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Metro | *Agenda*

Meeting: Transportation Policy Alternatives Committee (TPAC)
Date: Friday, April 29, 2011
Time: 9:30 a.m. to noon
Place: Council Chambers

9:30 AM	**1.**		**Call to Order and Declaration of a Quorum**	**Robin McArthur, Chair**
9:30 AM	**2.**		**Comments from the Chair and Committee Members**	**Robin McArthur, Chair**
9:35 AM	**3.**		**Citizen Communications to TPAC on Non-Agenda Items**	
9:40 AM	**4.**	*	**Consideration of the TPAC Minutes for March 25, 2011**	
	5.		**ACTION ITEMS**	
9:45 AM	5.1	*	**Resolution No. 11-4246**, For the Purpose of Amending the 2010-2013 Metropolitan Transportation Improvement Program (MTIP) to Allocate Funds to Manage the Regional Mobility Program – RECOMMENDATION TO JPACT REQUESTED • *Purpose*: Present and have TPAC review the resolution. • *Outcome*: A recommendation from TPAC to JPACT.	**Ted Leybold** **Dennis Mitchell, ODOT** **Peter Koonce, City of Portland**
	6.		**INFORMATION/DISCUSSION ITEMS**	
10:10AM	6.1	*	Climate Smart Communities Scenarios Evaluation – DISCUSSION • *Purpose*: Brief TPAC on scenarios evaluation approach and role of TPAC/MTAC technical work group • *Outcome*: Receive TPAC input on evaluation framework and strategies to be tested in regional scenarios	**Kim Ellis**
11:10 AM	6.2	*	Making a Great Place – INFORMATION o Proposed HCT System Expansion Policy Guidance o Proposed Local Plan Implementation Guidance (RTP and Title 6) o State of the Centers Report and 2040 Context Tool • *Purpose*: To review and discuss transportation and land use tools to assist local governments in becoming eligible for regional investments and supporting local aspirations. • *Outcome*: Prepare for recommendation to JPACT on the System Expansion Policy at future meeting	**Josh Naramore** **Josh Naramore** **Sherry Oeser** **Brian Harper**

Continued on back

11:45 AM **7.** **ADJOURN** **Robin McArthur, Chair**

* Material available electronically.
\# Material will be available at the meeting.

For agenda and schedule information, call Kelsey Newell at 503-797-1916, e-mail: kelsey.newell@oregonmetro.gov.
To check on closure or cancellations during inclement weather please call 503-797-1700#.

Future TPAC discussion items:

- MOVES update
- Lake Oswego Locally Preferred Alternative
- On-street Bus Rapid Transit
- High Speed Rail – ODOT funds, alignment and station areas, etc.
- Update on the Columbia River Crossing Project
- Context sensitive design and least cost planning
- A briefing on the Metro Auditor's *Tracking Transportation Project Outcomes* report

2011 TPAC Work Program
4/22/11

April 29, 2011 – Regular Meeting • Climate Smart Communities Scenarios Evaluation – Discussion • Making the Greatest Place – Information o State of the Centers Report and 2040 Context Tool o Proposed HCT System Expansion Policy Guidance o Proposed Local Plan Implementation Guidance (RTP and Title 6) • TSMO amendment	**May 27, 2011 – Regular Meeting** • Lake Oswego to Portland Transit Project Locally Preferred Alternative (LPA) Briefing – Information • HCT System Expansion Policy Guidance – Recommendation to JPACT • Climate Smart Communities Scenarios Evaluation – Recommendation to JPACT • DEQ Low Carbon Fuel Standards – Information / Discussion
July 1, 2011 – Regular Meeting • Lake Oswego to Portland Transit Project Locally Preferred Alternative (LPA) – Recommendation to JPACT • Regional Flexible Fund Project Summaries – Discussion	**July 29, 2011 – Regular Meeting**
August 26, 2011 – Regular Meeting • Climate Smart Communities Scenarios - Discussion on Preliminary Results	**September 23, 2011 – Regular Meeting** • Climate Smart Communities Scenarios - Discussion on Preliminary Results
October 28, 2011 – Regular Meeting • Climate Smart Communities Scenarios – Discussion on Findings and Recommendations to be Submitted to 2012 Legislature	**November 18, 2011 – Regular Meeting** • 2012-15 MTIP/STIP Approval and Air Quality Conformity – Recommendation to JPACT • Climate Smart Communities Scenarios – Recommendation to JPACT on Findings and Recommendations to be Submitted to 2012 Legislature • 2014-15 Regional Flexible Fund Allocation – Recommendation to JPACT **FYI: Hold Joint JPACT/MPAC Meeting** Climate Smart Communities Scenarios Results and Preliminary Recommendations

