipe, sewage could be seen in the manhole and rising close to the surface elevation with a potential for overflow. The City wanted to avoid such conditions and ensure the pipe was sized large enough to convey all of the flow within the pipe itself.
 - Two generic examples illustrating the condition evaluation were displayed on the right side of Slide 7. The top example showed cracks in the pipe itself, which meant water inflow was coming in, either from groundwater or rainwater. The bottom pipe showed root intrusion, as oftentimes roots come through the pipe and effectively block the flow causing potential upstream problems and overflows.
- Identifying the Existing System Capacity involved evaluating the depth of water in the pipeline and the legend on Slide 8 indicated that anything in green was less than 60 percent full. Under existing conditions, the collection system looked very good with no capacity issues to serve existing customers.
- Identifying Future System Capacity included growth within the UGB and the potential for UGB growth expansion. With that additional sanitary flow from future customers, the pipelines shown in red (Slide 9) would begin flowing full or exceeding their capacity and, therefore, some form of improvements would be needed. A few pump stations, also highlighted in red, would also require improvement.
- Improvement Types. Existing system upgrades and condition based improvements were considered for enlarging or replacing existing pipelines to serve more people. New infrastructure was also considered for areas not currently served, as new pipes or pump stations would be required to serve those areas.
- Prioritization Category. The improvements were prioritized by considering what was driving the improvement such as growth, condition, growth within the UGB, or expansion of the UGB. Based on those drivers, some priorities and timing, occurring in five-year increments, for the various improvements were developed.
- CIP Existing Upgrades UGB Only. Slide 12 showed the improvements required to serve growth within the UGB. The improvements were primarily located along the Coffee Creek interceptor and would serve

development in the northern part of the city. The Memorial Park pump station was another key improvement that would be required for additional development in the Frog Pond area and infill growth on the east side.

- These improvements were funded by a combination of system development charges (SDCs), so developers were paying to develop and contributing to the system, as well as rates based on existing customer flows for the pipe segments.
- When considering expansion of the UGB, more substantial improvements would be needed. Improvements shown in red on Slide 13 would be a higher priority because they were meant to serve future customers in the UGB versus those shown in green, which were meant to serve future customers in expansion areas. Those additional improvements were located along the Parkway Interceptor, which would serve areas to the north, and the Boeckman Interceptor, which would serve areas in the northeast, as well as the Advance Rd urban reserve, in addition to customers in Frog Pond. A few additional improvements would be made to pump stations, including the Canyon Creek Pump Station.
- CIP – Condition Based. The City had two programs for condition based improvements, which were identified through closed-circuit television, where a television camera was sent into a pipeline to actually inspect for defects. The Charbonneau area had already been analyzed by the City and had been included in the Capital Improvement Program and Master Plan. This improvement program included various projects slated over a 20-year period.
 - The other program, covering the rest of the city, was for repair and replacement, primarily of concrete piping where condition issues had been identified through the TV inspection.
 - Condition based improvements would be funded through rates.
 - When pump stations exceed their useful life, they need to be replaced and so they were also lumped into the condition based improvements.
- CIP – New Infrastructure for Future Development. A number of new basins were identified and while some of the areas already had concept plans, such as Frog Pond, others did not. Specific improvements from those concept plans were highlighted, as well as placeholder improvements in areas that had not yet been planned. These new infrastructure improvements were developer funded, either through direct contributions or SDCs.
- The cost summary consisted of the various components, such as existing system upgrades, condition based improvements and new infrastructure.
 - Growth within the UGB, which was partially funded by SDCs and partially funded by rates, cost approximately \$10 million over the 20-year horizon. Costs outside of the UGB would be another \$19 million over that period.
 - The condition based improvements cost \$15.7 million over the 20-year period.
 - The Master Plan broke all the costs out a little more specifically by timeframes: zero to five years, five to ten, and then, ten to 20 years, which was also depicted in the final slide.

Commissioner Levit:

- Noted the maps for both the Waste Water Collection System Master Plan and Basalt Creek were included in the meeting packet, but it did not appear that the Master Plan included all of Basalt Creek.
 - Mr. Ward confirmed it did not, and explained the Master Plan predominantly covered the same amount of area covered in the Water Master Plan as well as a bit more on the east side along I-5, where gravity flowed in Wilsonville's direction as a conservative approach. The City knew Tualatin would want some of that land, but regardless of what happened, Staff wanted to be confident that the City could service an appropriate area, so that was what they considered, more or less. He added it was an average, and the City would want to refine the model as soon as Basalt Creek had defined areas.
- Asked if the numbers on Slide 15 indicated a rough guess of when they would be developed sequentially.
 - Mr. Roundy replied not necessarily. Other than Frog Pond and Coffee Creek, he was not sure a complete understanding existed of when the areas would develop.
 - Mr. Ward agreed, adding they were included more for readability.
- Commended the consultants on a great report.

- Mr. Ward agreed, adding the report was very readable, followed one step to the next logically, and made it very easy to understand what was needed and how they got there.

Chair Altman called for public testimony on the Waste Water Collection System Master Plan. Seeing none, he closed the public hearing at 6:42 pm and called for Commissioner comments. There were none.

Jerry Greenfield moved to adopt Resolution LP14-0002 recommending that the City Council adopt an Update to the Waste Water Collection System Master Plan. Peter Hurley seconded the motion, which passed unanimously.

VIII. WORK SESSIONS

A. Frog Pond Area Plan Update (Neamtzu)

Chris Neamtzu, Planning Director, presented an overview of the updated Frog Pond Area Plan materials reviewed by the Frog Pond Technical Advisory Committee (TAC) and Task Force last week and included in the Commission's meeting packet. He noted the presentation was to prepare the Commission for its joint work session with City Council on January 22, 2015. The Area Plan was still in its very early phases with adoption process anticipated for late spring. His key comments and responses to questions from the Commission included:

- In response to citizens' input, Table 2 on Page 8 of 83 of the meeting packet reflected the residential capacity and estimated density statistics for the draft Preferred Alternative, which he reviewed, noting that 1552 single-family (SF) dwelling units were identified for the entire Frog Pond Area; approximately 73 percent of the total unit count of all three neighborhoods.
- He noted that multi-family housing had many different forms, it was not always an apartment configuration, but could include a senior housing project, condominiums, or apartments.
- He reviewed the components of the four land use alternatives previously presented and about which the City received a lot of comment at the open house and a lot of participation in the online forum. All those comments were included in the packet and would be used to build the citizen involvement record, which would ultimately become a separate document. After sorting through all that information, the consultants developed the Draft Preferred Alternative being presented.
- Displaying the Land Use Framework Map (Page 15 of 83), he noted the land use categories now included small, medium and large SF lots, as well as multi-family and attached SF, which would be a row house or townhouse product.
 - Feedback from the Task Force last week included wrapping Small Lot SF completely around the school.
 - The one area of continuing concern and with the least consensus was having retail at the four corners.
 - The City did not have a proven track record of local retail, so he believed appropriately sizing the retail in the Frog Pond Area would be the key to its success, as well as its location on the street and the access it had.
 - Residents in the Landover neighborhood did not care to have the retail at the four corners. He believed their preference was at the Grange location, or having none at all.
 - He requested the Commission's feedback about retail use in Frog Pond, noting the issue would be discussed at the joint work session with Council. Retail was one of the driving forces that would determine how land use was distributed in Frog Pond.
 - The light purple color was an Institutional/Civic land use that was created and added to the Grange and church sites in light of discussion regarding the potential of the Grange site to have an adaptive reuse similar to the Old Church at the McMenamins' site. The Grange could have a community center or something related to arts and theatre, an environmental learning center or a component supportive of the open space activities that occur under the BPA power line. Compatible ancillary uses, such as a daycare or small retail, could be added to the grange site.

- The local connection arrows indicated points of connection through the development blocks, not cul-de-sacs. In prior discussions about the grid network, concern was expressed about having long, straight streets through the site, which would impact traffic speeds and aesthetics. A couple framework streets had been removed from prior iterations, which resulted in larger development blocks, and the connection points provided developers more flexibility to be creative within the development blocks.
 - The arrows' placement was conceptual as minimum spacing requirements were not represented and more connections might ultimately exist. The intent was to reflect the grid network and connectivity expected.
- Transportation Framework (Page 16). At the TAC meeting, the fire district discussed their dislike for roundabouts and traffic calming measures on main streets. More internal or local roundabouts were acceptable where options existed to avoid roundabouts by following local streets to reach a call. Frog Pond would be serviced from the Elligsen Rd station.
 - Discussion also regarded whether 60th Ave, south of Advance Rd, should be classified as a collector, since it essentially dead-ended, with suggestions that it be scaled appropriately for the anticipated traffic and surrounding land uses.
- Bicycle/Pedestrian Framework. Nancy Kraushaar recommended moving the grade-separated crossing on Advance Rd to the eastern boundary of the potential park site, which would allow for easier ADA accessibility, due to the grades involved, and provide more accessibility for those using the park or school sites, rather than at the actual intersection as shown.

Discussion and feedback from the Planning Commission was as follows:

- The new location for the grade-separated crossing had better topography for that type of crossing and would better serve the neighborhood and sporting events at the park and school.
- Concern was expressed about planning Frog Pond as if the northeast corner was already in the urban growth boundary (UGB). That area would not be added for at least five to ten years.
 - Mr. Neamtzu explained the City planned to ask Metro to add the land to the UGB, which would be decided end of 2015 and after many policy considerations were considered. The next ask would be another six years out, in 2021.
 - Planning seemed to be building a compelling case to add the land, but how could the school and park exist and Safe Routes to School be identified during the build out of the West Neighborhood without access to that northeast corner and across Advance Rd. Access to that quadrant was very important.
- With regard to the comments received from Lori Loen about privacy and the pathway along the school property adjacent to the Landover neighborhood, Mr. Neamtzu noted that the trees were fairly thick and the ravine was steep toward the southern end. The trees were thinner at the northern end. The school district discussed planting trees to screen and buffer exiting homes. In response to Ms. Loen's comment, Staff moved the trail, but it could be moved from the current conceptual location. The trail's new location (Page 17 of 83) would be better if the park and grade-separated crossing were constructed in the new location discussed earlier.
 - Schools typically have 6-ft wide, asphalt pathways surrounding the perimeter of their sites that are used for recreation, connectivity, running events, etc. The City's Bicycle and Pedestrian Master Plan included a school-to-school concept such that some off street connection would come across Meridian Creek with a bridge and connect across the site and into the school.
- More connections to the road system from the looping trail created by the Boeckman Creek and BPA Easement Trails were suggested since the trail would be close to the street grid. Having more access points between the roadway and trail would address safety issues by eliminating long, isolated sections of trail and provide access without traveling blocks through the neighborhood.
- The school district was focused on doing Safe Routes to School well, so Staff was doing their best to make it work. He described some of the measures used in Villebois, and some of the challenges faced when building new schools in new areas due to the phasing of surrounding development. The City's civil engineers were very responsive and were working with the Planning Staff on such programs.

- Mr. Neamtzu was not sure where the school zones would be on Advance Rd, but would ask Scott Mansur of DKS & Associates. He believed the City had some flexibility in determining school zones and could consider the surrounding neighborhoods and use signage and different programs.
- If the northeast corner did not come into the UGB, what would the implications be to Safe Routes to School at the Wilsonville Rd/Advance Rd intersection and along Advance Rd?
 - In near term, the routes from the Landover and Meadows neighborhoods would be Wilsonville Rd to Advance Rd and around on 60th Ave. In the preliminary site planning for the school and park sites, a major access road was included here to help alleviate traffic congestion. Different building configurations were also considered. Improvements would likely be needed along Advance Rd and 60th Ave, including new sidewalks from the existing terminated sidewalk at Wilsonville Rd, along Advance Rd to the east, and down 60th Ave to the school building, which would have one major vehicular access.
 - Shortcuts were a potential; however, the City would see where pathways and shortcuts naturally occur, as in campus planning. In some existing neighborhoods, students have cut through side yards between homes for years, which was very informal and up to the property owner's discretion. Cut-through pathways were built in Landover, which included a mid-block crossing. Wilsonville Meadows' pedestrian circulation was more circuitous given the access to Willow Creek, which would likely be part of a major walking route.
- Prior to Frog Pond planning, the principal at Boeckman Creek Primary School was hoping for the bridge connection to allow school students access to the high school for classes.
 - A wider sidewalk was planned at south entrance of Boeckman Creek, so the kids from Wilsonville Meadows could walk through Boeckman Creek school property, cross over a bridge to reach the new middle school when it is built.
- Mr. Neamtzu noted that a property owner, who owns all the property south of the study area as well as property down toward the river, is open to working with the City to have more direct connections, though that area was more remote and forested. A more detailed study was needed of the available options. The ravine got wider heading south.
- The new Institutional/Civic Nodes were depicted on Pages 18 and 19 of 83 in the packet. Community gardens, interpretation centers, or uses similar to the farm-to-school program could be operated within the BPA easement at the Grange site.
 - Including an art center, as proposed in the concept plan presented by Theonie Gilmore, was a possibility as the Grange was already used for theatre-type activities. The Grange provided only a small space, so building something complementary, such as an open air stage, could work. Mr. Neamtzu suspected the facilities would be smaller than Ms. Gilmore preferred due to constraints of the power lines; however, parking and other paved surfaces could be located there.
- Packets would be provided in time for the Commission to review prior to the joint work session with City Council with any additional changes highlighted in order to track revisions moving forward.
- It seemed like multi-family was taking more real estate than in previous alternatives.
 - Mr. Neamtzu agreed to tabulate and do comparisons across the scenarios to compare the multi-family numbers in the Draft Preferred Alternative to the multi-family proposed in Options A and B.
 - The Commission keeps hearing that Wilsonville has enough multi-family, which was understood to mean apartments or multi-unit type buildings, not attached homes. Metro's definition included attached homes, so a variety of housing types should be provided, but having additional apartments this far from the city center might not make sense. Multi-family in Frog Pond was envisioned as row homes rather than multi-unit type buildings.
 - Mr. Neamtzu explained the Attached Single-Family (SF) was a new category of townhomes/row homes shown in lighter brown that was lumped into multi-family. The multi-family shown in dark brown on map was 284 units at a density of 25 units per acre. The lighter brown had 283 units, and both categories comprised 40% of the East Neighborhood.
 - Taking up that much real estate for multi-family complexes was a concern. Perhaps the solution was less or no multi-family apartment-type dwellings and more attached homes. Surrounding

commercial use with a row home type product was a probably a good idea and something developers could support.

- The market study identified the need to plan for older populations. Senior housing would be a multi-story building that would be considered multi-family housing. The question seemed to be how to choose or lean toward one type of multi-family housing or get an urban form that was one over another.
- For the sake of presentation, the terminology should be made clearer. Differentiating the light and dark brown multi-family types was good, but people did not understand the complexities of multi-family, thinking it was apartments, which was not the case here.
- No suggestions had been made or concerns expressed about lacking space for improvements at the Stafford/Advance Rd intersection or that private property would be need to be taken.
 - Right-of-way existed on the south side of Boeckman Rd that was not being utilized and the County had required dedications on the intersection's northwest corner, which could be seen on the Land Use Framework Map on Page 15 of 83. Needed right-of-way would be obtained to the northeast of the intersection, and right-of-way should exist beyond the fences between the existing two-lane road and the northern most homes in Landover. While some constraints exist, some preliminary design had been done for signaling the Stafford/Advance Rd intersection when the Arbor Crossing Subdivision was developed.
 - Some of the previous concerns about space had been alleviated because no undercrossing would be constructed there. Typical sidewalk and bike lane improvements would still be constructed.
- BPA was represented on the TAC and their comments were driven primarily by the location of their towers, and the hang or sag of the lines. Spacing requirements exist from the bases of the towers and problems arise with structures of any height, like the tall metal poles required for full signalized intersections.
 - The BPA has teams of people, including electrical engineers, who review uses under and within their easements all the time.
 - Different things at various heights are allowed under the power lines, depending on the vertical spacing and difference from the actual line. The middle of the wire sag would be more constrained than areas closer to the poles. The poles are far apart in the Frog Pond Area so the lines have a fair amount of sag, and the hotter the lines get, the lower they sag.
 - Parking and short light poles were allowed under power lines, as well as generic sports fields, like the one at Morey's Landing. Options existed for raising the lines, which was being done in Hillsboro.
 - Paved surfaces provided BPA with better access, so parking areas and the regional trail was welcomed, as BPA might help build it to support their machinery, so benefits exist with the power line easements.
- A cost benefit analysis should be done for the isolated areas northeast of the BPA Corridor given the expense of providing City services, which would be required at this point in time. Shadow platting or having larger lots with rural development, including wells and septic systems, had also been suggested, which would require changing City regulations.
 - Staff definitely had differing opinions about the appropriateness of housing in that isolated area, and debated internally whether the area should even be in the Area Plan.
 - No color was shown in the area between the easement and ravine in the northeast portion of the Frog Pond Area because it was hard to justify the cost of the infrastructure required to serve the handful of units that would be built there.
 - Kahle Road was a public right-of-way that would provide access to the area, which was a beautiful, enveloped environment and relatively flat so it would be a good place to do big lots.
 - One property owner envisioned drilling a well and having a septic system to live there long term and had enough property to do it. That could be the destiny for the area for a long time.
 - Mr. Neamtzu argued planning this area as part of the 20-Year Look; it was a complete area and he did not want to leave land out of the equation at this time. The market would determine if it was feasible, but the City should plan for it.
 - The area did figure into the density calculation for Metro's purposes.

- Commissioner Greenfield reiterated his concerns about back loading density in the East Neighborhood while building up the other two areas with less density and promising to meet Metro's goals using the East Neighborhood.
 - Mr. Neamtzu clarified the Metro did not have any hold or say in how Wilsonville developed the West Neighborhood, as it was already in the UGB and no conditions existed regarding its density. In the context of the UGB nomination next spring, he imagined all of it being brought forward as a plan because it was being done all together.
 - Metro would be looking at the East and South Neighborhoods because that was what would be included in the UGB request, so that would be Metro's primary concern; and if it did not make the grade, it simply would not be added. If the Area Plan did not exhibit all the important principles, such as appropriate land use planning, an efficient use of land, housing diversity, affordable housing, place making, etc. the areas would not be added to the UGB.
 - The Metro representative had suggested that being around 10 net density would probably put the City in a relatively strong position to make a solid request. Mr. Neamtzu believed that applied to the East and South Neighborhoods without regard to how the West Neighborhood was developed.
 - Currently, the East Neighborhood alone was 11.8 net density and the South Neighborhood was 8.3. Both neighborhoods combined were 10.4 net density (Table 2, Page 8 of 83), so some room existed to potentially do some other things.
 - All unbuildable land, including schools, environmental constraints, power lines, and unbuildable areas, had been removed for purpose of calculating density.
- When was the latest the City had to make a decision about the commercial development and high density in the northeast corner?
 - Mr. Neamtzu did not believe any drastic sweeping changes should be made after February when a major open house was to be held, so a decision regarding the retail location was needed soon, even if development might not occur for 10 years.
 - Not having the land added to the UGB would jeopardize the entire Frog Pond Area Plan because the City would have to wait six years for the next request and the Plan did not have a long shelf life. By that time, there would be new commissioners and councilors, new ideas around land uses, etc. so he believed the City would be redoing the plan to some extent.
 - One of the concerns was spending the money for concept planning and going into an uncertain process with no guarantees and risk wasting the money.
- No housing was assumed in the commercial portion of Frog Pond. The commercial use was all single-level product, not mixed-use with housing. If mixed-use were envisioned, a new typology could be built with three to four-story residential over single-story retail and the units could be programmed. The site studies for this configuration were all single-story commercial with no housing.
- The market study suggested having about 58,000 to 60,000 sq ft of retail to be successful, so the commercial areas in all four proposed alternatives were in that range.
 - Since the 60,000 sq ft included parking, some land could be regained, or less land would be needed, at the Grange site because the BPA easement could be used for parking.

Comments from the Planning Commission continued as follows:

Chair Altman:

- Having the retail at the corner of Stafford/Advance Rd was the logical place according to retail location criteria, but not from a neighborhood standpoint and clearly this was more neighborhood commercial than a major retail focus, so there was room to downgrade at the main intersection. Even the Grange location had a significant intersection, but it was an arterial/collector crossing rather than two arterials.
 - He leaned toward the commercial location being afloat and not located. The potential for retail would exist if the market demanded it, and criteria would be provided about how it would occur in terms of the mix around it, etc.
 - In this Area Plan, the higher density (dark brown) relies on that commercial corner to drive it at that location. With the commercial removed, there could be more of the Attached SF.

- He was not totally opposed to the higher density, but fully recognized the current sensitivity to it and that there had always been sensitivity to higher density, which occurs over time. Today's density was a snapshot in time considering what has happened in Wilsonville over the last five years, and looking out another 30 to 40 years, it was another snapshot of what would make sense at that time.
- What related to the Metro concern was them upping the ante for densities at the edge, and the original plan never anticipated that kind of layout, so that's a challenge.
- He still believed opportunity existed for the City to push back a bit with Metro. The housing report clearly demonstrated that Wilsonville, historically, has outperformed, in terms of density, all other communities in the Metro District. Why should the City have to go out of its way to meet the new rules when Wilsonville was already ahead of the game?
 - Metro's big concern was they did not want to keep expanding the UGB just to accommodate growth, but Wilsonville could clearly demonstrate that even with an 8 unit per acre average, Wilsonville had already met and was exceeding Metro's growth requirements.
 - He supported having lighter densities and pushing Metro to go there because Wilsonville had the history to support that.
- He liked idea of allowing some large lot, rural or suburban-type lotting in the northeast quadrant on Kahle Rd. Though considered an urban context, typically, the requirement for connecting to public services was if one was within 300 ft of the line, and if the City never ran a line within 300 ft of that area, it was pushing that envelope.
 - Shadow platting could be used to provide for future density. At some point, the boundary was likely to go north of Kahle Rd, and then it made more sense to develop that area at a higher density. He noted the Boeckman Creek ranchettes were two-acre rural lots, and now the site was Renaissance Canyon Creek at an urban density.
 - Rural lots functioned well for 20+ years, so they should be planned into this Area Plan to meet the short-term desire for a lower density option that Wilsonville was running out of.
 - The problem with the whole regional thing was that Oregon has been divided into urban and rural, and then the rural has really been minimized and the urban emphasized, which did not give people too many choices. People looking for a two-acre lot had to go to Silverton or Estacada, which was not good planning either. Such options should be available in close to the city and accounted for in a longer term plan.

Commissioner Levit:

- The two areas adjacent to Kahle Road looked too isolated and nothing about them brought them into the community.
- The commercial was a tough decision. It seemed the location shown at Stafford/Advance Rd was a logical place, but considering all the land to the north, if Wilsonville continued to grow to 54,000 people, that would be brought in so the better place for commercial might be at the Grange site, which would be more central to future development as well. He asked if there were studies to gain some understanding about how far apart small commercial areas must be to be viable.
 - Mr. Neamtzu replied three general benchmarks were used to determine if enough synergy existed to make a retail location work: The number of people in a quarter mile walking radius, the number of rooftops within one mile and the number of cars driving by on the arterials fronting the commercial.
- The Grange site would be more isolated and not have the competition. A mile radius from the Stafford/Advance Rd location was halfway downtown, so those businesses would compete with commercial in Frog Pond.
 - Mr. Neamtzu noted one driver of the Stafford/Advance Rd location was all the existing nearby lots and the number of residents who could walk to that location versus the Grange site.
- The number of existing nearby residents was why he was conflicted. Retail made more sense at the Stafford/Advance Rd location, but it had to be very tastefully done to blend in. Trying to satisfy everyone's comments was a no win situation. It would be interesting to see what actually comes out of the Area Plan.

- He confirmed SMART would hit the commercial area in Frog Pond primarily, but then also come back through the neighborhood.
 - Mr. Neamtzu indicated how SMART would loop through Frog Pond and return to Wilsonville Rd so that most all the homes in the West and East Neighborhoods were within the walking radius of a transit route. The route benefitted SMART as well after the loss of its turnaround at the Boulder Creek parking lot. SMART was asked to leave that site due to the damage being done to the parking lot.
 - He agreed a better system was needed for adjusting routes, as complaints could cause changes that eliminated service in some areas.
- He was glad to hear SMART would go through the neighborhood. Typically, if no people were living in apartments, there was no reason for having SMART access, but that fit the cultural stereotype of letting people living in lower density areas like the West Neighborhood be happy suburbanites, rather than part of the city.

Commissioner Greenfield was concerned about not being able to get a commercial developer for that corner and having vacancies, similar to the problems experienced in Villebois or on west Wilsonville Rd. If the plan was to ease into the development of a commercial area over a longer time frame, the Grange area seemed like a better place to do that. Residential or commercial development could be postponed in that area until a clear demand for it existed and the other area could develop residentially.

Commissioner Postma added he had heard lots of discussion that retail would be needed in 10 to 20 years, and yet the Stafford/Advance Rd area would build out sooner. He believed that development would radiate from that corner and agreed the retail location would end up vacant, making the marketability of some farther lots in the East Neighborhood much less palatable due to the empty chunk of land. He doubted anyone would build the multi-family without the commercial development at least starting on the corner.

- Serious thought should be given to moving the commercial to the Grange area, because such a big retail footprint was not needed given the use of the BPA easement for parking and the City could gain back a bit of land to use for homes.
 - Second, the next UGB request was six years away. If the retail was not needed for 10 to 20 years, then there would be more UGB requests before then, and the City could be developing north of the West Neighborhood by that time. Perhaps having the commercial in the next UGB area was more appropriate than in Frog Pond.
- Looking at the longer horizon and the entire piece along Stafford Rd being developed, it seemed the commercial should be north of the intersection, because currently, it was awfully close to Town Center. Areas farther north would not be close to grocery outlets and Target and Costco would be awkward to access from their location.
- Typically, one would want commercial at the corners, but it did not make logical sense here, so he was not a fan of having retail at the Stafford/Advance Rd intersection.

Commissioner Levit said he had heard that commercial in Villebois had not developed because renting it was not a high priority by the owner.

Commissioner Hurley responded that was not the case. He described how about 18 months ago; a business person interested in renting had talked to the dentist who moved from Sherwood who said he had no clients from Villebois after spending thousands of dollars to market his dental practice to Villebois residents. All his clients still drive from Sherwood. The interested party found space right off I-5 due to the nature of his clientele. The developer had told him no businesses wanted to come to Villebois because it was too far removed. In today's age, if a dentist was not attracting local clientele, then they were probably driving to other things as well.

Chair Altman added that Villebois had no main intersection even close by, so it was a hard sell as far as a retail location. Much like Charbonneau, the commercial was in the middle, where no one could find it, which never worked well. Neighborhood commercial was a slippery slope.

- He liked the addition of the Institutional/Civic category; perhaps it could be an Institutional/Commercial option and completely remove the Commercial, currently shown in red, then Commercial could be considered in a future round. There was some logic to having commercial north of Kahle Rd or up toward Elligsen Rd.

Commissioner Hurley:

- He reviewed the Common Themes from the Online Open House listed on Page 64 of 83, emphasizing no more apartments and no retail in Frog Pond. Therefore, putting retail as proposed at the Stafford/Advance Rd intersection did not make any sense.
 - He liked the idea of having a floating retail or including it as a possible future build out along with the Grange.
- At 53 percent multi-family, he believed the entire City's density should be presented as a package to Metro, and emphasize that Wilsonville was well beyond every other city. He understood the pendulum swung back and forth between single-family attached and multi-family, and that the economy was why Wilsonville was at those numbers.
- His point was that if a Wilsonville resident on a 7,000 sq ft lot costing \$500,000 to \$600,000 wanted to expand their housing choice, they must leave Wilsonville. Therefore, the leaders of Mentor Graphics, FLIR, Xerox, etc. do not live in the city limits, but east of Frog Pond because that was where larger lots were available.
- Tim Woodley of the Wilsonville/West Linn School District stated that embracing diversity was a cornerstone of the school system, but the diversity was only as good as the housing stock. Wilsonville's housing was at 54 or 53 percent multi-family, and he was told that 24 percent of Wilsonville's students had a reduced/free lunch program, whereas West Linn students were 3 percent. Housing stock and diversity of population was a direct indicator of the student body, as well as the quality of education that children receive. This was being lost in Wilsonville.
 - He understood Metro had its rules, but Wilsonville has told everyone in the Metro area that only those who could rent an apartment or whose socio-economic status stopped at a \$500,000 home were wanted in Wilsonville.
 - Wilsonville was a nice middle to low income suburban area and successful people in the community with the financial resources to contribute to the schools lived elsewhere. The school had turf on both its practice and football game fields only because of one parent's contribution 15+ years ago.
- The economic research done by the consultants comparing Wilsonville to Tualatin was a big disservice. Comparisons should be made to West Linn, the city's school partner. West Linn has much more than 7,000 sq ft lots, that city had economic diversity in its housing stock, from apartments to multimillion dollar homes, which provided a nice, diverse student population.
- He hoped the Planning Commission would consider the message being sent. Everything was about workforce housing when he first started on the Commission; that issue had been addressed, so now it was time to provide for those who provided those workforce jobs.

Mr. Neamtzu noted another piece of work was being done behind the scenes. The consultant team was running three different scenarios on the economics of land development. Using a hypothetical 20-acre site, scenarios were being run to try to understand the cost of a home on a large, medium and small lot; what it would take to deliver a house to market; at what point does a house get brought to market, and how much are comparable houses in its price range and category.

- The Commission would be able to see the draft report soon; some individuals had taken issue with the preliminary findings. The scenarios used fixed cost, although land development costs obviously fluctuated. Housing comps were studied between Wilsonville and Tualatin, and suggestions were made that West Linn was a better comp. Higher-priced categories included the price of land and all the costs of developing these areas, but the question was whether the house was marketable when it was done.

Commissioner Hurley stated in his opinion, the report was done so that the numbers fit the paradigm they wanted to sell: the smaller lot makes for a more affordable product and more profit for the developer, which was obvious. The report was just a simple piece of economics that basically said putting a cookie-cutter house on a small lot would make the builder more money. People did not care for the report because it was just basic economics that did not play out. On the flip side, Wilsonville is a small piece of a very large real estate market.

- A 100-year old home on a 5,000 sq ft lot in southeast Portland that needs renovation would cost \$500,000, but Street of Dream homes, houses in West Linn and in unincorporated areas around Wilsonville, where people have to put in their own wells and septic, were being sold for multimillions of dollars.
- People were chomping at the bit and everyone he has spoken with, and those who have left Wilsonville because they have exceeded its socio-economic limits, have said that if something was in the area, they would buy it.
 - People drive to Happy Valley via 82nd Ave in southeast Portland just to get to a \$750,000+ home on a 5,000 sq ft lot that is on a hillside. The economies exist and the buyers are available.
- With this report and with Metro, it was as if Wilsonville was a child going to mom and dad begging for an apple as a snack, when they should be asking for the whole Snickers bar. Wilsonville has been eating healthy for the last 10 years and was at 54 percent multi-family, so they deserved a Snickers bar.

Commissioner Greenfield said that he did not have a clear picture about what power Metro had and how successful a pushback would be from the City.

Chair Altman believed the bottom line was the City would submit the concept plan to Metro, who would either approve it or not, and then the City would have to wait six years, change the plan, or whatever. The important part was how the plan was presented and demonstrating, within the context of everything Metro was trying to accomplish within the UGB Management Program, that Wilsonville was doing just fine and did not have to push 25 units per acre at the edge to meet Metro's criteria. That was the bottom line argument.

- With the history of Wilsonville and its densities, Wilsonville has plenty of room to do a reasonably good job of providing a mix of densities and there was a lot of room for the larger lot product not being provided within the region. There was a good argument for it. The City has managed density so they were not pushing the boundary by building only one-acre lots. Metro's concern was they did not want to keep pushing the UGB out, but 25 units per acre was not needed to avoid pushing the boundary out either.

Commissioner Postma noted that groundwork was being laid now. The Mayor had sent a letter to Metro Policy Advisory Committee (MPAC) that essentially said the Wilsonville has been the model citizen, so to speak, and had followed the rules and created what was actually a denser community than any in the Portland metro area and that the city should be rewarded and not punished for that.

- It was an uphill battle, but the City should not be afraid to take that step, which was an important one for the community. It was not fair to see Wilsonville at a 58-percent multi-family allocation when no one else was even beyond 50 percent, and then to be told the City should not be considering developments more than one percentage point below Metro's suggested density rates throughout the community. Wilsonville already met that, and that groundwork was being laid.

Barbara Jacobson, Assistant City Attorney suggested taking a short break to allow an audience member who had been waiting a long time to testify.

Chair Altman invited the audience member to the microphone.

Dorothy Von Eggers, President, Landover HOA, said she served as a Frog Pond Task Force member in April, May and June, but due to work conflicts, Lori Loen, from the Landover HOA Board of Directors, became her replacement. Arriving late, she had not heard all of tonight's meeting.

- She was concerned for the Landover residents and asked if the pathway proposed on the school property behind the homes on the east side of Wilsonville Rd was a requirement. Many Landover residents wanted the entire pathway moved to the east side of the school and completely away from west side of school property.

Mr. Neamtzu did not believe the pathway was a requirement, but noted the City's Bicycle and Pedestrian Master Plan which did show required primary connections from school to school that the City hoped to achieve with the project. The circular path around the school property involved campus design and was the school district's preference.

- He could not negotiate on behalf of the school district regarding the pathway's location, but the school district made a proposal and the community could have a conversation about that.
- He explained that Staff had moved the northern leg of the trail significantly to the east in response to some of the concerns.

Ms. Von Eggers said she had saw the revision, but was still a bit concerned about the trail section that still bordered the houses; even though there was the ravine and buffer.

Mr. Neamtzu replied at the southern part of the trail, the forest was pretty solid and there was a steep canyon, so visually, there did not appear to be much of a concern. He believed the northern part was the focus of the sensitivity because the forest was thinner, so the trail was moved away. The City was trying to be responsive to the concern, but it was an ongoing conversation.

- He noted that as part of the concept planning process, the Commission could recommend any series of lines on the map to City Council, who could also make changes in response to public testimony.

Chair Altman added that additional public review would occur at the time of actual development. The specifics of how the school-to-school links actually occurred was subject to further review.

Ms. Von Eggers commented that the statements made about multi-family apartments being needed for seniors seemed contradictory to the overall plan because schools, sports fields and city parks were being planned for families.

Mr. Neamtzu responded that the City was planning a complete community. The school and the parks were needed to accommodate the population today, regardless of the development being planned. Seniors use parks as well, and the juxtaposition of seniors, parks and schools was a good thing.

Ms. Von Eggers explained that building schools and sports fields, and then saying apartments were needed for seniors seemed like a contradiction.

B. Basalt Creek Concept Plan Update (Neamtzu)

Chris Neamtzu, Planning Director, noted the recent Joint City of Tualatin and City of Wilsonville Council work session was a good meeting as both Cities worked to develop the base case scenario to start putting land uses on the ground and developing a transportation network. He reviewed the presentation given at the Joint Council work session on the first Base Case Scenarios for the Basalt Creek Concept Plan via PowerPoint, which was included in the packet, with these key additional comments:

- The Envision Tomorrow software generates outputs and creates different statistics about different land models based on the Base Scenario. The scenarios were considered crash test dummies because if the outcomes received were not satisfactory or realistic, the model could be rerun.
 - Two more scenarios would be developed, where Commission input would be requested to help identify potential land uses, determine if and where retail should be considered, and to help locate jurisdictional boundaries. Public outreach also would be done for each scenario.
- Ultimately, a jurisdictional boundary would need to be determined between the two cities, but for the first Base Case Scenario, the initial city boundary was based on the East-West Connector, which was identified in the 2004 Metro ordinance as being a possible dividing line, as well as in the Basalt

Creek Transportation Refinement Plan adopted by both cities after two years of work. The 18 projects in that Plan were all assumed in the Base Case transportation network.

- The Development Codes between the cities are very different. For example, both Office Park/Flex categories could be accommodated in the City's PDI Zone; however, Tualatin has separate zones for each category, using it more as a service commercial zone. Wilsonville would have more of a corporate headquarters configuration with multi-story buildings and no service retail.
 - The land uses would be calibrated to more closely fit the types of development desired and new categories would be created based specifically on Tualatin and Wilsonville input.
 - Tualatin articulated the need for more residential, so the next Base Case would include more housing for Tualatin. Wilsonville's City Council continued to be consistent in its vision since 2004 that Basalt Creek would be an area for jobs.
- He confirmed entire Basalt Creek area was added to the UGB in 2004, but was not coded to either city. Previous UGB additions have been on the City's boundary and assigned to Wilsonville.
 - Basalt Creek was added to "The UGB" and described as being divided through the current process. Annexation could not occur until a concept plan was adopted by both Cities. When the jurisdictional boundary was agreed upon, the concept plan would be split and each City would adopt a concept plan for their respective side.
- He clarified that trails would definitely be part of the planning, but were not included in the Base Case. A lot of activity and ideas surrounded trails and connectivity.
- Adding more residential to the north had the potential to use more available trips, but no discussion about an equitable distribution of vehicle trips had occurred yet. If there was some equity in land uses, there had to be equity in the distribution of the available infrastructure capacity.
 - The model could generate the separate outputs based on the jurisdiction, such as determining the number of trips north of the dividing line.
 - A significant number of trips would be going to households, and Office Flex and retail were also big drivers of vehicle trips. For industrial, there could be a warehouse with 6 employees on five acres, which was likely to be on the Wilsonville side.
- He was not sure if the forecast for parking spaces (Page 15 of 29) included residential, but he did not believe so.
 - Commissioner Levit believed the number for parking spaces was way too high.
 - Commissioner Greenfield questioned what proportion of the parking spaces would be filled by traffic from I-5 or from the west.
 - Commissioner Hurley suggested considering how many would be for tractor trailers and not commuters.
- The East-West Connector would have limited access with only two intersections, Boones Ferry Rd and Grahams Ferry Rd, having full access. The consultant team was considering ways to cross the Connector with a grade-separated crossing, which would be very expensive.
- Staff sought input about West Railroad Area. He described the land area and its constraints, including that no legal rail crossing currently exists.
- He noted that the Intersection Volume-to-Capacity assumed an overcrossing of the 124th Ave East-West Connector at Day Road, which would relieve congestion at intersections through the Elligsen Rd area. (Slide 28, Page 18 of 29 the Staff report)
- He explained that the East-West Connector could come out at Parkway Center or Canyon Creek Rd, or both, on the east side, but the final location had not been determined. The East-West Connector was a Washington County project currently under design. Nothing had been determined about who would pay for the overcrossings, but it would likely involve many parties.
- He reviewed the Link Volume-to-Capacity, noting that problems were identified at ODOT's on and off ramps. He reminded that the Basalt Creek Refinement Plan included a second I-5 overcrossing, but that important connection was not included in the model because it was planned beyond the 20-year planning horizon.
 - He clarified that ultimately the plan was to go to five lanes on Boones Ferry Rd by 2035.

- Grahams Ferry Rd was a Villebois access point, which was likely why the southbound segment was orange, however, the thin line indicated low traffic volume. While nearing capacity, as a two-lane roadway, it was not a high capacity street.
- He confirmed wet infrastructure costs would be minimized if the jurisdictional boundary was pushed toward Tonquin Rd, which could eliminate a couple pump stations.
 - The fresh water system would be looped, so it did not matter which city served the area with water. However, Tualatin had a charter provision that did not permit Willamette River water, so comingling the drinking water systems would not be possible today.
 - Capacity of Wilsonville's sanitary sewer treatment plant was a consideration, as far as the amount of capacity the community would want to give up to treat another city's affluent when Wilsonville could attract a wet industry that was optimal from an employment standpoint and wants to preserve capacity of major infrastructure for large industries that would bring good jobs.
- Site specific, well boring information was being sought to better understand where rock masses were located, as this would be a significant cost factor. Perhaps a sampling has been done on Boones Ferry Rd.
 - Chair Altman suggested contacting the geology department at Oregon State University which was currently mapping the entire state for earthquake faults.
- He noted the letter from Grace Lucini dated December 7, 2014 that was distributed to the Commission and explained that Staff would work through her questions and provide her some good written responses that would be shared with all the meeting groups.
- He sought feedback from the Commission specifically about the West Railroad Area, land uses, and jurisdictional boundaries.

