



Date: December 23, 2014
To: TSP Project Management Team
From: Zach Pelz, City of West Linn and Gail Curtis, ODOT
Subject: Technical Memorandum No. 3: Performance Outcomes and Key Measures Workshop

Context

The City of West Linn is updating its transportation system plan (TSP), a 20-year plan that identifies transportation needs and prioritizes projects and programs that will implement the City's transportation and land-use aspirations. As a part of the TSP update, the City wishes to evaluate the success of its TSP over time based on measurable targets. This approach is consistent with the regional requirement that TSPs include "performance measures for safety, vehicles miles traveled per capita, freight reliability, congestion, and walking, bicycling and transit mode shares to evaluate and monitor performance of the TSP."¹ Draft targets and measures have been developed for the technical and citizen advisory committees to review and comment.

The targets and measures included herein are based on existing policies and desired outcomes from recently adopted transportation-related plans at the State, Regional and Local level. This "outcomes based approach" more readily conveys the City's vision and progress towards achieving that vision, and is able to answer questions such as: *"Can residents and visitors more easily and safely get around the city? Are there more travel options in and to the city? What will the city look like in 20 years if the TSP succeeds?"*

The draft TSP targets and performance measures in this document were developed with the following considerations in mind:

- The City's vision and relevant adopted policies;
- West Linn's lack of vacant undeveloped parcels and the predominantly single-family residential pattern of development;
- West Linn has low employment, which coupled with the relatively low-density configuration of residential land, increases trip distance;
- West Linn is hilly, which limits walking and biking for many;

¹ Section 3.08.230 Performance Targets and Standards, Chapter 3.08, Regional Transportation Function Plan, Exhibit E. to Ordinance No 10-1241B

- Key measures address topics that are important to the City and implement the evaluation requirements established in the Regional Transportation Function Plan (RTFP);
- Key measures rely upon data that can be collected and maintained by the City or the region;
- The City is in control or has major influence on the ability to make progress towards the targets;
- The quantity of targets are manageable for the City; and
- The targets balance City resources across all travel modes.

The following section includes agreed upon desired regional outcomes from the Regional Transportation Plan (RTP) and City policies. Together, the regional outcomes and City policies provide a basis for the draft performance measures. Technical Memorandum 1 (West Linn TSP Update Policy Framework) provides a complete list of applicable local, regional and state policy. Table 1 outlines the six desired outcomes that were adopted by the region in 2010 that serve to guide future urban planning and express shared regional values.

Table 1: Six Desired Regional Outcomes

Outcome	Description
1 Vibrant communities	People live, work and play in vibrant communities where their everyday needs are easily accessible.
2 Sustained economic competitiveness and prosperity	Current and future residents benefit from the region’s sustained economic competitiveness and prosperity.
3 Safe and reliable transportation choices	People have safe and reliable transportation choices that enhance their quality of life.
4 Leadership on climate change	The region is a leader on climate change and minimizing contributions to global warming.
5 Clean air, clean water and healthy ecosystems	Current and future generations enjoy clean air, clean water and healthy ecosystems.
6 Equity	Equity exists relative to the benefits and burdens of growth and change to the region’s communities.

The adopted vision for West Linn, *Imagine West Linn*, was originally developed in 1994 and updated in 2008. *Imagine West Linn* defines the preferred future vision for the City in a proactive and constructive manner and establishes the following guiding principles:

Table 2: 2008 Imagine West Linn Guiding Principles

Guiding principle	Description
1 Sense of community	To create and sustain a spirit of community, openness and connectedness that ensures present and future needs are met.
2 Land use and quality of life	Shape the physical design of West Linn in a way that instills a sense of pride in the community.
3 Sustainability	Meet the present needs of West Linn’s citizens without compromising the ability to meet the needs of future generations.
4 Cultural diversity, education and the arts	Celebrate the creative, innovative, and inspirational works of nature and humankind while exposing citizens to other cultures and viewpoints.
5 Community Institutions	Shape City government, the school district, and other local institutions in a manner that fosters trust, respect, courage, and cooperation from the community.