Parking Lot:

- MOVES update
- On-street Bus Rapid Transit
- High Speed Rail
- Update on the Columbia River Crossing Project
- Context sensitive design and least cost planning
- A briefing on the Metro Auditor's *Tracking Transportation Project Outcomes* report
- Congestion Pricing Pilot Study

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TRANSPORTATION POLICY ALTERNATIVES COMMITTEE
March 25, 2011
Metro Regional Center, Council Chamber

MEMBERS PRESENT	AFFILIATION
Elissa Gertler	Clackamas County
Mara Gross	Citizen
Katherine Kelly	City of Gresham, Representing Cities of Multnomah Co.
Scott King	Port of Portland
Nancy Kraushaar	City of Oregon City, Representing Cities of Clackamas Co.
Alan Lehto	TriMet
Mike McKillip	City of Tualatin, Representing Cities of Washington Co.
Dave Nordberg	Oregon Department of Environmental Quality
Satvinder Sandhu	FHWA
Karen Schilling	Multnomah County
Charlie Stephens	Citizen
Tracy Ann Whalen	Citizen
Rian Windsheimer	Oregon Department of Transportation
Sharon Zimmerman	Washington State Department of Transportation

MEMBERS EXCUSED	AFFILIATION
Chris Beanes	Citizen
Marta Carrillo	Citizen
Brent Curtis	Washington County
John Hoefs	C-TRAN
Dean Lookingbill	SW Washington RTC
Paul Smith	City of Portland
Jenny Weinstein	Citizen

ALTERNATES PRESENT	AFFILIATION
Blair Crumpacker	Washington County
Lynda David	SW Washington RTC
John Gilliam	City of Portland

STAFF: Derek Hofbauer, Dan Kaempff, Tom Kloster, Ted Leybold, Robin McArthur, Lake McTighe, Chris Myers, Josh Naramore, Deena Platman, Deb Redman, Dylan Rivera.

1. CALL TO ORDER AND DECLARATION OF A QUORUM

Chair Robin McArthur called the meeting to order and declared a quorum at 9:34 a.m.

2. COMMENTS FROM THE CHAIR AND COMMITTEE MEMBERS

Chair McArthur announced:

- March 29 brown bag lunch session in which Patrick Condon will discuss his book Seven Steps to Sustainable Cities.
- April 1, 2011 Climate Leadership Summit meeting between MPAC and JPACT Committee leaders, other elected officials, and business and community members working toward identifying strategies to reduce the region's greenhouse gas emissions and create great communities.

3. CITIZEN COMMUNICATIONS ON NON-AGENDA ITEMS

There was none.

4. CONSIDERATION OF THE TPAC MINUTES FOR FEBRUARY 25, 2011

MOTION: Mr. Alan Lehto moved, Ms. Tracy Ann Whalen seconded, to approve the TPAC minutes from February 25, 2011.

ACTION TAKEN: With all in favor, the motion passed.

5. INFORMATION / DISCUSSION ITEMS:

5.1 Update on the Regional Travel Survey Model Enhancements

Mr. Mike Hoglund and Dick Walker of Metro, presented an update on the Regional Travel Survey and Model Enhancements. Highlights included information regarding the Household Travel Behavior Survey, travel demand modeling, destination time of arrival, MetroScope Sketch Tools, and Geographic Information Services applications. Further updates included other significant surveys such as park and ride lot choice, Columbia River Crossing project, and transit time perception. The survey will include data on demographic information, socio-economic information, number of cars and bikes per household, trip frequency, destinations, mode of transit, trip time, routes, and other general household travel activities. Objectives of the survey are to collect a snapshot of 2011 conditions and collect information for model building. Partners for the survey include the Oregon Department of Transportation, Oregon Metropolitan Planning Organizations, and the Southwest Washington Regional Transportation Council.

Committee discussion included the incremental cost of adding more households to the survey and the ramifications to the demographic information due to oversampling. Further Committee Member discussion included how long the survey will take, the potential for an expanded survey from two days to four days with a small sub set of participants, and the possible uses for the survey results.

5.2 Resolution No. 11-4236 For the Purpose of Adopting the FY 2011-12 Unified Planning Work Program (UPWP) and Amending the FY 2010-11 UPWP.