Discussion and feedback regarding the Base Case Scenario continued amongst the Commission and Mr. Neamtzu as follows:

- West Railroad Area. Constraints included power line easements, a riparian corridor, wetland bottoms, cliffs and shallow soil.
 - Deed it to Oregon Department of Forestry and Wildlife (ODF&W) or Metro Greenspaces as a new wetland as what was done along Hwy 99W.
 - The area's topography included a bit of everything, including portions that are wetland bottom.
 - Use it as a land transfer if so more land could be used in Frog Pond.
 - Such mitigation banks were more complicated than it appeared. A wetland is supposed to be created or improved to receive a land credit. Going through the process to establish a bank was good idea because the area was part of the Metro target area for wetland restoration and enhancement.
 - Not much could be done until something was done with the railroad crossing at Grahams Ferry Rd because realistically, no trucks could get in or out of there.
 - A significant series of cuts and fills would be needed east of Grahams Ferry Rd for the East-West Connector, especially to achieve the required 6 percent grade for freight traffic and to cross the canyon with an 800-ft bridge. Washington County has developed profiles of the needed cuts and fills. The Connector would be at grade at both Grahams Ferry Rd and Boones Ferry Rd.
 - Right-of-way acquisition would be fairly difficult as a lot was needed and much of it followed rear property lines. Properties south of Tonquin Rd were long, deep, rectangular properties. The Connector essentially followed the north and south property lines, which would impact property owners on each side.
 - Land needed for right-of-way was largely farm fields with few structures being impacted.
 - Was the area worth developing, even if Metro approved the land transfer?
 - The railroad crossing prevented trucks from accessing the area. It was a fairly dangerous intersection and sending trucks down a two-lane road was not desirable. No good access point existed toward the north due to limited turning movements, and the high traffic volume expected here. (Base Case Roads Map, Slide 27, Page 18 of 29)
 - A sports complex was suggested for the flat areas, although traffic volumes were a concern.

- A lot more activity was going on in terms of indoor sports activities in warehouse configurations; however, a good balance was needed between the uses. The City did not have a good way to accommodate a large square footage for indoor recreation in the current system. If there was a site or area that made sense, it could be something worth targeting.
- The trip generation would be huge, with both off peak and PM peak use, and a lot of parking would be required.
- With the Form-based Code, locations where recreational respite spots could be located amongst the industrial were desired and the constrained land of the West Railroad Area seemed perfect for that. Recreation could be different in West Railroad where more outdoor/open space/trail types of uses made sense.
- Make it a recreational area. Some of the land could not be built so put a trail through there, similar to Smith and Bybee Lakes in Portland, then keep West Railroad in the City's park system.
- Could Cahalin Rd cross under the power lines to access the area?
 - While private crossings exist, the railroad was not allowing any new at-grade crossings. A road could go over or under the railroad, but Staff understood the City would have to give up a crossing to get one.
 - If the area was a lower grade than Cahalin Rd, a road might be able to go under the railroad; however, going under the railroad would be a constrained opening anyway.
- Expanding the existing under crossing at Grahams Ferry Rd would be less expensive and needed to happen anyway as discussed in the Transportation System Plan (TSP).
- 18-wheeler tractor/trailers use the underpass to get to Pro-Gro already, but they could have difficulty making it up the hill.
- Jurisdictional boundaries
 - Having the East-West Connector as the boundary seemed ridiculousness, at least going westward, simply because of the gravity flows.
 - It seemed to make more sense for Wilsonville to give up some land closer to the east side, near I-5 and let Tualatin come south to encapsulate all the residential that was already planned, and then let Wilsonville extend farther north on the west side for industrial. Wilsonville's boundary could be on the lots just north of Tonquin Rd.
 - Having the City service just one or two pockets of residential seemed counterintuitive, if residential was not in the City's current plan.
 - Discussion at the City Council meeting involved not using the road as a transition between uses, but that might not hold true with a limited access collector, particularly with only two intersections. It was a different situation than Boones Ferry Rd, for example.
 - Traditional planning principles do not advise using roads as boundaries or transitions, though Wilsonville had many areas where roads separate land uses, like Canyon Creek Rd, so it could be done well.
 - There was so much focus on new mixed use and sustainable mixed use planning, but the old archaic plans about land use separation keep being carried forward. In some cases, roads make very good barriers and transition points.
 - It was more an issue of how much cost Tualatin wanted to absorb for infrastructure, which was more their call than Wilsonville's.
- Additional comments included:
 - While decisions would be made by City Council, the Planning Commission's input was important because the Commission would be making recommendations to the elected officials on the Concept Plan and they valued the Commission's input. Mr. Neamtzu would continue updating the Commission because as a body, they provided excellent ideas and would do a lot of the heavy lifting on the Concept Plan. He believed the Commission had an integral role in project.
 - The dirt pile seen in the curve of Tonquin Rd west of the Basalt Creek area on the Base Case Roads map was for stock piling soil and construction debris that was intended to fill the rock quarry pit. The huge holes seen to the south of 124th Ave off of Tualatin-Sherwood Rd would need to be filled to extend 124th Ave.

- Mr. Neamtzu believed more residential would be seen in the next Base Case Scenario, as well as a boundary farther north to see if the utility costs balanced out better.
 - Assessed value based on building types was another output the modeling software could calculate, so subsequent Base Case Scenarios would include outputs on valuation.
 - Tualatin's Council has been interested in the output of Basalt Creek to see how it compared with the costs. A lot of information would be generated to see how Basalt Creek could be served economically and how it would start balancing out long term, which made sense.
- The recreation issue continues to be discussed, including indoor recreation, as well as what suite of land uses would be appropriate that the City would want to encourage. The City had a good, flexible industrial zone that allows for a lot of different things, but this was a new area and Wilsonville wants to be on the cutting edge.
- Given the office flex space north of Tonquin Rd, traffic on Tonquin Rd could potentially go to Tualatin-Sherwood Rd, but otherwise traffic would come to Wilsonville.
 - Mr. Neamtzu indicated various traffic routes from the Basalt Creek area, noting it would be interesting to see the trip splits and turning movements from DKS Associates at the intersections.
- The East-West Connector/I-5 overcrossing was projected beyond the 20 year horizon, but everything else would be built within the next 20 years so the I-5 crossing was important now. Residents from the multi-family proposed in Basalt Creek using Boones Ferry Rd could not access the freeway until Tualatin-Sherwood Rd and had to deal with all the stoplights. Traffic from the multi-family units would syphon south to the N. Wilsonville Rd exit, so waiting 20 years for a crossing that might alleviate that congestion made no sense.
 - Mr. Neamtzu reiterated that East-West Connector/I-5 overcrossing was projected to be built beyond the 20-year horizon.
 - Restrictions on the distance between freeway interchanges were largely uncontestable. The reasons for the one-mile standard were evident considering the Carmen Dr interchange.
 - None of it would matter if traffic was syphoned south to the N. Wilsonville interchange. A different I-5 problem was just being created because ODOT did not want to build another interchange.
 - The only way to get something fixed was if it was broken, which would not take long.

IX. OTHER BUSINESS

A. 2014 Planning Commission Work Program

B. Thank You to Chair Ben Altman

Refreshments were served following the meeting in honor of Chair Altman's service.

X. ADJOURNMENT

Chair Altman adjourned the regular meeting of the Wilsonville Planning Commission at 9:22 p.m.

Respectfully submitted,

By Paula Pinyerd of ABC Transcription Services, Inc. for
Linda Straessle, Planning Administrative Assistant



City of Wilsonville

PLANNING COMMISSION WEDNESDAY, JANUARY 14, 2015

VIII. WORK SESSIONS

- A. Climate Smart Communities (Kraushaar)

**PLANNING COMMISSION
STAFF REPORT**

Meeting Date: January 14, 2015	Subject: Climate Smart Communities Scenarios Project Update Staff Member: Nancy Kraushaar, PE, Community Development 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 type="checkbox"/> Information or Direction <input checked="" 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: 	
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 checked="" type="checkbox"/> Council Goals/Priorities #3 – Environmental Stewardship #9 – Multi-Modal Transportation Network	<input checked="" type="checkbox"/> Adopted Master Plan(s) Comprehensive Plan and the Transportation System Plan	<input type="checkbox"/> Not Applicable

ISSUE BEFORE PLANNING COMMISSION:

To be informed about the adopted Climate Smart Strategy for the Portland metropolitan region.

EXECUTIVE SUMMARY:

In 2009, the Oregon Legislature passed HB 2001 that required Metro to develop land use and transportation scenarios that would reduce per capita greenhouse gas (GHG) emissions from cars and small trucks in the Portland metropolitan area. The region was assigned a target of 20 percent reduction from 2005 levels to achieve by 2035.

After four years, the Climate Smart Communities Scenarios project has identified a preferred scenario. The resulting Climate Smart Strategy combines land use and transportation policies for which modeling demonstrates a 29% GHG emissions reduction can be achieved by 2035.

After significant input from the public, technical advisory groups, and policy leaders throughout the region, Metro Council adopted a Climate Smart Strategy on December 18, 2014.

At the January 14, 2015 meeting, staff will provide an update on the Climate Smart Communities Scenarios project. The presentation will include:

- Background
- Process
- Adopted “Climate Smart Strategy”
- What does the adopted strategy mean for the City of Wilsonville

The adopting Metro ordinance with Exhibits A through E are included in the packet and will be discussed at the meeting.

EXPECTED RESULTS:

The Planning Commission will understand the recently adopted Climate Smart Strategy and what it means for the City of Wilsonville.

TIMELINE:

N/A

CURRENT YEAR BUDGET IMPACTS:

N/A

COMMUNITY INVOLVEMENT PROCESS:

N/A

POTENTIAL IMPACTS or BENEFIT TO THE COMMUNITY:

Environmental (primarily air quality) and public health benefits are expected to result from implementing the adopted Climate Smart Strategy.

ALTERNATIVES:

N/A

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING A)	ORDINANCE NO. 14-1346B
CLIMATE SMART STRATEGY AND)	
AMENDING THE REGIONAL FRAMEWORK)	Introduced by Chief Operating Officer
PLAN TO COMPLY WITH STATE LAW)	Martha Bennett in concurrence with
)	Council President Tom Hughes

WHEREAS, the State of Oregon’s 2007 greenhouse gas emissions reductions goals direct Oregon to stop increases in greenhouse gas emissions by 2010, reduce emissions to at least 10 percent below 1990 levels by 2020, and reduce emissions to at least 75 percent below 1990 levels by 2050; and

WHEREAS, the cities of Beaverton, Forest Grove, Gladstone, Gresham, Hillsboro, Lake Oswego, Milwaukie, Oregon City, and Portland which together represent 66 percent of the population under Metro’s jurisdiction, have all signed onto the U.S. Mayor’s Climate Protection Agreement, pledging to reduce their greenhouse gas emissions by 7 percent below 1990 levels by 2012; and

WHEREAS, the Oregon Legislature passed House Bill 2001, also known as the Jobs and Transportation Act (“JTA”), in 2009; and

WHEREAS, Section 64 of the JTA included \$960 million for 14 projects identified by local governments in eastern Oregon and 37 highway projects across Oregon, including construction of Phase 1 of the Sunrise Corridor (Units 1-3) in Clackamas County, widening US 26 and improvements to US 26 interchanges at Shute and Glencoe roads in Washington County, and reconstruction of the OR 43/Sellwood Bridge interchange in Multnomah County, the I-5/I-205 interchange in Tualatin, the I-205/OR 213 interchange in Oregon City, and the I-84/257th Avenue interchange in Troutdale; and

WHEREAS, the JTA also included \$100 million for the ConnectOregon III program that is building rail, port, transit and aviation projects across the state; and

WHEREAS, Section 37 of the JTA requires Metro in the Portland metropolitan region to prepare and cooperatively select a preferred land use and transportation scenario for achieving greenhouse gas emission reductions from motor vehicles with a gross vehicle weight rating of 10,000 pounds or less (light vehicles); and

WHEREAS, the Metro Council, with the advice and support of the Metro Policy Advisory Committee (“MPAC”) and the Joint Policy Advisory Committee on Transportation (“JPACT”), adopted the 2035 Regional Transportation Plan (“RTP”) in 2010 and directed staff to conduct greenhouse gas scenario planning; and

WHEREAS, on December 16, 2010, the Metro Council, with the advice and support of MPAC, established six desired outcomes to reflect the region's desire to develop vibrant, prosperous and sustainable communities with safe and reliable transportation choices that minimize greenhouse gas emissions and equitably distribute the benefits and costs of growth and change in the region; and

WHEREAS, in 2011 the Land Conservation and Development Commission (“LCDC”) adopted Oregon Administrative Rules 660-044-0000 to -0060, which included per capita greenhouse gas emissions reduction targets for each of Oregon’s six metropolitan areas, including the Portland

metropolitan region, to help meet statewide goals to reduce greenhouse gas emissions to 75 percent below 1990 levels by the year 2050; and

WHEREAS, the target adopted by LCDC directs the Portland metropolitan region to reduce per capita roadway greenhouse gas emissions from light duty vehicles by 20 percent below 2005 levels by 2035; and

WHEREAS, the target reduction is in addition to significantly greater reductions anticipated to occur from state and federal actions related to advancements in cleaner, low carbon fuels and more fuel-efficient vehicle technologies, including electric and alternative fuel vehicles; and

WHEREAS, in 2012 LCDC amended OAR 660-044-0040 to direct Metro to evaluate a reference case that reflects implementation of existing adopted comprehensive and transportation plans and at least two alternative land use and transportation scenarios that accommodate planned growth while achieving a reduction in greenhouse gas emissions from light vehicles and to guide Metro in the evaluation and selection of a preferred land use and transportation scenario by December 31, 2014; and

WHEREAS, the Portland metropolitan region conducted scenario planning through the Climate Smart Communities Scenarios Project to demonstrate leadership on addressing climate change, maximize achievement of all six of the region's desired outcomes, implement adopted local and regional plans and visions, including the 2040 Growth Concept, local comprehensive and transportation system plans and the regional transportation system plan, and respond to Section 37 of the JTA and OAR 660-044; and

WHEREAS, the Climate Smart Communities Scenarios Project was completed through a three-phase collaborative effort designed to support communities in the Portland metropolitan region in realizing their aspirations for healthy and equitable communities and a strong economy, and reduce greenhouse gas emissions from light vehicles as required by the State; and

WHEREAS, Phase 1 of the Scenarios Project focused on understanding the region's land use and transportation choices by conducting a review of published research and testing 144 regional scenarios in 2011; and

WHEREAS, Phase 2 of the Scenarios Project, in 2012 and 2013, focused on shaping future choices for the region to advance implementation of community visions by conducting further analysis of the Phase 1 scenarios, confirming local land use visions, preparing eight community case studies and engaging community and business leaders, city and county officials and staff, county coordinating committees, responsible state agencies, a technical work group and Metro's technical and policy advisory committees to develop assumptions for three scenarios to test and evaluation criteria to be used to measure and compare them; and

WHEREAS, Phase 2 of the Scenarios Project found that adopted local and regional plans, if implemented, can meet the state mandated target for reducing greenhouse gas emissions from light duty vehicles by 2035; and

WHEREAS, Phase 3 of the Scenarios Project, in 2014, considered the results of the Phase 2 evaluation, the region's six desired outcomes, feedback received from public officials, business and community leaders, and interested members of the public to draft a preferred land use and transportation scenario to meet the targeted reductions under state law, called the "Climate Smart Strategy"; and

WHEREAS, on June 19, 2014, the Metro Council directed staff to evaluate the draft Climate Smart Strategy, a product of four years of research, analysis, community engagement and discussion, that was unanimously recommended by MPAC and JPACT for testing on May 30, 2014; and

WHEREAS, the Climate Smart Strategy accommodates expected growth, exceeds the state mandate, and relies on implementing adopted local and regional land use and transportation plans, including investment priorities adopted in the 2014 Regional Transportation Plan (“RTP”) on July 17, 2014; and

WHEREAS, the Climate Smart Strategy reflects assumptions used by the state when adopting the region’s reduction target for state and federal actions related to advancements in cleaner, low carbon fuels and more fuel-efficient vehicle technologies, including electric and alternative fuel vehicles; and

WHEREAS, the Climate Smart Strategy reflects the financially constrained 2014 RTP level of investment for streets, highways and active transportation, and higher levels of investment for (1) transit service and related capital improvements needed to support increased service levels, (2) transportation system management technologies, and (3) travel information and incentive programs; and

WHEREAS, while the recommended level of investment for transit service and related capital, transportation system management technologies, and travel information and incentive programs is more than what is adopted in the financially constrained 2014 RTP, the estimated costs fall within the adopted 2014 Regional Transportation System Plan funding assumptions the region has agreed to work toward as part of meeting statewide planning goals; and

WHEREAS, analysis shows, if implemented, the Climate Smart Strategy achieves a 29 percent reduction in per capita greenhouse gas emissions from light duty vehicles by 2035 and provides significant community, public health, environmental and economic benefits to communities and the region; and

WHEREAS, the Climate Smart Strategy reduces air pollution, improves safety, helps people live healthier lives, manages congestion, reduces freight truck travel costs due to delay, expands travel options, improves access to jobs and essential destinations, and makes the most of investments already made in the region’s transportation system – all of which help save businesses and households money and support job creation and economic development; and

WHEREAS, the results further demonstrate that the Portland metropolitan region is already a leader in planning for lower greenhouse gas emissions from transportation; and

WHEREAS, on September 15, 2014, Metro staff launched an online survey and released the preferred land use and transportation scenario under OAR 660-044-0040 for review and comment through October 30, 2014, as set forth in the recommended Climate Smart Strategy, Regional Framework Plan Amendments, Toolbox of Possible Actions (2015-2020) and Performance Monitoring Approach; and

WHEREAS, the Regional Framework Plan guides Metro’s land use and transportation planning and other activities and does not mandate local government adoption of any particular policy or action; and

WHEREAS, the Regional Framework Plan Amendments identify refinements to existing regional policies that integrate the key components of the Climate Smart Strategy, including policies and strategies to guide implementation of the strategy and performance measures for tracking the region’s progress on implementing the strategy; and

WHEREAS, the Toolbox of Possible Actions (2015-2020) identifies an advisory menu of possible near-term actions that state, regional and local governments and special districts can take in the next five years to begin implementation of the Climate Smart Strategy; and

WHEREAS, the toolbox does not require state, regional and local governments or special districts to adopt any particular policy or action; and

WHEREAS, MPAC and JPACT recommend the toolbox be a living document subject to further review and refinement by local governments, the Oregon Department of Transportation (ODOT), TriMet and other stakeholders as part of regularly scheduled updates to the RTP to reflect new information and approaches to reducing greenhouse gas emissions; and

WHEREAS, MPAC and JPACT agree updates to local comprehensive plans and development regulations, transit agency plans, port district plans and regional growth management and transportation plans present continuing opportunities to consider implementing the toolbox actions in locally tailored ways; and

WHEREAS, the Performance Monitoring Approach identifies measures and performance monitoring targets for tracking the region's progress on implementing the Climate Smart Strategy adopted by the Metro Council that build on the existing land use and transportation performance monitoring Metro is already responsible for as a result of state and federal requirements; and

WHEREAS, Metro sought and received comments on public review drafts of the Climate Smart Strategy, Regional Framework Plan Amendments, Toolbox of Possible Actions (2015-2020) and Performance Monitoring Approach from MPAC, JPACT, its Metro Technical Advisory Committee ("MTAC"), its Transportation Policy Alternatives Committee ("TPAC"), state agencies and commissions, including the Oregon Department of Transportation, the Oregon Department of Environmental Quality, the Oregon Department of Land Conservation and Development, LCDC, local governments in the region, the Port of Portland, public, private and non-profit organizations and the public; and

WHEREAS, the Metro Council held public hearings on October 30 and December 18, 2014; and

WHEREAS, Metro identified amendments in response to comments received on the draft Climate Smart Strategy, draft Regional Framework Plan Amendments, draft Toolbox of Possible Actions (2015-2020) and draft Performance Monitoring Approach for consideration by MTAC, TPAC, MPAC and JPACT; and

WHEREAS, MTAC, TPAC, MPAC and JPACT have considered the results of the evaluation, the Climate Smart Strategy and supporting implementation recommendations released for public review on September 15, 2014, subsequent public and stakeholder input received and amendments identified to address input received prior to recommending the Climate Smart Strategy and supporting implementation recommendations be adopted by the Metro Council by December 31, 2014; and

WHEREAS, adoption of the Climate Smart Strategy and supporting implementation recommendations presents an opportunity for the region to act together to continue to demonstrate leadership on climate change and address challenges related to transportation funding and implementing adopted local and regional plans, including transit service plans; and

WHEREAS, MPAC and JPACT acknowledge that implementation of adopted local and regional plans, including transit service plans, as called for in the Climate Smart Strategy and supporting

implementation recommendations, will require new resources and active participation from a full range of partners over the long-term; and

WHEREAS, MPAC and JPACT have agreed to work together with the Metro Council and other public and private partners to begin implementation in 2015 and recommend a short list of three Climate Smart Strategy actions as a starting point; and

WHEREAS, the 2018 RTP update will serve as a major vehicle for implementing the preferred scenario under OAR 660-044-0040; and

WHEREAS, MPAC, on December 10, 2014, and JPACT, on December 11, 2014, recommended Council adoption of the preferred scenario under OAR 660-044-0040, as reflected in the Climate Smart Strategy and supporting implementation recommendations, to achieve state and regional climate goals and support many other state, regional and local goals, including expanded transportation choices, clean air, healthy and equitable communities, and a strong economy; now, therefore,

BE IT ORDAINED THAT:

1. The Climate Smart Strategy, attached to this ordinance as Exhibit A, is hereby adopted as part of the preferred land use and transportation scenario under OAR 660-044-0040.
2. The amendments to the Regional Framework Plan, attached to this ordinance as Exhibit B, are hereby adopted as part of the preferred land use and transportation scenario under OAR 660-044-0040 to provide policy direction on efforts to reduce per capita greenhouse gas emissions from light duty vehicles and identify performance measures to evaluate and report on the region's progress toward implementing key components of the Climate Smart Strategy.
3. The amendments to Chapter 2 of the Regional Framework Plan, attached to this ordinance as Exhibit B, are also incorporated into Chapter 2 of the Regional Transportation Plan.
4. The Toolbox of Possible Actions (2015-2020), attached to this ordinance as Exhibit C, is hereby adopted as part of the preferred land use and transportation scenario under OAR 660-044-0040 and will be updated and incorporated into the technical appendix for the Regional Transportation Plan as part of the next update.
5. The toolbox is acknowledged as a living document that is expected to evolve and change over time to reflect new information and approaches for reducing greenhouse gas emissions. Toolbox actions are not mandatory, but, rather are intended to provide guidance to state, regional and local governments and be tailored to meet individual jurisdictions' needs. The Metro Council directs staff to provide opportunities for further review and refinement of the toolbox by local governments, ODOT, TriMet and other stakeholders as part of regularly scheduled updates to the Regional Transportation Plan.
6. The Performance Monitoring Approach, attached to this ordinance as Exhibit D, is hereby adopted as part of the preferred land use and transportation scenario under OAR 660-044-0040 and will be reviewed and potentially updated before being incorporated into the Regional Transportation Plan.
7. Metro's on-going regional performance monitoring program will evaluate and report on the region's progress over time toward implementing key components of the Climate Smart Communities Strategy through regularly-scheduled updates to the Regional Transportation Plan

and Urban Growth Report, and in response to Oregon State Statutes ORS 197.301 and ORS 197.296.

8. The Short List of Climate Smart Strategy Actions for 2015 and 2016, attached to this ordinance as Exhibit E, is hereby adopted to demonstrate the region's commitment to work together to begin implementing the Climate Smart Strategy.
9. The Findings of Fact and Conclusions of Law in Exhibit F, attached and incorporated into this ordinance, explain how adoption of Exhibits A through E by the Council satisfies Metro's responsibility under state law to prepare and cooperatively select a preferred land use and transportation scenario that achieves the adopted LCDC target for greenhouse gas emission reductions from light vehicles in the Portland metropolitan region by 2035 pursuant to OAR 660-044.
10. Metro staff is directed to prepare a final report that consolidates Exhibits A, C, D and E and transmit the report and decision record, including this ordinance and exhibits to the ordinance, to LCDC in the manner of periodic review.
11. The preferred scenario under OAR 660-044-0040, adopted by this ordinance and reflected in the Climate Smart Strategy and supporting implementation recommendations, will be further implemented through the next scheduled update to the Regional Transportation Plan. Metro staff is directed to begin scoping the work plan for the next update to the Regional Transportation Plan, and identify a schedule and outline of policy decisions and resources needed.

ADOPTED by the Metro Council this 18th day of December, 2014.

Tom Hughes, Council President

Approved as to Form:

Alison Kean, Metro Attorney

Metro Staff Report

For

Metro Ordinance No. 14-1346B

STAFF REPORT

IN CONSIDERATION OF ORDINANCE NO. 14-1346B, FOR THE PURPOSE OF ADOPTING A CLIMATE SMART STRATEGY AND AMENDING THE REGIONAL FRAMEWORK PLAN TO COMPLY WITH STATE LAW

Date: December 9, 2014

Prepared by: Kim Ellis, Principal Transportation Planner,
Planning and Development Department, 503-797-1617

BACKGROUND

The Climate Smart Communities Scenarios Project responds to a 2009 mandate from the Oregon Legislature for Metro to develop and implement a strategy to reduce per capita greenhouse gas emissions from cars and small trucks by 2035. Metro is the regional government serving a population of 1.5 million people in the Portland metropolitan region. In that role, Metro has been working together with regional technical and policy advisory committees and community, business and elected leaders across the region to shape the Climate Smart Strategy and supporting implementation recommendations in this ordinance. Adoption of this ordinance satisfies the 2009 legislative mandate and subsequent requirements adopted by the Land Conservation and Development Commission (LCDC) in 2011 and 2012 under Oregon Administrative Rule 660-044.

This ordinance forwards recommendations from the Metro Policy Advisory Committee (MPAC) and the Joint Policy Advisory Committee on Transportation (JPACT) to the Metro Council on adopting a preferred land use and transportation scenario under OAR 660-044-0040. The Climate Smart Strategy contained in the ordinance achieves a 29 percent reduction in per capita greenhouse gas emissions from light duty vehicles and provides significant community, public health, environmental and economic benefits to communities and the region. The strategy builds on and supports adopted local and regional plans and visions for healthy and equitable communities and a strong economy. It also demonstrates that the Portland metropolitan region is already a leader in planning for lower greenhouse gas emissions from transportation.

Metro Council action through Ordinance No. 14-1346B adopts a preferred land use and transportation scenario under OAR-044-0040 and directs staff to develop and submit a final report with the decision record to LCDC in the manner of periodic review. The ordinance also directs staff to begin scoping the work plan for the next update to the Regional Transportation Plan, which will serve as a major vehicle for implementing the preferred scenario under OAR 660-044-0040.

LEGISLATIVE BACKGROUND

Since 2006, Oregon has initiated a number of actions to respond to mounting scientific evidence that shows the earth's climate is changing, indicating a long-term commitment to significantly reduce GHG emissions in Oregon.

In 2007 the Oregon Legislature established statewide greenhouse gas emissions reduction goals through House Bill 3543. The goals apply to all emission sectors – energy production, buildings, solid waste and transportation – and direct Oregon to:

- stop increases in GHG emissions by 2010
- reduce GHG emissions to 10 percent below 1990 levels by 2020
- reduce GHG emissions to at least 75 percent below 1990 levels by 2050.

In 2009, the Oregon Legislature passed House Bill 2001, the Jobs and Transportation Act (JTA). Section 37 of the Act requires Metro to develop two or more alternative land use and transportation scenarios designed to accommodate population and job growth anticipated by 2035 and reduce GHG emissions from light vehicles. Section 37 of the Act requires Metro to adopt a preferred scenario after public review and consultation with local governments in the Portland metropolitan region and calls for local governments to implement the adopted scenario.

In addition, the JTA increased vehicle-related fees and the state gas tax, and included \$960 million for 14 projects identified by local governments in eastern Oregon and 37 specific highway projects across Oregon, including construction of Phase 1 of the Sunrise Corridor (Units 1-3) in Clackamas County, widening US 26 and improvements to US 26 interchanges at Shute and Glencoe roads in Washington County, and reconstruction of the OR 43/Sellwood Bridge interchange in Multnomah County, the I-5/I-205 interchange in Tualatin, the I-205/OR 213 interchange in Oregon City, and the I-84/257th Avenue interchange in Troutdale. The JTA also included an additional \$100 million for the Connect Oregon III program that is building rail, port, transit and aviation projects across the state.

In 2010, the Metro Council adopted the 2035 Regional Transportation Plan (RTP) and directed staff to conduct greenhouse gas scenario planning consistent with the JTA. In the same year, the Council also adopted six desired outcomes for the region to reflect a shared vision to develop vibrant, prosperous and sustainable communities with safe and reliable transportation choices that minimize greenhouse gas emissions and equitably distribute the benefits and costs of development.

To guide Metro's scenario planning work, the LCDC adopted the Metropolitan Greenhouse Gas Reduction Targets Rule (Oregon Administrative Rule 660-044) in May 2011. As required by section 37 of the JTA, OAR 660-044-0020 identifies GHG emissions reduction targets for 2035 for each of Oregon's six metropolitan areas. The targets identify the percentage reduction in per capita GHG emissions from light vehicle travel that is needed to help Oregon meet its GHG emissions reduction goals for 2050.

The LCDC target-setting process assumed anticipated changes to the vehicle fleet mix, improved fuel economy, and the use of improved vehicle technologies and low carbon fuels that would reduce 2005 emissions levels from 4.05 to 1.5 MT CO₂e per capita by 2035. The adopted target for the Portland metropolitan region calls for a 20 percent per capita reduction in GHG emissions from light vehicle travel by 2035. This target reduction is in addition to the emissions reductions anticipated from changes to the fleet and technology sectors as identified in the Agencies' Technical Report. Therefore, to meet the target, per capita roadway GHG emissions must be reduced by an additional 20 percent below the 1.5 MT CO₂e per capita by 2035 to 1.2 MT CO₂e per capita. The adopted target for the region is the equivalent of 1.2 MT CO₂e per capita by 2035.

In 2012, the LCDC amended OAR 660-044-0040 to further direct Metro to evaluate a reference case that reflects implementation of existing adopted comprehensive and transportation plans and at least two alternative land use and transportation scenarios that accommodate planned growth while achieving a reduction in greenhouse gas emissions from light vehicles. The amendments also directed Metro on the evaluation and selection of a preferred land use and transportation scenario by December 31, 2014.

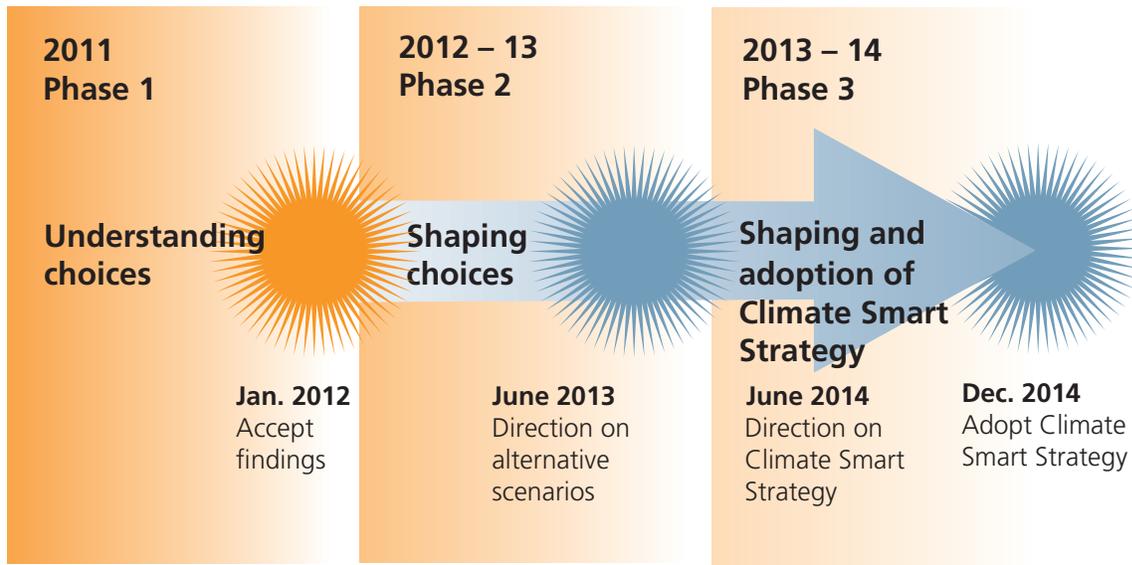
CLIMATE SMART COMMUNITIES SCENARIOS PROJECT

Since 1995, Metro and its partners have collaborated to help communities realize their local aspirations while moving the region toward its goals for making a great place: vibrant communities, economic prosperity, transportation choices, equity, clean air and water, and leadership on climate change. Local and regional efforts to implement the 2040 Growth Concept provided a solid foundation for the GHG scenario planning work required of the region.

The Portland metropolitan region conducted scenario planning in three phases through the Climate Smart Communities Scenarios Project (Scenarios Project). The project was designed to implement the 2010 Council actions, demonstrate leadership on climate change, maximize achievement of all six of the region’s desired outcomes, support adopted local and regional plans, and satisfy requirements in Section 37 of the JTA and OAR 660-044.

Figure 1 shows the project timeline.

Figure 1. Climate Smart Communities Project Timeline



Working together with city, county, state, business and community leaders, Metro researched how land use and transportation policies and investments can be leveraged to create healthy and equitable communities and a strong economy and meet state adopted targets for reducing greenhouse gas emissions. The adopted land use plans and zoning of cities and counties across the region served as the foundation for the scenarios tested throughout the project, with a goal of creating a diverse yet shared vision of how to make this region a great place for all communities today and for generations to come – and meet state greenhouse gas emissions targets.

Metro led this process in consultation and coordination with federal, state and local governments, and engagement of other stakeholders with an interest in or who are affected by this planning effort. Metro facilitated this consultation and coordination through four advisory committee bodies—the Joint Policy Advisory Committee on Transportation (JPACT), the Metro Policy Advisory Committee (MPAC), the Transportation Policy Alternatives Committee (TPAC) and the Metro Technical Advisory Committee (MTAC).

The project relied on this existing regional decision-making structure for development, review and adoption of the plan. MPAC, JPACT and the Metro Council made recommendations at key decision points based on input from TPAC, MTAC and the public participation process. A technical work group of members from MTAC and TPAC was formed to assist Metro staff with the development of work products, provide technical advice and assist with engaging local government officials and senior staff throughout the process.

PHASE 1: UNDERSTANDING OUR LAND USE AND TRANSPORTATION CHOICES (JAN. 2011 TO JAN. 2012)

Phase 1 began in 2011 and concluded in early 2012. This phase focused on understanding the region's choices and produced the *Strategy Toolbox*, a comprehensive review of the latest research on greenhouse gas reduction strategies and their potential effectiveness and benefits. Staff also engaged public officials, community and business leaders, community groups and government staff through two regional summits, 31 stakeholder interviews, and public opinion research.

In addition, Metro evaluated a wide range of options for reducing greenhouse gas emissions by testing 144 different combinations of land use and transportation strategies to learn what it would take to meet the region's reduction target by 2035. Strategies we organized into six policy areas:

- Community design
- Pricing
- Marketing and incentives
- Roads
- Fleet
- Technology

Each of these policies areas included individual strategies that national research has shown to affect greenhouse gas emissions. Metro staff used a regionally tailored version of the Oregon Department of Transportation (ODOT) Greenhouse Gas State Transportation Emissions Planning (GreenSTEP) model to conduct the scenario analysis – the same model used by state agencies to set the region's greenhouse gas emissions reduction target and ODOT develop the Statewide Transportation Strategy for reducing greenhouse gas emissions. GreenSTEP accounts for the synergies between the policy areas and other variables, including vehicle miles traveled, fuel consumption, fleet mix, vehicle technology, amount of transit service and road expansion provided and the location of forecasted future growth.

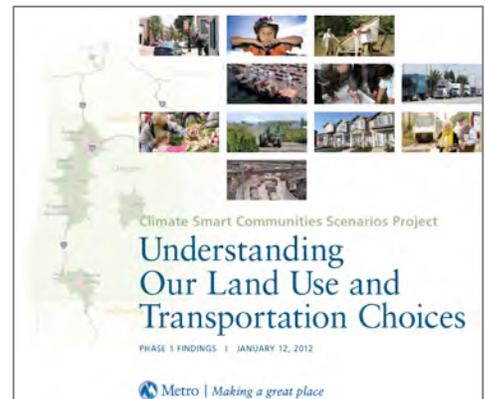
The initial scenario analysis found more than 90 of the 144 scenarios tested met or exceeded the target. The findings are summarized in *Understanding Our Land Use and Transportation Choices: Phase 1 Findings* (January 2012).

The Phase 1 findings indicated that current adopted plans and policies – if realized – along with state assumptions related to advancements in cleaner, low carbon fuels and more fuel-efficient vehicle technologies, including electric and other alternative fuel vehicles, provide a strong foundation for meeting the state target. Although



Strategy Toolbox

Staff completed a comprehensive review of the latest research on greenhouse gas reduction strategies and their potential effectiveness and benefits.



Understanding Our Land Use and Transportation Choices

Phase 1 concluded adopted plans provide a strong foundation for reducing greenhouse gas emissions and that a key to meeting state target would be developing public and private partnerships to invest in communities in ways that support local community and economic development goals.

current plans move the region in the right direction, current funding is not sufficient to implement adopted local and regional plans. As a result, the region concluded that a key to meeting the target would be the various governmental agencies working together to develop public and private partnerships to invest in communities in ways that support adopted local and regional plans and reduce greenhouse gas emissions.

PHASE 2: SHAPING OUR LAND USE AND TRANSPORTATION CHOICES (JAN. 2012 – OCT. 2013)

Phase 2 began in January 2012 and concluded in October 2013. This phase focused on shaping and evaluating future choices for supporting community visions and meeting the state GHG emissions reduction target. Staff conducted a sensitivity analysis of the policy areas tested during Phase 1 to better understand the GHG emissions reduction potential of individual strategies within each policy area.¹ The policies tested included pay-as-you-drive insurance, use of technology to actively manage the transportation system, expanded transit service, user-based pricing of transportation, transportation demand management programs, increased bicycle travel, carsharing and advancements in clean fuels and vehicle technologies.

Assuming adopted community plans and national fuel economy standards, the most effective individual policies for reducing greenhouse gas emissions were found to be:

- Fleet and technology advancements
- Transit service expansion
- User-based pricing of transportation (e.g., fuel price, pay-as-you-drive insurance, parking fees, mileage-based road use fee, and carbon fee)

The information derived from the sensitivity analysis was used to develop a simplified five-star rating system for communicating the relative climate benefit of different policies. The potential reductions found for each individual policy area, and the star rating assigned, represent the potential effect of individual policy areas in isolation and do not capture greenhouse gas emissions reductions that may occur from synergies between multiple policies if implemented together.

It should be noted that the potential reductions achieved from increased walking and biking are likely underestimated due to known limitations with GreenSTEP.² It is also important to note that while some strategies did not individually achieve significant greenhouse gas emissions reductions, such as increasing biking or walking mode share or participation in marketing and incentives programs, they remain important elements to complement more effective strategies such as transit service expansion and building walkable downtowns and main streets as called for in adopted community plans and visions.

Metro also undertook an extensive consultation process by sharing the Phase 1 findings with cities, counties, county-level coordinating committees, regional advisory committees and state commissions. Staff also regularly convened a local government staff technical working group throughout 2012. The work group continued to provide technical advice to Metro staff, and assistance with engaging local government officials and senior staff.

¹ Memo to TPAC and interested parties on Climate Smart Communities: Phase 1 Metropolitan GreenSTEP scenarios sensitivity analysis (June 21, 2012).

² Metro staff used a regionally tailored version of ODOT's Greenhouse Gas State Transportation Emissions Planning (GreenSTEP) model to conduct the analysis. ODOT is currently working on enhancements to GreenSTEP to better account for pedestrian travel and address other limitations identified through the Climate Smart Communities Scenarios Project and development of the Statewide Transportation Strategy.

In addition, Metro convened workshops with community leaders working to advance public health, social equity, environmental justice and environmental protection in the region. A series of discussion groups were also held in partnership with developers and business associations across the region. More than 100 community and business leaders participated in the workshops and discussion groups from summer 2012 to winter 2013.

Eight case studies were produced to spotlight local government success stories related to strategies implemented to achieve their local community visions that also help to reduce greenhouse gas emissions. A video of local elected officials and other community and business leaders was produced as another tool for sharing information about the project and the range of strategies being considered.

Through these efforts, the Metro Council and regional advisory committees concluded that the region’s 2040 Growth Concept and the locally adopted land use and transportation plans that implement the growth concept should be the starting point for further scenario development and analysis.



More than 100 community and business leaders participated in the workshops and discussion groups that informed development of three scenarios to test and the criteria that would be used to evaluate and compare them.

Figure 2 summarizes the three approaches evaluated in summer 2013. Each scenario was distinguished by an assumption of progressively higher levels of investment in adopted local and regional plans.

Figure 2. Three approaches that were evaluated in 2013

Scenario A	RECENT TRENDS This scenario shows the results of implementing adopted plans to the extent possible with existing revenue.
Scenario B	ADOPTED PLANS This scenario shows the results of successfully implementing adopted land use and transportation plans and achieving the current RTP, which relies on increased revenue.
Scenario C	NEW PLANS & POLICIES This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans.

A set of criteria were developed through the Phase 2 engagement process that would be used to evaluate and compare the scenarios considering costs and benefits across public health, environmental, economic and social equity outcomes. As unanimously recommended by MPAC and JPACT, Council approved a resolution on June 6, 2013 directing staff to move forward into the analysis and report back with the results in fall 2013.