Chapter 12 of the West Linn Comprehensive Plan also includes transportation-related goals that will guide future transportation investments and decision-making:

Table 3: Goals from Chapter 12 (Transportation) of the West Linn Comprehensive Plan

Goal	Description
1 Mobility, access, safety, equity, neighborhood character, and affordability	Provide a transportation system that provides maximum mobility while encouraging modes other than the automobile; provides connectivity within and between neighborhoods; is convenient, safe, and efficient; maintains the cohesiveness of the City’s neighborhoods; respects the community’s priorities and affordability; respects the natural environment.
2 Cost-effective	Provide a cost-effective balanced transportation system, incorporating all modes of transportation (automobiles, bicycles, transit and other modes)
3 Accessible	Develop transportation facilities that are accessible to all members of the community and minimize out-of-direction travel.

Table 4 is a compilation of the transportation-related goals from; *Metro’s Six Desired Outcomes* (Table 1), *Imagine West Linn* (Table 2), and *Goal 12 of the West Linn Comprehensive Plan* (Table 3). The Goals and Desired Outcomes proposed by the Project Management Team in Table 4 recognize the need to: focus on transportation-related issues; balance City resources across all travel modes; create targets that are manageable and which rely on data that can be collected, maintained and evaluated by the City; develop outcomes for which the City is in control of or has major influence over and reflect the other considerations listed on page 1 of this document.

Table 4: Goals and Desired Outcomes for TSP Update based on Desired Regional Outcomes, the Image West Linn Vision, and the West Linn Comprehensive Plan.

Goal	Desired Outcome
1 Safety	Reduce transportation-related fatalities and serious injuries across all modes.
2 Mobility, Access and the Environment	Improve peoples’ access to jobs, schools, health care and other regular needs in ways that improve health, reduce pollution and retain money in the local economy.
3 Equity	Develop transportation facilities that are accessible to all members of the community.
4 Maintenance	Deliver access and safety improvements cost effectively, and within available revenues.

To ensure the effective use of local transportation resources, and as required by Title 3 of the RTFP, the City desires a tool to monitor progress toward achieving its stated goals. Table 5 below, proposes: 1) a numerical target the City will strive to achieve by the planning horizon for this TSP (2040), 2) a baseline metric to compare future years to, 3) the transportation-related characteristic that is being measured; 4) the result that will determine whether or not progress has been made toward achieving each target; 5) a monitoring plan to monitor progress overtime; and, 6) the current baseline metric.

Table 5 Proposed Targets and Performance Measures for the West Linn TSP Update

SAFETY						
GOAL 1 Reduce transportation related fatalities and injuries for all transportation modes						
Target	Baseline	Measure	Success is...	Current TSP Projects that Advance Target	Monitoring Plan	Current Baseline Metric
Target 1A – Zero severe injury and fatal collisions by mode.	Number of severe injury and fatal collisions in 2013.	The number of severe injuries and fatalities for each mode over time.	A steady reduction each year in the number of severe injury and fatal collisions as compared to prior years.	<ul style="list-style-type: none"> • Intersection improvements with consideration for bicyclists and pedestrians • Pedestrian crossings near schools and high pedestrian traffic areas • Bicycle and pedestrian treatments at intersections (e.g., crossing islands, painted boxes and bike signals) • Bicycle and pedestrian facility improvements with emphasis on separated facilities on high-speed or high-volume roads • Traffic calming and greenways • Education and enforcement 	<ul style="list-style-type: none"> • Document the measure on an annual basis based on a review of data maintained by ODOT. Successful progress towards the target includes a steady reduction each year in the number severe injury and fatal collisions compared to prior years. 	<ul style="list-style-type: none"> • Number of severe injury crashes (2013) • Number of fatal crashes (2013) • Number of crashes involving pedestrians or bicyclists (2013)
Target 1B - Reduce total number of high collision locations to zero by 2040.	Number of locations in 2013 on the ODOT Safety Priority Index System (SPIS) List or where collision rate exceeds 1.0 crashes per million entering vehicles	Number of locations on the ODOT Safety Priority Index System (SPIS) List or where collision rate exceeds 1.0 crashes per million entering vehicles	A steady reduction each year in the number of locations on the ODOT Safety Priority Index System (SPIS) List or where collision rate exceeds 1.0 crashes per million entering vehicles	<ul style="list-style-type: none"> • Intersection improvements with consideration for bicyclists and pedestrians • Bicycle and pedestrian treatments at intersections (e.g., crossing islands, painted boxes and bike signals) • Bicycle and pedestrian facility improvements with emphasis on separated facilities • Traffic calming and greenways • Pedestrian crossings near schools and high pedestrian traffic areas 	<ul style="list-style-type: none"> • Document the measure on an annual basis based on a review of data maintained by ODOT. Successful progress towards the target includes a steady reduction each year in the number of SPIS locations and locations with a crash rate above 1.0. 	<ul style="list-style-type: none"> • Number of ODOT SPIS locations (2013) • Number of intersections with a crash rate above 1.0 crashes/MEV (2013)