Mr. Josh Naramore of Metro, briefed the committee on Resolution No. 11-4236, which if approved would certify that the Portland metropolitan area is in compliance with federal transportation planning requirements and adopting the fiscal year 2011-12 Unified Planning Work Program (UPWP).

Committee members discussed how the local excise tax fits into the UPWP, the quality organization of the UPWP, and the Oregon Department of Transportation's (ODOT) participatory role during the discussion phase.

5.3 Resolution No. 11-4235 For the Purpose of Amending the FY 2010-11 Unified Planning Work Program.

Mr. Josh Naramore of Metro, briefed the committee on Resolution No. 11-4235, which if amended will add the Council Creek Trail, Multimodal Arterial Performance Regional Concept of Transportation Operations, and the Aloha-Reedville Study and Livability Plan projects to the 2010-11 UPWP and modify project development language for the Metropolitan Transportation Improvement Program.

Committee members appreciate the timely completion of the resolution and the subsequent projects listed within. Committee members also expressed a desire for the the language in the resolution consistent with the UPWP overview book.

MOTION: Ms. Tracy Ann Whalen moved, Ms. Karen Schilling seconded to approve resolution 11-4235.

ACTION TAKEN: With all in favor, the motion passed.

6. ADJOURN

Chair McArthur adjourned the meeting at 10:57am

Respectfully submitted,

Chris Myers
Recording Secretary

ATTACHMENTS TO THE PUBLIC RECORD FOR MARCH 25, 2011
The following have been included as part of the official public record:

ITEM	DOCUMENT TYPE	DOC DATE	DOCUMENT DESCRIPTION	DOCUMENT NO.
5.1	Powerpoint	3/29/11	**Update on the Regional Travel Survey Model Enhancements**	032511t-01

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE 2010-2013 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO ALLOCATE FUNDS TO MANAGE THE REGIONAL MOBILITY PROGRAM	)))	RESOLUTION NO. 11-4246 Introduced by Rex Burkholder

WHEREAS, the 2035 Regional Transportation Plan establishes effective and efficient management of the transportation system as a high priority; and

WHEREAS, the Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council approved Resolution No. 09-4099 accepting the Regional Transportation System Management and Operations (TSMO) Plan, which provides a ten-year investment strategy for enhanced management of the transportation system; and

WHEREAS, the Metro Regional Mobility program manages Regional TSMO Plan implementation; and

WHEREAS, the Metropolitan Transportation Improvement Program (MTIP) prioritizes projects to receive transportation-related funding with approval from JPACT and Metro Council for the MTIP and any subsequent amendments to allocate funding to projects; and

WHEREAS, JPACT and Metro Council approved $3,000,000 in each of the 2008-11 MTIP and 2010-13 MTIP to fund TSMO projects and conditioned the allocation on project recommendations by the TransPort Subcommittee to the Transportation Policy Alternatives Committee (TPAC); and

WHEREAS, JPACT and Metro Council approved Resolution Nos. 10-4144 and 10-4144 which sub-allocated these funds to TSMO projects; and

WHEREAS, JPACT and Metro Council approved Resolution No. 10-4160 to direct that a target $3,000,000 of 2014-15 regional flexible funds be proposed for TSMO purposes pending public comment and final allocation decision; and

WHEREAS, the Regional Mobility program is seeking to become self-funded through a sub-allocation from the MTIP TSMO program in order to support management of regional TSMO activities; and

WHEREAS, current TSMO capital projects lead by regional partners are unaffected by the sub allocation; and

WHEREAS, TransPort recommends the allocation of funds to manage regional TSMO activities; and

WHEREAS, JPACT approved Resolution No. 11-4246 at the May 12, 2011 meeting; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the recommendation of JPACT to amend the 2010-13 Metropolitan Transportation Improvement Program to allocate funds to manage the Regional Mobility Program as shown in Exhibit A.

ADOPTED by the Metro Council this 12th day of May 2011.