PHASE 3: DEVELOPMENT AND SELECTION OF THE CLIMATE SMART STRATEGY (OCT. 2013 – DEC. 2014)

Phase 3, the final phase of the process, began in October 2013 with release of the Phase 2 analysis results. The results demonstrated that the Portland metropolitan region is already a leader in planning for lower greenhouse gas emissions from transportation. Implementation of the 2040 Growth Concept and locally-adopted zoning, land use and transportation plans and policies make the state-mandated greenhouse gas emissions reduction target achievable – if the region is able to make the investments and take the actions needed to implement those plans. Scenario A fell short of the state mandated target, achieving a 12 percent reduction in per capita greenhouse gas emissions. Scenario B achieved a 24 percent reduction and Scenario C achieved a 36 percent reduction.

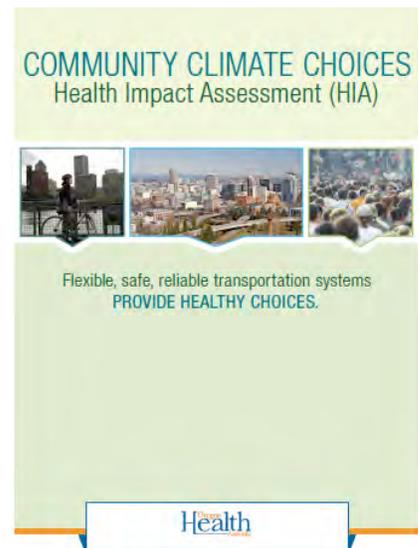
The analysis also demonstrated there are potentially significant long-term benefits that can be realized by implementing adopted plans (Scenario B) and new policies and plans (Scenario C), including cleaner air, improved public health and safety, reduced congestion and delay and travel cost savings that come from driving more fuel efficient vehicles and traveling shorter distances. Part of the analysis was conducted by the Oregon Health Authority through the Community Climate Choices Health Impact Assessment (HIA). The HIA built on a rapid HIA completed on a representative set of scenarios from Phase 1 and represents groundbreaking work to provide the region’s decision-makers with information about how the three scenarios may affect the health of people in the region before a final decision is made. The HIA found significant public health benefits from investments that increase physical activity, reduce air pollution and improve traffic safety.³

The Phase 2 analysis demonstrated that if the region continues investing in transportation at current levels (as reflected in Scenario A) the region will fall short of the state greenhouse gas emissions reduction target and other outcomes the region is working together to achieve – healthy and equitable communities, clean air and water, transportation choices, and a strong economy.

Release of the Phase 2 findings in October 2013 initiated Phase 3 and a regional discussion aimed at identifying which policies, investments and actions should be included in the Climate Smart Strategy.

SHAPING THE CLIMATE SMART STRATEGY IN 2014

In February 2014, MPAC and JPACT approved moving forward to shape and recommend a Climate Smart Strategy for the Metro Council to adopt by the end of 2014. As recommended by both policy committees, development of the key components of the Climate Smart Strategy began with the adopted 2040 Growth Concept, the 2014 Regional Transportation Plan (RTP) and the adopted plans of the region’s cities and counties including local zoning, capital improvement, comprehensive and transportation system plans. During this time, the RTP was in the process of being updated to reflect changes to local, regional and state investment priorities, which were different from what was studied in Scenario B and Scenario C during Phase 2.



Community Choices Health Impact Assessment

The Community Climate Choices HIA was conducted to provide health information and evidence-based recommendations to inform the selection of a final scenario.

³ The Community Choices Health Impact Assessment is available to download at www.healthoregon.org/hia.

From January to April 2014, Metro facilitated a Community Choices discussion to explore policy priorities and possible trade-offs. The activities built upon earlier public engagement to solicit feedback from public officials, business and community leaders, interested members of the public and other identified audiences. Interviews, discussion groups, and statistically valid public opinion research were used to gather input that was presented at a joint meeting of MPAC and JPACT on April 11, 2014. In addition, more detailed information about the policy areas under consideration was provided in a discussion guide, including estimated costs, potential benefits and impacts, and a comparison of the relative climate benefits and cost of six policy areas.⁴

The six policy areas discussed at the joint meeting are:

- Make transit convenient, frequent, accessible and affordable
- Use technology to actively manage the transportation system
- Provide information and incentives to expand the use of travel options
- Make biking and walking safe and convenient
- Make streets and highways safe, reliable and connected
- Manage parking to make efficient use of vehicle parking and land dedicated to parking spaces

After receiving additional information about the policy options and previous engagement activities, MPAC and JPACT discussed the six policy areas contained within the Scenarios A, B and C. The April 11 meeting concluded with a straw poll conducted of members to identify the desired levels of investment to assume in the region's draft Climate Smart Strategy using a scale of 1 to 7, with 1 representing the level of investment in Scenario A and 7 representing the level of investment in Scenario C.

Figure 3 summarizes the results of the straw poll.



Discussion guide for policymakers

The guide summarized the results of the Phase 2 analysis and public input received through the Community Choices engagement activities.

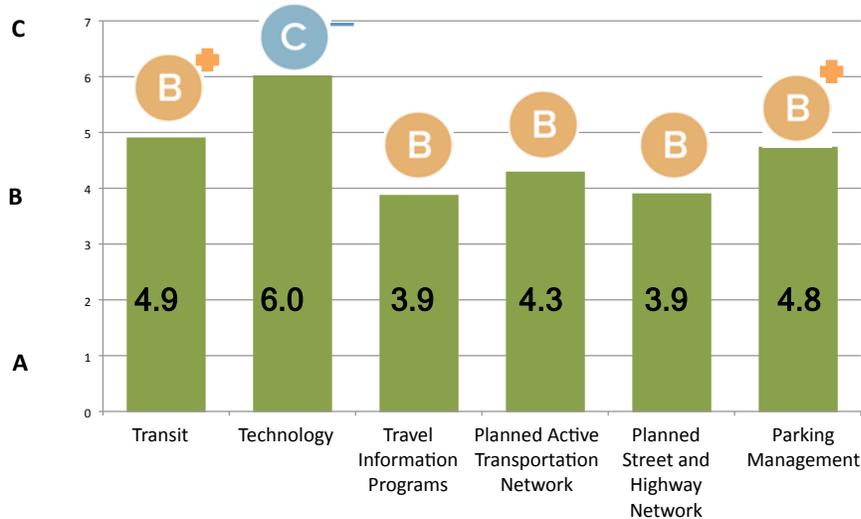
⁴ *Shaping the Preferred Approach: A Policymakers Discussion Guide* is available to download from the project website at www.oregonmetro.gov/climatescenarios

Figure 3. April 11 MPAC/JPACT Straw Poll Results

April 11 JPACT/MPAC Straw poll results

Preferences for Scenarios A, B, C and in-Between Scenarios

Averages of all respondents (mean):

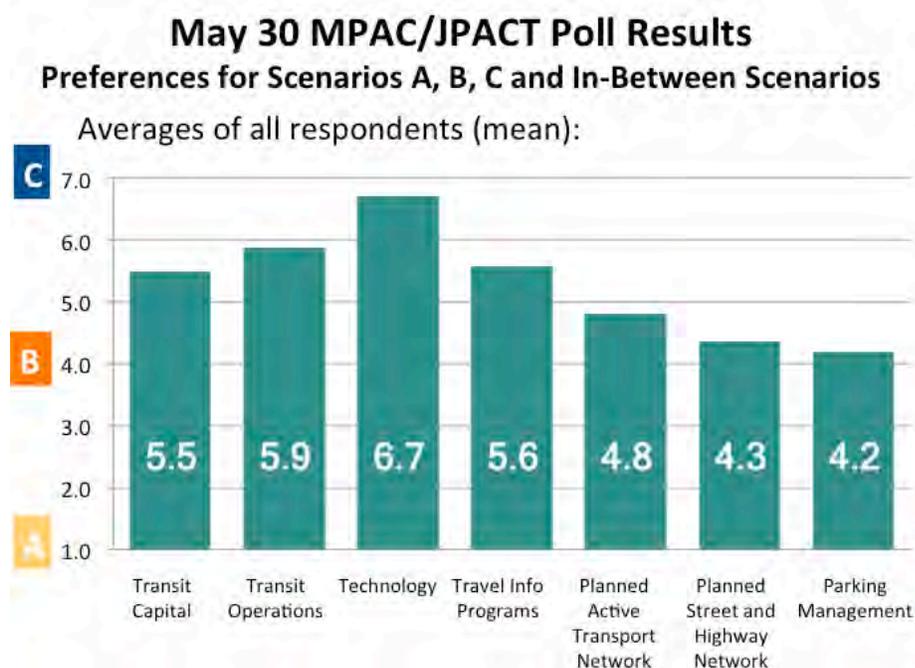


Between April 11 and May 30, the Metro Council and staff engaged local governments and other stakeholders on the straw poll results, primarily through the county-level coordinating committees and regional technical and policy advisory committees. On May 12, a MTAC/TPAC workshop was held to begin shaping a recommendation to JPACT and MPAC on a draft Climate Smart Strategy, factoring cost, the region’s six desired outcomes, the April 11 straw poll results, and other input received from the public and county-level coordinating committees. MTAC and TPAC further refined their recommendation to JPACT and MPAC on May 21 and May 23, respectively. The refinements included more directly connecting their recommendations on the draft strategy to the 2014 RTP in anticipation of the plan’s adoption on July 17, 2014.

On May 30, a joint meeting of the MPAC and JPACT was held to review additional cost information, public input, the April 11 straw poll results and recommendations from MTAC and TPAC on a draft approach for testing. After discussion of each recommendation, the committees took a poll to confirm the levels of investment to assume in the region’s draft strategy – using a scale of 1 to 7, with 1 representing the level of investment in Scenario A and 7 representing the level of investment in Scenario C.

At the end of the meeting, both policy committees unanimously recommended forwarding the results of the May 30 poll to the Metro Council as the draft strategy recommended for staff to study during the summer, 2014. The poll results are summarized in **Figure 4**.

Figure 4. May 30 MPAC/JPACT poll results on levels of investment in the draft strategy recommended for testing



On June 19, 2014, the Metro Council directed staff to evaluate the draft strategy as recommended by MPAC and JPACT on May 30, 2014. The draft strategy recommended for study includes the following assumptions:

- **Growth** - Adopted local and regional land use plans, including the 2040 Growth Concept, as assumed in the 2035 growth distribution adopted by the Metro Council in 2012 through Metro Ordinance No. 12-1292A.⁵
- **State and federal actions related to advancements in fuels and vehicle fleet and technologies** - Assumptions used by the state when adopting the region’s reduction target to account for anticipated state and federal actions related to advancements in cleaner, low carbon fuels and more fuel-efficient vehicle technologies, including electric and alternative fuel vehicles⁶
- **Transportation investments** - Local and regional investment priorities adopted in the 2014 Regional Transportation Plan (RTP) on July 17, 2014 to address current and future transportation needs in the region, including:
 - the financially constrained 2014 RTP level of investment for streets, highways and active transportation

⁵ The adopted 2035 growth distribution reflects locally adopted comprehensive plans and zoning as of 2010 and assumes an estimated 12,000 acres of urban growth boundary expansion by 2035. Metro’s assumption about UGB expansion is not intended as a land use decision authorizing an amendment through this ordinance. Instead, the assumption about UGB expansion is included for purposes of analysis to assure that UGB expansion – if subsequently adopted by Metro and approved by LCDC – would be consistent with regional efforts to reduce greenhouse gas emissions. Review of any UGB expansion will occur through the UGB Amendment process provided for by ORS 197.626(a) and OAR Chapter 660, Division 24.

⁶ The assumptions were developed based on the best available information and current estimates about improvements in vehicle technologies and fuels and will be reviewed by LCDC in 2015.

- the financially constrained 2014 RTP assumptions for parking management, which link varying levels of parking management to the availability of high capacity transit, frequent bus service and active transportation in 2040 centers
- the full 2014 RTP level of investment for transit service and related capital improvements needed to support increased service levels to be able to more fully implement community and regional transit service identified in transit service plans
- the full 2014 RTP level of investment for transportation system management and operations technologies to actively manage the transportation system and reduce delay
- a higher level of investment than assumed in the full 2014 RTP for travel information and incentive programs to increase carpooling, bicycling, walking and use of transit.

Metro staff worked with the project’s technical work group over the summer to develop modeling assumptions to reflect the draft strategy. **Attachment 1** provides a summary of the key planning assumptions studied in the draft strategy.

Staff completed the evaluation in August, 2014. Analyses show the draft strategy, if implemented, achieves a 29 percent per capita reduction in greenhouse gas emissions as shown in **Figure 5**. But the draft approach does more than just meet the target. It will deliver significant environmental and economic benefits to communities and the region, including:

- Less air pollution and run-off of vehicle fluids means fewer environmental costs. This helps save money that can be spent on other priorities.
- Spending less time in traffic and reduced delay on the system saves businesses money, supports job creation, and promotes the efficient movement of goods and a strong regional economy.
- Households save money by driving more fuel-efficient vehicles fewer miles and walking, biking and using transit more.
- Reducing the share of household expenditures for vehicle travel helps household budgets and allows people to spend money on other priorities; this is particularly important for households of modest means.

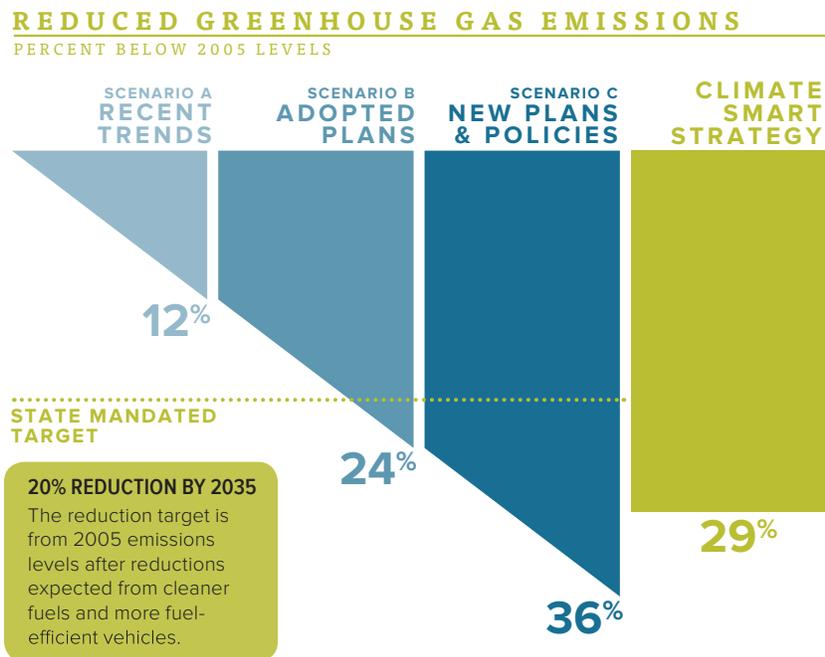


Figure 5. Estimated greenhouse gas emissions reduction from implementation of the Climate Smart Strategy

In addition, the Oregon Health Authority completed a third health impact assessment to evaluate the health impacts of the strategy. The assessment found that the investments in land use and transportation under consideration in the strategy not only protect health by reducing the risks of climate change, they will also deliver significant public health benefits to communities and the region, including:

- reduced air pollution and increased physical activity can help reduce illness and save lives
- reducing the number of miles driven results in fewer traffic fatalities and severe injuries.

The HIA also monetized expected public health benefits to help demonstrate the economic benefits that can result from improved public health outcomes. Analysis found that by 2035 the region could save \$100 – \$125 million per year in healthcare costs related to illness from implementing the strategy.

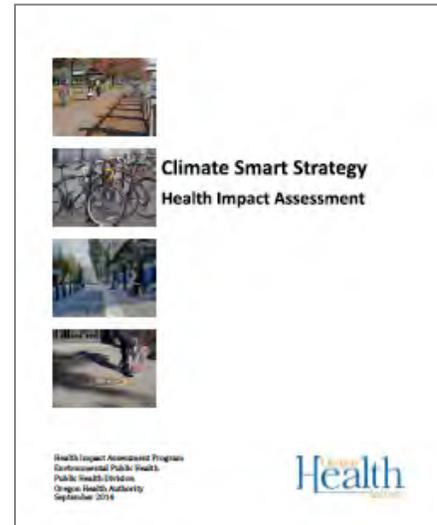
Staff also prepared cost estimates to implement the strategy. At \$24 billion over 25 years, the overall cost of the strategy is less than the full 2014 RTP (\$29 billion), but about \$5 billion more than the financially constrained 2014 RTP (\$19 billion). The financially constrained 2014 RTP refers to the priority investments that can be funded with existing and anticipated revenues identified by federal, state and local governments. The full 2014 RTP is the region's regional transportation system plan under the Transportation Planning Rule and refers to all of the investments that have been identified to meet current and future regional transportation needs in the region to meet statewide planning goals. It assumes additional funding beyond existing and anticipated revenues.

While the recommended level of investment for transit service and related capital, transportation system management technologies, and travel information and incentive programs is more than what is adopted in the financially constrained 2014 RTP, the estimated costs fall within the full 2014 RTP funding assumptions the region has agreed to work toward as part of meeting statewide planning goals. The cost to implement the strategy is estimated to be \$945 million per year, plus an estimated \$480 million per year needed to maintain and operate the region's road system. While this is about \$630 million more than we currently spend as a region, analysis shows multiple benefits and a significant return on investment. In the long run, the strategy can help people live healthier lives and save households and businesses money providing a significant return on investment.

Attachment 2 to the staff report summarizes the results of the analysis.

CLIMATE SMART STRATEGY

After a four-year collaborative process informed by research, analysis, community engagement and discussion, community, business and elected leaders have shaped a Climate Smart Strategy that exceeds the state mandate and supports the plans and visions that have already been adopted by communities and the region.



Climate Smart Strategy Health Impact Assessment

The Climate Smart Strategy HIA was conducted to provide health information and evidence-based recommendations on the Climate Smart Strategy.

On September 15, 2014, Metro staff launched an online survey and released the results of the analysis and the preferred land use and transportation scenario under OAR 660-044-0040 for review and comment through October 30, 2014:

- **Draft Climate Smart Strategy** (*an overview of the draft strategy as unanimously recommended for study by MPAC and JPACT on May 30, 2014*)
- **Draft Implementation Recommendations** (*recommended policy, possible actions and monitoring approach organized in three parts*)
 1. **Draft Regional Framework Plan Amendments** identify refinements to existing regional policies to integrate the key components of the Climate Smart Strategy, including policies and strategies to guide implementation of the strategy and performance measures for tracking the region's progress on implementing the strategy. The Framework Plan guides Metro land use and transportation planning and other activities and does not mandate local government adoption of any particular policy or action.
 2. **Draft Toolbox of Possible Actions (2015-20)** identifies possible near-term (within the next five years) actions that the Oregon Legislature, state agencies and commissions, Metro, cities and counties and special districts can take to begin implementation of the Climate Smart Strategy. The toolbox is a comprehensive menu of more than 200 specific policy, program and funding actions that can be tailored to best support local, regional and state plans and visions that, if implemented, will reduce greenhouse gas emissions in ways that support community and economic development goals.

The toolbox provides an advisory menu of possible actions and does not require local governments, special districts, or state agencies to adopt any particular policy or action. The toolbox includes specific action steps that, if taken, will help implement the broader policies and strategies identified in the Regional Framework Plan. It is intended to be a living document, subject to further review and refinement by local governments, ODOT, TriMet and other stakeholders as part of scheduled updates to the RTP to reflect new information and approaches to reducing greenhouse gas emissions. Toolbox actions are not mandatory but, rather, are intended to provide guidance to state, regional and local governments and be tailored to meet individual jurisdiction's needs and conditions.

It builds on the research, analysis, community engagement and discussion completed during the past four years and was developed with the recognition that some tools and actions may work in some locations but not in others. It emphasizes the need for many diverse partners to work together to begin implementation of the Climate Smart Strategy and that each partner retains flexibility and discretion in pursuing the strategies most appropriate to local needs and conditions. Updates to local comprehensive plans and development regulations, transit agency plans, port district plans and regional growth management and transportation plans present continuing opportunities to consider implementing toolbox actions in locally tailored ways.

3. **Draft Performance Monitoring Approach** identifies measures and performance monitoring targets that reflect what was assumed in the analysis of the strategy. The performance measures identified for monitoring reflect a combination of existing and new performance measures, most of which are drawn from the Regional Transportation Plan and the Urban Growth Report to track existing land use and transportation policies. These and other performance measures are reflected in Chapter 7 of the Regional Framework Plan.

The 2035 performance monitoring targets are not policy targets, but rather reflect a combination of the planning assumptions used to evaluate the Climate Smart Strategy and outputs from the evaluation. The measures and performance monitoring targets will be reviewed before being incorporated into the Regional Transportation Plan as part of the next scheduled update and may be further refined at that time to address new information, such as MAP-21 performance-based planning provisions and recommendations from Metro's Equity Strategy

The measures and performance monitoring targets will be used to evaluate and report on the region's progress toward implementing key components of the Climate Smart Strategy. The monitoring approach builds on the existing land use and transportation performance monitoring Metro is already responsible for as a result of state and federal requirements. To monitor and assess implementation of the strategy, Metro will use observed data sources and existing regional performance monitoring and reporting processes to the extent possible, including regularly scheduled updates to the Regional Transportation Plan and Urban Growth Report, and reporting in response to Oregon Revised Statutes ORS 197.301 and ORS 197.296. The reporting will occur through scheduled updates to the RTP and Urban Growth Report, and through reporting in response to Oregon Revised Statutes ORS 197.301 and ORS 197.296. When observed data is not available, data from regional models may be reported. If the assessment finds the region is deviating significantly from the Climate Smart Strategy performance monitoring target, then Metro will work with local, regional and state partners to consider the revision or replacement of policies, strategies and actions to ensure the region remains on track with meeting adopted targets for reducing greenhouse gas emissions

Metro sought and received comments on the draft Climate Smart Strategy, draft Regional Framework Plan Amendments, draft Toolbox of Possible Actions (2015-2020) and draft Performance Monitoring Approach from MPAC, JPACT, MTAC, TPAC, state agencies and commissions, including the Oregon Department of Transportation, the Oregon Department of Environmental Quality, the Oregon Department of Land Conservation and Development, and the Land Conservation and Development Commission, local governments in the region, the Port of Portland; public, private and non-profit organizations; and the public.

For those interested in reviewing the draft documents and providing detailed comments, the public review documents were posted on the project web page at www.oregonmetro.gov/draftapproach. In response to these documents, Metro received 90 letters and emails from local governments, community based organizations and individuals. An online survey attracted nearly 2,400 people, who shared their thoughts on each of the core policy areas recommended in the overall strategy, providing a total of over 11,000 comments.

The Metro Council held public hearings on October 30 and December 18, 2014. A report documenting comments received through October 30, 2014 is provided in **Attachment 3**.

Most of the comments received during this period were specific to implementation efforts, and will inform existing regional planning and decision-making processes, including Regional Transportation Plan updates, Regional Flexible Funds Allocation processes, growth management decisions and corridor planning, as well as local and state planning and decision-making processes. Comments proposing specific changes to the public review documents were summarized in a log along with staff recommended changes for consideration by the Metro Council and regional technical and policy advisory committees in November and December. The log is provided in Attachment 4. Recommended changes are reflected in the exhibits to this ordinance.

On November 7, a joint meeting of the MPAC and JPACT was held to review Ordinance No. 14-1346B and its components, public input, and staff recommended changes to the adoption package to respond to public comment. A facilitated discussion of each component of the adoption package provided an

opportunity for both policy committees to provide further direction to staff on remaining issues and concerns to be addressed prior to Metro Council final action. At the end of the meeting, both policy committees supported Metro staff continuing to work with the technical advisory committees to fine-tune the adoption package for their consideration in December.

The regional policy and technical committees continued to fine-tune their recommendations to the Metro Council in November and December. On Nov. 21 and Dec. 3, TPAC and MTAC unanimously recommended that MPAC and JPACT recommend Metro Council adoption of this ordinance, respectively.

WORKING TOGETHER TO DEVELOP SOLUTIONS FOR OUR COMMUNITIES AND THE REGION

Adoption of the preferred scenario under OAR 660-044-0040 – the Climate Smart Strategy and supporting implementation recommendations – presents an opportunity for MPAC, JPACT and the Metro Council and others to work together to continue to demonstrate leadership on climate change and address challenges related to transportation funding and implementing adopted local and regional plans, including transit service plans.

The preferred scenario adopted by this ordinance sets the foundation for how the region moves forward to integrate reducing greenhouse gas emissions with ongoing local and regional efforts to create healthy, equitable communities and a strong economy. The ordinance recommends local regional and state implementation actions and allows for local flexibility to support the differences among the region’s cities and counties. The ordinance also acknowledges that implementation of adopted local and regional plans, including transit service plans, as called for in the Climate Smart Strategy and supporting implementation recommendations, will require new resources and active participation from a full range of partners over the long-term. MPAC and JPACT have agreed to work together with the Metro Council and other public and private partners to begin implementation in 2015 and recommend three priority actions as a starting point.

The Climate Smart Strategy will initially be implemented through amendments to Metro’s Regional Framework Plan in December 2014 and the short list of three actions for 2015 and 2016 related to transportation funding, fleet and technology advancements and seeking opportunities to combine and implement the most effective greenhouse gas emissions reduction strategies in local and regional demonstration projects. Implementation through Metro’s Regional Transportation Plan, functional plans, local comprehensive plans, land use regulations and transportation system plans will occur through future actions as defined by administrative rules adopted by LCDC.⁷

ANALYSIS/INFORMATION

1. **Known Opposition** None known. MPAC and JPACT unanimously recommended the Climate Smart Strategy (attached to this ordinance as Exhibit A) for study on May 30, 2014.
2. **Legal Antecedents** Several state and regional laws and actions relate to this action.

Metro Council actions

- Resolution No. 08-3931 (For the Purpose of Adopting a Definition of Sustainability to Direct Metro's Internal Operations, Planning Efforts, and Role as a Regional Convener), adopted on April 3, 2008.
- Ordinance No. 10-1241B (For the Purpose of Amending the 2004 Regional Transportation Plan to Comply with State Law; To Add the Regional Transportation Systems Management and

⁷ OAR 660-044-0040 and OAR 660-044-0045.

Operations Action Plan, the Regional Freight Plan and the High Capacity Transit System Plan; To Amend the Regional Transportation Functional Plan and Add it to the Metro Code; To Amend the Regional Framework Plan; And to Amend the Urban Growth Management Functional Plan), adopted on June 10, 2010.

- Ordinance No. 10-1244B (For the Purpose of Making the Greatest Place and Providing Capacity for Housing and Employment to the Year 2030; Amending the Regional Framework Plan and the Metro Code; and Declaring an Emergency), adopted on December 16, 2010.
- Resolution No. 12-4324 (For the Purpose of Accepting the Climate Smart Communities Scenarios Project Phase 1 findings and Strategy Toolbox for the Portland Metropolitan Region to Acknowledge the Work Completed to Date and Initiate Phase 2 of the Climate Smart Communities Scenarios Project), adopted on January 26, 2012.
- Ordinance No. 12-1292A (For the Purpose of Adopting the Distribution of the Population and Employment Growth to Year 2035 to Traffic Analysis Zones in the Region Consistent With the Forecast Adopted By Ordinance No. 11-1264B in Fulfillment of Metro's Population Coordination Responsibility Under ORS 195.036), adopted on November 29, 2012.
- Resolution No. 13-4338 (For the Purpose of Directing Staff to Move Forward With the Phase 2 of the Climate Smart Communities Scenarios Project Evaluation), adopted on June 6, 2013.
- Resolution No. 14-4539 (For the Purpose of Directing Staff to Test a Draft Approach and Complete Phase 3 of the Climate Smart Communities Scenarios Project), adopted June 19, 2014.
- Ordinance No. 14-1340 (For the Purpose of Amending the 2035 Regional Transportation Plan to Comply With Federal and State Law; and to Amend the Regional Framework Plan), adopted July 17, 2014.

State of Oregon actions

- Oregon House Bill 3543, the Climate Change Integration Act, passed by the Oregon Legislature in 2007, codifies state greenhouse gas reduction goals and establishes the Oregon Global Warming Commission and the Oregon Climate Research Institute in the Oregon University System.
- Oregon House Bill 2001, the Jobs and Transportation Act, passed by the Oregon Legislature in 2009, directs Metro to conduct greenhouse gas emissions reduction scenario planning and LCDC to adopt reduction targets for each of Oregon's metropolitan planning organizations.
- Oregon House Bill 2186, passed by the Oregon Legislature in 2009, directs work to be conducted by the Metropolitan Planning Organization Greenhouse Gas Emissions Task Force.
- Oregon Senate Bill 1059, passed by the Oregon Legislature in 2009, directs planning activities to reduce greenhouse gas emissions in the transportation sector and identifies ODOT as the lead agency for implementing its requirements. This work is being conducted through the Oregon Sustainable Transportation Initiative.
- OAR 660-044, the Metropolitan Greenhouse Gas Reduction Targets Rule, adopted by the Land Conservation and Development Commission (LCDC) in May 2011, and amended in November 2012.

3. Anticipated Effects

- Staff will transmit a final report and the decision record, including this ordinance, exhibits to the ordinance, the staff report to the ordinance and attachments to the staff report, to the Land Conservation and Development Commission in the manner of periodic review by January 31, 2015.
- The preferred scenario under OAR 660-044-0040, adopted by this ordinance and reflected in the Climate Smart Strategy and supporting implementation recommendations, will be further implemented through the next scheduled update to the Regional Transportation Plan. Staff will begin scoping the work plan for the next update to the Regional Transportation Plan, and identify

by September 30, 2015, a schedule and outline of policy decisions and resources needed. Opportunity for further review and refinement of the toolbox by local governments, ODOT, TriMet and other stakeholders will be provided as part of the RTP update.

4. **Budget Impacts** This phase of the project is funded in the current budget through Metro and ODOT funds. Implementation of the Climate Smart Strategy will be determined through future budget actions.

RECOMMENDED ACTION

Staff recommends approval of Ordinance 14-1346B.

Exhibit A

For

Metro Ordinance No. 14-1346B

**CLIMATE
SMART
COMMUNITIES**
SCENARIOS PROJECT

Exhibit A to Ordinance No. 14-1346B

Climate Smart Strategy

Recommended Draft

This document reflects changes recommended to respond to public comments received and subsequent advisory committee review

December 9, 2014

**MAKING A
GREAT
PLACE**



About Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to providing services, operating venues and making decisions about how the region grows. Metro works with communities to support a resilient economy, keep nature close by and respond to a changing climate. Together we're making a great place, now and for generations to come.

Stay in touch with news, stories and things to do.

www.oregonmetro.gov/climatescenarios

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Metro Councilors

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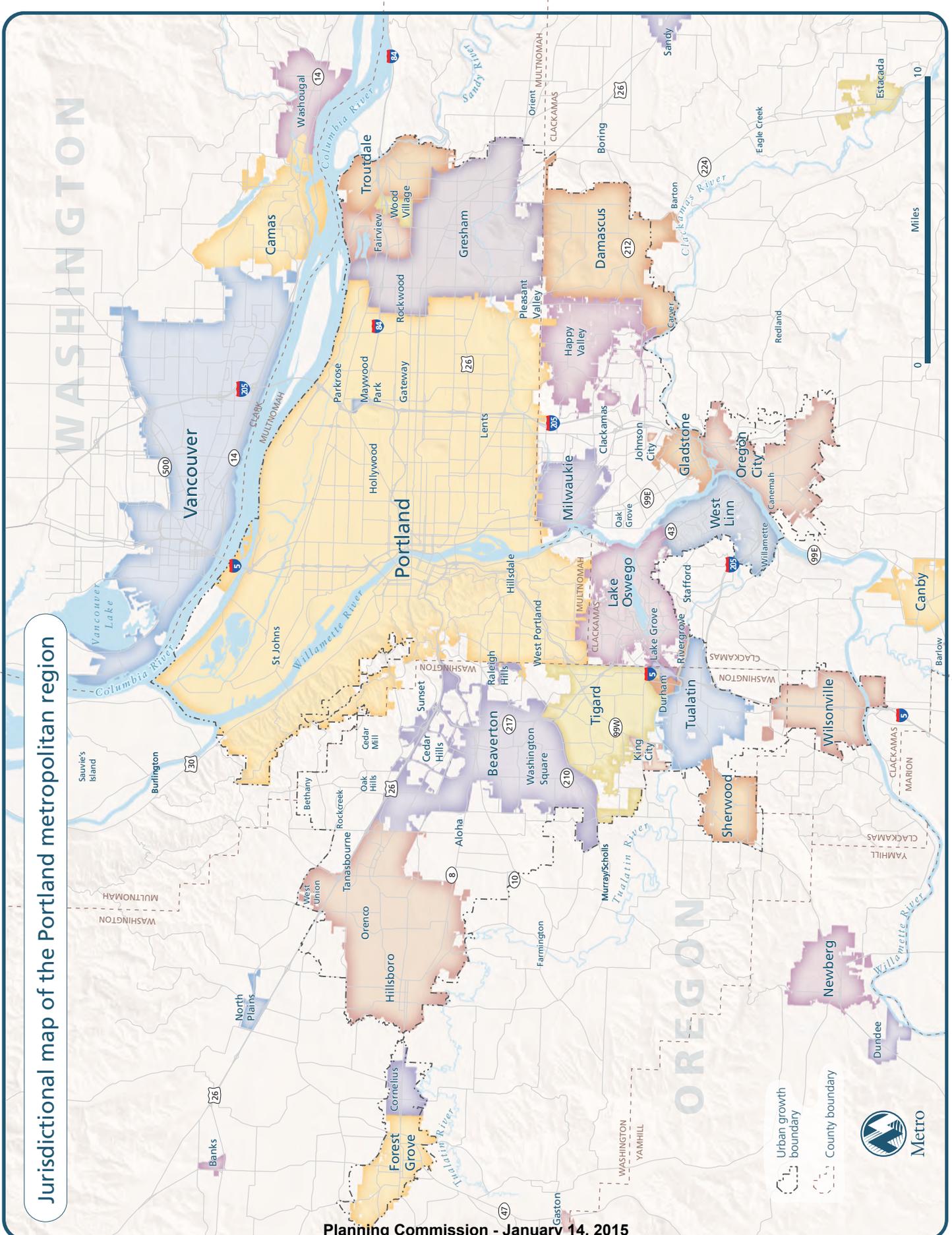
Auditor

Suzanne Flynn



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INTRODUCTION

The Climate Smart Communities Scenarios Project responds to a state mandate to develop and implement a strategy to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.

The project engaged community, business, public health and elected leaders to shape a strategy that supports local plans for downtowns, main streets and employment areas; protects farms, forestland, and natural areas; creates healthy and equitable communities; increases travel options; and grows the economy while reducing greenhouse gas emissions.

After four years of research, analysis, community engagement and discussion, the Metro Policy Advisory Committee (MPAC) and Joint Policy Advisory Committee on Transportation (JPACT) finalized their recommendation to the Metro Council on the Climate Smart Strategy and supporting implementation recommendations (Regional Framework Plan amendments, toolbox of possible actions and performance monitoring approach) in December 2014.



ATTRIBUTES OF GREAT COMMUNITIES

The six desired outcomes for the region endorsed by the Metro Policy Advisory Committee and approved by the Metro Council in 2010.

The Climate Smart Strategy and implementation recommendations support all six of the region's desired outcomes.





ABOUT THE CLIMATE SMART STRATEGY

The results are in and the news is good. After a four-year collaborative process informed by research, analysis, community engagement and deliberation, the region has identified a Climate Smart Strategy that achieves a 29 percent reduction in per capita greenhouse gas emissions. The strategy does more than just meet the target. Analyses show it supports many other local, regional and state goals, including clean air and water, transportation choices, healthy and equitable communities, and a strong economy.

Analyses demonstrate significant benefits can be realized by implementing the Climate Smart Strategy.

More information on the results, expected benefits and estimated costs is available at :

oregonmetro.gov/climatescenarios

This overview is designed to help elected, business, and community leaders, and residents better understand the strategy and supporting implementation recommendations as Metro Policy Advisory Committee (MPAC) and Joint Policy Advisory Committee on Transportation (JPACT) continue working to finalize their recommendation to the Metro Council in December 2014.

After a four-year collaborative process informed by research, analysis, community engagement and discussion, the region has identified a Climate Smart Strategy that achieves a 29 percent reduction in per capita greenhouse gas emissions and supports the plans and visions that have already been adopted by communities and the region.

WHAT IS THE CLIMATE SMART STRATEGY?

The Climate Smart Strategy is a set of policies, strategies and near-term actions to guide how the region moves forward to integrate reducing greenhouse gas emissions with ongoing efforts to create the future we want for our region. Key components of the strategy include:

CLIMATE SMART STRATEGY

- The key policies and strategies recommended to continue demonstrating the region's leadership in reducing greenhouse gas emissions from light-duty vehicles.
- The strategy relies on adopted local and regional land use and transportation plans and expected advancements in cleaner, low carbon fuels and more fuel-efficient vehicles.

REGIONAL FRAMEWORK PLAN (RFP) AMENDMENTS

- Refinements to existing regional policies to integrate the key components of the Climate Smart Strategy, including policies and strategies to guide implementation and performance measures for tracking the region's progress.

TOOLBOX OF POSSIBLE ACTIONS

- An advisory menu of possible near-term actions that state, regional and local governments and special districts can take in the next five years to begin implementing the strategy.
- A living document subject to further review and refinement as part of scheduled updates to the Regional Transportation Plan to reflect new information and approaches to reducing greenhouse gas emissions.
- Updates to local comprehensive plans and development regulations, transit agency plans, port district plans and regional growth management and transportation plans present ongoing opportunities to consider implementing the toolbox actions in locally tailored ways.

SHORT LIST OF CLIMATE SMART ACTIONS

- A list of three actions for 2015 and 2016 to demonstrate the region's commitment to work together to begin implementing the strategy.
- The actions focus on transportation funding, advancements in clean fuels and vehicle technologies and collaboration among multiple partners to seek opportunities to implement projects that combine the most effective greenhouse gas emissions reduction strategies.

PERFORMANCE MONITORING APPROACH

- Identifies measures and performance monitoring targets for tracking the region's progress on implementing the strategy.
- Monitoring and reporting system that builds on existing performance monitoring requirements per ORS 197.301 and updates to the RTP and Urban Growth Report.

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EXPECTED BENEFITS OF THE STRATEGY

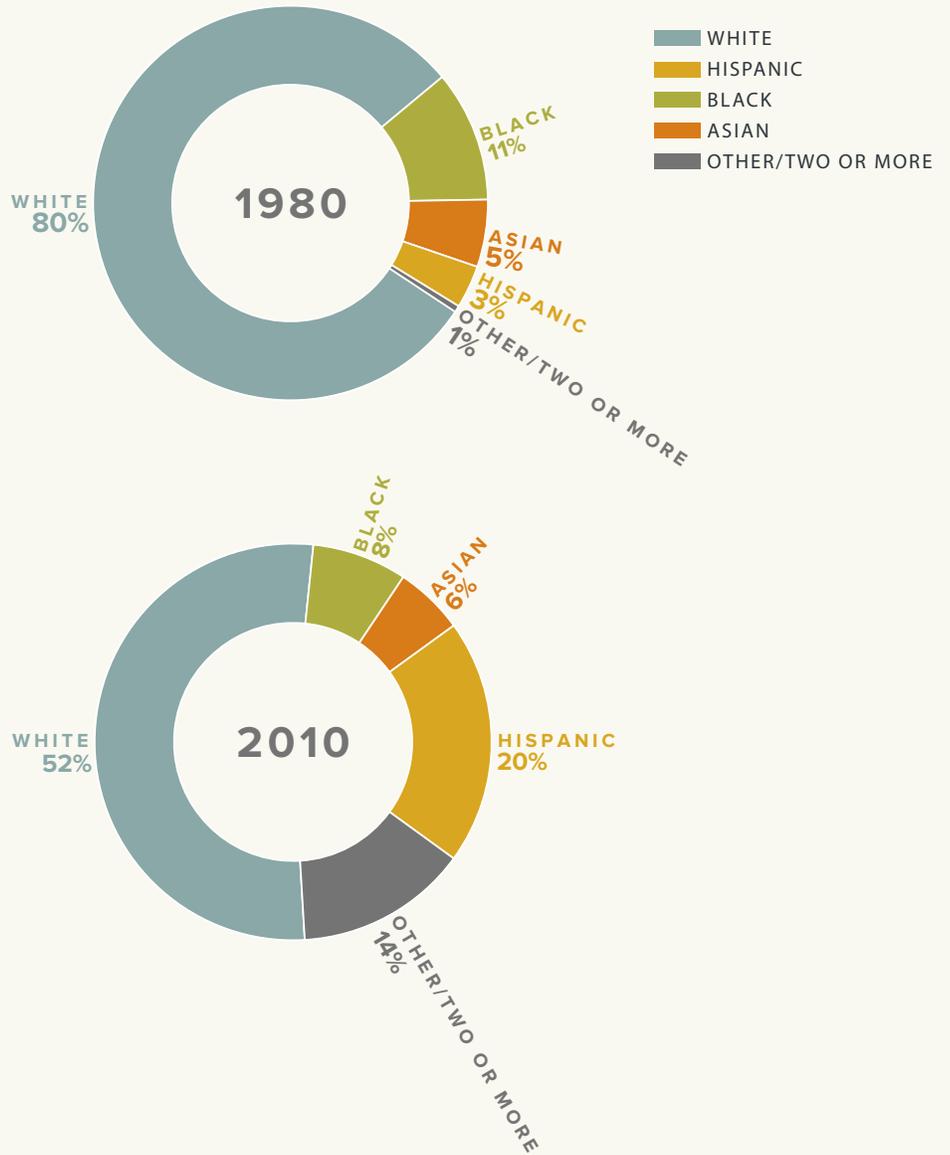
By 2035, the Climate Smart Strategy can help people live healthier lives and save businesses and households money through benefits like:

- Reduced air pollution and increased physical activity can help reduce illness and save lives. This helps save money that can be spent on other priorities.
- Less air pollution also means fewer environmental costs. This helps save money that can be spent on other priorities.
- Spending less time in traffic and reduced delay on the system saves businesses money, supports job creation, and promotes the efficient movement of goods.
- Households save money by driving more fuel-efficient vehicles fewer miles and walking, biking and using transit more. This allows people to spend money on other priorities, of particular importance to households of modest means.