MOBILITY, ACCESS and ENVIRONMENT

GOAL 2 Improve people's access to jobs, schools, health care and other regular needs in ways that improve health, reduce pollution and retain money in the local economy.

Target	Baseline	Measure	Success is...	Current TSP Projects that Advance Target	Monitoring Plan	Current Benchmark
<p>Target 2A - Reduce single-occupant vehicle miles traveled (VMT) per capita as compared to 2010 so that total VMT remains steady or declines as growth occurs.</p>	<p>2010 VMT and VMT per capita on an average weekday</p>	<p>VMT and VMT per capita on an average weekday avg. weekday</p>	<p>A reduction in VMT per capita such that VMT remains steady or declines over time even as growth occurs.</p>	<ul style="list-style-type: none"> • Transit queue jumps • Improved use of technology to improve user information • Park and ride lots with secure bike racks • Bicycle, pedestrian, and transit amenities • Frequent bus service • Educational and incentive programs to encourage and facilitate shifts to carpool, bike, walk, transit, telecommuting 	<ul style="list-style-type: none"> • Document the measure each time a new base year is created for the Metro Travel Demand Model. Successful progress towards the target includes a reduction in VMT per capita such that VMT remains steady or declines over time even as growth occurs. 	<ul style="list-style-type: none"> • Metro Travel Demand Model VMT and VMT per Capita (2010)
<p>Target 2B – Achieve 40-45% non-single occupant vehicle (SOV) trip mode share in 2040 industrial and employment areas and neighborhoods, and 45-55% in 2040 town centers, main streets, and corridors by 2040.</p>	<p>Non-SOV mode share in 2010 in 2040 industrial and employment areas, neighborhoods, town centers, main streets and corridors</p>	<p>Non-SOV mode share in 2040 investment areas</p>	<p>40-45 percent non-SOV mode share in industrial and employment areas and neighborhoods by 2040</p> <p><i>and</i></p> <p>45-55 percent non-SOV mode share in town centers, main streets and corridors by 2040</p>	<ul style="list-style-type: none"> • Bicycle, pedestrian, and transit facility improvements • Bus rapid transit, such as transit priority • Educational and incentive programs to encourage shifts to carpool, bike, pedestrian, and transit • Bicycle, pedestrian, and transit amenities such as bus shelters and benches, signage, bike maps, bike parking 	<ul style="list-style-type: none"> • Document the measure each time a new base year is created for the Metro Travel Demand Model. Successful progress towards the target includes an increase in the non-SOV mode share in the 2040 investment areas over time even as growth occurs. 	<ul style="list-style-type: none"> • Metro Travel Demand Model Non-SOV mode share in industrial and employment areas and neighborhoods (2010) • Metro Travel Demand Model Non-SOV mode share in town centers, main streets and corridors (2010)