Tom Hughes, Council President

Approved as to Form:

Alison Kean Campbell, Metro Attorney

Exhibit A to Resolution No. 11-4246
2010-13 Metropolitan Transportation Improvement Plan Table 3.1 amendment

Existing Programming

Sponsor	Metro ID No.	Project Name	Project Description	Funding Source	Project Phase	2009	2010	2011	2012	2013	2014 *	2015 *
Metro	15602/15603	ITS Programmatic allocation (to be sub-allocated)	Develop ITS program	CMAQ	Other	0	0	0	0	0	1,500,000	1,500,000
PSU		PORTAL Data Archive	Support enhancement to regional transportation data archive	CMAQ	Other	100,000	103,000	100,000	100,000	100,000		
Metro		Arterial Performance Measure RCTO	Develop concept of operations for arterial performance measurement	CMAQ	Plan		150,000					
ODOT		ITS Network	Upgrade ITS network equipment	CMAQ	Other					47,000		
Metro		Active Traffic Management RCTO	Develop concept of operations for active traffic management	STP	Plan					300,000		
ODOT		TTIP Enhancement for Arterial Traveler Information	Update software and in field systems for data transfer to TTIP	CMAQ	Other				500,000			
City of Beaverton		Canyon Rd/Beaverton-Hillsdale Hwy Adaptive Signal Timing	Install adaptive signal timing	CMAQ	Const			225,000	525,000			
Washington Co		Tualatin-Sherwood Rd ATMS Phase II (Teton – 99W)	Upgrade traffic signal systems and install video detection system	CMAQ	PE - Con				500,000	1,350,000		
City of Portland		Active Corridor Management Powell/Glisan/Sandy/ Halsey/I-84	Provide real-time traveler information, updates event timing plans in I-84 corridor	STP	PE - Con				500,000	1,400,000		
Sub-total by year						100,000	103,000	1,350,000	1,100,000	3,197,000	1,500,000	1,500,000
Program Total												9,000,000

* Years 2014 and 2015 are not currently programmed but are shown for illustrative purposes as Resolution 10-4160 requests staff to propose a TSMO allocation at existing program level for consideration.

Exhibit A to Resolution No. 11-4246
2010-13 Metropolitan Transportation Improvement Plan Table 3.1 amendment

Amended Programming

Sponsor	Metro ID No.	Project Name	Project Description	Funding Source	Project Phase	2009	2010	2011	2012	2013	2014 *	2015 *
Metro	15602/ 15603	ITS Programmatic allocation (to be sub-allocated)	Develop ITS program	CMAQ	Other	0	0	0	0	0	1,067,863	1,280,700
Metro		Regional Mobility Management 1	Manage regional mobility coordination and projects	STP	Other			195,000	200,850	206,875	213,000	219,300
PSU		PORTAL Data Archive	Support enhancement to regional transportation data archive	CMAQ	Other	100,000	103,000	100,000	100,000	100,000		
Metro		Arterial Performance Measure RCTO	Develop concept of operations for arterial performance measurement	STP	Plan		150,000					
ODOT		ITS Network Equipment 2	Upgrade ITS network equipment	CMAQ	Other						47,000	
Metro		Active Traffic Management RCTO 3	Develop concept of operations for active traffic management	STP	Plan						172,137	
ODOT		TTIP Enhancement for Arterial Traveler Information 4	Update software and in field systems for arterial data transfer to TTIP	CMAQ	Other					244,275		
City of Beaverton		OR8 & OR10: Hocken to Western/107th Ave (SCATS)	Install adaptive signal timing	CMAQ	PE			225,000				
				CMAQ	Const				525,000			
Washington Co		Tualatin-Sherwood Rd ATMS Phase 2: 99W -Teton	Upgrade traffic signal systems and install video detection system	CMAQ	PE				500,000			
				CMAQ	Const					1,350,000		
City of Portland		Active Corridor Management: Powell/Glisan/Sandy/ Halsey/I-84 5	Provide real-time traveler information, updates event timing plans in I-84 corridor	CMAQ	PE				500,000			
				CMAQ	Const					1,400,000		
Sub Totals by year						100,000	253,000	520,000	1,825,850	3,301,150	1,500,000	1,500,000
Program Total												**9,000,000**

* Years 2014 and 2015 will not be programmed through this amendment but are shown for purposes of intent should JPACT and Metro Council fund TSMO activities at current program levels (as Resolution No. 10-4160 directs staff to propose) and as will be considered in the final allocation of 2014-15 regional flexible funds currently scheduled for November 2011. Should this resolution be adopted, this programming intent would be proposed as part of the regional flexible fund allocation legislation and the subsequent 2012-15 MTIP legislation.

1. Add Regional Mobility Administration project for years 2011 – 2015 based on 2010-11 funding levels. Includes 3% inflation factor.
2. Move ITS Network equipment from 2013 to 2014. Funding stays the same.
3. Move Active Traffic Management RCTO from 2013 to 2014. Reduce funding from $300,000 to $172,137.
4. Move TTIP Enhancement from 2012 to 2013. Reduce funding from $500,000 to $244,275.
5. Move Active Corridor Management PE from 2011 to 2012. Move construction from 2012 to 2013.