People of color are an increasingly significant percentage of the Portland metropolitan region's population. Areas with high poverty rates and people of color are located in all three of the region's counties – often in neighborhoods with limited transit access to family wage jobs and gaps in walking and bicycling networks.

RACE AND ETHNICITY IN THE PORTLAND METROPOLITAN REGION



REGIONAL CONTEXT

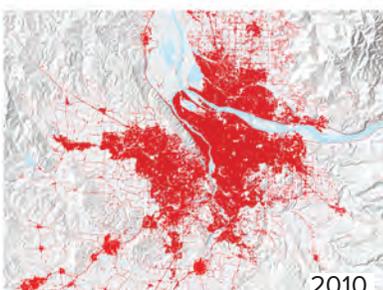
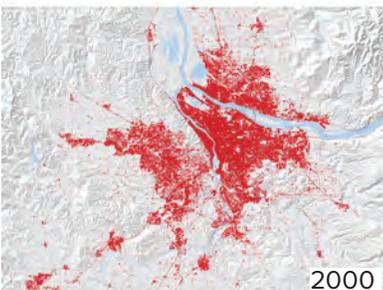
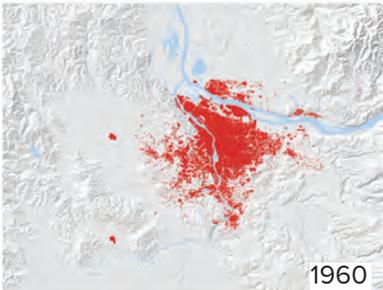
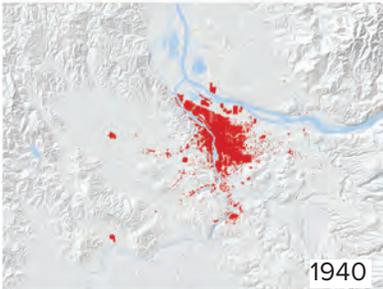
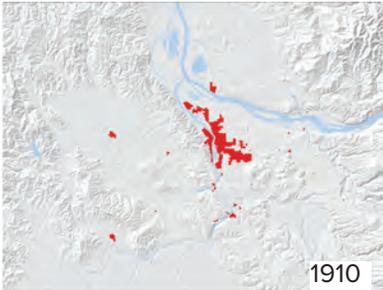
OUR REGION IS CHANGING

The Portland metropolitan region is an extraordinary place to call home. Our region has unique communities with inviting neighborhoods, a diverse economy and a world-class transit system. The region is surrounded by stunning natural landscapes and criss-crossed with a network of parks, trails and wild places within a walk, bike ride or transit stop from home. Over the years, the communities of the Portland metropolitan region have taken a collaborative approach to planning that has helped make our region one of the most livable in the country.

Because of our dedication to planning and working together to make local and regional plans a reality, we have set a wise course for managing growth – but times are challenging. With a growing and increasingly diverse population and an economy that is still in recovery, residents of the region along with the rest of the nation have reset expectations for financial and job security.

Aging infrastructure, rising energy costs, a changing climate, and global economic and political tensions demand new kinds of leadership, innovation and thoughtful deliberation and action to ensure our region remains a great place to live, work and play for everyone.

In collaboration with city, county, state, business and community leaders, Metro has researched how land use and transportation policies and investments can be leveraged to respond to these challenges and meet state targets for reducing greenhouse gas emissions from cars and small trucks.



Sources: 1910, 1940, 1960 - Historic Metropolitan Planning Commission Maps, 2000, 2010 - NOAA CCAP Landcover

The region expects to welcome nearly 500,000 new residents and more than 365,000 new jobs within the urban growth boundary by 2035.

PROJECT BACKGROUND

The Climate Smart Communities Scenarios Project responds to a 2009 mandate from the Oregon Legislature for Metro to develop and implement a strategy to reduce per capita greenhouse gas emissions from cars and small trucks by 2035.

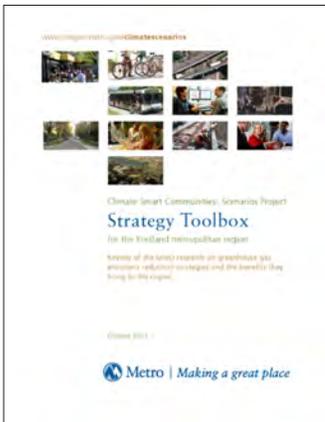
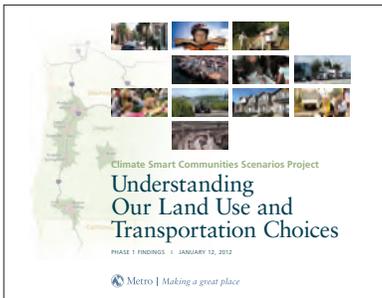
Metro is the regional government serving a population of 1.5 million people in the Portland metropolitan region. In that role, Metro has been working together with regional technical and policy advisory committees and community, business and elected leaders across the region to shape the Climate Smart Strategy and supporting implementation recommendations.

Development and adoption of the strategy was completed in three phases.

Phase 1 began in 2011 and concluded in early 2012. This phase consisted of testing strategies on a regional level to understand which strategies can most effectively help the region meet the state greenhouse gas emissions reduction mandate.

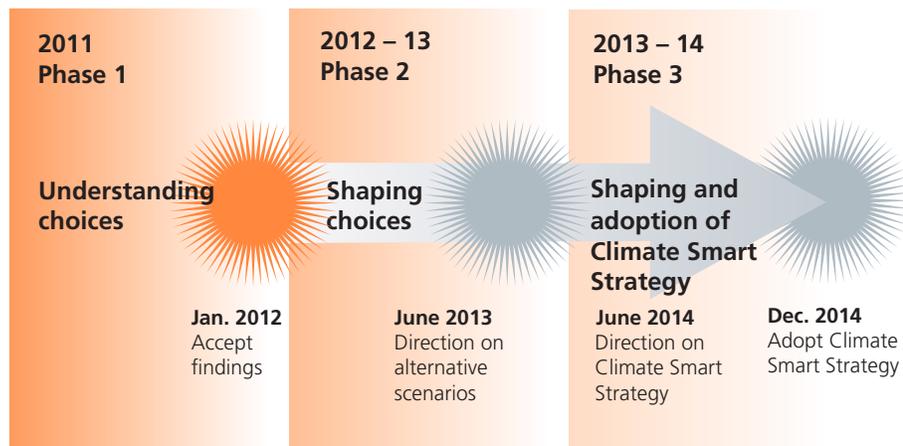
Most of the investments and actions under consideration are already being implemented to varying degrees across the region to realize community visions and other important economic, social and environmental goals.

As part of the first phase, Metro staff researched strategies used to reduce emissions in communities across the region, nation and around the world. This work resulted in a toolbox describing the range of potential strategies, their effectiveness at reducing emissions and other benefits they could bring to the region, if implemented.



We found there are many ways to reduce emissions while creating healthy, equitable communities and a strong economy, but no single solution will enable the region to meet the state's target.

Climate Smart Communities Scenarios Project timeline



We found there are many ways to reduce emissions while creating healthy, more equitable communities and a strong economy, but no single solution will enable the region to meet the state’s target, including anticipated changes to fleet and technology.

The Phase 1 findings reinforced that investing in communities in ways that support local visions for the future will be key to reducing greenhouse gas emissions. Providing schools, services and shopping near where people live, improving bus and rail transit service, building new street connections, using technology to manage traffic flow, encouraging electric cars and providing safer routes for walking and biking all can help.

The second phase began in 2012 and concluded in October 2013. In this phase, Metro worked with regional technical and policy advisory committees and business and community leaders to shape three approaches – or scenarios – and the criteria used to evaluate them. In 2013, Metro analyzed the three approaches to investing in locally adopted land use and transportation plans and policies.

The purpose of the analysis was to better understand the impact of those investments to inform the development of the Climate Smart Strategy in 2014. Each scenario reflects choices about how and where the region invests to implement locally adopted plans and visions. They illustrate how different levels of leadership and investment could impact how the region grows over the next 25 years and how those investments might affect different aspects of livability for the region. The results of the analysis were released in fall 2013, and summarized in a Discussion Guide For Policymakers.



The analysis showed that if we continue investing at our current levels we will fall short of what has been asked of our region, as well as other outcomes we are working to achieve – healthy and equitable communities, clean air and water, reliable travel options, and a strong economy.

Three approaches that we evaluated in 2013

SCENARIO



Recent Trends

This scenario shows the results of implementing adopted land use and transportation plans to the extent possible with existing revenue.

SCENARIO



Adopted Plans

This scenario shows the results of successfully implementing adopted plans and achieving the current Regional Transportation Plan which relies on increased revenue.

SCENARIO



New Plans and Policies

This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans.

WHERE WE ARE TODAY



The Climate Smart Strategy includes assumptions for cleaner, low carbon fuels and more fuel-efficient vehicles as defined by state agencies during the 2011 target-setting process.

The third phase began in November 2013. Building on the previous analyses and engagement, in February 2014, the Metro Policy Advisory Committee and Joint Policy Advisory Committee on Transportation approved a path for moving forward to shape and adopt a Climate Smart Strategy by December 31, 2014.

As recommended by MPAC and JPACT, the draft strategy started with the plans cities, counties and the region have already adopted – from local zoning, capital improvement, comprehensive, and transportation system plans to the 2040 Growth Concept and regional transportation plan – to create great communities and build a strong economy. This includes managing the urban growth boundary through regular growth management cycles (currently every six years).

In addition, MPAC and JPACT agreed to include assumptions for cleaner, low carbon fuels and more fuel-efficient vehicles as defined by state agencies during the 2011 target-setting process. A third component they recommended be included in the draft approach is the Statewide Transportation Strategy assumption for pay-as-you-drive vehicle insurance.

From January to May 2014, the Metro Council engaged community and business leaders, local governments and the public on what mix of investments and actions best support their community’s vision for healthy and equitable communities and a strong economy while reducing greenhouse gas emissions.

In May 2014, policymakers considered the results of prior engagement activities and analyses, and their February 2014 policy direction to recommend a draft strategy for testing during summer 2014. The recommendation carried forward their February recommendations related to adopted plans and assumptions for fleet and technology, and provided further direction around the remaining policy areas.

The draft strategy and supporting implementation recommendations were subject to a 45-day public comment period from Sept. 15 to Oct. 30, 2014. Metro received 90 letters and emails from local governments, community based organizations and individuals. An online survey attracted nearly 2,400 people, who shared their thoughts on each of the key policy areas recommended in the overall strategy. Metro staff identified changes to the draft documents for consideration by the Metro Council and regional policy and technical committees, who continued to fine-tune their recommendations to the Metro Council in November and December 2014.

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A one-size-fits-all approach won't meet the needs of our diverse communities. A combination of all of the investments and actions under consideration is needed to help us realize our shared vision for making this region a great place for generations to come.

OVERVIEW OF CLIMATE SMART STRATEGY

The goal of the Climate Smart Strategy is to demonstrate leadership on climate change by meeting adopted targets for reducing greenhouse gas emissions from light-duty vehicles while creating healthy and equitable communities and a strong economy.

This section provides an overview of the policies and strategies recommended in the Climate Smart Strategy:

1. Implement adopted local and regional land use plans
2. Make transit convenient, frequent, accessible and affordable
3. Make biking and walking safe and convenient
4. Make streets and highways safe, reliable and connected
5. Use technology to actively manage the transportation system
6. Provide information and incentives to expand the use of travel options
7. Make efficient use of vehicle parking and land dedicated to parking spaces
8. Support Oregon's transition to cleaner, low carbon fuels and more fuel-efficient vehicles
9. Secure adequate funding for transportation investments

Each section includes a description of the policy and strategies, the potential climate benefit, cost, implementation benefits and challenges, and a summary of the how the policy is implemented in the strategy.

EXPLANATION OF THE CLIMATE BENEFIT RATINGS

In Phase 1 of the project, staff conducted a sensitivity analysis to better understand the greenhouse gas emissions reduction potential of individual policies. The information derived from the sensitivity analysis was used to develop a simplified five-star rating system for communicating the relative climate benefit of different policies. The ratings represent the relative emissions reduction effects of individual policy areas in isolation and do not capture variations that may occur from synergies between multiple policies or other benefits the policies may provide.

The ratings, in combination with fiscal, economic, equity, public health, transportation and environmental criteria and public input, informed development of the Climate Smart Strategy and all of these factors will continue to inform future implementation and investment decisions.

Estimated reductions assumed in climate benefit ratings	
less than 1%	★ ★ ★ ★ ★
1 – 2%	★ ★ ★ ★ ★
3 – 6%	★ ★ ★ ★ ★
7 – 15%	★ ★ ★ ★ ★
16 – 20%	★ ★ ★ ★ ★

Source Memo to TPAC and interested parties on Climate Smart Communities: Phase 1 Metropolitan GreenSTEP scenarios sensitivity analysis (June 21, 2012)

A NOTE ON THE STATEWIDE TRANSPORTATION STRATEGY (STS)

The Oregon Statewide Transportation Strategy (STS): A 2050 Vision for Greenhouse Gas Emissions Reduction, was accepted by the Oregon Transportation Commission in March 2013. The strategy resulted from a state-level scenario planning effort that examined all aspects of the transportation system, including the movement of people and goods, and identified a combination of strategies to reduce greenhouse gas emissions. The STS was developed as part of a larger effort known as the Oregon Sustainable Transportation Initiative (OSTI), an integrated statewide effort to reduce greenhouse gas emissions from Oregon’s transportation sector. The effort responded to two bills passed by the Oregon Legislature, House Bill 2001 (2009) and Senate Bill 1059 (2010), which were crafted to help meet state GHG reduction goals set forth in Oregon Revised Statute 468a.205.

The STS was developed over the course of two years involving extensive research and technical analysis, as well as policy direction and technical input from local governments, industry representatives, metropolitan planning organizations (MPOs), state agencies and others. The STS identifies the most effective greenhouse gas emissions reduction strategies in transportation systems, vehicle and fuel technologies, and urban land use patterns. Beyond reducing GHG emissions, these strategies were found to provide other benefits, including improved health, cleaner air, and a more efficient transportation system. The most promising strategies identified in the STS informed the development of the recommended Climate Smart Strategy.



RELATIVE CLIMATE BENEFIT



NO COST ESTIMATE
AVAILABLE

Implement adopted local and regional land use plans

In 1995, the Portland region adopted the 2040 Growth Concept, the long-range plan for managing growth that merges land use and transportation design elements to reinforce the objectives of both. The unifying theme of the 2040 Growth Concept is to preserve the region’s economic health and livability and plan for growth in the region in an equitable, environmentally-sound and fiscally-responsible manner.

The 2040 Growth Concept includes land use and transportation building blocks that express the region’s aspiration to incorporate population growth within existing urban areas as much as possible and expand the urban growth boundary only when necessary. It concentrates mixed-use and higher density development in urban centers (e.g., Portland central city, regional centers and town centers), station communities, corridors, and main streets that are well-served by transit and a well connected street network that supports biking and walking for short trips. Employment lands serve as hubs for regional commerce and include industrial land and freight facilities for truck, marine, air and rail cargo sites that enable goods to be generated and moved in and out of the region. Access is centered on rail, the freeway system and other road connections.

Since 1995, cities and counties across the region have updated their comprehensive plans, development regulations and transportation system plans to implement the 2040 Growth Concept vision in locally tailored ways. The 2040 Growth Concept and adopted local plans provide the foundation for the Climate Smart Strategy.

BENEFITS

- compact urban form that uses land and public investments efficiently
- generates jobs and business opportunities
- protects air quality, farms, forestlands and natural areas
- provides a balanced transportation system to move people and goods
- supports housing for people of all income levels
- ensures safe and stable neighborhoods

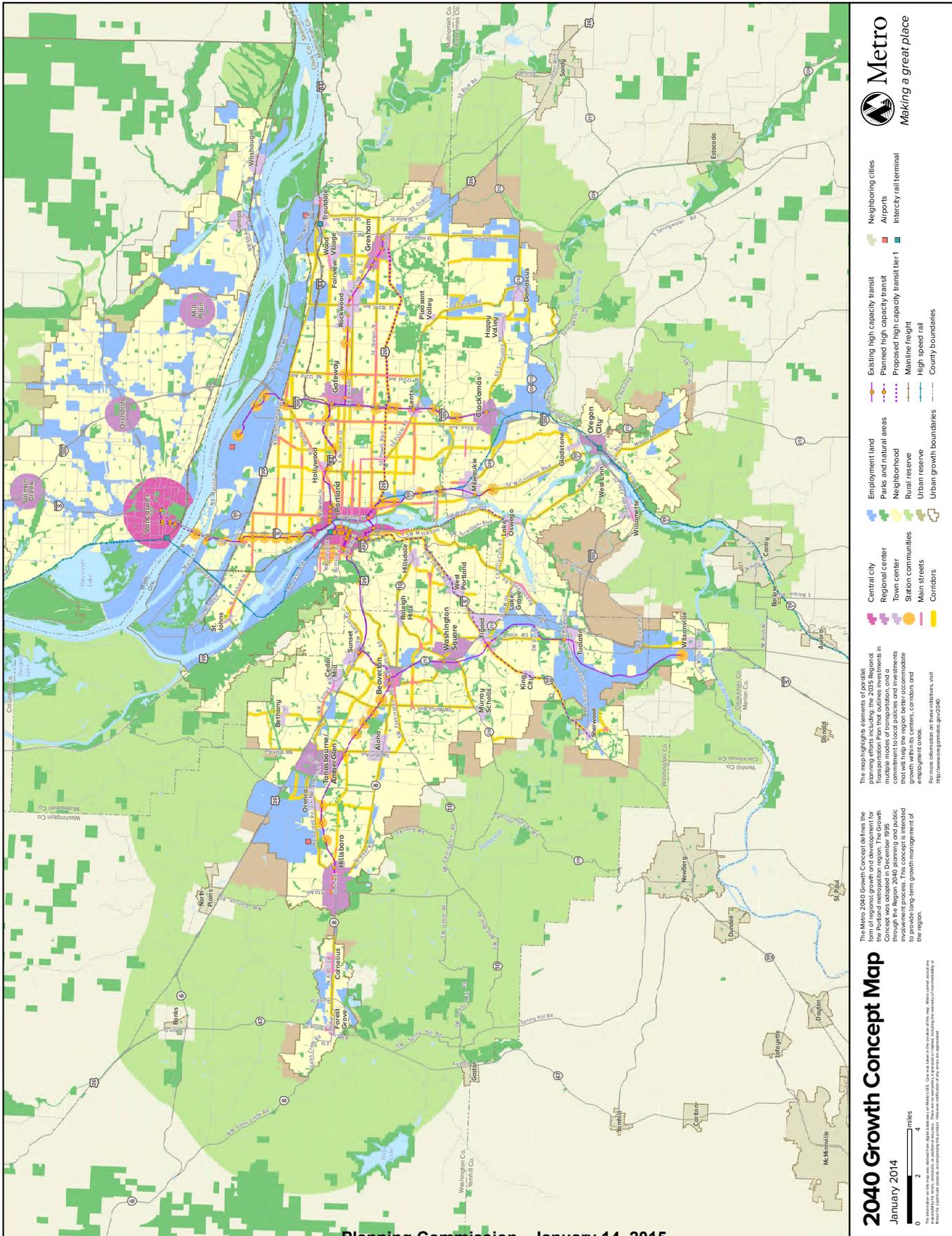
CHALLENGES

- lack of sufficient funding to make investments needed to make adopted plans a reality
- not all designated growth areas have developed as planned
- lack of civic amenities, such as public gathering places, parks and community centers in some urban centers
- changing demographics

Exhibit A to Ordinance No. 14-1346B

OUR SHARED VISION: THE 2040 GROWTH CONCEPT

An integrated land use and transportation vision for building healthy, equitable communities and a strong economy while reducing greenhouse gas emissions.





RELATIVE CLIMATE BENEFIT



ESTIMATED COST TO IMPLEMENT BY 2035 (2014\$)

Capital \$4.4 billion

Operations \$8 billion

Make transit convenient, frequent, accessible and affordable

There are four key ways to make transit service convenient, frequent, accessible and affordable. The effectiveness of each will vary depending on the mix of nearby land uses, the number of people living and working in the area, and the extent to which travel information, marketing and technology are used.

Frequency Increasing the frequency of transit service in combination with transit signal priority and bus lanes makes transit faster and more convenient.

System expansion Providing new community and regional transit connections improves access to jobs and community services and makes it easier to complete some trips without multiple transfers. This includes local services like GroveLink, a partnership between the City of Forest Grove, Ride Connection and TriMet to improve neighborhood access to regional transit service and jobs and other destinations in the community.

Transit access Building safe and direct biking and walking routes and crossings that connect to stops makes transit more accessible and convenient.

Fares Providing reduced fares makes transit more affordable; effectiveness depends on the design of the fare system and the cost.

Transit is provided in the region by TriMet and South Metro Area Rapid Transit (SMART) in partnership with Metro, cities, counties, employers, business associations and non-profit organizations.

BENEFITS

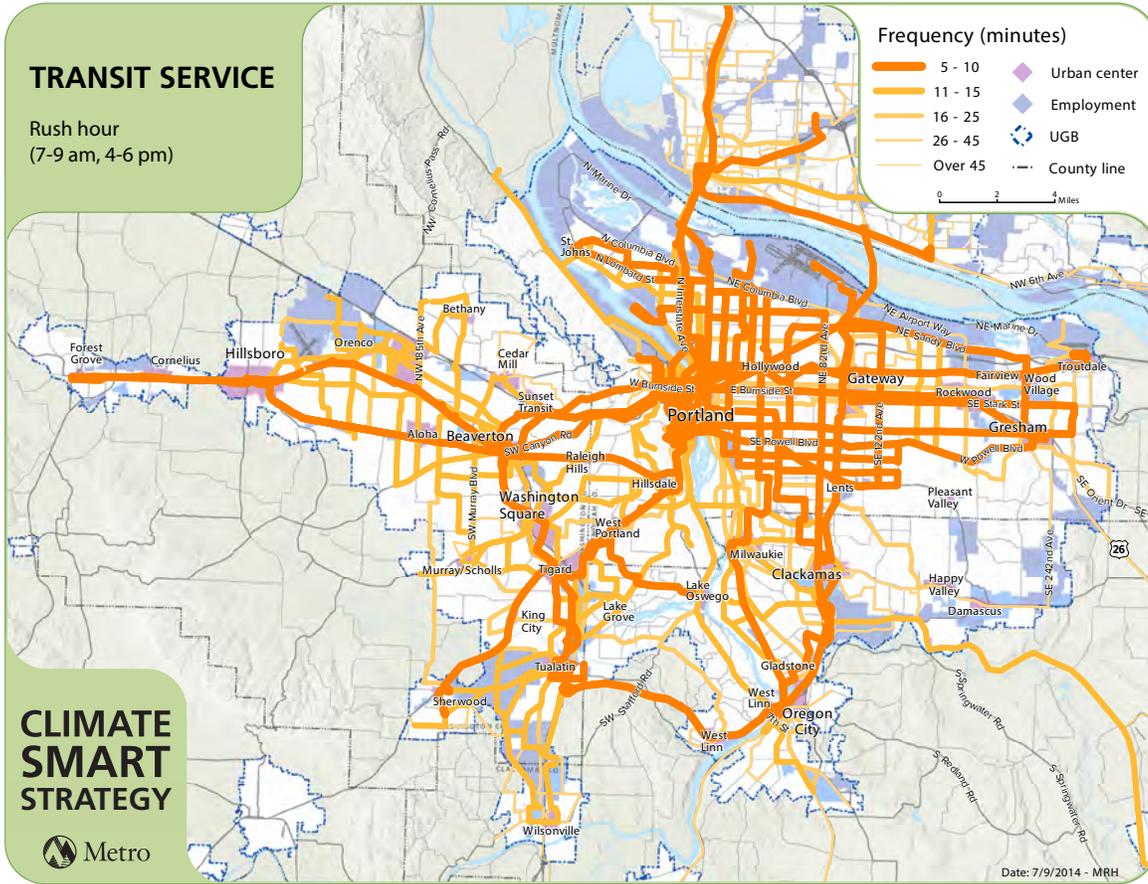
- improves access to jobs, the workforce, and goods and services, boosting business revenues
- creates jobs and saves consumers and employers money
- stimulates development, generating local and state revenue
- provides drivers an alternative to congested roadways and supports freight movements by taking cars off the road
- increases physical activity
- reduces air pollution and air toxics
- reduces risk of traffic fatalities and injuries

CHALLENGES

- transit demand outpacing funding
- enhancing existing service while expanding coverage and frequency to growing areas
- reduced revenue and federal funding, leading to increased fares and service cuts
- preserving affordable housing options near transit
- ensuring safe and comfortable access to transit for pedestrians, cyclists and drivers
- transit-dependent populations locating in parts of the region that are harder to serve with transit

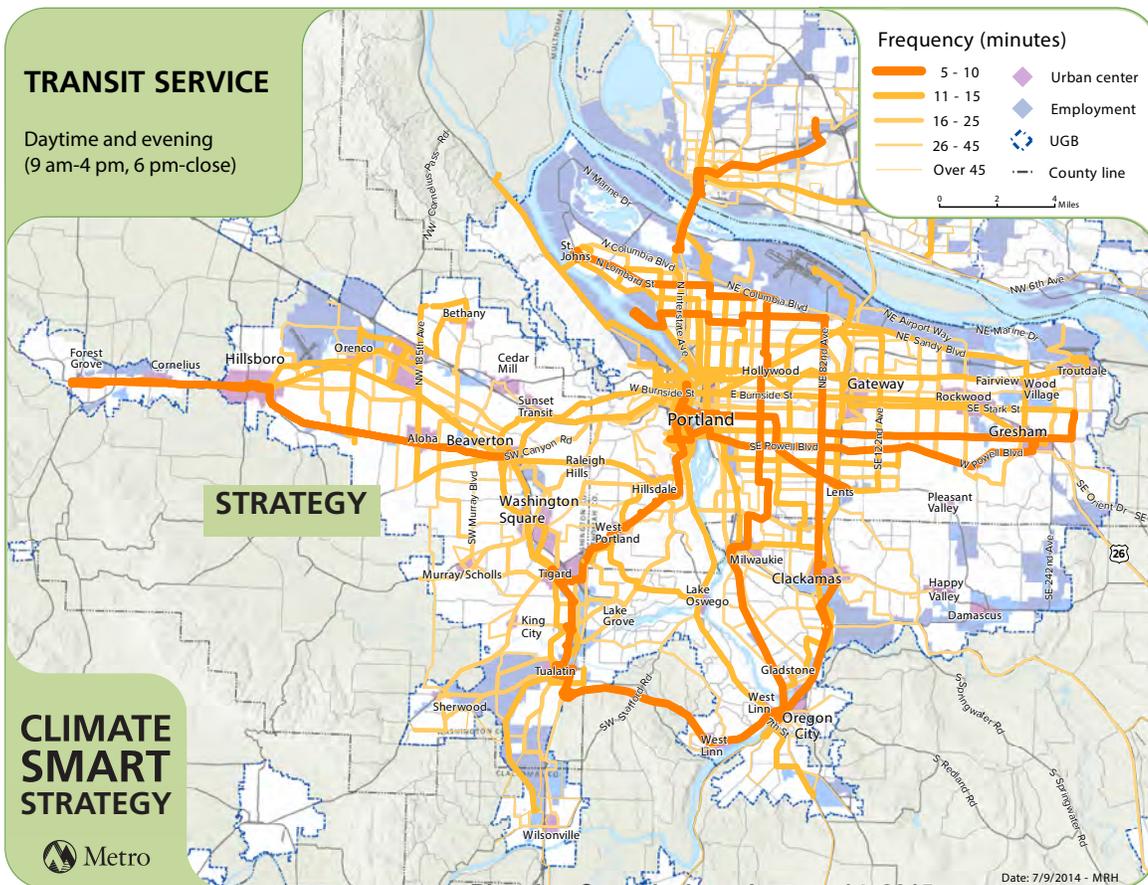
Exhibit A to Ordinance No. 14-1346B

CLIMATE SMART STRATEGY



55% jobs
49% households
62% low-income households

Estimated jobs and households within ¼-mile of 15-minute or better service by 2035



52% jobs
37% households
49% low-income households

Estimated jobs and households within ¼-mile of 15-minute or better service by 2035

Note: The maps and cost estimates reflect the transit service operations and frequencies adopted in the full 2014 RTP and transit capital investments adopted in the constrained RTP plus additional capital to support operations level.



RELATIVE CLIMATE BENEFIT



ESTIMATED COST TO IMPLEMENT BY 2035 (2014\$)

\$2 billion

Make biking and walking safe and convenient

Active transportation is human-powered travel that engages people in healthy physical activity while they go from place to place. Examples include walking, biking, pushing strollers, using wheelchairs or other mobility devices, skateboarding, and rollerblading. Active transportation is an essential component of public transportation because most of these trips begin and end with walking or biking.

Today, about 50 percent of the regional active transportation network is complete. Nearly 18 percent of all trips in the region are made by walking and biking, a higher share than many other places. Approximately 45 percent of all trips made by car in the region are less than three miles and 15 percent are less than one mile. With a complete active transportation network supported by education and incentives, many of the short trips made by car could be replaced by walking and biking. (See separate summary on providing information and incentives to expand use of travel options.)

For active travel, transitioning between modes is easy when sidewalks and bicycle routes are connected and complete, wayfinding is coordinated, and transit stops are connected by sidewalks and have shelters and places to sit. Biking to work and other places is supported when bicycles are accommodated on transit vehicles, safe and secure bicycle parking is available at transit shelters and community destinations, and adequate room is provided for walkers and bicyclists on shared pathways. Regional trails and transit function better when they are integrated with on-street walking and biking routes.

BENEFITS

- increases access to jobs and services
- provides low-cost travel options
- supports economic development, local businesses and tourism
- increases physical activity and reduces health care costs
- reduces air pollution and air toxics
- reduces risk of traffic fatalities and injuries

CHALLENGES

- major gaps exist in walking and biking routes across the region
- gaps in the active transportation network affect safety, convenience and access to transit
- many would like to walk or bike but feel unsafe
- many lack access to walking and biking routes
- dedicated funding is limited and in decline

Exhibit A to Ordinance No. 14-1346B

CLIMATE SMART STRATEGY

663

Miles of bikeways, sidewalks and trails added by 2035

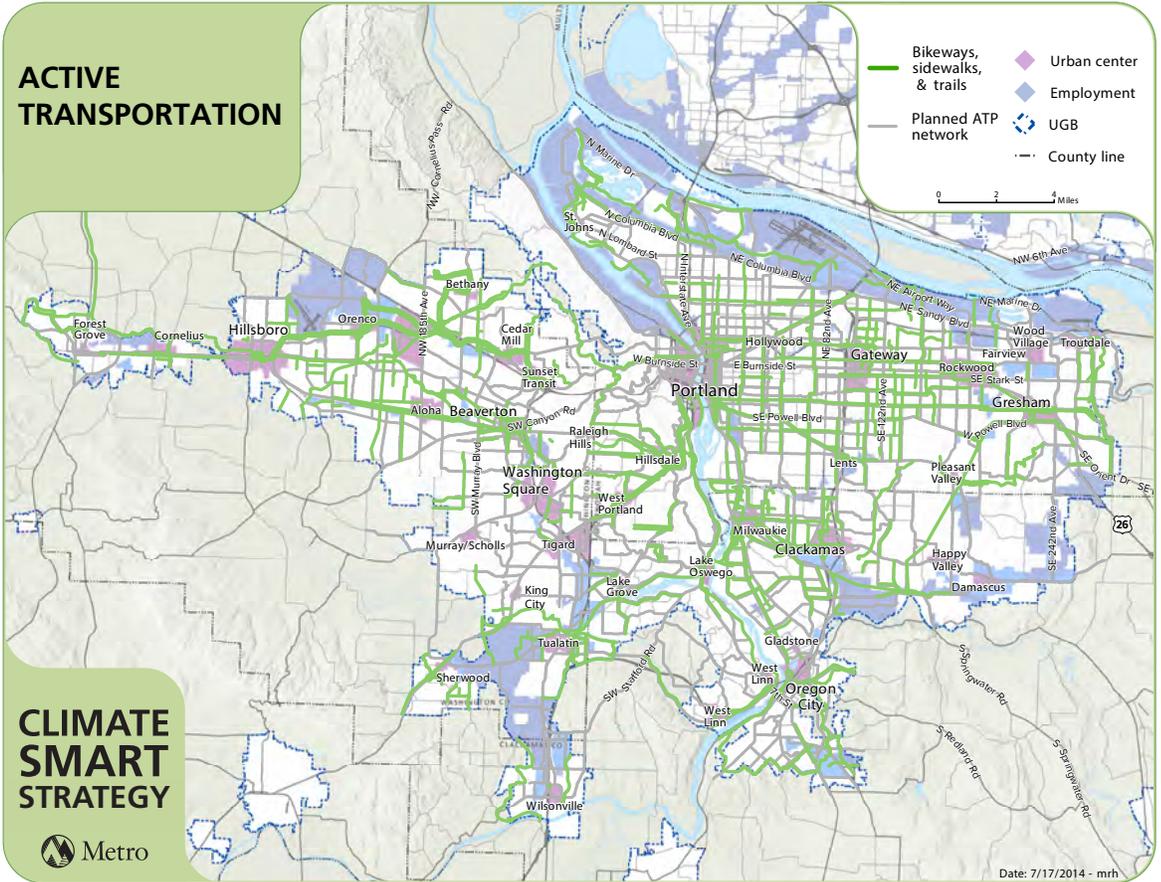
61

Estimated lives saved annually from increased physical activity by 2035

\$500 million

Societal value of the lives saved each year by 2035 (from increased physical activity)

ACTIVE TRANSPORTATION



Note: The map and estimated cost reflect the active transportation investments adopted in the constrained 2014 Regional Transportation Plan.



RELATIVE CLIMATE BENEFIT



ESTIMATED COST TO IMPLEMENT BY 2035 (2014\$)

Capital \$8.8 billion

Operations, maintenance, and preservation (OMP) \$12 billion

Make streets and highways safe, reliable and connected

Today, nearly 45 percent of all trips in the region made by car are less than three miles, and 15 percent are less than one mile. When road networks lack multiple routes serving the same destinations, short trips must use major travel corridors designed for freight and regional traffic, adding to congestion.

There are three key ways to make streets and highways more safe, reliable and connected to serve longer trips across the region on highways, shorter trips on arterial streets, and the shortest trips on local streets.

Maintenance and efficient operation of the existing road system Keeping the road system in good repair and using information and technology to manage travel demand and traffic flow help improve safety, and boost efficiency of the existing system. With limited funding, more effort is being made to maximize system operations prior to building new capacity in the region. (See separate summaries describing the use of technology and information.)

Street connectivity Building a well connected network of complete streets including new local and major street connections shortens trips, improves access to community and regional destinations, and helps preserve the capacity and function of highways in the region for freight and longer trips. These connections include designs that support walking and biking, and, in some areas, provide critical freight access between industrial areas, intermodal facilities and the interstate highway system.

Network expansion Targeted widening of streets and highways along with other strategies helps manage congestion and connect goods to market and support travel across the region.

BENEFITS

- improves access to jobs, goods and services, boosting business revenue
- creates jobs and stimulates development, boosting the economy
- reduces delay, saving businesses time and money
- reduces risk of traffic fatalities and injuries
- reduces emergency response time

CHALLENGES

- declining purchasing power of existing funding sources, growing maintenance backlog, and rising construction costs
- may induce more traffic
- potential community impacts, such as displacement and noise
- concentration of air pollutants and air toxics in major travel corridors

Exhibit A to Ordinance No. 14-1346B

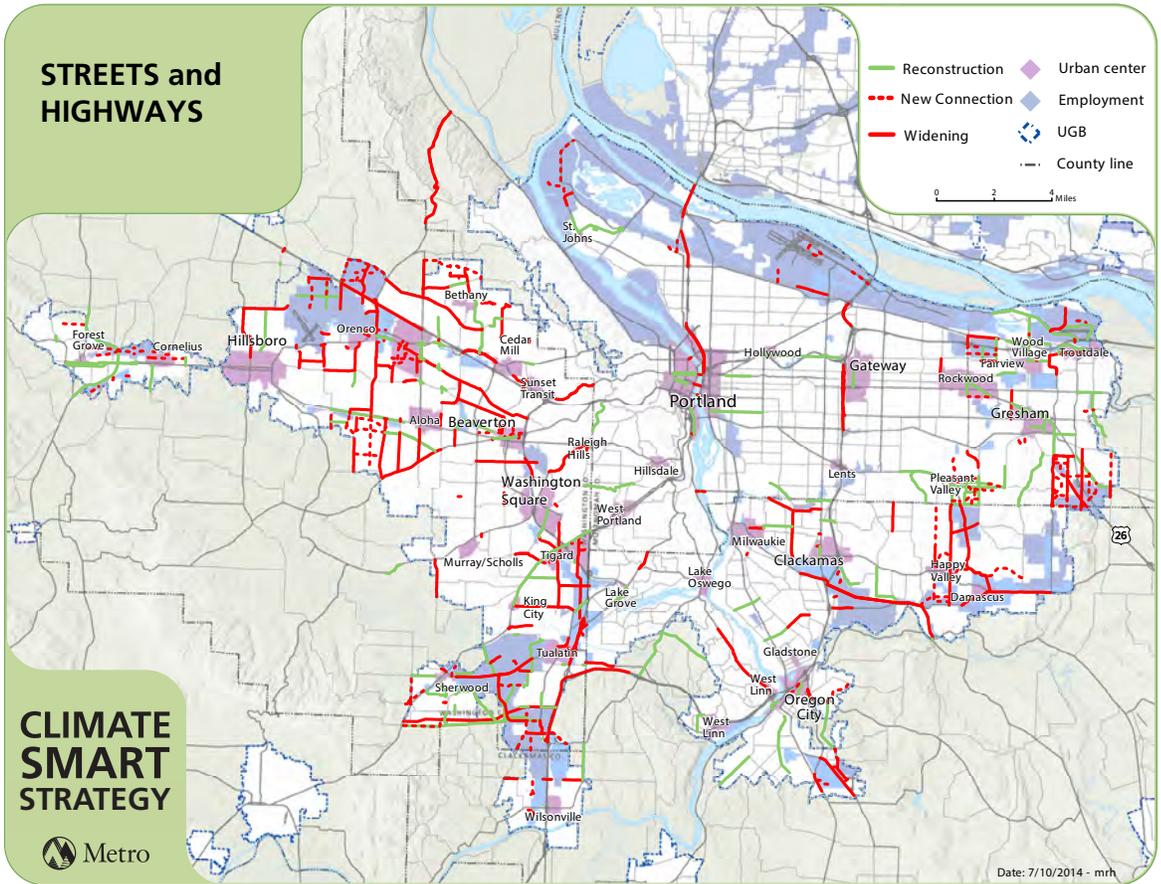
CLIMATE SMART STRATEGY

52

Lane miles of freeways added by 2035 to support people and goods movement

386

Lane miles of arterials added by 2035, nearly two-thirds of which include bike and pedestrian improvements



Note: The map reflects capital investments adopted in the constrained 2014 Regional Transportation Plan for streets, highways and bridges in the region. The estimated costs includes capital costs adopted in the constrained 2014 RTP and preliminary estimates for local and state road-related operations, maintenance and preservation needs in the region.



RELATIVE CLIMATE BENEFIT



ESTIMATED COST TO IMPLEMENT BY 2035 (2014\$)

\$206 million

Use technology to actively manage the transportation system

Using technology to actively manage the Portland metropolitan region’s transportation system means using intelligent transportation systems (ITS) and services to reduce vehicle idling associated with delay, making walking and biking more safe and convenient, and helping improve the speed and reliability of transit. Nearly half of all congestion is caused by incidents and other factors that can be addressed using these strategies.