Target	Baseline	Measure	Success is...	Current TSP Projects that advance Target	Monitoring Plan	Current Benchmark
Target 2C – Improve freight travel time reliability.	Travel time reliability for commercial heavy vehicles in 2010 on I-205 and OR 43	Degree of variability from mean commercial heavy vehicle travel time	Lower degree of variability from mean commercial heavy vehicle travel time compared to baseline on I-205 and OR 43	<ul style="list-style-type: none"> • Reduce peak-hour travel • Intersection operational improvements • Signal synchronization • Transit queue jumps • Improved use of technology to improve user information • Increase access to Oregon City transit and light rail transit to increase transit mode split 	<ul style="list-style-type: none"> • Document the measure each time a new base year is created for the Metro Travel Time Reliability (DTA) Model. Successful progress towards the target includes steady decline in the variability of travel time on I-205 and OR 43 	<ul style="list-style-type: none"> • Metro DTA model Travel Time Reliability on I-205 (2010) • Metro DTA model Travel Time Reliability on OR 43 (2010)
Target 2D - Increase the percentage of people that can access key destinations via a 20 minute walk, bike or public transit ride by 40 percent by 2040.	2010 percent of population within a 20 minute walk, bike or public transit ride of key destinations	The City’s population that is within a 20 minute walk, bike or public transit ride of key destinations as a percentage of all West Linn residents	An increase at each TSP Update in the percent of the West Linn population within a 20 minute walk, bike or public transit ride of key destinations.	<ul style="list-style-type: none"> • Educational and incentive programs to encourage and facilitate shifts to carpool, bike, walk, transit, telecommuting • Bicycle and pedestrian facilities near major activity centers with emphasis on filling gaps in the network • Transit level of service improvements, such as service frequency, hours, and coverage • Implement the Oregon Highway 43 Conceptual Design Plan • ADA curb ramps • Developer incentives to support transit, walking and biking and off-peak travel 	<ul style="list-style-type: none"> • Document the measure at each TSP Update based on current Metro Transportation Analysis Zone (TAZ) information. Successful progress towards the target includes steady increase in the percent of the population within a 20 minute walk, bike or public transit ride of key destinations. 	<ul style="list-style-type: none"> • Percent of the population within a 20 minute walk, bike, or public transit ride of key destinations (2010)
Target 2E – “Transportation Options” program is in place by 2040. ²	As of 2014, a Transportation Options program does not exist in West Linn	Presence of a Transportation Options program in West Linn	Presence of a Transportation Options program in West Linn	<ul style="list-style-type: none"> • City residents and visitors have access to transportation options (TO) services and programs and understand the options available to them. 	<ul style="list-style-type: none"> • Document the measure at each TSP Update. Successful progress towards the target includes the implementation of a Transportation Options program in West Linn 	<ul style="list-style-type: none"> • As of 2014, a Transportation Options program does not exist in West Linn

² A “transportation options program” is defined as at least one staff person who promotes the use of transportation options and provides transportation options information and education to the community. Currently, a statewide policy for this performance measure is being considered.

<p>Target 2F – A good quality pedestrian network and low stress bicycle network connecting all residents to key destinations.</p>	<p>2014 network of “Good” quality pedestrian facilities (per the Qualitative MMLOS methodology) and LTS Level 2 bicycle facilities</p>	<p>Number of residential areas and key destinations that are not connected to the network of “Good” quality pedestrian facilities and LTS Level 2 or better bicycle facilities</p>	<p>All residential areas and key destinations connected to the network of “Good” quality pedestrian facilities and LTS Level 2 or better bicycle facilities</p>	<ul style="list-style-type: none"> • Bicycle and pedestrian facilities in key destination areas with emphasis on filling gaps in the network • Bicycle/pedestrian separated facilities • Bicycle and pedestrian treatments at intersections (e.g. crossing islands, painted boxes, bike signals etc.) • Wider sidewalks buffered from automobile traffic • Traffic calming and greenways • Curb ramps 	<ul style="list-style-type: none"> • Document the measure at each TSP Update. Successful progress towards the target includes an increase in the network of “Good” quality pedestrian facilities and LTS Level 2 or better bicycle facilities and a reduction in the number of residential areas and key destinations that are not connected to this network. 	<ul style="list-style-type: none"> • 2014 “Good” quality pedestrian network • 2014 LTS 2 or better bicycle network • 2014 residential areas and key destinations not connected to the network.
<p>Target 2G – Increase the number of green street facilities by 2040</p>	<p>2014 number of green street facilities in 2014</p>	<p>Total number of green street facilities in the City of West Linn</p>	<p>Number of green street facilities in West Linn in 2040 is higher than baseline.</p>	<ul style="list-style-type: none"> • Update street standards to incorporate green streets. • Build green streets • Updated maintenance practices to reduce rate of run-off 	<ul style="list-style-type: none"> • Document the measure at each TSP Update. Successful progress towards the target includes an increase in the number of green street facilities at each TSP Update. 	<ul style="list-style-type: none"> • 2014 number of green street facilities