Local, regional and state agencies work together to implement transportation system technologies. Agreements between agencies guide sharing of data and technology, operating procedures for managing traffic, and the ongoing maintenance and enhancement of technology, data collection and monitoring systems.

Arterial corridor management includes advanced technology at each intersection to actively manage traffic flow. This may include coordinated or adaptive signal timing; advanced signal operations such as cameras, flashing yellow arrows, bike signals and pedestrian count down signs; and communication to a local traffic operations center and the centralized traffic signal system.

Freeway corridor management includes advanced technology to manage access to the freeways, detect traffic levels and weather conditions, provide information with variable message signs and variable speed limit signs, and deploying incident response patrols that quickly clear breakdowns, crashes and debris. These tools connect to a regional traffic operations center.

Traveler information includes using variable message and speed signs and 511 internet and phone services to provide travelers with up-to-date information regarding traffic and weather conditions, incidents, travel times, alternate routes, construction, or special events.

BENEFITS

- provides near-term benefits
- reduces congestion and delay
- makes traveler experience more reliable
- saves public agencies, consumers and businesses time and money
- reduces air pollution and air toxics
- reduces risk of traffic fatalities and injuries

CHALLENGES

- requires ongoing funding to maintain operations and monitoring systems
- requires significant cross-jurisdictional coordination
- workforce training gaps

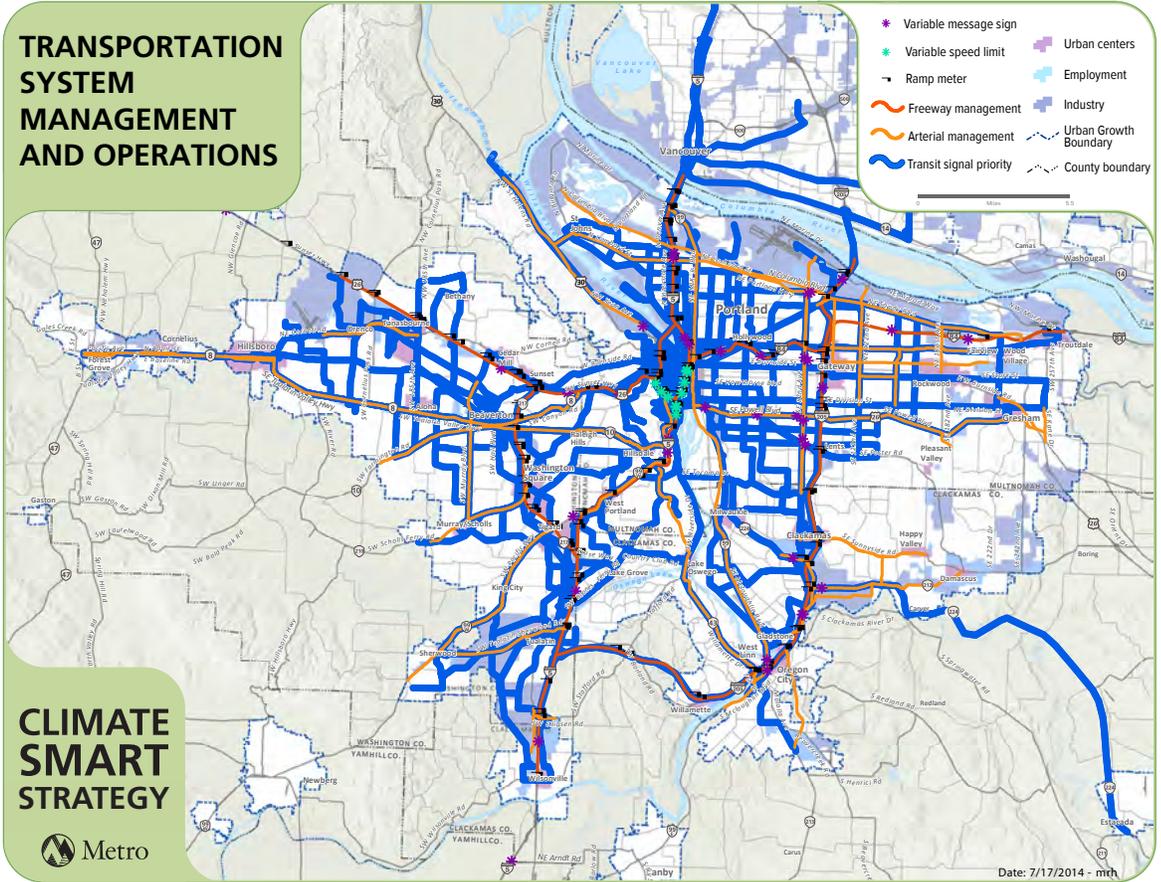
Exhibit A to Ordinance No. 14-1346B

CLIMATE SMART STRATEGY

TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS

35% on arterials and freeways

Estimated delay reduction by 2035



Note: The map and estimated cost reflect the full 2014 Regional Transportation Plan transportation system management and operations investments plus additional investments to support expanding incident response and transit signal priority across the region.



RELATIVE CLIMATE BENEFIT



ESTIMATED COST TO IMPLEMENT BY 2035 (2014\$)

\$185 million

Provide information and incentives to expand the use of travel options

Public awareness, education and travel options support tools are cost-effective ways to improve the efficiency of the existing transportation system through increased use of travel options such as walking, biking, carsharing, carpooling and taking transit. Local, regional and state agencies work together with businesses and non-profit organizations to implement programs in coordination with other capital investments. Metro coordinates partners' efforts, sets strategic direction, evaluates outcomes, and manages grant funding.

Public awareness strategies include promoting information about travel choices and teaching the public about eco-driving: maintaining vehicles to operate more efficiently and practicing driving habits that can help save time and money while reducing greenhouse emissions.

Commuter programs are employer-based outreach efforts that include (1) financial incentives, such as transit pass programs and offering cash instead of parking subsidies; (2) facilities and services, such as carpooling programs, bicycle parking, emergency rides home, and work-place competitions; and (3) flexible scheduling such as working from home or compressed work weeks.

Individualized Marketing (IM) is an outreach method that encourages individuals, families or employees interested in making changes in their travel choices to participate in a program. A combination of information and incentives is tailored to each person's or family's specific travel needs. IM can be part of a comprehensive commuter program.

Travel options support tools reduce barriers to travel options and support continued use with tools such as the Drive Less. Connect. online carpool matching; trip planning tools; wayfinding signage; bike racks; and carsharing.

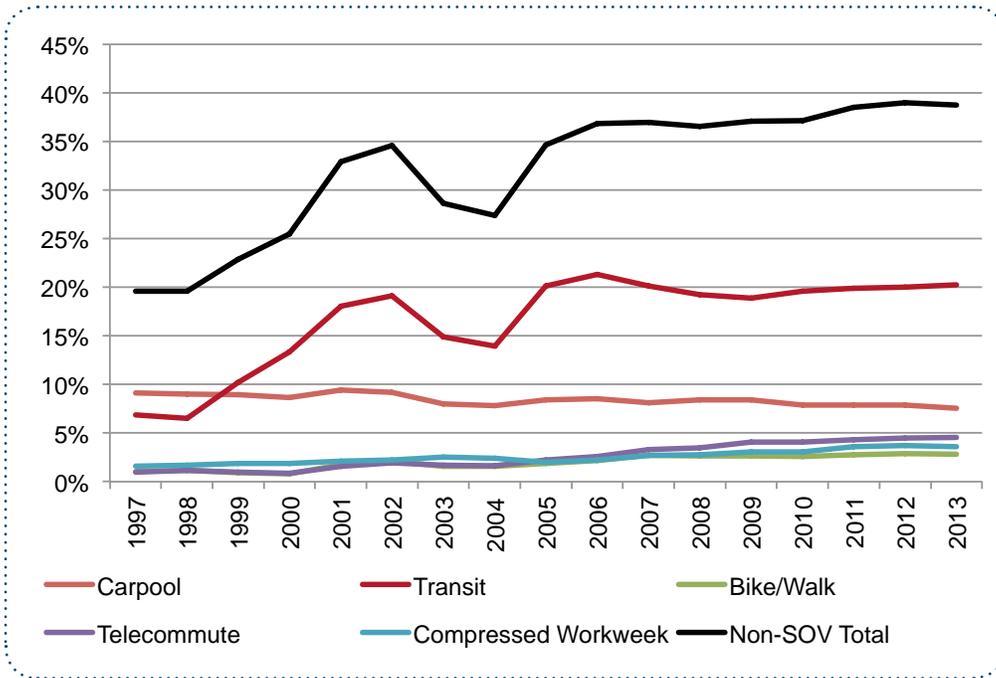
BENEFITS

- increases cost-effectiveness of capital investments in transportation
- saves public agencies, consumers and businesses time and money
- preserves road capacity
- reduces congestion and delay
- increases physical activity and reduces health care costs
- reduces air pollution and air toxics

CHALLENGES

- program partners need ongoing tools and resources to increase outcomes
- factors such as families with children, long transit times, night and weekend work shifts not served by transit
- major gaps exist in walking and biking routes across the region
- consistent data collection to support performance measurement

Exhibit A to Ordinance No. 14-1346B



EFFECTIVENESS OF EMPLOYER COMMUTER PROGRAMS (1997 - 2013)

The TriMet, Wilsonville SMART and TMA employer outreach programs have made significant progress with reducing drive-alone trips. Since 1996, employee commute trips that used non-drive-alone modes (transit, bicycling, walking, carpooling/vanpooling and telecommuting) rose from 20% to over 39% among participating employers.

EFFECTIVENESS OF COMMUNITY AND NEIGHBORHOOD PROGRAMS

Community outreach programs such as Portland Sunday Parkways and Wilsonville Sunday Streets encourage residents to use travel options by exploring their neighborhoods on foot and bike without motorized traffic. Sunday Parkways events have attracted 400,000 attendees since 2008 and the Wilsonville Sunday Streets event attracted more than 5,000 participants in 2012.

Other examples of valuable community outreach and educational programs include the Community Cycling Center’s program to reduce barriers to biking and Metro’s Vámonos program, both of which provide communities across the region with the skills and resources to become more active by walking, biking, and using transit for their transportation needs.

In 2004, the City of Portland launched the Interstate TravelSmart individualized marketing project in conjunction with the opening of the MAX Yellow Line. Households that received individualized marketing made nearly twice as many transit trips compared to a similar group of households that did not participate in the marketing campaign. In addition, transit use increased nearly 15 percent during the SmartTrips project along the MAX Green Line in 2010. Follow-up surveys show that household travel behavior is sustained for at least two years after a project has been completed.



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RELATIVE CLIMATE BENEFIT



ESTIMATED COST TO IMPLEMENT BY 2035 (2014\$)

No cost estimated. This policy area is primarily implemented through local development codes.

Make efficient use of vehicle parking and land dedicated to parking spaces

Parking management refers to various policies and programs that result in more efficient use of parking resources. Parking management is implemented through city and county development codes. Managing parking works best when used in a complementary fashion with other strategies; it is less effective in areas where transit or bicycle and pedestrian infrastructure is lacking.

Planning approaches include conducting assessments of the parking supply to better understand needs. A typical urban parking space has an annualized cost of \$600 to \$1,200 to maintain, while structured parking construction costs averages \$15,000 per space.

On-street parking approaches include spaces that are timed, metered, designated for certain uses or have no restriction. Examples of these different approaches include charging long-term or short-term fees, limiting the length of time a vehicle can park, and designating on-street spaces for preferential parking for electric vehicles, carshare vehicles, carpools, vanpools, bikes, public use (events or café “Street Seats”) and freight truck loading/unloading areas.

Off-street parking approaches include providing spaces in designated areas, unbundling parking, preferential parking (for vehicles listed above), shared parking between land uses (for example, movie theater and business center), park-and-ride lots for transit and carpools/vanpools, and parking garages in downtowns and other mixed-use areas that allow surface lots to be developed for other uses.

BENEFITS

- allows more land to be available for development, generating local and state revenue
- reduces costs to governments, businesses, developers and consumers
- fosters public-private partnerships that can result in improved streetscape for retail and visitors
- generates revenues where parking is priced
- reduces air pollution and air toxics

CHALLENGES

- inadequate information for motorists on parking and availability
- inefficient use of existing parking resources
- parking spaces that are inconvenient to nearby residents and businesses
- scarce freight loading and unloading areas
- low parking turnover rate
- lack of sufficient parking
- parking oversupply, ongoing costs and the need to free up parking for customers



RELATIVE CLIMATE BENEFIT



NO COST ESTIMATE
AVAILABLE

Support transition to cleaner, low carbon fuels and more fuel-efficient vehicles

There are a variety of strategies, vehicle technologies and fuels available to reduce greenhouse gas emissions including the development of higher fuel economy standards, lowering the carbon content of fuels, and deployment of electric vehicles and plug-in hybrids. The greenhouse gas emissions reduction potential of these strategies is directly related to the combination and pace at which these strategies are implemented over time, and the types, convenience and affordability of vehicle technologies and supporting infrastructure made available to businesses and consumers.

Much work is being done at state and federal levels to expand the number of vehicles available with higher fuel efficiency and lower emissions, and to reduce the carbon content of fuels. Oregon has made great strides in increasing the electric vehicle charging network; anxiety related to distances between charging stations is among the issues that need to be addressed.

Pilot projects and other policies can be implemented at the local and regional levels to support these efforts. Policies include developing a reliable network of public and private electric vehicle charging stations and supportive infrastructure, providing consumer and businesses incentives to make the higher initial purchasing costs of hybrid and electric vehicles more affordable, government and corporate purchases to increase visibility, supportive permitting and codes for electric vehicle charging and alternative fueling stations, and public education.

BENEFITS

- reduces fuel consumption
- reduces costs to governments, businesses and consumers
- reduces air pollution and air toxics and associated healthcare costs
- creates economic development and job opportunities

CHALLENGES

- legislative actions needed at state and federal level
- permitting and development code changes may be needed to allow for provision of charging and alternative fueling infrastructure
- more alternative fuel vehicles results in reduced fuel consumption, which reduces revenue to finance transportation investments
- concern about the potential costs associated with low carbon and alternative fuels

**FLEET AND TECHNOLOGY ADVANCEMENTS ASSUMED
IN THE CLIMATE SMART STRATEGY**

Strategy assumptions		2010	2035
		Base Year Reflects existing conditions	Climate Smart Strategy
Fleet	Fleet mix (proportion of autos to light trucks)	auto: 57% light truck: 43%	auto: 71% light truck: 29%
	Fleet turnover rate (age)	10 years	8 years
Technology	Fuel economy (miles per gallon)	auto: 29.2 mpg light truck: 20.9 mpg	auto: 68.5 mpg light truck: 47.7 mpg
	Carbon intensity of fuels	90 g CO ₂ e/megajoule	72 g CO ₂ e/megajoule
	Light-duty vehicles that are electric vehicles (EV) or plug-in hybrid electric vehicles (PHEV)	<u>EV or PHEV</u> auto: 1% light truck: 1%	<u>EV or PHEV</u> auto: 8% light truck: 2%
	Electric vehicle battery range (miles)	auto: 50 miles light truck: 25 miles	auto: 215 miles light truck: 144 miles

All fleet and technology assumptions reflect the values defined in the State Agencies' Technical report (3/1/11) available at arcweb.sos.state.or.us/pages/rules/oars_600/oar_660/_tables_660/660-044-0010_5-26.pdf.



RELATIVE CLIMATE BENEFIT

N/A

RELATIVE COST

N/A

Secure adequate funding for transportation investments

Communities have long relied upon state and federal funding to help fund local transportation system needs, financed largely through through gas taxes and other user fees. However, the purchasing power of federal and state gas tax revenues is declining as individuals drive less and fuel efficiency increases. The effectiveness of this revenue source is further eroded as the gas tax is not indexed to inflation.

Diminished resources mean reduced ability to expand, improve and maintain existing transportation infrastructure. Federal and state funding is not keeping pace with infrastructure operation and maintenance needs, so a substantial share of funding for future Regional Transportation Plan investments has shifted to local revenue sources.

Local governments in Oregon have increasingly turned to tax levies, road maintenance fees, system development charges and traffic impact fees in an attempt to keep pace, although some communities have been more successful than others. Expansion and operation of the transit system has relied heavily on payroll taxes and competitive federal funding for high capacity transit capital projects. But the region’s demand for frequent and reliable transit service exceeds the capacity of the payroll tax to support it.

The adopted RTP calls for stabilizing existing transportation revenue sources while securing new and innovative long-term sources of funding adequate to build, operate and maintain the regional transportation system for all modes of travel. The next update to the RTP will include updating the financial assumptions and potential funding mechanisms to advance implementation of adopted local and regional plans and the Climate Smart Strategy..

BENEFITS

- transforms community visions into reality
- improves access to jobs, goods and services, boosting business revenues
- creates jobs and stimulates development, boosting the regional economy
- reduces delay, saving businesses time and money
- reduces air pollution and air toxics
- reduces risk of traffic fatalities and injuries

CHALLENGES

- changing driving habits and declining purchasing power of existing funding sources due to inflation and improvement in fuel efficiency
- potential disproportionate impact of higher taxes and fees on drivers with limited travel options
- limited public support for higher fees and taxes
- patchwork of funding sources
- statutory or constitutional limitations on funding

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**Exhibit A to Ordinance No. 14-1346B
FUNDING MECHANISMS ASSUMED IN 2014 REGIONAL TRANSPORTATION
PLAN AND CLIMATE SMART STRATEGY**

EXISTING FUNDING MECHANISM	SOURCE		
	Federal	State	Local
Federal Highway Trust Fund ¹	●		
Federal Transit Fund	●		
Gas tax	●	●	●
Vehicle fees (e.g. registration, licensing fees)		●	●
Heavy truck weight-mile fee		●	
Local portion of State Highway Trust Fund ²			●
Development-based fees ³			●
Payroll tax			●
Transit passenger fares			●
Special funds and levies ⁴			●
Tolls (I-5 Columbia River Crossing)		●	

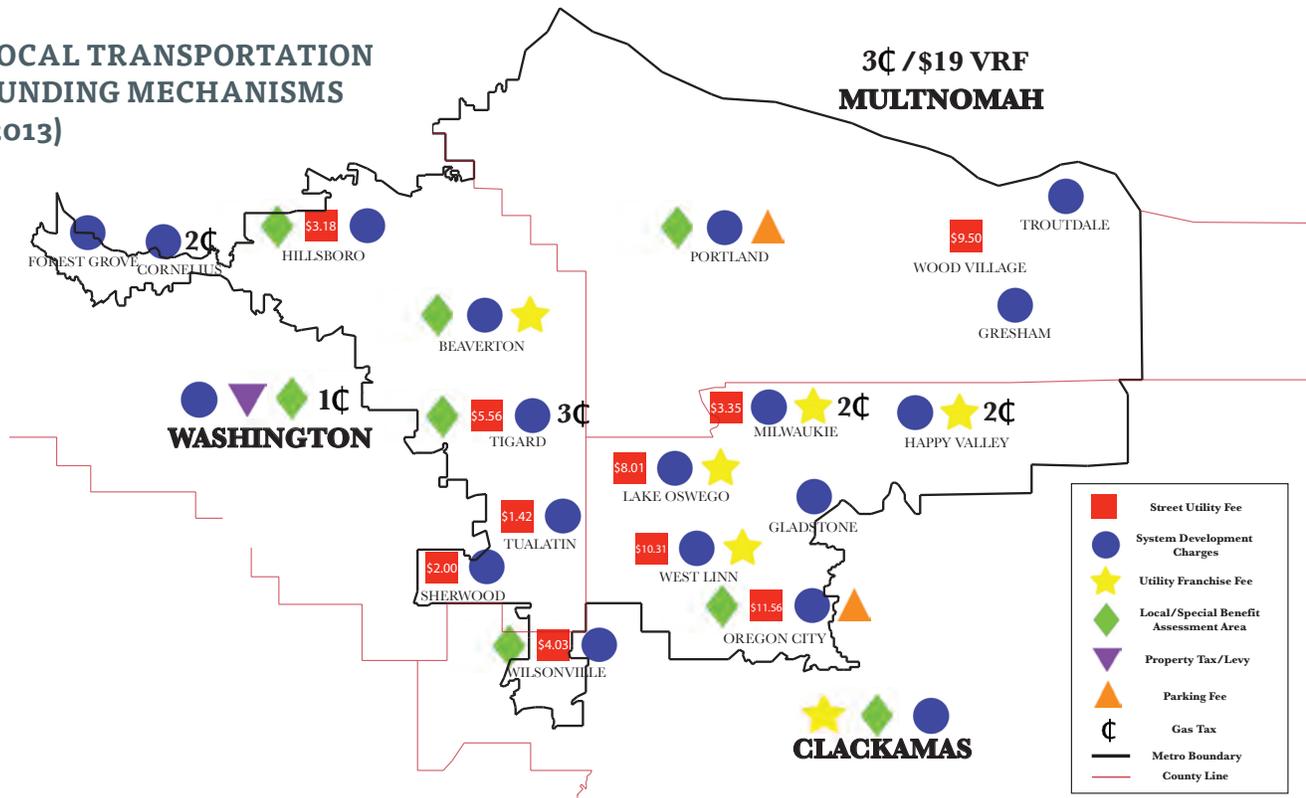
¹The Federal Highway Trust Fund includes federal gas tax receipts and other revenue.

²The State Highway Trust Fund includes state gas tax receipts, vehicle fees and heavy truck weight-mile fees.

³Development-based fees include system development charges, traffic impact fees, urban renewal districts and developer contributions.

⁴Special funds and levies include tax levies (e.g. Washington County MSTIP), local improvement districts, vehicle parking fees, transportation utility fees and maintenance districts (e.g. Washington County Urban Road Maintenance District).

**LOCAL TRANSPORTATION
FUNDING MECHANISMS
(2013)**



A NOTE ON CLIMATE CHANGE ADAPTATION AND RESILIENCY

House Bill 2001 directed the region to develop and implement a strategy to reduce greenhouse gas emissions from light-duty vehicles by 2035 to help meet state greenhouse gas emissions reduction goals for 2050. The goal of the Climate Smart Strategy is to meet the state target for reducing greenhouse gas emissions and support other local, regional and state goals including clean air and water, transportation choices, healthy and equitable communities, and a strong economy. Most of the investments and actions proposed in the Climate Smart Strategy to reduce -- or mitigate -- greenhouse gases going into the atmosphere are already being implemented to varying degrees across the region to realize community visions and other important economic, social and environmental goals. It is also important to recognize that scientists believe Oregon is already being impacted by physical changes in temperatures and precipitation patterns due to climate change, and that more changes are coming.

While specific strategies to help the region adapt to a changing climate are not called out in the Climate Smart Strategy, it is important to acknowledge that this work will be highly important to mitigating risks and developing resilient communities.

Recent studies¹ for the state of Oregon say there is a greater than 90 percent chance that in coming decades, our state will face increases in average annual air temperatures and the likelihood of extreme heat events. Additionally, changes in hydrology and water supply are likely to occur, including reduced snowpack and water availability in some basins, changes in water quality, and the timing of water availability. These changes are expected to impact the region's economy, infrastructure, natural systems, and human health in a variety of ways.

To prepare for these changes, a short list of regional actions is suggested:

- Apply the insights from the Oregon Climate Assessment Report and the Oregon Climate Change Adaptation Framework to understand the scientists' expected changes for our state and potential low- and no-cost first steps in preparing for and responding to these changes.
- Consider physical climate risks as potential natural hazards. With this in mind, continue to implement the policies identified in Chapter 5 of the Regional Framework Plan (Regional Natural Hazards). The policies were developed to protect citizens, critical facilities, infrastructure, private property, and the environment from natural hazards.
- Engage with public health officials, universities, and state agencies to identify strategies to address the potential impact of climate change on human health, such as developing public health adaptation resources, integrating planning at various government levels, and creating programs to monitor and respond to public health issues.

¹ 2013 Oregon Climate Assessment Report, Oregon Climate Change Research Institute, available at www.oc-cri.net/wp-content/uploads/2013/11/ClimateChangeInTheNorthwest.pdf.
2010 Oregon Climate Change Adaptation Framework, Department of Land Conservation and Development, available at www.oregon.gov/LCD/docs/ClimateChange/Framework_Final.pdf

GLOSSARY

Adaptation Adjustment in natural or human systems to a new or changing environment that exploits beneficial opportunities or moderates negative effects. “Climate adaptation” typically references efforts to respond to and minimize the impacts of a changing climate.

Brownfield A property for which the expansion, redevelopment, or reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant, or containment. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and both improves and protects the environment.

Carsharing A membership-based system of short term automobile rental. Such programs are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day. The organization renting the cars may be a commercial business or the users may be organized as a company, public agency, cooperative, or peer-to-peer. Zipcar and car2go are local examples.

Climate change Any change in climate over time, whether due to natural variability or as a result of human activity that persists for an extended period.

Complete streets A transportation policy and design approach where streets are designed, operated and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities, regardless of their mode of transportation.

Concept planning A planning process to create a blueprint for the future of land brought inside the urban growth boundary for urbanization. The process is required to address the provisions listed in Title 11 of the Urban Growth Management Functional Plan. These provisions include a minimum level of residential units per acre, a diversity of housing stock, an adequate transportation system, protection of natural resource areas and needed school facilities.

Drive Oregon A nonprofit 501(c)(6) trade association dedicated to growing the electric mobility industry in Oregon. Members include innovators, entrepreneurs, and established industry leaders throughout the entire supply chain. Drive Oregon is funded in part with Oregon State Lottery Funds administered by Business Oregon.

Eco-driving A combination of public education, in-vehicle technology and driving practices that result in more efficient vehicle operation and reduced fuel consumption and emissions. Examples of eco-driving techniques include avoiding rapid starts and stops, matching driving speeds to synchronized traffic signals, avoiding excessive idling, and keeping tires properly inflated.

ECO Rule An Oregon Department of Environmental Quality administrative rule (OAR 340-242) that is also called the Employee Commute Options Program. Under the DEQ ECO program, employers with more than 100 employees must provide commute options and incentives to employees designed to reduce the number of cars driven to work in the Portland metropolitan region. The employers must provide incentives for employee use of commute options like biking, walking, use of transit, carpooling, guaranteed ride home, and financial incentives. The incentives must have the potential to reduce drive alone commute trips to the work site by 10 percent from an established baseline. The ECO program is one of several strategies included in the Ozone Maintenance Plan for the Portland Air Quality Maintenance Area. The Ozone Maintenance Plan will keep the area in compliance with the federal ozone standard.

Employer-based commute programs Work-based travel demand management programs that can include transportation coordinators, employer-subsidized transit pass programs, ride-matching, carpool and vanpool programs, telecommuting, compressed or flexible work weeks and bicycle parking and showers for bicycle commuters.

Energize Oregon A coalition of public and private partners working to expand electric vehicle sales and use in Oregon. The voluntary partnership was created in 2013 through a memorandum of understanding (MOU) between Governor Kitzhaber's office, the Oregon Department of Transportation, and Drive Oregon. The coalition has received state funding and includes Nissan, Honda, Ford, and General Motors as members.

Fleet mix The percentage of vehicles classified as automobiles compared to the percentage classified as light trucks (weighing less than 10,000 lbs.); light trucks make up 43 percent of the light-duty fleet today.

Fleet turnover The rate of vehicle replacement or the turnover of older vehicles to newer vehicles; the current turnover rate in Oregon is 10 years.

Geometric changes to add capacity Road design and engineering strategies to help alleviate bottlenecks, such as the addition or reconfiguration of turning lanes, strategic lane widening, realignment of intersecting streets, improved acceleration or deceleration lanes at interchange ramps, removal of a physical constriction that delays travel, such as widening an underpass, providing lane continuity (i.e., replacing a two-lane bridge that connects pieces of four-lane roadway), or eliminating a sight barrier. Such strategies may be applied to highways, arterials, or local streets.

Greenhouse gas emissions The six gases identified in the Kyoto Protocol and by the Oregon Greenhouse Gas Mandatory Reporting Advisory Committee as contributing to global climate change: carbon dioxide (CO₂), nitrous oxide (N₂), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). More information is available at www.epa.gov/climatechange

GreenSTEP A modeling tool developed by the Oregon Department of Transportation to estimate GHG emissions at the individual household level. It estimates greenhouse gas emissions associated with vehicle ownership, vehicle travel, and fuel consumption, and is designed to operate in a way that allows it to show the potential effects of different policies and other factors on vehicle travel and emissions. GreenSTEP travel behavior estimates are made irrespective of housing choice or supply; the model only considers the demand forecast components – household size, income and age – and the policy areas considered in this analysis.

Guaranteed Ride Home Program Through a Guaranteed Ride Home program, commuters who use modes such as carpool/vanpool, bicycle, walk, or public transportation, receive a subsidized ride home from work when an unexpected emergency arises.

House Bill 2001 (Oregon Jobs and Transportation Act) Passed by the Legislature in 2009, this legislation provided specific directions to the Portland metropolitan region to undertake scenario planning and develop two or more land use and transportation scenarios that accommodate planned population and employment growth, while achieving the GHG emissions reduction targets approved by LCDC in May 2011. Metro, after public review and consultation with local governments, is to adopt a preferred scenario, called the Climate Smart Strategy. Following adoption of the Climate Smart Strategy, local governments within the Metro jurisdiction are to amend their comprehensive plans and land use regulations as necessary to be consistent with the preferred scenario. More information can be found at www.oregonlegislature.gov/bills_laws/lawsstatutes/2009orLaw0865.html

Health A condition of complete physical, mental and emotional well-being, not merely the absence of disease.

Health Impact Assessment A combination of procedures, methods, and tools by which a policy, program or project may be evaluated as to its potential effects on the health of a population, and the distribution of these effects within the population.

Individualized marketing Travel demand management programs focused on individual households. IM programs involve individualized outreach to households that identify household travel needs and ways to meet those needs with less vehicle travel.

Induced demand Refers to the process whereby improvements in the transportation system intended to alleviate congestion and delay result in additional demand for the transportation segment, offsetting some of the improvement's potential benefits. For instance, when a congested roadway is expanded from 2 to 3 lanes, some drivers will recognize the increased capacity and take this roadway though they had not done so previously.

Infill development Refers to the development or redevelopment of vacant, bypassed or under-utilized lands in an area that is largely developed. An alternative to development that occurs outside existing urban areas.

Intelligent transportation systems Refers to advanced communications technologies that are integrated with transportation infrastructure and vehicles to address transportation problems and enhance the movement of people and goods. ITS can include both vehicle-to-vehicle communication (which allows cars to communicate with one another to avoid accidents) and vehicle-to-infrastructure communication (which allows cars to communicate with the roadway to identify congestion, crashes or unsafe driving conditions).

Light-duty vehicles Vehicles weighing 10,000 pounds or less, including passenger cars, light trucks, sport utility vehicles, motorcycles and small delivery trucks.

Low Carbon Fuel Standard In 2009, the Oregon legislature authorized the Environmental Quality Commission to develop low carbon fuel standards (LCFS) for Oregon. The program has since been renamed the Clean Fuels Program. Each type of transportation fuel (gasoline, diesel, natural gas, etc.) contains carbon in various amounts. When the fuel is burned, that carbon turns into carbon dioxide (CO₂), which is a greenhouse gas. The goal is to reduce the average carbon intensity of Oregon's transportation fuels by 10 percent below 2010 levels by 2022 and applies to the entire mix of fuel available in Oregon. Carbon intensity refers to the emissions per unit of fuel; it is not a cap on total emissions or a limit on the amount of fuel that can be burned. The lower the carbon content of a fuel, the fewer greenhouse gas emissions it produces.

Mitigation To moderate a quality or condition in force or intensity. "Climate mitigation" typically references efforts taken to eliminate or reduce greenhouse gas emissions to reduce the long-term risk and hazards of climate change.

Mixed-use development Refers to portions of urban areas where commercial (e.g., retail, office, entertainment) and non-commercial uses (such as residential space), are located near one another. Different uses may be mixed vertically (e.g., housing above retail) or horizontally (e.g., housing within walking distance of retail). Mixed-use development reduces demand for motorized transportation by locating common destinations near residences where transit, pedestrian and bicycle access is convenient.

Mobility corridor Mobility corridors represent sub-areas of the region and include all regional transportation facilities within the sub-area as well as the land uses served by the regional transportation system. This includes freeways and highways and parallel networks of arterial streets, regional bicycle parkways, high capacity transit, and frequent bus routes. The function of this network of integrated transportation corridors is metropolitan mobility – moving people and goods between different parts of the region and, in some corridors, connecting the region with the rest of the state and beyond. This framework emphasizes the integration of land use and transportation in determining regional system needs, functions, desired outcomes, performance measures, and investment strategies.

Oregon Sustainable Transportation Initiative (OSTI) An integrated statewide effort to reduce GHG emissions from the transportation sector by integrating land use and transportation. OSTI is the result of several bills passed by the Oregon Legislature designed to help Oregon meet its 2050 goal of reducing greenhouse gas emissions by 75 percent below 1990 levels. Guided by stakeholder input, the initiative has built collaborative partnerships among local governments and the state's six Metropolitan Planning Organizations to help meet Oregon's goals to reduce GHG emissions. The effort includes five main areas: Statewide Transportation Strategy development, GHG emission reduction targets for metropolitan areas, land use and transportation scenario planning guidelines, tools that support MPOs and local governments and public outreach. More information can be found at www.oregon.gov/odot/td/osti

Oregon Zero Emission Vehicles (ZEV) Program A program administered by the Oregon Department of Environmental Quality to advance the state's transition to zero emission vehicles. The program adopted California ZEV requirements to stimulate development of emission-free vehicles and bring them to commercial-scale production beginning with the 2018 model year. It is difficult to predict how many zero emission vehicles the rules will bring to Oregon. However, some estimates suggest that electric vehicles and plug-in hybrid electric vehicles could make up 5 percent of new vehicle sales in 2018, growing to 13 percent of sales in 2025. More information can be found at <http://www.deq.state.or.us/aq/orlev>

Parking cash-out program A transportation demand management strategy where the market value of a parking space is offered to an employee by the employer. The employee can either spend the money on a parking space, or pocket it and use an alternative mode to travel to work. The program is intended to reduce vehicle trips and increase the use of alternative travel modes. Also referred to as an employer buy-back program.

Parking management Strategies that encourage more efficient use of existing parking facilities, improve the quality of service provided to parking facility users, and improve parking facility design. Examples include developing an inventory of parking supply and usage, reduced parking requirements, shared and unbundled parking, parking-cash-out, priced parking, bicycle parking and providing information on parking space availability. More information can be found at www.vtpi.org/park_man.pdf

Pay-as-you-drive insurance (PAYD) A method of insuring vehicles in which premiums are based in large part on the vehicle miles traveled within a given period of time. PAYD is also sometimes referred to as distance-based, usage-based, or mileage-based insurance. This pricing strategy converts a portion of liability and collision insurance from dollars-per-year to cents-per-mile to charge insurance premiums based on the total amount of miles driven per vehicle on an annual basis and other important rating factors, such as the driver's safety record. If a vehicle is driven more, the crash risk consequently increases. PAYD insurance charges policyholders according to their crash risk.

Peer-to-peer carsharing A car sharing program where the vehicle fleet is composed of privately owned vehicles that are available to rent to others at rates set by the car owners.

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Policy areas Categories of land use and transportation strategies used in GreenSTEP to show how the application of different policies may impact GHG emissions.

Preparation Assessing the risks and vulnerabilities and identifying actions to protect residents and businesses from the most significant impacts of climate change. Many agencies have used the term “adaptation” to refer to similar efforts.

Ramp meter A traffic signal used to regulate the flow of vehicles entering the freeway. Ramp meters smooth the merging process resulting in increased freeway speeds and reduced crashes. Ramp meters are automatically adjusted based on traffic conditions.

Reliability Refers to consistency or dependability in travel times, as measured from day to day and/or across different times of day. Variability in travel times means travelers must plan extra time for a trip.

Resilience An ability to anticipate, prepare for, respond to and recover from significant multi-hazard threats with minimum damage to social well-being, the economy and the environment.

Rideshare A transportation demand management strategy where two or more people share a trip in a vehicle to a common destination or along a common corridor. Private passenger vehicles are used for carpools, and some vanpools receive public/private support to help commuters. Carpooling and vanpooling provide travel choices for areas underserved by transit or at times when transit service is not available.

Scenario A term used to describe a possible future, representing a hypothetical set of policies and strategies or sequence of events.

Scenario planning A process that tests different actions and policies to see their affect on GHG emissions reduction and other quality of life indicators.

Social costs In the context of the Climate Smart Communities Strategy, social costs refer to the unintended consequences of transportation, such as carbon emissions that contribute to climate change, air pollution that causes health and environmental problems, energy security costs associated with importing fossil fuels from foreign nations, and other such impacts.

Statewide Transportation Strategy The strategy, as part of OSTI, defines a vision for Oregon to reduce its GHG emissions from transportation systems, vehicle and fuel technologies and urban form by 2050. The strategy was accepted by the Oregon Transportation Commission in March 2013. More information can be found at www.oregon.gov/ODOT/TD/OSTI/STS.shtml.

System efficiency Strategies that optimize the use of the existing transportation system, including traffic management, employer-based commute programs, individualized marketing and carsharing.

Traffic incident management Planned and coordinated processes followed by state and local agencies to detect, respond to, and remove traffic incidents quickly and safely in order to keep highways flowing efficiently.

Traffic management Strategies that improve transportation system operations and efficiency, including ramp metering, active traffic management, traffic signal coordination and real-time traveler information regarding traffic conditions, incidents, delays, travel times, alternate routes, weather conditions, construction, or special events.

Transportation management associations (TMA) Non-profit coalitions of local businesses and/or public agencies, and residences such as condo Home Owner Associations all dedicated to reducing traffic congestion and pollution while improving commuting options for employees, residents and visitors.

Transportation system management A set of strategies for increasing travel flow on existing facilities through improvements such as ramp metering, traffic signal synchronization and access management.

Travel (or transportation) demand management (TDM) The application of techniques that affect when, how, where, and how much people travel, done in a purposeful manner by government or other organizations. TDM techniques include education, policies, regulations, and other combinations of incentives and disincentives, and are intended to reduce drive alone vehicle trips on the transportation network.

Travel time reliability Refers to consistency or dependability in travel times, as measured from day to day and/or across different times of day. Variability in travel times means travelers must plan extra time for a trip.

TripCheck An Oregon Department of Transportation website that displays real-time data regarding road conditions, weather conditions, camera images, delays due to congestion and construction, and other advisories. Additionally, TripCheck provides travelers with information about travel services such as food, lodging, attractions, public transportation options, scenic byways, weather forecasts, etc. This information is also available through the 511 travel information phone line.

Unbundled parking A policy tool to encourage or require that residential or commercial parking be rented or sold separately, rather than automatically included with building space. Separate pricing can help reduce demand for parking as well as the combined housing/transportation costs for residents or business owners since occupants only pay for the parking they need. Unbundling can be done in several ways:

- Parking can be bought or rented separately when the apartment, condo, or office space is bought or leased.
- Renters can be offered a discount on their rent for not using parking spaces.
- Parking costs can be listed as a separate line item in lease agreements to show tenants the cost and enable them to negotiate reductions.

Exhibit A to Ordinance No. 14-1346B

- Unbundling can be encouraged informally by creating a market for available parking spaces; building managers can keep a list of tenants or owners with excess spaces available for rent.

U.S. Conference of Mayors Climate Protection Agreement An agreement where supporting mayors pledge to reduce greenhouse gas emissions by 7 percent below 1990 levels by 2012. On February 16, 2005, the Kyoto Protocol, the international agreement to address climate change, became law for the countries that have ratified it. On that day, Seattle Mayor Greg Nickels launched this initiative to advance the goals of the Kyoto Protocol through leadership and action by U.S. cities. By the 2005 U.S. Conference of Mayors Annual Meeting in June, 141 mayors had signed the Agreement – the same number of nations that ratified the Kyoto Protocol.

Since 2005, more than 1,000 mayors across all 50 states and Puerto Rico had signed on. Under the Agreement, participating cities commit to take following three actions:

- Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions ranging from land-use and transportation policies to urban forest restoration projects to public information campaigns;
- Urge their state governments, and the federal government, to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol 7 percent reduction from 1990 levels by 2012; and
- Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading.

More information can be found at www.usmayors.org/climateprotection

Vehicle-to-vehicle communication technology Wireless technology that allows for the transfer of information between vehicles. One major goal behind this research is to improve roadway safety. The Research and Innovative Technology Administration of the U.S. Department of Transportation (DOT) is currently investigating many potential benefits of this new technology.

Vision Zero Strategy An action plan for eliminating traffic fatalities and serious injury crashes for all modes of travel. The action plan typically includes a combination of enforcement, improved engineering, operations, design and emergency response, public education campaigns that identify dangerous or unsafe behavior on roads and streets to improve safety, and performance monitoring to track progress. Examples of adopted strategies can be found at: www.nyc.gov/html/visionzero/pdf/nyc-vision-zero-action-plan.pdf and www.mdt.mt.gov/homepage/articles/vision-zero.shtml.

Wayfinding Signage, maps, street markings, and other graphic or audible methods used to convey location and directions to help travelers orient themselves and reach destinations easily.

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West Coast Green Highway An initiative to advance the adoption and use of electric and alternative-fuel vehicles along the I-5 corridor in Washington, Oregon, and California. More information can be found at www.westcoastgreenhighway.com

Workplace charging challenge Part of the U.S. Department of Energy's (DOE's) EV Everywhere Grand Challenge, the Workplace Charging Challenge aims to achieve a tenfold increase in the number of U.S. employers offering workplace charging by 2018. More information can be found at <http://energy.gov/eere/vehicles/ev-everywhere-workplace-charging-challenge>

Exhibit B

For

Metro Ordinance No. 14-1346B

**CLIMATE
SMART
COMMUNITIES**
SCENARIOS PROJECT

Exhibit B to Ordinance No. 14-1346"

Regional Framework Plan Amendments

Recommended Draft

This document reflects changes recommended to respond to public comments and subsequent advisory committee review

December 9, 2014

**MAKING A
GREAT
PLACE**



About Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to providing services, operating venues and making decisions about how the region grows. Metro works with communities to support a resilient economy, keep nature close by and respond to a changing climate. Together we're making a great place, now and for generations to come.

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Recommended changes (December 9, 2014)

All of Chapter 1 of the Regional Framework Plan is provided for reference. Changes shown in ~~single strikethrough~~ and single underscore were included in the Sept. 15, 2014 public review draft. Changes shown in ~~double strikethrough~~ and double underscore reflect additional recommended changes to respond to comments received during the comment period and subsequent discussions by Metro's regional advisory committees.

Chapter 1

Land Use

**REGIONAL FRAMEWORK PLAN
CHAPTER 1 LAND USE**

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Chapter 1 Land Use

Introduction

The Metro Charter requires that Metro address growth management and land use planning matters of metropolitan concern. This chapter contains the policies that guide Metro in such areas as development of centers, corridors, station communities, and main streets; housing choices; employment choices and opportunities; economic vitality; urban and rural reserves; management of the Urban Growth Boundary (UGB); urban design and local plan and policy coordination.

This chapter also addresses land use planning matters that the Metro Council, with the consultation and advice of the Metro Policy Advisory Committee (MPAC), determines will benefit from regional planning, such as affordable housing.

A livable region is an economically strong region. This chapter contains policies that supports a strong economic climate through encouraging the development of a diverse and sufficient supply of jobs, especially family wage jobs, in appropriate locations throughout the region. [The policies in this chapter are also a key component of the regional strategy to reduce per capita greenhouse gas emissions from light-duty vehicle travel.](#)

Six Outcomes, Characteristics of a Successful Region

It is the policy of the Metro Council to exercise its powers to achieve the following six outcomes, characteristics of a successful region:

1. People live, work and play in vibrant communities where their everyday needs are easily accessible.
2. Current and future residents benefit from the region's sustained economic competitiveness and prosperity.
3. People have safe and reliable transportation choices that enhance their quality of life.
4. The region is a leader in minimizing contributions to [global warming climate change](#).
5. Current and future generations enjoy clean air, clean water and healthy ecosystems.
6. The benefits and burdens of growth and change are distributed equitably.

(Added 12/16/10, Metro Ord. 10-1244B.)

Performance Measures and Performance Targets

It is also the policy of the Metro Council to use performance measures and performance targets to:

- a. Evaluate the effectiveness of proposed policies, strategies and actions to achieve the desired Outcomes;

- b. Inform the people of the region about progress toward achieving the Outcomes;
- c. Evaluate the effectiveness of adopted policies, strategies and actions and guide the consideration of revision or replacement of the policies, strategies and actions; and
- d. Publish a report on progress toward achieving the desired Outcomes on a periodic basis.

(Added 12/16/10, Metro Ord. 10-1244B.)

The Metro Code provisions, the Urban Growth Management Functional Plan, a background discussion and policy analysis for this chapter are included in the Appendices of this plan.

Policies

The following section contains the policies for land use. These policies are implemented in several ways. The Metro Council implements the policies through its investments in planning, transportation and other services. The Council also implements the policies by adopting and occasionally revising Metro's functional plans for local governments. The functional plans themselves are implemented by the region's cities and counties through their comprehensive plans and land use regulations.

1.1 Compact Urban Form

It is the policy of the Metro Council to:

- 1.1.1. Ensure and maintain a compact urban form within the UGB.
- 1.1.2. Adopt and implement a strategy of investments and incentives to use land within the UGB more efficiently and to create a compact urban form.
- 1.1.3. Facilitate infill and re-development, particularly within Centers, Corridors, Station Communities, Main Streets and Employment Areas, to use land and urban services efficiently, to support public transit, to promote successful, walkable communities and to create equitable and vibrant communities.
- 1.1.4. Incent and Encourage elimination of unnecessary barriers to compact, mixed-use, pedestrian and bicycle-friendly and transit-supportive development within Centers, Corridors, Station Communities and Main Streets.
- 1.1.5. Promote the distinctiveness of the region's cities and the stability of its neighborhoods.
- 1.1.6. Enhance compact urban form by developing the Intertwine, an interconnected system of parks, greenspaces and trails readily accessible to people of the region.
- 1.1.7. Promote excellence in community design.
- 1.1.8. Promote a compact urban form as a key climate action strategy to reduce greenhouse gas emissions.

(RFP Policy 1.1 amended 12/16/10, Metro Ord. 10-1244B.)

1.2 Centers, Corridors, Station Communities and Main Streets

It is the policy of the Metro Council to:

- 1.2.1. Recognize that the success of the 2040 Growth Concept depends upon the success of the region's Centers, Corridors, Station Communities and Main Streets as the principal centers of urban life in the region. Recognize that each Center, Corridor, Station Community and Main Street has its own character and stage of development and its own aspirations; each needs its own strategy for success.
- 1.2.2. Work with local governments, community leaders and state and federal agencies to develop an investment strategy for Centers, Corridors, Station Communities and Main Streets with a program of investments in public works, essential services and community assets, that will enhance their roles as the centers of urban life in the region. The strategy shall:
 - a. Give priority in allocation of Metro's investment funds to Centers, Corridors, Station Communities and Main Streets;
 - b. To the extent practicable, link Metro's investments so they reinforce one another and maximize contributions to Centers, Corridors, Station Communities and Main Streets;
 - c. To the extent practicable, coordinate Metro's investments with complementary investments of local governments and with state and federal agencies so the investments reinforce one another, maximize contributions to Centers, Corridors, Station Communities and Main Streets and help achieve local aspirations; and
 - d. Include an analysis of barriers to the success of investments in particular Centers, Corridors, Station Communities and Main Streets.
- 1.2.3. Encourage employment opportunities in Centers, Corridors, Station Communities and Main Streets by:
 - a. Improving access within and between Centers, Corridors, Station Communities and Main Streets;
 - b. Encouraging cities and counties to allow a wide range of employment uses and building types, a wide range of floor-to-area ratios and a mix of employment and residential uses; and
 - c. Encourage investment by cities, counties and all private sectors by complementing their investments with investments by Metro.
- 1.2.4. Work with local governments, community leaders and state and federal agencies to employ financial incentives to enhance the roles of Centers, Corridors, Station Communities and Main Streets and maintain a catalogue of incentives and other tools

that would complement and enhance investments in particular Centers, Corridors, Station Communities and Main Streets.

- 1.2.5. Measure the success of regional efforts to improve Centers and Centers, Corridors, Station Communities and Main Streets and report results to the region and the state and revise strategies, if performance so indicates, to improve the results of investments and incentives.

1.3 Housing Choices and Opportunities

It is the policy of the Metro Council to:

- 1.3.1. Provide housing choices in the region, including single family, multi-family, ownership and rental housing, and housing offered by the private, public and nonprofit sectors, paying special attention to those households with fewest housing choices.
- 1.3.2. As part of the effort to provide housing choices, encourage local governments to ensure that their land use regulations:
 - a. Allow a diverse range of housing types;
 - b. Make housing choices available to households of all income levels; and
 - c. Allow affordable housing, particularly in Centers and Corridors and other areas well-served with public services [and frequent transit service](#).
- 1.3.3. Reduce the percentage of the region's households that are cost-burdened, meaning those households paying more than 50 percent of their incomes on housing and transportation.
- 1.3.4. Maintain voluntary affordable housing production goals for the region, to be revised over time as new information becomes available and displayed in Chapter 8 (Implementation), and encourage their adoption by the cities and counties of the region.
- 1.3.5. Encourage local governments to consider the following tools and strategies to achieve the affordable housing production goals:
 - a. Density bonuses for affordable housing;
 - b. A no-net-loss affordable housing policy to be applied to quasi-judicial amendments to the comprehensive plan;
 - c. A voluntary inclusionary zoning policy;
 - d. A transferable development credits program for affordable housing;
 - e. Policies to accommodate the housing needs of the elderly and disabled;
 - f. Removal of regulatory constraints on the provision of affordable housing; and

- g. Policies to ensure that parking requirements do not discourage the provision of affordable housing.
- 1.3.6 Require local governments in the region to report progress towards increasing the supply of affordable housing and seek their assistance in periodic inventories of the supply of affordable housing.
 - 1.3.7 Work in cooperation with local governments, state government, business groups, non-profit groups and citizens to create an affordable housing fund available region wide in order to leverage other affordable housing resources.
 - 1.3.8 Provide technical assistance to local governments to help them do their part in achieving regional goals for the production and preservation of housing choice and affordable housing.
 - 1.3.9 Integrate Metro efforts to expand housing choices with other Metro activities, including transportation planning, land use planning and planning for parks and greenspaces.
 - 1.3.10 When expanding the Urban Growth Boundary, assigning or amending 2040 Growth Concept design type designations or making other discretionary decisions, seek agreements with local governments and others to improve the balance of housing choices with particular attention to affordable housing.
 - 1.3.11 Consider incentives, such as priority for planning grants and transportation funding, to local governments that obtain agreements from landowners and others to devote a portion of new residential capacity to affordable housing.
 - 1.3.12 Help ensure opportunities for low-income housing types throughout the region so that families of modest means are not obliged to live concentrated in a few neighborhoods, because concentrating poverty is not desirable for the residents or the region.
 - 1.3.13 Consider investment in transit, pedestrian and bicycle facilities and multi-modal streets as an affordable housing tool to reduce household transportation costs to leave more household income available for housing.
 - 1.3.14 For purposes of these policies, “affordable housing” means housing that families earning less than 50 percent of the median household income for the region can reasonably afford to rent and earn as much as or less than 100 percent of the median household income for the region can reasonably afford to buy.

(RFP Policy 1.3 updated 9/10/98, Metro Ord. 98-769; Policies 1.3, 1.3.1 through 1.3.7. updated, Metro Ord. 00-882C; RFP Policies 1.3.1 through 1.3.4, updated 2/05; RFP Policy 1.3 updated 4/25/07, Metro Ord. 06-1129B; and amended 12/16/10, Metro Ord. 10-1244B.)

1.4 Employment Choices and Opportunities

It is the policy of the Metro Council to:

- 1.4.1. Locate expansions of the UGB for industrial or commercial purposes in locations consistent with this plan and where, consistent with state statutes and statewide goals, an assessment of the type, mix and wages of existing and anticipated jobs within subregions justifies such expansion.
- 1.4.2. Balance the number and wage level of jobs within each subregion with housing cost and availability within that subregion. Strategies are to be coordinated with the planning and implementation activities of this element with Policy 1.3, Housing Choices and Opportunities and Policy 1.8, Developed Urban Land.
- 1.4.3. Designate, with the aid of leaders in the business and development community and local governments in the region, as Regionally Significant Industrial Areas those areas with site characteristics that make them especially suitable for the particular requirements of industries that offer the best opportunities for family-wage jobs.
- 1.4.4. Require, through the Urban Growth Management Functional Plan, that local governments exercise their comprehensive planning and zoning authorities to protect Regionally Significant Industrial Areas from incompatible uses.
- 1.4.5. Facilitate investment in those areas of employment with characteristics that make them especially suitable and valuable for traded-sector goods and services, including brownfield sites and sites that are re-developable.
- 1.4.6. Consistent with policies promoting a compact urban form, ensure that the region maintains a sufficient supply of tracts 50 acres and larger to meet demand by traded-sector industries for large sites and protect those sites from conversion to non-industrial uses.

(RFP Policy 1.4 updated 10/26/00, Metro Ord. 00-879A; and Policies 1.4.1 and 1.4.2 added 12/05/02, Metro Ord. 02-969B-06; Policies 1.4.1 through 1.4.2 updated and 1.4.3 and 1.4.4 added 2/05)

1.5 Economic Vitality

It is the policy of the Metro Council to:

- 1.5.1 Include all parts of the region in the region's economic development, including areas and neighborhoods which have been experiencing increasing poverty and social needs, even during periods of a booming regional economy.
- 1.5.2 Recognize that to allow the kinds of social and economic decay in older suburbs and the central city that has occurred in other larger and older metro regions is a threat to our quality of life and the health of the regional economy.
- 1.5.3 Ensure that all neighborhoods and all people have access to opportunity and share the benefits, as well as the burdens, of economic and population growth in the region.
- 1.5.4 Support economic vitality throughout the entire region, by undertaking the following steps:

- a. Monitoring regional and subregional indicators of economic vitality, such as the balance of jobs, job compensation and housing availability.
 - b. Facilitating collaborative regional approaches which better support economic vitality for all parts of the region if monitoring finds that existing efforts to promote and support economic vitality in all parts of the region are inadequate.
- 1.5.5 Promote, in cooperation with local governments and community residents, revitalization of existing city and neighborhood centers that have experienced disinvestment and/or are currently underutilized and/or populated by a disproportionately high percentage of people living at or below 80 percent of the region's median income.

1.6 Growth Management (Repealed, Ord. 10-1244B, 12/16/10)

(RFP Policy 1.6 updated 10/26/00, Metro Ord. 00-879A; RFP Policy 1.6 updated 2/05; RFP Policy 1.6 repealed 12/16/10.)

1.7 Urban and Rural Reserves

It is the policy of the Metro Council to:

- 1.7.1 Establish a system of urban reserves, sufficient to accommodate long-term growth, that identifies land outside the UGB suitable for urbanization in a manner consistent with this Regional Framework Plan.
- 1.7.2 Collaborate with Multnomah, Clackamas and Washington Counties and Neighbor Cities to establish a system of rural reserves to protect agricultural land, forest land and natural landscape features that help define appropriate natural boundaries to urbanization, and to keep a separation from Neighbor Cities to protect their identities and aspirations.
- 1.7.3 Designate as urban reserves, with a supply of land to accommodate population and employment growth to the year 2060, those lands identified as urban reserves on the Urban and Rural Reserves Map in Title 14 of the Urban Growth Management Functional Plan.
- 1.7.4 Protect those lands designated as rural reserves on the Urban and Rural Reserves Map in Title 14 of the Urban Growth Management Functional Plan from addition to the UGB and from re-designation as urban reserves at least until the year 2060.
- 1.7.5 In conjunction with the appropriate county, cities and service districts, develop concept plans for urban reserves prior to their addition to the UGB. Provide technical, financial and other support to the local governments in order to:
 - a. Help achieve livable communities [and reduce greenhouse gas emissions](#).
 - b. Identify the city or cities that will likely annex the area after it is added to the UGB.
 - c. Identify the city or cities or the service districts that will likely provide services to the area after it is added to the UGB.

- d. Determine the general urban land uses [key local and regional multi-modal transportation facilities](#) and prospective components of the regional system of parks, natural areas, open spaces, fish and wildlife habitats, trails and greenways.

- 1.7.6 Twenty years after the initial designation of the reserves, in conjunction with Clackamas, Multnomah and Washington Counties, review the designated urban and rural reserves for effectiveness, sufficiency and appropriateness.

(RFP Policy 1.7 updated 10/26/00, Metro Ord. 00-879A, RFP Policy 1.7 updated 2/05; RFP Policy 1.7 updated Ord. 10-1238A, 09/08/10.)

1.8 Developed Urban Land

It is the policy of the Metro Council to:

- 1.8.1 Identify and actively address opportunities for and obstacles to the continued development and redevelopment of existing urban land using a combination of regulations and incentives to ensure that the prospect of living, working and doing business in those locations remains attractive to a wide range of households and employers.
- 1.8.2 Encourage, in coordination with affected agencies, the redevelopment and reuse of lands used in the past or already used for commercial or industrial purposes wherever economically viable and environmentally sound.
- 1.8.3 Assess redevelopment and infill potential in the region when Metro examines whether additional urban land is needed within the UGB, and include the potential for redevelopment and infill on existing urban land as an element when calculating the buildable land supply in the region, where it can be demonstrated that the infill and redevelopment can be reasonably expected to occur during the next 20 years.
- 1.8.4 Work with jurisdictions in the region to determine the extent to which redevelopment and infill can be relied on to meet the identified need for additional urban land.
- 1.8.5 Initiate an amendment to the UGB, after the analysis and review in 1.8.3, to meet that portion of the identified need for land not met through commitments for redevelopment and infill.

(RFP Policy 1.8 updated 2/05.)

1.9 Urban Growth Boundary

It is the policy of the Metro Council to:

- 1.9.1 Establish and maintain an urban growth boundary to limit urbanization of rural land and facilitate the development of a compact urban form.
- 1.9.2 Consider expansion of the UGB only after having taken all reasonable measures to use land within the UGB efficiently.

- 1.9.3 Expand the UGB, when necessary, from land designated Urban Reserves unless they cannot reasonably accommodate the demonstrated need to expand.
- 1.9.4 Not to expand the UGB onto lands designated Rural Reserves at least until the year 2060.
- 1.9.5 Consult appropriate Neighbor Cities prior to addition of land to the UGB in their vicinity.
- 1.9.6 Add land to the UGB only after concept planning for the land has been completed by the responsible local governments in collaboration with Metro unless participants cannot agree on the plan and addition of the land is necessary to comply with ORS 197.299.
- 1.9.7 Provide the following procedures for expansion of the UGB:
 - a. A process for minor revisions
 - b. A complete and comprehensive process associated with the analysis of the capacity of the UGB required periodically of Metro by state planning laws
 - c. A process available for expansion to accommodate non-residential needs between the state-required capacity analyses
 - d. An accelerated process for addition of land to accommodate an immediate need for industrial capacity.
- 1.9.8 Use natural or built features, whenever practical, to ensure a clear transition from rural to urban land use.
- 1.9.9 Ensure that expansion of the UGB enhances the roles of Centers, Corridors and Main Streets.
- 1.9.10 Determine whether the types, mix and wages of existing and potential jobs within subareas justifies an expansion in a particular area.
- 1.9.11 Conduct an inventory of significant fish and wildlife habitat that would be affected by addition of land, and consider the effects of urbanization of the land on the habitat and measures to reduce adverse effects, prior to a decision on the proposed addition.
- 1.9.12 Use the choice of land to include within the UGB as an opportunity to seek agreement with landowners to devote a portion of residential capacity to needed workforce housing as determined by the Urban Growth Report adopted as part of the UGB expansion process.
- 1.9.13 Prepare a report on the effect of the proposed amendment on existing residential neighborhoods prior to approving any amendment or amendments of the urban growth boundary in excess of 100 acres and send the report to all households within one mile of the proposed UGB amendment area and to all cities and counties within the district. The report shall address:

- a. Traffic patterns and any resulting increase in traffic congestion, commute times and air quality.
- b. Whether parks and open space protection in the area to be added will benefit existing residents of the district as well as future residents of the added territory.
- c. The cost impacts on existing residents of providing needed public services and public infrastructure to the area to be added.

(RFP Policy Nos. 1.9.1 thru 1.9.4 updated to 1.9.1 thru 1.9.3, 10/26/00, Metro Ord. 00879A; RFP Policy 1.9.3 regarding Measure 26-29 updated 5/15/03, Metro Ord. 03-1003; RFP Policies 1.9 through 1.9.3 updated 2/05 and RFP Policies 1.9.4 through 1.9.11 added 2/05; RFP Policy 1.9.12 added 9/29/05, Metro Ord. 05-1077C, Exb. B, Amend. 3; and RFP Policy No. 1.9 updated 09/08/10, Metro Ord. 10-1238A, § 2.)

1.10 Urban Design

It is the policy of the Metro Council to:

1.10.1 Support the identity and functioning of communities in the region through:

- a. Recognizing and protecting critical open space features in the region.
- b. Developing public policies that encourage diversity and excellence in the design and development of settlement patterns, landscapes and structures.
- c. Ensuring that incentives and regulations guiding the development and redevelopment of the urban area promote a settlement pattern that:
 - i) Links any public incentives to a commensurate public benefit received or expected and evidence of private needs.
 - ii) ~~Is pedestrian "friendly,"~~ Makes biking and walking the most convenient, safe and enjoyable convenient transportation choices for short trips, encourages transit use and reduces auto dependence and related greenhouse gas emissions.
 - iii) Provides access to neighborhood and community parks, trails, schools, ~~and~~ walkways bikeways, and other recreation and cultural areas and public facilities.
 - iv) Reinforces nodal, mixed-use, neighborhood-oriented community designs to provide walkable access to a mix of destinations to support meeting daily needs, such as jobs, education, shopping, services, transit, and recreation, social and cultural activities.
 - v) Includes concentrated, high-density, mixed-use urban centers developed in relation to the region's transit system.

- vi) Is responsive to needs for privacy, community, sense of place and personal safety in an urban setting.
- vii) Facilitates the development and preservation of affordable mixed-income neighborhoods.
- viii) Avoids and minimizes conflicts between urbanization and the protection of regionally significant fish and wildlife habitat.

1.10.2 Encourage pedestrian-, bicycle- and transit-supportive building patterns in order to minimize the need for auto trips, reduce greenhouse gas emissions and to create a development pattern conducive to face-to-face community interaction.

(RFP Policy 1.10.1 (c)(viii) added 9/29/05, Metro Ord. 05-1077C, Exb. B, Amend. 4.)

1.11 Neighbor Cities

It is the policy of the Metro Council to:

- 1.11.1 Coordinate concept planning of Urban Reserves with Neighbor Cities Sandy, Canby, Estacada, Barlow, North Plains, Banks and Vancouver to minimize the generation of new automobile trips between Neighbor Cities and the Metro UGB by seeking appropriate ratios of dwelling units and jobs within the Metro UGB and in Neighbor Cities.
- 1.11.2 Pursue agreements with Neighbor Cities, Clackamas and Washington Counties and the Oregon Department of Transportation to establish “green corridors” along state highways that link Neighbor Cities with cities inside the Metro UGB in order to maintain a rural separation between cities, to protect the civic identities of Neighbor Cities, and to protect the capacity of those highways to move people and freight between the cities.
- 1.11.3 Coordinate with Vancouver, Clark County and the Southwest Washington Transportation Council through the Bi-State Coordinating Committee and other appropriate channels on population and employment forecasting; transportation; economic development; emergency management; park, trail and natural area planning; and other growth management issues.

(RFP Policy 1.11.3 updated 10/26/00, Metro Ord. 00-879A; RFP Policy 1.9 updated 2/05; and RFP Policy 1.11 updated 09/08/10, Metro Ord. 10-1238A, § 2.)

1.12 Protection of Agriculture and Forest Resource Lands. (Repealed, Ord. 10-1238A, 09/08/10, § 2)

(Policies 1.12.1 through 1.12.4 updated 9/22/04, Metro Ord. 04-1040B-01; RFP Policy 1.12 updated 2/05; and repealed Metro Ord. 10-1238A, § 2.)

1.13 Participation of Citizens

It is the policy of the Metro Council to:

- 1.13.1 Encourage public participation in Metro land use planning.
- 1.13.2 Follow and promote the citizen participation values inherent in the RFP and the Metro Citizen Involvement Principles.
- 1.13.3 Encourage local governments to provide opportunities for public involvement in land use planning and delivery of recreational facilities and services.

1.14 School and Local Government Plan and Policy Coordination

It is the policy of the Metro Council to:

- 1.14.1 Coordinate plans among local governments, including cities, counties, special districts and school districts for adequate school facilities for already developed and urbanizing areas.
- 1.14.2 Consider school facilities to be “public facilities” in the review of city and county comprehensive plans for compliance with the Regional Framework Plan.
- 1.14.3 Work with local governments and school districts on school facility plans to ensure that the Urban Growth Boundary contains a sufficient supply of land for school facility needs.
- 1.14.4 Use the appropriate means, including, but not limited to, public forums, open houses, symposiums, dialogues with state and local government officials, school district representatives, and the general public in order to identify funding sources necessary to acquire future school sites and commensurate capital construction to accommodate anticipated growth in school populations.
- 1.14.5 Prepare a school siting and facilities functional plan with the advice of MPAC to implement the policies of this Plan.

(RFP Policy 1.14.2 updated 11/24/98, Metro Ord. 98-789; RFP Policy 1.14.2 updated 12/13/01, Metro Ord. 01-929A; RFP Policy 1.14 updated 2/05.)

1.15 Centers (Repealed, Ord. 10-1244B, 12/16/10)

(RFP Policy 1.15 added 12/05/02, Metro Ord. 02-969B-06; RFP Policy 1.15 updated 2/05; RFP Policy 1.5 repealed 12/16/10.)

1.16 Residential Neighborhoods

It is the policy of the Metro Council to:

- 1.16.1 Recognize that the livability of existing residential neighborhoods is essential to the success of the 2040 Growth Concept.
- 1.16.2 Take measures, in order to protect and improve the region’s existing residential neighborhoods, by:

- a. Protecting residential neighborhoods from air and water pollution, noise and crime.
- b. Making community services accessible to residents of neighborhoods by walking, bicycle and transit, where possible.
- c. Facilitating the provision of affordable government utilities and services to residential neighborhoods.

1.16.3 Not require local governments to increase the density of existing single-family neighborhoods identified solely as Inner or Outer Neighborhoods.

(RFP Policy 1.16 added 12/05/02, Metro Ord. 02-969B-06, pursuant to Measure 26-29, enacted by the Metro Area voters on 5/21/02.)

Recommended changes (December 9, 2014)

All of Chapter 2 of the Regional Framework Plan is provided for reference. Changes shown in ~~single strikethrough~~ and single underscore were included in the Sept. 15, 2014 public review draft. Changes shown in ~~double strikethrough~~ and double underscore reflect additional recommended changes to respond to comments received during the comment period and subsequent discussions by Metro's regional advisory committees.

Chapter 2 Transportation

**REGIONAL FRAMEWORK PLAN
CHAPTER 2 TRANSPORTATION**

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Chapter 2 Transportation

Introduction

In 1992, the region's voters approved a charter for Metro that formally gave responsibility for regional land use planning to the agency, and requires adoption of a Regional Framework Plan that integrates land use, transportation and other regional planning mandates. The combined policies of this framework plan establish a new framework for planning in the region by linking land use and transportation plans. Fundamental to this plan is a transportation system that integrates goods and people movement with the surrounding land uses.

This chapter of the Regional Framework Plan presents the overall policy framework for the specific transportation goals, objectives and actions contained in the Regional Transportation Plan (RTP). It also sets a direction for future transportation planning and decision-making by the Metro Council and the implementing agencies, counties and cities. [The policies in this chapter are also a key component of the regional strategy to reduce per capita greenhouse gas emissions from light-duty vehicle travel.](#)

The policies aim to implement the 2040 Growth Concept and:

- Protect the economic health and livability of the region.
- Improve the safety of the transportation system.
- Provide a transportation system that is efficient and cost-effective, investing our limited resources wisely.
- [Make the most of the investments the region has already made in our transportation system through system and demand management strategies, such as by expanding the use of technology to actively manage the transportation system, and providing traveler information and incentives to expand the use of travel options.](#)
- [Make transit more convenient, frequent, accessible and affordable.](#)
- Provide access to more and better choices for travel in this region and serve special access needs for all people, including youth, ~~elderly seniors~~ [older adults](#) and ~~disabled people with disabilities and people with low income.~~
- Provide adequate levels of mobility for people and goods within the region.
- Protect air and water quality ~~and~~, promote energy conservation, [and reduce greenhouse gas emissions.](#)
- Provide transportation facilities that support a balance of jobs and housing.
- [Make biking and walking the most safe and convenient, safe and enjoyable transportation choices for short trips.](#)
- Limit dependence on ~~any single mode of drive alone~~ travel, and increase ~~ing the use of transit, biking, bicycling, walking, and carpooling, and vanpooling~~ [and the use of transit.](#)
- [Make streets and highways safe, reliable and connected to p](#) ~~Provide~~ [ing](#) for the movement of people and goods through an interconnected system of [street](#), highway, air, marine and rail systems, including passenger and freight intermodal facilities and air and water terminals.

- Integrate land use, automobile, bicycle, pedestrian, freight and public transportation needs in regional and local street designs.
- ~~Use transportation demand management and system management strategies.~~
- Limit the impact of urban travel on rural land through use of green corridors.
- ~~Manage parking to make efficient use of vehicle parking and land dedicated to vehicle and parking spaces.~~
- ~~Demonstrate leadership on climate change reducing greenhouse gas emissions.~~

Goal 1: Foster Vibrant Communities and Efficient Urban Form

Land use and transportation decisions are linked to optimize public investments, reduce greenhouse gas emissions and support active transportation options and jobs, schools, shopping, services, recreational opportunities and housing proximity.

Objective 1.1 Compact Urban Form and Design

Use transportation investments to ~~reinforce focus~~ growth in and provide multi-modal access to 2040 Target Areas and ensure that development in 2040 Target Areas is consistent with and supports the transportation investments.

Objective 1.2 Parking Management

Minimize the amount and promote the efficient use of land dedicated to vehicle parking.

Objective 1.3 Affordable Housing

Support the preservation and production of affordable housing in the region.

Goal 2: Sustain Economic Competitiveness and Prosperity

Multi-modal transportation infrastructure and services support the region's well-being and a diverse, innovative, sustainable and growing regional and state economy.

Objective 2.1 Reliable and Efficient Travel and Market Area Access

Provide for reliable and efficient multi-modal local, regional, interstate and intrastate travel and market area access through a seamless and well-connected system of throughways, arterial streets, freight services, transit services and bicycle and pedestrian facilities.

Objective 2.2 Regional Passenger Connectivity

Ensure reliable and efficient connections between passenger intermodal facilities and destinations in and beyond the region to improve non-auto access to and from the region and promote the region's function as a gateway for tourism.

Objective 2.3 Metropolitan Mobility

Maintain sufficient total person-trip and freight capacity among the various modes operating in the Regional Mobility Corridors to allow reasonable and reliable travel times through those corridors.

Objective 2.4 Freight Reliability

Maintain reasonable and reliable travel times and access through the region as well as between freight intermodal facilities and destinations within and beyond the region to promote the region's function as a gateway for commerce.

Objective 2.5 Job Retention and Creation

Attract new businesses and family-wage jobs and retain those that are already located in the region.

Goal 3: Expand Transportation Choices

Multi-modal transportation infrastructure and services provide all residents of the region with affordable and equitable options for accessing housing, jobs, services, shopping, educational, cultural and recreational opportunities, and facilitate competitive choices for goods movement for all businesses in the region.

Objective 3.1 Travel Choices

Achieve modal targets for increased walking, bicycling, use of transit and shared ride and reduced reliance on the automobile and drive alone trips.

Objective 3.2 Vehicle Miles of Travel

Reduce vehicle miles traveled per capita.

Objective 3.3 Equitable Access and Barrier Free Transportation

Provide affordable and equitable access to travel choices and serve the needs of all people and businesses, including people with low income, [youth, children, elders older adults and](#) ~~and~~ people with disabilities ~~and people with low incomes~~, to connect with jobs, education, services, recreation, social and cultural activities.

Objective 3.4 Shipping Choices

Support multi-modal freight transportation system that includes air cargo, pipeline, trucking, rail, and marine services to facilitate competitive choices for goods movement for businesses in the region.

Goal 4: Emphasize Effective and Efficient Management of the Transportation System

Existing and future multi-modal transportation infrastructure and services are well-managed to optimize capacity, improve travel conditions [for all users](#) and address air quality [and greenhouse gas emissions reduction](#) goals.

Objective 4.1 Traffic Management

Apply technology solutions to actively manage the transportation system.

Objective 4.2 Traveler Information

Provide comprehensive real-time traveler information to people and businesses in the region.

Objective 4.3 Incident Management

Improve traffic incident detection and clearance times on the region's transit, arterial and throughways networks.

Objective 4.4 Demand Management

Implement services, incentives and supportive infrastructure to increase telecommuting, walking, biking, taking transit, and carpooling, and shift travel to off-peak periods.

Objective 4.5 Value Pricing

Consider a wide range of value pricing strategies and techniques as a management tool, including but not limited to parking management to encourage walking, biking and transit ridership and selectively promote short-term and long-term strategies as appropriate.

Goal 5: Enhance Safety and Security

Multi-modal transportation infrastructure and services are safe and secure for the public and goods movement.

Objective 5.1 Operational and Public Safety

Reduce fatal and severe [injury injuries and](#) crashes for all modes of travel.

Objective 5.2 Crime

Reduce vulnerability of the public, goods movement and critical transportation infrastructure to crime.

Objective 5.3 Terrorism, Natural Disasters and Hazardous Material Incidents

Reduce vulnerability of the public, goods movement and critical transportation infrastructure to acts of terrorism, natural disasters, [climate change](#), hazardous material spills or other hazardous incidents.

Goal 6: Promote Environmental Stewardship

Promote responsible stewardship of the region's natural, community, and cultural resources.

Objective 6.1 Natural Environment

Avoid or minimize undesirable impacts on fish and wildlife habitat conservation areas, wildlife corridors, significant flora and open spaces.

Objective 6.2 Clean Air

Reduce transportation-related vehicle emissions to improve air quality so that as growth occurs, the view of the Cascades and the Coast Range from within the region are maintained.

Objective 6.3 Water Quality and Quantity

Protect the region's water quality and natural stream flows.

Objective 6.4 Energy and Land Consumption

Reduce transportation-related energy and land consumption and the region's dependence on unstable energy sources.

Objective 6.5 Climate Change

Reduce transportation-related greenhouse gas emissions [and meet adopted targets for reducing greenhouse gas emissions from light vehicle travel](#).

Goal 7: Enhance Human Health

Multi-modal transportation infrastructure and services provide safe, comfortable and convenient options that support active living and physical activity, and minimize transportation-related pollution that negatively impacts human health.

Objective 7.1 Active Living

Provide safe, comfortable and convenient transportation options that support active living and physical activity to meet daily needs and access services.

Objective 7.2 Pollution Impacts

Minimize noise, impervious surface and other transportation-related pollution impacts on residents in the region to reduce negative health effects.

Goal 8: Ensure Equity

The benefits and adverse impacts of regional transportation planning, programs and investment decisions are equitably distributed among population demographics and geography, considering different parts of the region and census block groups with different incomes, races and ethnicities.

Objective 8.1 Environmental Justice

Ensure benefits and impacts of investments are equitably distributed by population demographics and geography.

Objective 8.2 Coordinated Human Services Transportation Needs

Ensure investments in the transportation system provide a full range of affordable options for people with low income, elders and people with disabilities consistent with the Tri-County Coordinated Human Services Transportation Plan (CHSTP).

Objective 8.3 Housing Diversity

Use transportation investments to achieve greater diversity of housing opportunities by linking investments to measures taken by the local governments to increase housing diversity.

Objective 8.4 Transportation and Housing Costs

Reduce the share of households in the region spending more than 50 percent of household income on housing and transportation combined.

Goal 9: Ensure Fiscal Stewardship

Regional transportation planning and investment decisions ensure the best return on public investments in infrastructure and programs and are guided by data and analyses.

Objective 9.1 Asset Management

Adequately update, repair and maintain transportation facilities and services to preserve their function, maintain their useful life and eliminate maintenance backlogs.

Objective 9.2 Maximize Return on Public Investment

Make transportation investment decisions that use public resources effectively and efficiently, using performance-based planning approach supported by data and analyses that include all transportation modes.

Objective 9.3 Stable and Innovative Funding

Stabilize existing transportation revenue while securing new and innovative long-term sources of funding adequate to build, operate and maintain the regional transportation system for all modes of travel at the federal, state, regional and local level.

Goal 10: Deliver Accountability

The region's government, business, institutional and community leaders work together in an open and transparent manner so the public has meaningful opportunities for input on transportation decisions and experiences an integrated, comprehensive system of transportation facilities and services that bridge governance, institutional and fiscal barriers.

Objective 10.1 Meaningful Input Opportunities

Provide meaningful input opportunities for interested and affected stakeholders, including people who have traditionally been underrepresented, resource agencies, business, institutional and community stakeholders, and local, regional and state jurisdictions that own and operate the region's transportation system in plan development and review.

Objective 10.2 Coordination and Cooperation

Ensure representation in regional transportation decision-making is equitable from among all affected jurisdictions and stakeholders and improve coordination and cooperation among the public and private owners and operators of the region's transportation system so the system can function in a coordinated manner and better provide for state and regional transportation needs.

Goal 11: Demonstrate leadership on climate change reducing greenhouse gas emissions

It is the policy of the Metro Council to:

11.1 Adopt and It is the policy of the Metro Council to implement the regional climate strategy to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel while creating healthy and equitable communities and a strong economy. The strategy shall include:

Objective 11.1 Land Use and Transportation Integration

Continue to implementing the 2040 Growth Concept through regional plans and functional plans adopted by the Metro Council for local governments to support a compact urban form to reduce vehicle miles traveled and increase the use of transit and zero or low carbon emissions travel options, such as bicycling, walking, and electric vehicles.

Objective 11.2 Clean Fuels and Clean Vehicles

Support state efforts to transition Oregon to cleaner, low carbon fuels and increase the use of more fuel-efficient vehicles, including electric and alternative fuel vehicles.

- Expanding the use of low carbon transportation options across the region by:

Objective 11.3 Regional and Community Transit Network and Access

Make transit convenient, frequent, accessible and affordable by investing in new community and regional transit connections, expanding and improving existing transit services, improving bicycle and pedestrian access to transit, and implementing reduced fare programs for transit-dependent communities, such as youth, older adults, people with disabilities and people with low income to make transit convenient, frequent, accessible and affordable.

Objective 11.4 Active Transportation Network

Making biking and walking safe the safest, and most convenient and enjoyable transportation choices for short trips for all ages and abilities by completing gaps and addressing deficiencies in the region's network of bicycle and pedestrian networks that connect people to their jobs, schools and other destinations.

Objective 11.5 Transportation Systems Management and Operations

Making the most of investments the region has already made in the transportation system Enhance fuel efficiency and system investments and reduce emissions by using technology to actively manage and fully optimize the transportation system.

Objective 11.6 Transportation Demand Management

Implement programs, services and other tools that provide commuters, households, and businesses with and providing information and incentives to expand the use of travel options, including carsharing, and reduce drive alone trips.

Objective 11.7 Parking Management

Implement locally-defined approaches to parking management of parking in Centers, Corridors, Station Communities and Main Streets served by frequent transit service and active transportation options Managing parking to make efficient use of vehicle parking and land dedicated to parking.

Objective 11.8 Streets and Highways Network

Investing strategically in streets and highways to make them safe, reliable and connected to support the movement of people and goods.

•—Supporting and building upon Oregon's transition to cleaner, low carbon fuels and more fuel-efficient vehicles;

•—Securing adequate funding for transportation investments; and

•—Demonstrating leadership on climate change.

11.3 Objective 11.9 Metro Actions

Take actions recommended to implement the regional climate strategy *Toolbox of Possible Actions* to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel, including such as:

Implement the 2040 Growth Concept through regional plans and functional plans.

i. Maintain and periodically update the *Toolbox of Possible Actions* and encourage local, state and federal governments and special districts to implement the toolbox actions in locally tailored ways.

ii. Work with local, state and federal governments, community and business leaders and organizations, and special districts to implement the strategy, including securing adequate funding for transportation and other investments needed to implement the strategy.

iii. Build a diverse coalition that includes elected official and business and community leaders at local, regional and state levels to secure adequate funding for transportation and other investments needed to implement the strategy.

iii. Provide technical assistance, best practices and grant funding to local governments and other business and community partners to encourage and support implementation of the strategy. and

iv. Report on the potential light-duty vehicle greenhouse gas emissions impacts of Metro's major land use and transportation RTP policy and investment decisions to determine whether they help the region meet adopted targets for reducing greenhouse gas emissions.

v. Monitor and measure the progress of local and regional efforts to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel as described in Chapter 7 of the Regional Framework Plan, report the results to the region and state on a periodic basis, and guide the consideration of revision or replacement of the policies and actions, if performance so indicates, as part of federally required regularly scheduled updates to the Regional Transportation Plan.