EQUITY

GOAL 3 Deliver transportation improvements equitably

Target	Baseline	Measure	Success is...	Potential TSP Projects that Advance Target	Monitoring Plan	Current Benchmark
Target 3A – By 2040 increase walking, bicycle and public transit access, for transportation disadvantaged populations, to key destinations, by 40 percent	2010 population of transportation disadvantaged persons in 20-minute neighborhoods	The percent of the City’s transportation disadvantaged population that is within a 20 minute walk, bike or public transit ride of key destinations	An increase at each TSP Update in the percent of the transportation disadvantaged population within a 20 minute walk, bike or public transit ride of key destinations.	<ul style="list-style-type: none"> • Bicycle and pedestrian facility improvements near schools and other transportation disadvantaged destinations with emphasis on filling gaps in the network and ADA improvements • Transit improvements such as increased service on high ridership routes • Curb ramps • Rail transit 	<ul style="list-style-type: none"> • Document the measure at each TSP Update based on current census data information. Successful progress towards the target includes steady increase in the percent of the population within a 20 minute walk, bike or public transit ride of key destinations. 	<ul style="list-style-type: none"> • Percent of the transportation disadvantaged population within a 20 minute walk, bike, or public transit ride of key destinations (2010)
Target 3B - Ensure transportation services (and impacts) are equitably distributed to all segments of the population.	N/A	Number or percent of total projects in TSP financially-constrained list that are within or adjacent to areas of low income and/or minority populations	Number of projects, on 2040 TSP financially constrained project list, that are within or adjacent to areas of low income or minority populations is proportionate to the population in those areas relative to the City of West Linn as a whole	<ul style="list-style-type: none"> • Transit improvements such as increased frequent-service routes • Street or streetscape improvements • Bicycle and pedestrian improvements 	<ul style="list-style-type: none"> • Document the measure at each TSP Update 	<ul style="list-style-type: none"> • N/A

MAINTENANCE

GOAL 4 Deliver access and safety improvements cost effectively, within available revenues, and responsively to the needs of all users of the transportation system

Target	Baseline	Measure	Success is...	Current TSP Projects that Advance Target	Monitoring Plan	Current Benchmark
Target 4A - Increase the average local road pavement condition index (PCI) to 70 by 2040.	2014 PCI	The pavement condition index (PCI)	2040 average local road PCI is 70 or greater.	<ul style="list-style-type: none"> Maintenance, repair and operation of local roadways Road rehabilitation and reconstruction 	<ul style="list-style-type: none"> Document the measure annually. Successful progress towards the target includes an increase in the average local road PCI. 	<ul style="list-style-type: none"> 2014 average local road PCI.
Target 4B - Reduce the number of transportation facilities in "distressed" condition by 5 percent by 2040.	Number of transportation facilities in 2014, in distressed condition	Total number of transportation facilities designated as distressed. A distressed transportation facility includes any roadway with a PCI that is lower than 50.	Number of transportation facilities in distressed condition in 2040 is at least 5 percent below 2014 baseline	<ul style="list-style-type: none"> Maintenance, repair and operation of local roadways Bus replacements Upgrades to transit facilities Road rehabilitation and reconstruction 	<ul style="list-style-type: none"> Document the measure annually. Successful progress towards the target includes a reduction in the number of facilities in distressed condition. 	<ul style="list-style-type: none"> 2014 number of facilities in distressed condition.