11.4 Objective 11.10 Partner Actions

Encourage local, state and federal governments and special districts to take locally tailored consider implementing actions recommended in the climate strategy *Toolbox of Possible Actions* in locally tailored ways to help the region meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel, including such as:

- ~~i. Implement plans and zoning that focus higher density, mixed-use zoning and development near transit.~~
- ~~ii. Implement capital improvements in frequent bus corridors, such as dedicated bus lanes, stop/shelter improvements, and intersection priority treatments, to increase service performance.~~
- ~~iii. Complete gaps in pedestrian and bicycle access to transit.~~
- ~~• build infrastructure and urban design elements that facilitate and support bicycling and walking (e.g., completing gaps, crosswalks and other crossing treatments, wayfinding signs, bicycle parking, bicycle sharing programs, lighting, separated facilities);~~
 - ~~• link active transportation investments to providing transit and travel information and incentives~~
- ~~iv. Adopt “complete streets” policies and designs to support all users.~~
- ~~• invest in making new and existing streets “complete” and connected to support all users;~~
- ~~v. Integrate multi-modal designs in road improvement and maintenance projects to support all users.~~
- ~~• expand use of intelligent transportation systems (ITS), including active traffic management, incident management and travel information programs and coordinate with capital projects;~~
 - ~~• partner with transit providers to expand deployment of transit signal priority along corridors with 15-minute or better transit service;~~
 - ~~• partner with businesses and/or business associations and transportation management associations to implement demand management programs in employment areas and centers served with active transportation options, 15-minute or better transit service, and parking management;~~
 - ~~• expand local travel options program delivery through new coordinator positions and partnerships with business associations, transportation management associations, and other non-profit and community-based organizations;~~
- ~~vi. Implement safe routes to school and transit programs.~~
- ~~vii. Prepare community inventory of public parking spaces and usage.~~
- ~~• adopt shared and unbundled parking policies;~~
 - ~~• provide preferential parking for electric vehicles, vehicles using alternative fuels and carpools;~~
 - ~~• adopt policies and update development codes to support private adoption of alternative fuel vehicles (AFVs), such as streamlining permitting for fueling stations, planning for access to charging and compressed natural gas (CNG) stations, allowing charging and CNG stations in residences, work places and public places, providing preferential parking for AFVs, and encouraging new construction to include necessary infrastructure to support use of AFVs;~~
 - ~~• prepare and periodically update a community-wide greenhouse gas emissions inventory;~~
 - ~~• adopt greenhouse gas emissions reduction policies and performance targets; and~~
- ~~viii. Develop and implement local climate action plans.~~

~~11.45 Monitor and measure the progress of local and regional efforts in meeting adopted targets for reducing greenhouse gas emissions from light vehicle travel, report the results to the region and state on a periodic basis, and guide the consideration of revision or replacement of the policies and actions, if performance so indicates, as part of updates to the Regional Transportation Plan.~~

The following is a clean version of the updated Goal 11 (and objectives) to help readability:

Goal 11: Demonstrate Leadership on Reducing Greenhouse Gas Emissions

It is the policy of the Metro Council to implement the regional strategy to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel while creating healthy and equitable communities and a strong economy.

Objective 11.1 Land Use and Transportation Integration

Continue to implement the 2040 Growth Concept to support a compact urban form to reduce vehicle miles traveled and increase the use of transit and zero or low carbon emission travel options, such as bicycling, walking, and electric vehicles.

Objective 11.2 Clean Fuels and Clean Vehicles

Support state efforts to transition Oregon to cleaner, low carbon fuels and increase the use of more fuel-efficient vehicles, including electric and alternative fuel vehicles.

Objective 11.3 Regional and Community Transit Network and Access

Make transit convenient, frequent, accessible and affordable by investing in new community and regional transit connections, expanding and improving existing transit services, improving bicycle and pedestrian access to transit, and implementing reduced fare programs for transit-dependent communities, such as youth, older adults, people with disabilities and people with low income.

Objective 11.4 Active Transportation Network

Make biking and walking the safest, most convenient and enjoyable transportation choices for short trips for all ages and abilities by completing gaps and addressing deficiencies in the region's bicycle and pedestrian networks.

Objective 11.5 Transportation Systems Management and Operations

Enhance fuel efficiency and system investments and reduce emissions by using technology to actively manage and fully optimize the transportation system.

Objective 11.6 Transportation Demand Management

Implement programs, services and other tools that provide commuters and households with information and incentives to expand the use of travel options, including carsharing, and reduce drive alone trips.

Objective 11.7 Parking Management

Implement locally-defined approaches to parking management in Centers, Corridors, Station Communities and Main Streets served by frequent transit service and active transportation options to make efficient use of vehicle parking and land dedicated to parking.

Objective 11.8 Streets and Highways Network

Invest strategically in streets and highways to make them safe, reliable and connected to support the movement of people and goods.

Objective 11.9 Metro Actions

Take actions to implement the regional strategy to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel, such as:

- i. Maintain and periodically update the *Toolbox of Possible Actions* and encourage local, state and federal governments and special districts to implement the toolbox actions in locally tailored ways.
- ii. Work with local, state and federal governments, community and business leaders and organizations, and special districts to implement the strategy, including securing adequate funding for transportation and other investments needed to implement the strategy.
- iii. Provide technical assistance, best practices and grant funding to local governments and other business and community partners to encourage and support implementation of the strategy.
- iv. Report on the potential light-duty vehicle greenhouse gas emissions impacts of Metro's major land use and RTP policy and investment decisions to determine whether they help the region meet adopted targets for reducing greenhouse gas emissions.
- v. Monitor and measure the progress of local and regional efforts to meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel as described in Chapter 7 of the Regional Framework Plan, report the results to the region and state on a periodic basis, and guide the consideration of revision or replacement of the policies and actions, if performance so indicates, as part of regularly scheduled updates to the Regional Transportation Plan.

Objective 11.10 Partner Actions

Encourage local, state and federal governments and special districts to consider implementing actions in the *Toolbox of Possible Actions* in locally tailored ways to help the region meet adopted targets for reducing greenhouse gas emissions from light-duty vehicle travel.

Recommended changes (December 9, 2014)

All of Chapter 7 of the Regional Framework Plan is provided for reference. Changes shown in ~~double strikethrough~~ and double underscore reflect recommended changes to respond to comments received during the comment period and subsequent discussions by Metro's regional advisory committees.

Chapter 7 Management

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Chapter 7 Management

Introduction

Any plan put into effect is only a set of policies or actions based on what is known at the time. Actual conditions can and do change. Accordingly, any plan which is intended to be useful over a period of time must include ways of addressing new circumstances. To this end, this chapter includes policies and processes that will be used to keep the Regional Framework Plan (Plan) abreast of current conditions and a forward thinking document.

In addition, this Plan includes disparate subjects, ones that, while interconnected, at times suggest conflicting policy actions. This chapter describes the ways in which such conflicts can be resolved.

The policies included in Chapters 1-6 of this Plan are regional goals and objectives consistent with ORS 268.380(1). Many of these policies were originally adopted and acknowledged as the Regional Urban Growth Goals and Objectives and have been superseded by the policies of this Plan. The specific policies included in this Plan are neither a comprehensive plan under ORS 197.015(5), nor a functional plan under ORS 268.390(2).

Policies

7.1 Citizen Participation

It is the policy of the Metro Council to:

- 7.1.1 Develop and implement an ongoing program for citizen participation in all aspects of the regional planning effort.
- 7.1.2 Coordinate such a program with local programs to support citizen involvement in planning processes and avoid duplicating the local programs.
- 7.1.3 Establish a Metro Committee for Citizen Involvement to assist with the development, implementation and evaluation of its citizen involvement program and to advise the Metro Council regarding ways to best involve citizens in regional planning activities.
- 7.1.4 Develop programs for public notification, especially for, but not limited to, proposed legislative actions that ensure a high level of awareness of potential consequences as well as opportunities for involvement on the part of affected citizens, both inside and outside of Metro's boundaries.

7.2 Metro Policy Advisory Committee and Joint Policy Advisory Committee on Transportation

It is the policy of the Metro Council to:

- 7.2.1 Work with the Metro Policy Advisory Committee (MPAC), consistent with the Metro Charter.
- 7.2.2 Choose the composition of MPAC according to the Metro Charter and according to any changes approved by majorities of MPAC and the Metro Council.
- 7.2.3 Ensure that the composition of MPAC reflects the partnership that must exist among implementing jurisdictions in order to effectively address areas and activities of metropolitan concern and includes elected and appointed officials and citizens of Metro, cities, counties, school districts and states consistent with Section 27 of the Metro Charter.
- 7.2.4 Appoint technical advisory committees as the Metro Council or MPAC determines a need for such bodies, consistent with MPAC By-laws.
- 7.2.5 Perform, with the Joint Policy Advisory Committee on Transportation (JPACT), the functions of the designated Metropolitan Planning Organization as required by federal transportation planning regulations.
- 7.2.6 Develop a coordinated process for JPACT and MPAC, to assure that regional land use and transportation planning remains consistent with these goals and objectives and with each other.

7.3 Applicability of Regional Framework Plan Policies

It is the policy of the Metro Council to:

- 7.3.1 Ensure that all functional plans adopted by the Metro Council are consistent with the policies of this Plan.
- 7.3.2 Guide Metro's management of the UGB through standards and procedures that are consistent with policies in Chapters 1-6 of this Plan. These policies do not apply directly to site-specific land use actions, such as amendments of the UGB.
- 7.3.3 Apply the policies in Chapters 1-6 of this Plan to adopted and acknowledged comprehensive land use plans as follows:
 - a. Components of this Plan that are adopted as functional plans, or other functional plans, shall be consistent with these policies.
 - b. The management and periodic review of Metro's acknowledged UGB Plan, shall be consistent with these policies.
 - c. Metro may, after consultation with MPAC, identify and propose issues of regional concern, related to or derived from these policies, as recommendations but not requirements, for consideration by cities and

counties at the time of periodic review of their adopted and acknowledged comprehensive plans.

- 7.3.4 Apply the policies of this Plan to Metro land use, transportation and greenspace activities as follows:
- a. The UGB, other functional plans, and other land use activities shall be consistent with these policies.
 - b. To the extent that a proposed action may be compatible with some policies and incompatible with others, consistency with this Plan may involve a balancing of applicable goals, sub-goals and objectives by the Metro Council that considers the relative impacts of a particular action on applicable policies.
- 7.3.5 Adopt a periodic update process of this Plan's policies.
- 7.3.6 Require MPAC to consider the regular updating of these policies and recommend based on the adopted periodic update process.
- 7.3.7 Seek acknowledgement of the Plan, consistent with ORS 197.015(16).

7.4 Urban Growth Boundary Management Plan

It is the policy of the Metro Council to:

- 7.4.1 Manage the UGB consistent with Metro Code 3.01 and the policies of this Plan and in compliance with applicable statewide planning goals and laws.

7.5 Functional Plans

It is the policy of the Metro Council to:

- 7.5.1 Develop functional plans that are limited purpose plans, consistent with this Plan, which addresses designated areas and activities of metropolitan concern.
- 7.5.2 Use functional plans as the identified vehicle for requiring changes in city and county comprehensive plans in order to achieve consistence and compliance with this Plan.
- 7.5.3 Adopt policies of this Plan as functional plans if the policies contain recommendations or requirements for changes in comprehensive plans and to submit the functional plans to LCDC for acknowledgment of their compliance with the statewide planning goals.
- 7.5.4 Continue to use existing or new functional plans to recommend or require changes in comprehensive plans until these Plan components are adopted.
- 7.5.5 Continue to develop, amend and implement, with the assistance of cities, counties, special districts and the state, state-required functional plans for air,

water and transportation, as directed by ORS 268.390(1) and for land use planning aspects of solid waste management, as mandated by ORS Ch. 459.

- 7.5.6 Propose new functional plans from one of two sources:
- a. MPAC may recommend that the Metro Council designate an area or activity of metropolitan concern for which a functional plan should be prepared.
 - b. The Metro Council may propose the preparation of a functional plan to designate an area or activity of metropolitan concern and refer that proposal to MPAC.
- 7.5.7 Use the matters required by the Metro Charter to be addressed in this Plan to constitute sufficient factual reasons for the development of a functional plan under ORS 268.390 and make the adoption of a functional plan subject to the procedures specified above.
- 7.5.8 Ensure the participation of MPAC in the preparation of the functional plan, consistent with the policies of this Plan and the reasons cited by the Metro Council.
- 7.5.9 Require that MPAC review the functional plan and make a recommendation to the Metro Council after preparation of the Plan and broad public and local government consensus, using existing citizen involvement processes established by cities, counties and Metro.
- 7.5.10 Resolve conflicts or problems impeding the development of a new functional plan and complete the functional plan if MPAC is unable to complete its review in a timely manner.
- 7.5.11 Hold a public hearing on the proposed functional plan and afterwards either:
- a. Adopt the proposed functional plan.
 - b. Refer the proposed functional plan to MPAC in order to consider amendments to the proposed plan prior to adoption.
 - c. Amend and adopt the proposed functional plan.
 - d. Reject the proposed functional plan.
- 7.5.12 Adopt functional plans by ordinance and include findings of consistency with this Plans policies.
- 7.5.13 Ensure that adopted functional plans are regionally coordinated policies, facilities and/or approaches to addressing a designated area or activity of metropolitan concern, to be considered by cities and counties for incorporation in their comprehensive land use plans.

- 7.5.14 Review any apparent inconsistencies if a city or county determines that a functional plan requirement should not or cannot be incorporated into its comprehensive plan, by the following process:
- a. Metro and affected local governments notify each other of apparent or potential comprehensive plan inconsistencies.
 - b. After Metro staff review, MPAC consults the affected jurisdictions and attempt to resolve any apparent or potential inconsistencies.
 - c. MPAC may conduct a public hearing and make a report to the Metro Council regarding instances and reasons why a city or county has not adopted changes consistent with requirements in a regional functional plan.
 - d. The Metro Council reviews the MPAC report and holds a public hearing on any unresolved issues. The Council may decide either to:
 - i. Amend the adopted regional functional plan.
 - ii. Initiate proceedings to require a comprehensive plan change.
 - iii. Find there is no inconsistency between the comprehensive plan(s) and the functional plan.
 - iv. Grant an exception to the functional plan requirement.

7.6 Periodic Review of Comprehensive Land Use Plans

It is the policy of the Metro Council to:

- 7.6.1 Require MPAC, at the time of LCDC-initiated periodic review of comprehensive plans of cities and counties in the region, to assist Metro with the identification of the Plan elements, functional plan provisions or changes in functional plans adopted since the last periodic review as changes in law to be included in periodic review notices.
- 7.6.2 Encourage MPAC, at the time of LCDC-initiated periodic review of comprehensive plans in the region, to provide comments during the review on issues of regional concern.

7.7 Implementation Roles

It is the policy of the Metro Council to:

- 7.7.1 Recognize the inter-relationships between cities, counties, special districts, Metro, regional agencies and the State, and their unique capabilities and roles in regional planning and the implementation of this Plan.

7.7.2 Recognize the role of the cities to:

- a. Adopt and amend comprehensive plans to conform to functional plans adopted by Metro.
- b. Identify potential areas and activities of metropolitan concern through a broad-based local discussion.
- c. Cooperatively develop strategies for responding to designated areas and activities of metropolitan concern.
- d. Participate in the review and refinement of these goals and objectives.

7.7.3 Recognize the role of counties to:

- a. Adopt and amend comprehensive plans to conform to functional plans adopted by Metro.
- b. Identify potential areas and activities of metropolitan concern through a broad-based local discussion.
- c. Cooperatively develop strategies for responding to designated areas and activities of metropolitan concern.
- d. Participate in the review and refinement of these goals and objectives.

7.7.4 Recognize the role of Special Service Districts to:

- a. Assist Metro, through a broad-based local discussion, with the identification of areas and activities of metropolitan concern and the development of strategies to address them, and participate in the review and refinement of these goals and objectives. Special Service Districts will conduct their operations in conformance with acknowledged comprehensive plans affecting their service territories

7.7.5 Recognize the role of School Districts to:

- a. Advise Metro regarding the identification of areas and activities of school district concern.
- b. Cooperatively develop strategies for responding to designated areas and activities of school district concern.
- c. Participate in the review and refinement of these goals and objectives.

7.7.6 Recognize the role of the State of Oregon to:

- a. Advise Metro regarding the identification of areas and activities of metropolitan concern.

- b. Cooperatively develop strategies for responding to designated areas and activities of metropolitan concern.
- c. Review state plans, regulations, activities and related funding to consider changes in order to enhance implementation of the Plan and functional plans, and employ state agencies and programs to promote and implement these goals and objectives and the Regional Framework Plan.
- d. Participate in the review and refinement of these goals and objectives.

7.7.7 Recognize the role of Metro to:

- a. Identify and designate areas and activities of metropolitan concern.
- b. Provide staff and technical resources to support the activities of MPAC within the constraints established by Metro Council.
- c. Serve as a technical resource for cities, counties, school districts and other jurisdictions and agencies.
- d. Facilitate a broad-based regional discussion to identify appropriate strategies for responding to those issues of metropolitan concern.
- e. Adopt functional plans necessary and appropriate for the implementation of the Regional Framework Plan.
- f. Coordinate the efforts of cities, counties, special districts and the state to implement adopted strategies.
- g. Amend the Future Vision for the region, consistent with Objective 9. (See Ordinance No. 95-604A "For the Purpose of Adopting a Future Vision for the Region," adopted June 15, 1995.)

7.8 Performance Measures

It is the policy of the Metro Council to:

- 7.8.1 Develop performance measures designed for considering the policies of this Plan in consultation with MPAC and the public.
- 7.8.2 Use state benchmarks for performance measures to the extent possible or develop, in consultation with MPAC and the Metro Committee for Citizen Involvement, new performance measures.
- 7.8.3 Measure performance for Chapters [21](#)-6 of this Plan by using several different geographies, including by region, jurisdiction, 2040 design type and market area.

7.8.4 Include the following performance measures for Chapters 21-6 of this Plan:

- a. Vacant land conversion;
- b. Housing development, density, rate and price;
- c. Job creation;
- d. Infill and redevelopment;
- e. Environmentally sensitive lands;
- f. Price of land;
- g. Residential vacancy rates;
- h. Access to open spaces;
- i. ~~Transportation measures~~ Vehicle miles traveled;
- j. Motor vehicle, bicycle and pedestrian fatal and serious injury crashes;
- k. Transit revenue hours;
- l. Transit affordability;
- m. Transit ridership;
- n. Access to transit;
- o. Travel time and reliability in regional mobility corridors, including incident response clearance times;
- p. Air quality, including PM 2.5 and ozone precursors.

7.8.5 Direct these measures to be ~~completed~~ reported every two years.

7.8.6 In addition to the measures identified in 7.8.4, monitor the following performance measures as part of regularly scheduled updates to the Regional Transportation Plan to assess whether key strategies or actions that make up the regional strategy for reducing greenhouse gas emissions from light-duty vehicles are being implemented:

- a. Households living in walkable, mixed-use areas;
- b. Light-duty vehicle greenhouse gas emissions;
- c. Household transportation and housing cost burden;
- d. Registered light-duty vehicles by fuel/energy source;

[e. Workforce participation in employer-based commuter programs:](#)

[f. Household participation in individualized marketing programs:](#)

[g. Bicycle and pedestrian miles traveled:](#)

[h. Bikeways, sidewalks and trails completed:](#)

[i. Parking management.](#)

7.8.67 Take corrective actions if anticipated progress is found to be lacking or if Metro goals or policies need adjustment.

7.9 Monitoring and Updating

It is the policy of the Metro Council to:

- 7.9.1 Review this Plan and all functional plans every seven years, or at other times as determined by the Metro Council after consultation with or upon the advice of MPAC.
- 7.9.2 Involve a broad cross-section of citizen and jurisdictional interests, and MPAC consistent with Policy 7.1 Citizen Participation, of this Plan in any review and amendment process.
- 7.9.3 Provide for broad public and local government review of proposed amendments prior to final Metro Council action.
- 7.9.4 Determine whether amendments to adopted this Plan, functional plans or the acknowledged regional UGB are necessary. If amendments prove to be necessary, the Metro Council will:
- a. Act on amendments to applicable functional plans.
 - b. Request recommendations from MPAC before taking action.
 - c. Include date and method through which proposed amendments will become effective if adopted.
 - d. Consider amendments to the UGB under UGB amendment procedures in the Metro Code.
- 7.9.5 Inform, in writing, any affected cities and counties of any amendment to this Plan or a functional plan, including amendments that are advisory in nature, that recommend changes in comprehensive land use plans, and that require changes in plans, and the effective date of amendments.

7.10 Environmental Education

It is the policy of the Metro Council to:

- 7.10.1 Provide education to the community on the principles and foundation of this Plan in order to maintain it as a living document and to ensure that the citizens of the region understand the decision making mechanisms, the principles that guide sound planning and the effect of decisions and changes on the livability of the community.
- 7.10.2 Provide an unbiased source of environmental education that does not advocate for one viewpoint, that invites and involves diverse viewpoints and that gives everyone opportunities to participate in all aspects of the learning process.
- 7.10.3 Ensure that education for this Plan is enriched by and relevant to all points of view.
- 7.10.4 Develop and implement an ongoing partnership with cultural, environmental and educational organizations to keep abreast of current conditions and maintain this Plan as a forward-looking document.
- 7.10.5 Coordinate with local programs for supporting education that involves citizens in the analysis of critical environmental issues related to regional growth and environmental quality in order to help citizens gain awareness, knowledge and skills to make connections between the issues of regional growth and the creation of livable communities.
- 7.10.6 Provide citizens with the information needed and the opportunity to:
 - a. Analyze critical environmental issues related to regional growth.
 - b. Understand the effects of their choices on the urban and natural systems used to manage growth, natural areas and transportation, process waste and provide water and energy.
 - c. Engage in decisions which affect the livability of their communities.
 - d. Take actions which reflect the region's plan.
 - e. Cooperatively develop strategies with citizens to provide regional environmental education.
 - f. Identify cultural, environmental and educational organizations which currently provide education about issues related to livable communities.
 - g. Identify sites and facilities that currently and potentially provide education about issues related to livable communities.
 - h. Function as a clearinghouse for educational organizations and facilitate educational partnerships in the community.
- 7.10.7 Enable individuals and communities to challenge and discuss the rural and urban systems and policies responsible for creating livable communities in order to achieve the policies of this Plan.

Exhibit C

For

Metro Ordinance No. 14-1346B

**CLIMATE
SMART
COMMUNITIES**
SCENARIOS PROJECT

Exhibit C to Ordinance No. 14-1346"

Toolbox of Possible Actions (2015-20)

Recommended Draft

This document reflects changes recommended to respond to public comments and subsequent advisory committee review

December 9, 2014

**MAKING A
GREAT
PLACE**



About Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to providing services, operating venues and making decisions about how the region grows. Metro works with communities to support a resilient economy, keep nature close by and respond to a changing climate. Together we're making a great place, now and for generations to come.

Stay in touch with news, stories and things to do.

www.oregonmetro.gov/climatescenarios

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Metro Councilors

Shirley Craddick, District 1

Carlotta Collette, District 2

Craig Dirksen, District 3

Kathryn Harrington, District 4

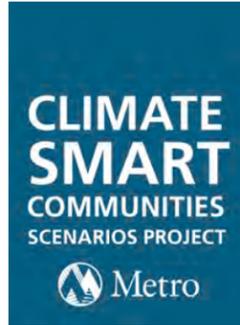
Sam Chase, District 5

Bob Stacey, District 6

Auditor

Suzanne Flynn

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS



TOOLBOX OF POSSIBLE ACTIONS (2015-2020)

BACKGROUND | The Climate Smart Communities Scenarios Project responds to a state mandate to develop and implement a strategy to reduce greenhouse gas emissions from cars and small trucks by 2035. Working together, community, business and elected leaders developed a Climate Smart Strategy that exceeds the mandate and will contribute to creating healthy and equitable communities and a strong economy. The strategy relies on implementing the plans and visions that have already been adopted by communities and the region, along with anticipated advancements in cleaner, low carbon fuels and more fuel-efficient vehicles. The strategy does more than just meet the target. It supports many other local, regional and state goals, including clean air and water, more transportation choices, improved access to jobs and services, reduced delay on the transportation system, and reduced travel and healthcare costs for households and businesses.

Building on existing local, regional and statewide activities and priorities, the project partners have developed an advisory toolbox of actions with meaningful steps that can be taken to implement the Climate Smart Strategy. The actions support implementation of adopted local and regional plans and, if taken, will reduce greenhouse gas emissions and minimize the region’s contribution to climate change in ways that support community and economic development goals. The toolbox builds on the research, analysis, community engagement and discussion completed during the past four years and was developed with the recognition that some tools and actions may work in some locations but not in others. It emphasizes the need for many diverse partners to work together to begin implementation of the Climate Smart Strategy and that each partner retains flexibility and discretion in pursuing the strategies most appropriate to local needs and conditions. Inclusion of an action was primarily driven by advisory committee and public feedback.

HOW TO USE THE TOOLBOX | The toolbox is focused on possible near-term (within the next 5 years) actions that the Oregon Legislature, state agencies and commissions, Metro, cities and counties and special districts are encouraged to take to begin implementing the broader policies and strategies identified in the Climate Smart Strategy. The near-term actions include a combination of existing actions and new ideas and approaches that will lay the foundation for longer term action. The toolbox does not require Metro, local governments, special districts, or state agencies to adopt any particular policy or action, and is intended to allow for flexibility so any action can be tailored to best support local, regional and state plans and visions. The toolbox is intended to be a living document, subject to further review and refinement by local governments, ODOT, TriMet and other stakeholders as part of regularly-scheduled updates to the Regional Transportation Plan to reflect new information and approaches to reducing greenhouse gas emissions from land use and transportation.

Local, state and regional partners are encouraged to review the toolbox and identify actions they have already taken and any new actions they are willing to consider or commit to in the future. Updates to local comprehensive plans and development regulations, transit agency plans, port district plans and regional growth management and transportation plans present ongoing opportunities to consider implementing the actions recommended in locally tailored ways. Medium and longer-term actions will be identified during the next update to the Regional Transportation Plan (scheduled for 2016-18).

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
1. Implement the 2040 Growth Concept and local adopted land use and transportation plans	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Reauthorize Oregon Brownfield Redevelopment Fund <input type="checkbox"/> Support brownfield redevelopment-related legislative proposals <input type="checkbox"/> Restore local control of housing policies and programs to ensure communities have a full range of tools available to meet the housing needs of all residents and income levels and expand opportunities for households of modest means to live closer to work, services and transit <input type="checkbox"/> Begin implementation of the Statewide Transportation Strategy Vision and short-term implementation plan to support regional and community visions <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seek opportunities to leverage local, regional, state and federal funding to achieve local visions and the region's desired outcomes <input type="checkbox"/> Provide increased funding and incentives to local 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Continue implementing 2040 growth Concept <input type="checkbox"/> Implement policies and investments that align with regional and community visions to focus growth in designated centers, corridors and employment areas <input type="checkbox"/> Support restoring local control of housing policies and programs to ensure communities have a full range of tools available to meet the housing needs of all residents and income levels and expand opportunities for households of modest means to live closer to work, services and transit <input type="checkbox"/> Support reauthorization of Oregon Brownfield Redevelopment Fund <input type="checkbox"/> Facilitate regional brownfield coalition to develop legislative proposals and increase resources available in the region for brownfield redevelopment <input type="checkbox"/> Maintain a compact urban growth boundary 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Continue implementing adopted land use plans <input type="checkbox"/> Implement policies and investments that align with community visions, focus growth in designated centers, corridors and employment areas <input type="checkbox"/> Support restoring local control of housing policies and programs to ensure communities have a full range of tools available to meet the housing needs of all residents and income levels and expand opportunities for households of modest means to live closer to work, services and transit <input type="checkbox"/> Support reauthorization of Oregon Brownfield Redevelopment Fund <input type="checkbox"/> Participate in regional brownfield coalition to develop legislative proposals and increase resources available in the region for brownfield redevelopment <input type="checkbox"/> Develop concept plans for new urban areas in 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Implement policies and investments that align with community visions, focus growth in designated centers, corridors and employment areas <input type="checkbox"/> Support restoring local control of housing policies and programs to ensure communities have a full range of tools available to meet the housing needs of all residents and income levels and expand opportunities for households of modest means to live closer to work, services and transit <input type="checkbox"/> Support reauthorization of Oregon Brownfield Redevelopment Fund <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seek opportunities to leverage local, regional, state and federal funding to achieve local visions and the region's desired outcomes <input type="checkbox"/> Share brownfield redevelopment expertise with local governments and expand leadership role in making brownfield sites development ready

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
	<p>governments, developers and non-profits to encourage brownfield redevelopment and transit-oriented development to help keep urban areas compact</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Review functional plans and amend as needed to implement Climate Smart Strategy Near-term (2017-20) <input type="checkbox"/> Seek opportunities to leverage local, regional, state and federal funding to achieve local visions and the region's desired outcomes <input type="checkbox"/> Expand on-going technical assistance and grant funding to local governments, developers and others to advance implementation of local land use plans and incorporate travel information and incentives, transportation system management and operations strategies, parking management approaches and transit-oriented development in local plans and projects <input type="checkbox"/> Convene regional brownfield coalition and strengthen regional brownfields program by providing increased funding and technical assistance to local governments to leverage the investment of private and non-profit developers <input type="checkbox"/> Leverage Metro's public investments to maintain and create affordable housing options in areas served with frequent transit service <input type="checkbox"/> Support increased funding for affordable housing, particularly along corridors with frequent transit service 	<p>ways that further the region's efforts in achieving greenhouse gas emissions reductions, such as planning for complete communities with walking, biking and transit to reduce or eliminate vehicle trips for daily needs</p> <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Pursue opportunities to locate higher-density residential development near activity centers such as parks and recreational facilities, commercial areas, employment centers, and transit <input type="checkbox"/> Locate new schools, services, shopping, and other health promoting resources and community destinations in activity centers <input type="checkbox"/> Seek opportunities to leverage local, regional, state and federal funding to achieve local visions and the region's desired outcomes <input type="checkbox"/> Develop brownfield redevelopment plans and leverage local funding to seek state and federal funding and create partnerships that leverage the investment of private and non-profit developers 	
<p>2. Make transit convenient, frequent, accessible and affordable</p>	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Begin update to Oregon Public Transportation Plan <input type="checkbox"/> Increase state funding for transit service <input type="checkbox"/> Maintain existing intercity passenger rail service and develop proposals for improvement of speed, frequency and reliability <input type="checkbox"/> Provide technical assistance and funding to help establish local transit service <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adopt Oregon Public Transportation Plan with funding strategy to implement <input type="checkbox"/> Begin implementation of incremental improvements to intercity passenger rail service <input type="checkbox"/> Make funding for access to transit a priority 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Work with elected officials and community and business leaders at local, regional and state levels to: <ul style="list-style-type: none"> <input type="checkbox"/> Seek and advocate for new, dedicated funding mechanism(s) <input type="checkbox"/> Seek transit funding from Oregon Legislature <input type="checkbox"/> Consider local funding mechanism(s) for local and regional transit service <input type="checkbox"/> Support state efforts to consider carbon pricing <input type="checkbox"/> Fund reduced fare programs and service improvements for transit dependent communities, such as youth, older adults, people with disabilities and low-income families <input type="checkbox"/> Research and develop best practices that support equitable growth and development near transit without displacement, including strategies that provide for the retention and creation of 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Support and/or participate in efforts to build transportation funding coalition <input type="checkbox"/> Participate in development of TriMet Service Enhancement Plans (SEPs): <ul style="list-style-type: none"> <input type="checkbox"/> Provide more community to community transit connections <input type="checkbox"/> Identify community-based public and private shuttles that link to regional transit service <input type="checkbox"/> Link service enhancements to areas with transit-supportive development, communities of concern¹, and other locations with high ridership potential <input type="checkbox"/> Use ridership demographics in service planning <input type="checkbox"/> Consider local funding mechanism(s) for local and regional transit service <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Make funding for access to transit a priority <input type="checkbox"/> Complete gaps in pedestrian and bicycle access 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Support and/or participate in efforts to build transportation funding coalition <input type="checkbox"/> Expand transit payment options (e.g., electronic e-fare cards) to increase affordability, convenience and flexibility <input type="checkbox"/> Seek state funding sources for transit and alternative local funding mechanisms <input type="checkbox"/> Complete development of TriMet Service Enhancement Plans (SEPs): <ul style="list-style-type: none"> <input type="checkbox"/> Provide more community to community transit connections <input type="checkbox"/> Identify community-based public and private shuttles that link to regional transit service <input type="checkbox"/> Link service enhancements to areas with transit-supportive development, communities of concern, and other locations with potential high ridership potential <input type="checkbox"/> Use ridership demographics in service planning

¹ The 2014 Regional Transportation Plan defines communities of concern as people of color, people with limited English proficiency, people with low-income, older adults, and young people.

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
		<p>businesses and affordable housing near transit</p> <ul style="list-style-type: none"> <input type="checkbox"/> Update Regional High Capacity Transit System Plan <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Support reduced fares and service improvements for low-income families and individuals, youth, older adults and people with disabilities through testimony, endorsement letters or similar means <input type="checkbox"/> Make funding for access to transit a priority 	<p>to transit</p> <ul style="list-style-type: none"> <input type="checkbox"/> Expand partnerships with transit agencies to implement capital improvements in frequent bus corridors (including dedicated bus lanes, stop/shelter improvements, and intersection priority treatments) to increase service performance <input type="checkbox"/> Implement plans and zoning that focus higher density, mixed-use zoning and development near transit <input type="checkbox"/> Partner with transit providers and school districts to seek resources to support youth pass program and expand reduced fare program to low-income families and individuals <input type="checkbox"/> Support reduced fares and service improvements for low-income families and individuals, youth, older adults and people with disabilities through testimony, endorsement letters or similar means <input type="checkbox"/> Convert school bus and transit fleets to electric and/or natural gas buses 	<p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Expand partnerships with cities, counties and ODOT to implement capital improvements in frequent bus corridors (including dedicated bus lanes, stop/shelter improvements, and intersection priority treatments) to increase service performance <input type="checkbox"/> Partner with local governments and school districts to seek resources to support youth pass program and expanding reduced fare program to low-income families and individuals <input type="checkbox"/> Expand transit service to serve communities of concern, transit-supportive development and other potential high ridership locations, etc. <input type="checkbox"/> Improve and increase the availability of transit route and schedule information <input type="checkbox"/> Convert school bus and transit fleets to electric and/or natural gas buses <input type="checkbox"/> Expand and sustain youth pass program, including expanding routes and frequency along school corridors <input type="checkbox"/> Support transit partners in seeking federal grants and increased state funding for electric and other low-carbon alternative fuel buses <input type="checkbox"/> Seek increased funding flexibility to allow for greater upfront capital spending on electric and other low-carbon alternative fuel buses if those expenses are offset by operating savings
<p>3. Make biking and walking safe and convenient</p>	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adopt Oregon Bicycle and Pedestrian Plan with funding strategy <input type="checkbox"/> Seek and advocate for new, dedicated funding mechanism(s) for active transportation projects <input type="checkbox"/> Advocate for use of Connect Oregon funding for active transportation projects <input type="checkbox"/> Review driver's education training materials and certification programs and make changes to increase awareness of bicycle and pedestrian safety <input type="checkbox"/> Complete Region 1 Active Transportation Needs inventory <input type="checkbox"/> Maintain commitment to funding Safe Routes to School programs statewide <input type="checkbox"/> Fund Safe Routes to Transit programs <input type="checkbox"/> Adopt a complete streets policy <input type="checkbox"/> Partner with local governments to conduct site-specific evaluations from priority locations 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fund construction of active transportation projects as called for in air quality transportation control measures <input type="checkbox"/> Advocate for use of Connect Oregon funding for active transportation projects <input type="checkbox"/> Build a diverse coalition that includes elected officials and community and business leaders at local, regional and state levels working together to: <ul style="list-style-type: none"> <input type="checkbox"/> Build local and state commitment to implement Active Transportation Plan, and Safe Routes to Schools and Safe Routes to Transit programs <input type="checkbox"/> Seek and advocate for new, dedicated funding mechanism(s) <input type="checkbox"/> Advocate to maintain eligibility in federal formula programs (i.e., NHPP, STP, CMAQ) and discretionary programs (New Starts, 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Continue implementing adopted transportation system plans <input type="checkbox"/> Support and/or participate in efforts to build transportation funding coalition <input type="checkbox"/> Advocate for use of Connect Oregon funding for active transportation projects <input type="checkbox"/> Leverage local funding with development for active transportation projects <input type="checkbox"/> Seek opportunities to coordinate local investments with investments being made by special districts, park providers and other transportation providers <input type="checkbox"/> Seek and advocate for new, dedicated funding mechanism(s) <input type="checkbox"/> Seek opportunities to implement Regional Transportation Safety Plan recommendations in planning, project development and development review activities 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Support and/or participate in efforts to build transportation funding coalition <input type="checkbox"/> Advocate for use of Connect Oregon funding for active transportation projects <input type="checkbox"/> Complete Port of Portland 2014 Active Transportation Plan for Portland International Airport <input type="checkbox"/> Prepare a TriMet Bicycle Plan <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Invest in trails that increase equitable access to transit, services and community destinations <input type="checkbox"/> Adopt a Vision Zero strategy for eliminating traffic fatalities

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
	<p>identified in the ODOT Pedestrian and Bicycle Safety Implementation Plan</p> <ul style="list-style-type: none"> <input type="checkbox"/> Improve bicycle and pedestrian crash data collection <input type="checkbox"/> Support local and regional health impact assessments <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adopt a Vision Zero strategy for eliminating traffic fatalities <input type="checkbox"/> Provide technical assistance and expand grant funding to support development and adoption of complete streets policies and designs <input type="checkbox"/> Expand existing funding for active transportation investments <input type="checkbox"/> Simplify and clarify policy on e-bike use of bike lanes and other infrastructure 	<p>Small Starts, TIFIA, TIGER)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Seek opportunities to implement Regional Transportation Safety Plan recommendations in planning, project development and development review activities <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide technical assistance and planning grants to support development and adoption of complete streets policies and designs in local planning and project development activities <input type="checkbox"/> Review the regional transportation functional plan and make amendments needed to implement the Regional Active Transportation Plan <input type="checkbox"/> Update and fully implement the Regional Transportation Safety Plan <input type="checkbox"/> Adopt a Vision Zero strategy for eliminating traffic fatalities <input type="checkbox"/> Update best practices in street design and complete streets, including: <ul style="list-style-type: none"> o develop a complete streets checklist o provide design guidance to minimize air pollution exposure for bicyclists and pedestrians o use of green street designs that include tree plantings to support carbon sequestration o identify new pavement and hard surface materials proven to help reduce infrastructure-related heat gain <input type="checkbox"/> Update the Regional Active Transportation Plan needs assessment in the 2018 RTP <input type="checkbox"/> Build and monitor local and state commitment to implement the Active Transportation Plan and programs for safe routes to schools and transit <input type="checkbox"/> Clarify that e-bikes are part of the region’s active transportation strategy <input type="checkbox"/> Partner with Portland State University to develop a pilot project to test the efficacy of e-bikes in attracting new riders 	<ul style="list-style-type: none"> <input type="checkbox"/> Review community inventory of sidewalk and bike lane gaps and deficiencies to help prioritize where limited funding could best be directed to encourage multi-modal movement <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Develop and maintain a city/county-wide active transportation network of sidewalks, on- and off-street bikeways, and trails to provide connections between neighborhoods, schools, civic center/facilities, recreational facilities, transit centers, bus stops, employment areas and major activity centers <input type="checkbox"/> Build infrastructure and urban design elements that facilitate and support bicycling and walking (e.g., completing gaps, crosswalks and other crossing treatments, wayfinding signs, bicycle parking, bicycle sharing programs, lighting, separated facilities) <input type="checkbox"/> Invest to equitably complete active transportation network gaps in centers and along streets that provide access to transit stops, schools and other community destinations <input type="checkbox"/> Link active transportation investments to providing transit and travel information and incentives <input type="checkbox"/> Partner with ODOT to conduct site-specific evaluations from priority locations identified in the ODOT Pedestrian and Bicycle Safety Implementation Plan <input type="checkbox"/> Expand Safe Routes to Schools programs to include high schools and Safe Routes to Transit <input type="checkbox"/> Adopt a Vision Zero strategy for eliminating traffic fatalities <input type="checkbox"/> Adopt “complete streets” policies and designs to support all users <input type="checkbox"/> Establish local funding pool to leverage state and federal funds <input type="checkbox"/> Conduct needs assessments for schools and access to transit during updates to TSPs and other plans 	

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? <small>(e.g., transit providers, Port districts, parks providers, etc.)</small>
<p>4. Make streets and highways safe, reliable and connected</p>	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Maintain existing highway network to improve traffic flow <input type="checkbox"/> Increase state gas tax (indexed to inflation and fuel efficiency) <input type="checkbox"/> Update the Oregon Transportation Safety Action Plan <input type="checkbox"/> Review driver’s education training materials and certification programs and make changes to increase awareness of safety for all system users <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Work with Metro and local governments to consider alternative performance measures <input type="checkbox"/> Integrate multi-modal designs in road improvement and maintenance projects to support all users <input type="checkbox"/> Adopt a Vision Zero strategy for eliminating traffic fatalities <input type="checkbox"/> Pilot new pavement and hard surface materials proven to help reduce infrastructure-related heat gain <input type="checkbox"/> Use green street designs that include tree plantings to support carbon sequestration <input type="checkbox"/> Optimize built road capacity through improved geometric design and other operational improvements to address bottlenecks and improve traffic flow on existing multi-modal arterials 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Build a diverse coalition that includes elected officials and community and business leaders at local, regional and state levels working together to: <ul style="list-style-type: none"> <input type="checkbox"/> Support state and federal efforts to increase gas tax (indexed to inflation and fuel efficiency) <input type="checkbox"/> Support state and federal efforts to implement mileage-based road usage charge program <input type="checkbox"/> Seek opportunities to implement Regional Transportation Safety Plan recommendations in planning, project development and development review activities <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Work with ODOT and local governments to consider alternative performance measures <input type="checkbox"/> Provide technical assistance and grant funding to support integrated transportation system management operations strategies in local plans, projects and project development activities <input type="checkbox"/> Update and fully implement Regional Transportation Safety Plan <input type="checkbox"/> Adopt a Vision Zero strategy for eliminating traffic fatalities <input type="checkbox"/> Update best practices in street design and complete streets, including: <ul style="list-style-type: none"> <input type="checkbox"/> Develop a complete streets checklist <input type="checkbox"/> Provide design guidance to minimize air pollution exposure for bicyclists and pedestrians <input type="checkbox"/> Use of green street designs that include tree plantings to support carbon sequestration <input type="checkbox"/> Identify new pavement and hard surface materials proven to help reduce infrastructure-related heat gain 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Continue implementing adopted transportation system plans <input type="checkbox"/> Maintain existing street network to improve traffic flow <input type="checkbox"/> Support and/or participate in efforts to build transportation funding coalition <input type="checkbox"/> Seek opportunities to implement Regional Transportation Safety Plan recommendations in planning, project development and development review activities <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Work with ODOT and Metro to consider alternative performance measures <input type="checkbox"/> Support railroad grade separation projects in corridors to allow for longer trains and less delay/disruption to other users of the system <input type="checkbox"/> Invest in making new and existing streets complete and connected to support all users <input type="checkbox"/> Integrate multi-modal designs in road improvement and maintenance projects to support all users <input type="checkbox"/> Adopt a Vision Zero strategy for eliminating traffic fatalities <input type="checkbox"/> Pilot new pavement and hard surface materials proven to help reduce infrastructure-related heat gain <input type="checkbox"/> Use green street designs that include tree plantings to support carbon sequestration <input type="checkbox"/> Optimize built road capacity through improved geometric design and other operational improvements to address bottlenecks and improve traffic flow on existing multi-modal arterials 	<p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Support and/or participate in efforts to build transportation funding coalition <input type="checkbox"/> Support railroad grade separation projects in corridors to allow for longer trains and less delay/disruption to other users of the system
<p>5. Use technology to actively manage the transportation system</p>	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Integrate transportation system management and operations strategies into project development activities <input type="checkbox"/> Expand deployment of intelligent transportation systems (ITS), including active traffic management, incident management and traveler information programs <input type="checkbox"/> Partner with cities, counties and TriMet to expand deployment of transit signal priority 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Continue implementing Regional Transportation System Management and Operations Action Plan <input type="checkbox"/> Seek Metro Council/JPACT commitment to invest more in transportation system management and operations (TSMO) projects using regional flexible funds <input type="checkbox"/> Advocate for increased state commitment to invest more in TSMO projects using state funds <input type="checkbox"/> Pursue opportunities and funding for pilot 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Continue implementing adopted transportation system plans <input type="checkbox"/> Advocate for increased regional and state commitment to invest more in TSMO projects using regional and state funds <input type="checkbox"/> Pursue opportunities and funding for pilot projects that help establish the region as a living laboratory for sustainable and multi-modal intelligent transportation systems (ITS) 	<p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Partner with cities, counties and ODOT to expand deployment of transit signal priority along corridors with 15-minute or better transit service <input type="checkbox"/> Pursue opportunities and funding for pilot projects that help establish the region as a living laboratory for sustainable and multi-modal intelligent transportation systems (ITS)

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
	<p>along corridors with 15-minute or better transit service</p> <ul style="list-style-type: none"> <input type="checkbox"/> Pursue opportunities and funding for pilot projects that help establish the region as a living laboratory for sustainable and multi-modal intelligent transportation systems (ITS) 	<p>projects that help establish the region as a living laboratory for sustainable and multi-modal intelligent transportation systems (ITS)</p> <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Build capacity and strengthen interagency coordination <input type="checkbox"/> Provide technical assistance and grant funding to integrate transportation system management operations strategies in local plans, project development, and development review activities <input type="checkbox"/> Update Regional TSMO Strategic Plan by 2018 	<p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Expand deployment of intelligent transportation systems (ITS), including active traffic management, incident management and travel information programs and coordinate with capital projects <input type="checkbox"/> Partner with TriMet to expand deployment of transit signal priority along corridors with 15-minute or better transit service <input type="checkbox"/> Complete an inventory of the installed intelligent transportation systems (ITS) along arterials to help prioritize areas where limited funding could best be directed to increase roadway performance 	
<p>6. Provide information and incentives to expand the use of travel options</p>	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adopt Statewide Transportation Options Plan with funding strategy to implement <input type="checkbox"/> Deploy statewide eco-driving educational effort, including integration of eco-driving information in driver's education training courses, Oregon Driver's education manual and certification programs <input type="checkbox"/> Review EcoRule to identify opportunities to improve effectiveness <input type="checkbox"/> Increase state capacity and staffing to support on-going EcoRule implementation and monitoring <input type="checkbox"/> Deploy video conferencing, virtual meeting technologies and other communication technologies to reduce business travel needs <input type="checkbox"/> Partner with TriMet, SMART and media partners to link the Air Quality Index to transportation system information outlets <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Promote and provide information, recognition, funding and incentives to encourage commuter programs and individualized marketing to provide employers, employees and residents information and incentives to use travel options <input type="checkbox"/> Integrate transportation demand management practices into planning, project development, and development review activities <input type="checkbox"/> Establish a state vanpool strategy that addresses urban and rural transportation needs <input type="checkbox"/> Integrate promotion of workplace charging, carsharing, and new people mover services into employer-based outreach programs that 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Continue implementing Regional Travel Options Strategic Plan <input type="checkbox"/> Seek Metro Council/JPACT commitment to invest more regional flexible funds to expand direct services and funding provided to local partners (e.g., local governments, transportation management associations, and other non-profit and community-based organizations) to implement expanded education, recognition and outreach efforts in coordination with other capital investments <input type="checkbox"/> Provide funding and partner with community-based organizations to develop culturally relevant information materials <input type="checkbox"/> Develop best practices on how to integrate transportation demand management in local planning, project development, and development review activities <input type="checkbox"/> Integrate transportation demand management practices into planning, project development and development review activities <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Expand on-going technical assistance and grant funding to local governments, transportation management associations, business associations and other non-profit organizations to incorporate travel information and incentives in local planning and project development activities and at worksites <input type="checkbox"/> Establish an on-going individualized marketing program that targets deployment in conjunction with capital investments being made in the 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Continue implementing adopted transportation system plans <input type="checkbox"/> Advocate for increased state and regional funding to expand direct services provided to local partners (e.g., local governments, transportation management associations, and other non-profit organizations) to support expanded education, recognition and outreach efforts in coordination with other capital investments <input type="checkbox"/> Host citywide and community events like Bike to Work Day and Sunday Parkways <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Integrate transportation demand management practices into planning, project development, and development review activities <input type="checkbox"/> Provide incentives for new development over a specific trip generation threshold to provide travel information and incentives to support achievement of EcoRule and mode share targets adopted in local and regional plans <input type="checkbox"/> Partner with businesses and/or business associations and transportation management associations to implement demand management programs in employment areas and centers served with active transportation options, 15-minute or better transit service, and parking management <input type="checkbox"/> Expand local travel options program delivery through new coordinator positions and partnerships with business associations, transportation management associations, and 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Expand employer program capacity and staffing to support expanded education, recognition and outreach efforts

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
	<p>encourage transit, walking, bicycling and carpooling</p> <ul style="list-style-type: none"> <input type="checkbox"/> Integrate education about vehicle and fuel efficiency into public awareness strategies such as eco-driving promotion <input type="checkbox"/> Integrate education about carsharing programs into public awareness strategies 	<p>region</p> <ul style="list-style-type: none"> <input type="checkbox"/> Begin update to Regional Travel Options Strategic Plan in 2018 <input type="checkbox"/> Clarify that e-bikes are part of the regional toolkit of travel options <input type="checkbox"/> Encourage regional carsharing services to increase their use of electric vehicles and other clean fuel alternatives <input type="checkbox"/> Integrate promotion of workplace charging, carsharing, and new people mover services into employer-based outreach programs that encourage transit, walking, bicycling and carpooling <input type="checkbox"/> Integrate education about vehicle and fuel efficiency into public awareness strategies such as eco-driving promotion <input type="checkbox"/> Integrate education about carsharing programs into public awareness strategies 	<p>other non-profit and community-based organizations</p>	
<p>7. Manage parking to make efficient use of vehicle parking and land dedicated to parking spaces</p>	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide technical assistance and grant funding to support development of parking management plans at the local and regional level <input type="checkbox"/> Distribute “Parking Made Easy” handbook and provide technical assistance, planning grants, model code language, education and outreach <input type="checkbox"/> Increase safe, secure and convenient bicycle parking <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide preferential parking for electric vehicles, vehicles using alternative fuels and carpools <input type="checkbox"/> Prepare inventory of state-owned public parking spaces and usage <input type="checkbox"/> Provide monetary incentives such as parking cash-out and employer buy-back programs <input type="checkbox"/> Develop and support pilot projects and model planning approaches to encourage highly visible charging infrastructure on-street and in the public right-of-way <input type="checkbox"/> Join the Workplace Charging Challenge as a partner 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Expand on-going technical assistance to local governments, developers and others to incorporate parking management approaches in local plans and projects <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Pilot projects to develop model parking management plans and model ordinances for different development types <input type="checkbox"/> Research and update regional parking policies and best practices to more comprehensively reflect the range of parking approaches available for different development types and to incorporate goals beyond customer access, such as: <ul style="list-style-type: none"> <input type="checkbox"/> linking parking approaches to the level of transit service and active transportation options provided <input type="checkbox"/> use of priced parking as a revenue source to help fund travel information and incentives programs, active transportation projects and transit service <input type="checkbox"/> linking parking policies in mixed-use transit corridors and centers with maintaining and providing affordable housing <input type="checkbox"/> Amend Title 6 of Regional Transportation Functional Plan to update regional parking map and reflect updated regional parking policies <input type="checkbox"/> Join the Workplace Charging Challenge as a 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Consider charging for parking in high usage areas served by 15-minute or better transit service and active transportation options <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Prepare community inventory of public parking spaces and usage <input type="checkbox"/> Adopt shared and unbundled parking policies <input type="checkbox"/> Require or provide development incentives for developers to separate parking from commercial space and residential units in lease and sale agreements <input type="checkbox"/> Provide preferential parking for electric vehicles, vehicles using alternative fuels and carpools <input type="checkbox"/> Require or provide development incentives for large employers to offer employees a parking cash-out option where the employee can choose a parking benefit, a transit pass or the cash equivalent of the benefit <input type="checkbox"/> Increase safe, secure and convenient bicycle parking <input type="checkbox"/> Reduce requirements for off-street parking and establish off-street parking supply maximums, as appropriate, enacting and adjusting policies to minimize spillover impacts in adjacent areas <input type="checkbox"/> Prepare parking management plans tailored to 2040 centers served by high capacity transit (existing and planned) <input type="checkbox"/> Join the Workplace Charging Challenge as a 	<p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide preferential parking for electric vehicles, vehicles using alternative fuels and carpools <input type="checkbox"/> Increase safe, secure and convenient bicycle parking <input type="checkbox"/> Join the Workplace Charging Challenge as a partner <input type="checkbox"/> Develop and support pilot projects and model planning approaches to encourage highly visible charging infrastructure on-street and in the public right-of-way

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
		partner <input type="checkbox"/> Develop and support "charging oases" with multiple chargers, modeled on the Electric Avenue project at Portland State University <input type="checkbox"/> Convene regional transportation and planning officials to develop strategies for developing cost-effective charging infrastructure that also reinforces regional planning goals	partner <input type="checkbox"/> Develop and support pilot projects and model planning approaches to encourage highly visible charging infrastructure on-street and in the public right-of-way <input type="checkbox"/> Support efforts in new development (particularly multi-family housing and large parking lots) to install conduit for future charging of 20% or more parking spaces (see similar standards in Hawaii and California)	
8. Secure adequate funding for transportation investments	Immediate (2015-16) <input type="checkbox"/> Preserve local options for raising revenue to ensure local communities have a full range of financing tools available to adequately fund current and future transportation needs <input type="checkbox"/> Seek and advocate for new, dedicated funding mechanism(s) for active transportation and transit <input type="checkbox"/> Research and consider carbon pricing models to generate new funding for clean energy, transit and active transportation, alleviating regressive impacts to businesses and communities of concern <input type="checkbox"/> Increase state gas tax (indexed to inflation and fuel efficiency) <input type="checkbox"/> Implement a mileage-based road usage charge program as called for in Senate Bill 810 Near-term (2017-20) <input type="checkbox"/> Expand funding available for active transportation and transit investments <input type="checkbox"/> Broaden implementation of the mileage-based road usage charge	Immediate (2015-16) <input type="checkbox"/> Update research on regional infrastructure gaps and potential funding mechanisms to inform communication materials that support engagement activities and development of a funding strategy to meet current and future transportation needs <input type="checkbox"/> Build a diverse coalition that includes elected officials and community and business leaders at local, regional and state levels working together to: <ul style="list-style-type: none"> o Seek and advocate for funding the adopted RTP o Advocate for local revenue raising options o Seek and advocate for new, dedicated funding mechanism(s) for transit and active transportation o Seek transit and active transportation funding from Oregon Legislature o Seek funding for road connections/improvements that will support multi-modal transportation o Consider local funding mechanism(s) for local and regional transit service o Support state efforts to research and consider carbon pricing models o Build local and state commitment to implement Active Transportation Plan, and Safe Routes to Schools (including high schools) and Safe Routes to Transit programs o Support state and federal efforts to increase gas tax (indexed to inflation and fuel efficiency) o Support state and federal efforts to implement road usage charge program 	Immediate (2015-16) <input type="checkbox"/> Support and/or participate in efforts to build transportation funding coalition <input type="checkbox"/> Advocate for local revenue raising options <input type="checkbox"/> Support state efforts to implement a mileage-based road usage charge program <input type="checkbox"/> Support state efforts to research and consider carbon pricing models <input type="checkbox"/> Consider local funding mechanism(s) for local and regional transportation needs, including transit service and active transportation Near-term (2017-20) <input type="checkbox"/> Work with local, regional and state partners, including elected officials and business and community leaders, to develop a funding strategy to meet current and future transportation needs	Immediate (2015-16) <input type="checkbox"/> Support and/or participate in efforts to build transportation funding coalition <input type="checkbox"/> Advocate for local revenue raising options <input type="checkbox"/> Seek and advocate for new, dedicated funding mechanism(s) for active transportation and transit <input type="checkbox"/> Support state efforts to research and consider carbon pricing models Near-term (2017-20) <input type="checkbox"/> Work with local, regional and state partners, including elected officials and business and community leaders, to develop a funding strategy to meet current and future transportation needs

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
<p>9. Support Oregon’s transition to cleaner, low carbon fuels, more fuel-efficient vehicles and pay-as-you-drive insurance</p>	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Reauthorize Oregon Clean Fuels Program <input type="checkbox"/> Implement Oregon Zero Emission Vehicle Program and Multi-State Zero Emission Vehicle Action Plan in collaboration with California and other states <input type="checkbox"/> Lead by example by increasing the public alternative fuel vehicle (AFV) fleet <input type="checkbox"/> Provide funding to Drive Oregon to advance electric mobility, and to other endeavors that advance alternative fuels <input type="checkbox"/> Work with insurance companies to offer and encourage pay-as-you-drive insurance <input type="checkbox"/> Support renewal of Oregon's tax credits for charging stations and other alternative fueling infrastructure <input type="checkbox"/> Support legislation being promoted by Drive Oregon and the Energize Oregon Coalition to create a purchase rebate for electric vehicles <input type="checkbox"/> Join Drive Oregon an Energize Oregon Coalition as a member organization and participate as an active partner in promoting electric vehicle readiness and deployment <input type="checkbox"/> Review the state greenhouse gas emissions reduction targets, including assumptions related to fleet and technology advancements <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide consumer and business incentives to purchase new AFVs <input type="checkbox"/> Expand communication efforts about the cost savings of driving more fuel-efficient vehicles <input type="checkbox"/> Promote and provide information, funding and incentives to encourage the provision of electric vehicle charging and compressed natural gas (CNG) stations and infrastructure in residences, work places and public places <input type="checkbox"/> Encourage private fleets to purchase, lease or rent AFVs <input type="checkbox"/> Develop model code for electric and CNG vehicle infrastructure and partnerships with businesses <input type="checkbox"/> Remove barriers to electric and CNG vehicle charging and fueling station installations <input type="checkbox"/> Promote AFV infrastructure planning and investment by public and private entities <input type="checkbox"/> Provide clear and accurate signage to direct AFV users to charging and fueling stations and parking 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Support reauthorization of the Oregon Clean Fuels Program <input type="checkbox"/> Support the Oregon Zero Emission Vehicle Program <input type="checkbox"/> Support renewal of Oregon's tax credits for charging stations and other alternative fueling infrastructure <input type="checkbox"/> Support legislation being promoted by Drive Oregon and the Energize Oregon Coalition to create a purchase rebate for electric vehicles <input type="checkbox"/> Join Drive Oregon an Energize Oregon Coalition as a member organization and participate as an active partner in promoting electric vehicle readiness and deployment <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lead by example by increasing public AFV fleet <input type="checkbox"/> Support state efforts to build public acceptance of pay-as-you-drive insurance <input type="checkbox"/> Expand communication efforts about the cost savings of driving more fuel-efficient vehicles <input type="checkbox"/> Partner with state agencies to hold regional planning workshops to educate local governments on AFV opportunities <input type="checkbox"/> Develop AFV readiness strategy for region in partnership with local governments, state agencies, electric and natural gas utilities, non-profits and others <input type="checkbox"/> Increase Metro fleet use of electric vehicles, including non-passenger cars (e-bikes and utility vehicles) <input type="checkbox"/> Expand availability of charging at Metro venues (Oregon Zoo, Expo Center, Convention Center, P5, etc.) 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Support reauthorization of the Oregon Clean Fuels Program <input type="checkbox"/> Support the Oregon Zero Emission Vehicle Program <input type="checkbox"/> Update development codes to streamline/incent/encourage the installation of electric vehicles charging stations, alternative fueling stations and infrastructure, particularly new buildings <input type="checkbox"/> Support renewal of Oregon's tax credits for charging stations and other alternative fueling infrastructure <input type="checkbox"/> Support legislation being promoted by Drive Oregon and the Energize Oregon Coalition to create a purchase rebate for electric vehicles <input type="checkbox"/> Join Drive Oregon an Energize Oregon Coalition as a member organization and participate as an active partner in promoting electric vehicle readiness and deployment <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lead by example by increasing public AFV fleet <input type="checkbox"/> Expand communication efforts about the cost savings of driving more fuel-efficient vehicles <input type="checkbox"/> Pursue grant funding and partners to expand the growing network of electric vehicle fast charging stations and publicly accessible CNG stations <input type="checkbox"/> Partner with local dealerships, Department of Energy (DOE) Clean Cities programs, non-profit organizations, businesses and others to incorporate AFV outreach and education events for consumers in conjunction with such events as Earth Day celebrations, National Plug-In Day and the DOE/Drive Oregon Workplace Charging Challenge <input type="checkbox"/> Update development codes and encourage new construction to include necessary infrastructure to support use of AFVs 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Support reauthorization of the Oregon Clean Fuels Program <input type="checkbox"/> Support the Oregon Zero Emission Vehicle Program <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Provide electric vehicle charging and CNG stations in public places (e.g., park-and-rides, parking garages) <input type="checkbox"/> Provide preferential parking for AFVs

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
	<ul style="list-style-type: none"> <input type="checkbox"/> Expand communication efforts to promote AFV tourism activities <input type="checkbox"/> Continue participation in the Pacific Coast Collaborative, Western Climate Initiative, and West Coast Green Highway Initiative and partner with members of Energize Oregon coalition <input type="checkbox"/> Track and report progress toward adopted state goals related to greenhouse gas emissions reductions and AFV deployment <input type="checkbox"/> Provide incentives and information to expand use of pay-as-you-drive insurance and report on progress 			
<p>10. Demonstrate leadership on climate change</p>	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Update the 2017-20 Statewide Transportation Improvement Program (STIP) allocation process to address the Statewide Transportation Strategy (STS) Vision and STS Short-Term Implementation Plan actions <input type="checkbox"/> Support local government and regional planning for climate change mitigation <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Amend the Oregon Transportation Plan to address the Statewide Transportation Strategy Vision <input type="checkbox"/> Update statewide greenhouse gas emissions inventory and track progress toward adopted greenhouse gas emissions reduction goals <input type="checkbox"/> Through the Oregon Modeling Steering Committee, collaborate on appropriate tools to support greenhouse gas reduction planning <input type="checkbox"/> Report on the potential greenhouse gas emissions impacts of policy, program and investment decisions 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Participate in local, regional and national panels and presentations to share the outcomes and recommendations of the Climate Smart Strategy <input type="checkbox"/> Seek Metro Council/JPACT commitment to address the Climate Smart Strategy in the policy update for the 2018-21 Metropolitan Transportation Improvement Program (MTIP) and the 2019-21 Regional Flexible Fund Allocation (RFFA) process <input type="checkbox"/> Continue participating in the Oregon Modeling Steering Committee Health and Transportation subcommittee to make recommendations to ODOT on tools and methods to support future health assessments by local, regional and state partners <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review and evaluate Climate Smart Strategy investments and actions for adoption in the 2018 RTP <input type="checkbox"/> Evaluate Metro's major land use and RTP policy and investment decisions to determine whether they help the region meet adopted targets for reducing greenhouse gas emissions <input type="checkbox"/> Assess potential risks and identify strategies to address potential climate impacts to transportation infrastructure and operations as part of 2018 RTP update <input type="checkbox"/> Update regional greenhouse gas emissions inventory and track progress toward adopted greenhouse gas emissions reduction target <input type="checkbox"/> Through the Oregon Modeling Steering Committee, collaborate on appropriate tools and methods to support greenhouse gas reduction planning and monitoring 	<p>Immediate (2015-16)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review the Toolbox of Possible Actions to identify actions that are already being implemented and new actions public officials are willing to implement <p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Sign U.S. Conference of Mayors Climate Protection Agreement <input type="checkbox"/> Prepare and periodically update community-wide greenhouse gas emissions inventory <input type="checkbox"/> Report on the potential greenhouse gas emissions impacts of policy, program and investment decisions <input type="checkbox"/> Adopt greenhouse gas emissions reduction policies and performance targets <input type="checkbox"/> Develop and implement local climate action plans 	<p>Near-term (2017-20)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Prepare and periodically update greenhouse gas emissions inventory of transportation operations <input type="checkbox"/> Report on the potential greenhouse gas emissions impacts of policy, program and investment decisions <input type="checkbox"/> Adopt greenhouse gas emissions reduction policies and performance targets

RECOMMENDED TOOLBOX OF POSSIBLE ACTIONS

POLICY	TOOLBOX OF POSSIBLE ACTIONS (2015-2020)			
	WHAT CAN THE STATE DO?	WHAT CAN METRO DO?	WHAT CAN CITIES AND COUNTIES DO?	WHAT CAN SPECIAL DISTRICTS DO? (e.g., transit providers, Port districts, parks providers, etc.)
		<ul style="list-style-type: none"> <input type="checkbox"/> Report on the potential greenhouse gas emissions impacts of policy, program and investment decisions <input type="checkbox"/> Encourage development and implementation of local climate action plans 		

Exhibit D

For

Metro Ordinance No. 14-1346B

**CLIMATE
SMART
COMMUNITIES**
SCENARIOS PROJECT

Exhibit D to Ordinance No. 14-1346B

Performance Monitoring Approach

Recommended Draft

This document reflects changes recommended to respond to public comments received and subsequent advisory committee review

December 9, 2014

**MAKING A
GREAT
PLACE**



About Metro

Clean air and clean water do not stop at city limits or county lines. Neither does the need for jobs, a thriving economy, and sustainable transportation and living choices for people and businesses in the region. Voters have asked Metro to help with the challenges and opportunities that affect the 25 cities and three counties in the Portland metropolitan area.

A regional approach simply makes sense when it comes to providing services, operating venues and making decisions about how the region grows. Metro works with communities to support a resilient economy, keep nature close by and respond to a changing climate. Together we're making a great place, now and for generations to come.

Stay in touch with news, stories and things to do.

www.oregonmetro.gov/climatescenarios

Metro Council President

Tom Hughes

Metro Councilors

Shirley Craddick, District 1

Carlotta Collette, District 2

Craig Dirksen, District 3

Kathryn Harrington, District 4

Sam Chase, District 5

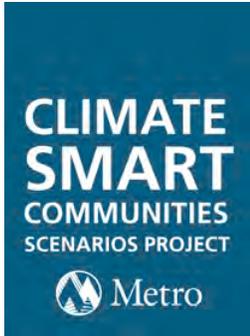
Bob Stacey, District 6

Auditor

Suzanne Flynn

RECOMMENDED DRAFT

December 9, 2014



PERFORMANCE MONITORING APPROACH

OR 660-044-0040(3)(e) directs Metro to identify performance measures and targets to monitor and guide implementation of the Climate Smart Strategy. The purpose of performance measures and performance monitoring targets is to monitor and assess whether key elements or actions that make up the strategy are being implemented, and whether the strategy is achieving the expected outcomes.

ABOUT THE PERFORMANCE MEASURES: The performance measures identified for monitoring reflect a combination of existing and new performance measures, most of which are drawn from the Regional Transportation Plan and the Urban Growth Report to track existing land use and transportation policies. These and other performance measures are reflected in Chapter 7 of the Regional Framework Plan.

ABOUT THE PERFORMANCE MONITORING TARGETS: The 2035 performance monitoring targets are not policy targets, but rather reflect a combination of the planning assumptions used to evaluate the Climate Smart Strategy and outputs from the evaluation. The measures and performance monitoring targets will be reviewed before being incorporated into the Regional Transportation Plan as part of the next scheduled update and may be further refined at that time to address new information, such as MAP-21 performance-based planning provisions and recommendations from Metro’s Equity Strategy.

ABOUT THE PROCESS FOR PERFORMANCE MONITORING: To monitor and assess implementation of the strategy, Metro will use observed data sources and existing regional performance monitoring and reporting processes to the extent possible, including regularly scheduled updates to the Regional Transportation Plan and Urban Growth Report, and reporting in response to Oregon Revised Statutes ORS 197.301 and ORS 197.296. When observed data is not available, data from regional models may be reported. If the assessment finds the region is deviating significantly from the Climate Smart Strategy performance monitoring target, then Metro will work with local, regional and state partners to consider the revision or replacement of policies, strategies and actions to ensure the region remains on track with meeting adopted targets for reducing greenhouse gas emissions.

POLICY AREA	MEASURE	HOW WILL PROGRESS BE MONITORED?	
		BASELINE (2010 unless otherwise noted)	2035 PERFORMANCE MONITORING TARGET
1. Implement the 2040 Growth Concept and local adopted land use and transportation plans	a. Share of households living in walkable, mixed-use areas ¹ (<i>new</i>)	a. 26%	a. 37% <i>A methodology for tracking progress will be developed in 2018 RTP update.</i>
	b. New residential units built through infill and redevelopment in the urban growth boundary (UGB) ² (<i>existing</i>)	b. 58% <i>(average for 2007-12)</i>	b. 65%
	c. New residential units built on vacant land in the UGB ³ (<i>existing</i>)	c. 42% <i>(average for 2007-12)</i>	c. 35%
	d. Acres of urban reserves	d. 0	d. 12,000

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POLICY AREA	MEASURE	HOW WILL PROGRESS BE MONITORED?	
		BASELINE (2010 unless otherwise noted)	2035 PERFORMANCE MONITORING TARGET
	added to the UGB ⁴ <i>(existing)</i>		
	e. Daily vehicle miles traveled per capita ⁵ <i>(existing)</i>	e. 19	e. 17
2. Make transit convenient, frequent, accessible and affordable	a. Daily transit service revenue hours <i>(new)</i>	a. 4,900	a. 9,400
	b. Share of households within ¼-mile all day frequent transit <i>(new)</i>	b. 30%	b. 37%
	c. Share of low-income households within ¼-mile of all day frequent transit <i>(new)</i>	c. 39%	c. 49%
	d. Share of employment within ¼-mile of all day frequent transit <i>(new)</i>	d. 41%	d. 52%
	e. Transit fares <i>(new)</i>	e. <i>A baseline for tracking transit affordability relative to inflation and other transportation costs will be developed in the 2018 RTP update.</i>	e. <i>A methodology for tracking transit affordability relative to inflation and other transportation costs will be developed in the 2018 RTP update.</i>
3. Make biking and walking safe and convenient	a. Daily trips made by biking and walking ⁶ <i>(existing)</i>	a. 505,000 walk trips and 179,000 bike trips	a. 768,000 walk trips and 280,000 bike trips
	b. Per capita miles of bicycle and pedestrian travel per week ⁷	b. 1.3 miles walked 2.1 miles biked	b. 1.8 miles walked 3.4 miles biked
	c. Bicycle and pedestrian fatal and severe injury crashes ⁸ <i>(existing)</i>	c. 63 fatal or severe injury pedestrian crashes 35 fatal or severe injury bicycle crashes	c. 32 fatal or severe injury pedestrian crashes 17 fatal or severe injury bicycle crashes
	d. New miles of bikeways, sidewalks and trails in UGB ⁹ <i>(existing)</i>	d. Bikeways (on-street) = 623 miles Trails = 229 miles Sidewalks (on at least one side of the street) = 5,072 miles	d. 663 new miles Bikeways (on-street) = 1,044 miles Trails = 369 miles Sidewalks <i>(data not available but will be</i>

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POLICY AREA	MEASURE	HOW WILL PROGRESS BE MONITORED?	
		BASELINE (2010 unless otherwise noted)	2035 PERFORMANCE MONITORING TARGET
			<i>developed in the 2018 RTP update.</i>
4. Make streets and highways safe, reliable and connected	a. Motor vehicle, bike and pedestrian fatal and severe injury crashes ¹⁰ (<i>existing</i>)	a. 398 fatal or severe injury motor vehicle crashes 63 fatal or severe injury pedestrian crashes 35 fatal or severe injury bike crashes	a. 199 fatal or severe injury motor vehicle crashes 32 fatal or severe injury pedestrian crashes 17 fatal or severe injury bike crashes
	b. Change in travel time and reliability in regional mobility corridors (<i>existing</i>)	b. <i>A baseline for this measure will be developed in the 2018 RTP update.</i>	b. <i>A performance monitoring target and methodology for tracking progress will be developed in the 2018 RTP update.</i>
	c. Share of freeway lane blocking crashes cleared within 90 minutes (<i>new</i>)	c. <i>Data under development with ODOT staff. A baseline for this measure will be developed in the 2018 RTP update.</i>	c. 100% ¹¹
5. Use technology to actively manage the transportation system	a. Share of arterial and freeway delay reduced by traffic management strategies (<i>new</i>)	a. 10%	a. 35% <i>A methodology for tracking progress will be developed in 2018 RTP update.</i>
	b. Share of regional transportation system covered with transportation system management and operations (TSMO) strategies (<i>new</i>)	b. <i>A baseline for tracking progress will be developed in 2018 RTP update.</i>	b. <i>A performance monitoring target and methodology for tracking progress will be developed in 2018 RTP update.</i>
6. Provide information and incentives to expand the use of travel options	a. Share of households participating in individualized marketing programs (<i>existing</i>)	a. 9%	a. 45%
	b. Share of the workforce participating in commuter programs (<i>existing</i>)	b. 20%	b. 30%

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POLICY AREA	MEASURE	HOW WILL PROGRESS BE MONITORED?	
		BASELINE (2010 unless otherwise noted)	2035 PERFORMANCE MONITORING TARGET
7. Manage parking to make efficient use of vehicle parking and land dedicated to parking	a. Share of work and non-work trips occurring to areas with actively managed parking ¹² (new)	a. 13% / 8%	a. 30% / 30% <i>A methodology for tracking progress will be developed in 2018 RTP update.</i>
8. Support Oregon's transition to cleaner, low carbon fuels, more fuel-efficient vehicles and pay-as-you-drive private vehicle insurance	a. Share of registered light duty vehicles in Oregon that are electric vehicles (EV) or plug-in hybrid electric vehicles (PHEV) ¹³ (new) b. Share of households using pay-as-you-drive private vehicle insurance ¹⁴ (new)	<u>EV or PHEV</u> a. 1% (auto) 1% (light truck) b. >1%	<u>EV or PHEV</u> a. 8% (auto) 2% (light truck) b. 40%
9. Secure adequate funding for transportation investments	a. Address local, regional and state transportation funding gap (new)	<i>A baseline and methodology for tracking progress will be developed in 2018 RTP update.</i>	
10. Demonstrate leadership on climate change	a. Region-wide per capita roadway greenhouse gas emissions from light vehicles (new)	a. 4.05 MTCO ₂ e ¹⁵	a. 1.2 MTCO ₂ e ¹⁶

Exhibit E

For

Metro Ordinance No. 14-1346B

RECOMMENDED DRAFT*December 9, 2014***PERFORMANCE MONITORING TABLE NOTES**

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- ¹ Data is an estimate from the metropolitan GreenSTEP model based on the land use assumptions described below.
- ² Data is compiled and reported by Metro every two years in response to Oregon Revised Statutes ORS 197.301 and ORS 197.296. The Climate Smart Strategy assumed the regionally-coordinated 2035 Growth Distribution adopted by the Metro Council on Nov. 29, 2012 as the basis for the population, housing, and employment growth assumptions used in the analysis. The adopted 2035 growth distribution was developed using MetroScope and reflects locally adopted comprehensive plans and zoning as of 2010. The performance monitoring target reflects the adopted growth distribution assumption that 65% of new residential units would be built through infill and redevelopment by 2035.
- ³ The performance monitoring target reflects the adopted growth distribution assumption that 35% of new residential units would be built on vacant land inside the urban growth boundary by 2035.
- ⁴ The performance monitoring target reflects the adopted growth distribution assumption that 12,000 acres of urban reserves would be added to the urban growth boundary by 2035.
- ⁵ Data is from the ODOT Oregon Highway Performance Monitoring System (HPMS) and was the official state submittal to the Federal Highway Administration for tracking nationally. The 2014 Regional Transportation Plan (RTP) target calls for reducing daily vehicle miles traveled per person by 10 percent compared to 2010.
- ⁶ Data is an estimate from the regional travel demand model and does not include walk trips to transit. The 2014 Regional Transportation Plan calls for tripling the share of daily trips made by biking and walking compared to 2010.
- ⁷ Data from Oregon Health Authority Climate Smart Strategy Health Impact Assessment.
- ⁸ Data is for the period 2007-2011 and comes from the ODOT Oregon Highway Performance Monitoring System (HPMS). The data was reported in the 2014 RTP adopted by the Metro Council on July 17, 2014. The 2014 RTP target calls for reducing fatal and severe injury crashes for all modes by 50 percent compared to the 2007-2011 period.
- ⁹ The 2014 RTP financially constrained system includes completing 663 miles of bikeways, sidewalks and trails; progress toward completion of the system of investments will be tracked.
- ¹⁰ See note 8.
- ¹¹ The measure and target reflect an ODOT performance goal.
- ¹² The measure and performance monitoring target reflect a planning assumption from in 2014 Regional Transportation Plan that was used in the Climate Smart Strategy analysis.
- ¹³ The Oregon Department of Motor Vehicles will track this data through vehicle registration records.
- ¹⁴ The performance monitoring target is less aggressive than the Statewide Transportation Strategy, which assumed nearly all Oregon households would have pay-as-you-drive insurance by 2035.
- ¹⁵ Data is a model estimate for the year 2005, using the Metropolitan GreenSTEP model.
- ¹⁶ The performance monitoring target reflects the state mandated 20 percent reduction per person in roadway greenhouse gas emissions, after accounting for state assumptions for advancements in cleaner, low carbon fuels and more fuel-efficient vehicles. A transition to the Motor Vehicle Emission Simulator (MOVES) model for tracking progress will be made as part of the 2018 Regional Transportation Plan update. The MOVES model is the federally-sanctioned model for demonstrating compliance with federal and state air quality requirements.



Exhibit E to Ordinance No. 14-1346B

December 11, 2014

A SHORT LIST OF CLIMATE SMART ACTIONS FOR 2015 AND 2016

BACKGROUND

The Climate Smart Communities project responds to a 2009 legislative mandate to develop and implement a regional strategy to reduce per capita greenhouse gas emissions from cars and small trucks by 2035. After a four-year collaborative effort, community leaders have shaped a Climate Smart Strategy that exceeds the state mandate while supporting local city and county plans that have already been adopted in the region. When implemented, the strategy will also deliver significant public health, environmental and economic benefits to households and businesses in the region.

WORKING TOGETHER TO DEVELOP SOLUTIONS FOR OUR COMMUNITIES AND THE REGION

Building on existing activities and priorities in our region, the project partners have developed a *Toolbox of Possible Actions* that recommends immediate steps that can be taken individually by local, regional and state governments to implement the Climate Smart Strategy. The toolbox does not mandate adoption of any particular policy or action, and instead was developed with the recognition that existing city and county plans for creating great communities are the foundation for reaching the state target and some tools and actions may work better in some locations than others. The toolbox emphasizes the need for diverse partners to work together in pursuing those strategies most appropriate to local needs and conditions.

The toolbox includes some regional actions that produce particularly high returns on investment, and require local and regional officials to work together. Seeing the opportunity to act quickly, the Metro Policy Advisory Committee (MPAC) and the Joint Policy Advisory Committee on Transportation (JPACT) have identified three toolbox actions that are key for the region to work together on now:

CLIMATE SMART ACTIONS FOR 2015 AND 2016

<p>Action 1</p>	<p>Advocate for increased federal, state, regional and local transportation funding for all transportation modes as part of a diverse coalition, with top priorities of maintaining and preserving existing infrastructure, and implementing transit service enhancement plans and transit-supportive investments. <i>This action will advance efforts to implement adopted local city and county plans, transit service plans, and the 2014 Regional Transportation Plan.</i></p>
<p>Action 2</p>	<p>Advocate for federal and state governments to advance Oregon’s transition to cleaner, low carbon fuels, and more fuel-efficient vehicle technologies. <i>This action will accelerate the fuel and vehicle technology trends assumed in the state target.</i></p>
<p>Action 3</p>	<p>Seek opportunities to advance local and regional projects that best combine the most effective greenhouse gas emissions reduction strategies. <i>This action will implement adopted regional, city and county policies or plans and identify locally tailored approaches that integrate transit and active transportation investments with the use of technology, parking and transportation demand management strategies to show how these strategies, if implemented together, can achieve greater cost-effectiveness and greenhouse gas emissions reductions than if implemented individually.</i></p> <p><i>The action means the region will seek seed money for demonstration projects that leverage (1) local, regional, state and federal resources and (2) state and regional technical assistance to plan for and implement community demonstration projects that combine the following elements:</i></p> <ul style="list-style-type: none"> • <i>investments in transit facility and/or service improvements identified in TriMet Service Enhancement Plans or the South Metro Area Regional Transit (SMART) Master Plan, including community-based services that complement regional service, such as the GroveLink service in Forest Grove</i> • <i>local bike and pedestrian safety projects that also improve access to transit, schools and activity</i>

	<p><i>centers</i></p> <ul style="list-style-type: none"> • <i>investments in transportation system management technologies, such as traffic signal timing and transit signal priority along corridors with 15-minute or better service, to smooth traffic flow and improve on-time performance and reliability</i> • <i>parking management approaches, such as bicycle parking, preferential parking for alternative fuel vehicles, and shared and unbundled parking</i> • <i>transportation demand management incentives or requirements to increase carpooling, biking, walking and use of transit</i> • <u><i>optimize built road capacity through improved geometric design and other operational improvements to address bottlenecks and improve traffic flow on existing multi-modal arterials.</i></u> <p><i>Seed funding could be sought from multiple sources, such as the Regional Flexible Funding Allocation process, Metro’s Community Planning and Development Grant program, Oregon’s Transportation Growth Management grant program, and federal grant programs such as the Building Blocks for Sustainable Communities.</i></p>
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PARTNERSHIPS TO IMPLEMENT EARLY ACTIONS CAN DRIVE POSITIVE CHANGE

Adoption of the Climate Smart Strategy presents an opportunity for the region to work together to continue demonstrating leadership on climate change while addressing the need to step up funding to implement our adopted local and regional plans. Working together on these early actions presents an opportunity to lay a foundation for addressing our larger shared challenges through a collaborative approach. The actions recommended are achievable, but require political will and collaboration among regional partners to succeed.

This collaborative effort will require full participation from not only MPAC, JPACT, and the Metro Council, but also the region's cities and counties, transit agencies, port districts, parks providers, businesses, non-profits as well as state agencies, commissions and the Oregon Legislature. Coordinated work plans for addressing these priority actions will be developed by MPAC and JPACT and the Metro Council in 2015.