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 11-4246, FOR THE PURPOSE OF AMENDING THE 2010-2013 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO ALLOCATE FUNDS TO MANAGE THE REGIONAL MOBILITY PROGRAM

Date: March 21, 2011 Prepared by: Ted Leybold – 503-797-1759

BACKGROUND

Since 2005, Metro has actively managed regional coordination and integration of Transportation System Management and Operations (TSMO) into the metropolitan planning functions. Initially, this function was funded by an FHWA Regional Concept of Transportation Operations demonstration grant, which provided two years of funding for a Metro-housed transportation planner to create a regional collaboration framework for TSMO. The grant's success led to a permanent planning position to oversee a new Regional Mobility program that manages collaboration and implementation of the Regional TSMO Plan, adopted in June 2010.

Currently, Metro is largely funding administration of the Regional Mobility program through its federal planning funds. With the transition from a newly-emerging program area into an established one, Metro seeks to align the administrative structure of the program with those of the Regional Travel Options and Transit Oriented Development, which fund program management through their respective regional flexible fund grants. The proposal follows the same evolution as previous programs, where an idea is nurtured until it reaches a level of maturity to be self-sustaining. This approach provides a stable footing for regional management of TSMO activities thus ensuring continuity over the longer term. Attachment 1 includes a letter in support of the resolution from TransPort, the TSMO subcommittee to the Transportation Policy Alternatives Committee (TPAC).

JPACT and Metro Council have approved a total of $6 million in TSMO programmatic funding for MTIP years 2010 – 2013 and have identified an additional $3 million for allocation for the 2014-15 MTIP. In collaboration with TransPort, the TSMO subcommittee of the Transportation Policy Alternatives Committee (TPAC), Metro has developed a five-year funding recommendation for Regional Mobility program management as shown in Exhibit A. The recommendation requests a sub-allocation of the TSMO program funds to support management of regional TSMO activities. To accommodate the new project within the existing program allocation, funding for the Active Traffic Management RCTO and the TTIP Enhancement for Arterial Traveler Information was reduced and the time horizons were extended. The capital projects lead by City of Portland, City of Beaverton and Washington County are unaffected by this recommendation.

The services provided to the region through the Regional Mobility program include:

- New revenue and grant coordination – Acquire additional transportation funding to the region by coordinating grant applications with partner agencies when regional coordination creates a competitive advantage (i.e. FHWA ARRA funds, ODOT Operations Innovation grant); keep local TSMO projects eligible and competitive for grant funds by managing the coordination and upkeep of regional ITS architecture and TSMO plan.
- Making streets safer and more efficient – Operation of the arterial street network needs to be coordinated across jurisdictional boundaries. Prior to the demonstration grant, coordination had been

ad-hoc and without a common set of principals or guidelines between agencies. This program improves operations and safety through proactive oversight and implementation of the Regional TSMO Plan; administrative support for TransPort and its established and ad hoc subcommittees, including the PORTAL advisory committee and the ITS Network advisory committee; support for the Regional Safety work group and its activities; manage allocation and administrative support of TSMO-designated regional flexible funds to partner agencies.

- Investing scarce transportation resources more effectively and efficiently – Understanding how the transportation system is performing today and in the future is critical to making wise investment choices in an era of scarce resources. The Regional Mobility program at Metro supports the understanding of system performance by supporting research and development activities related to TSMO and safety. The program also coordinates TSMO professional development opportunities and manages outreach activities including web page, presentations, and informational materials.

The 2010-2013 MTIP needs to be amended to reflect the sub allocation of program funds. Additionally, the resolution demonstrates intent to program funds to TSMO program management from funds targeted to TSMO activities in the 2014-2015 allocation of regional flexible fund allocation process, pending final adoption of those funds in the 2012-15 MTIP.

This change to programming is exempt by federal rule [40 CFR 93.134] from the need for conformity determination with the State Implementation Plan for air quality.

ANALYSIS/INFORMATION

- **Known Opposition** There is no known opposition to the proposal at this time.

- **Legal Antecedents** Amends the 2008-11 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 07-3825 on August 16, 2007 (For the Purpose of Approving the 2008-11 Metropolitan Transportation Improvement Program for the Portland Metropolitan Area); Amends the Metro Council Resolution 07-3773 on March 15, 2007 (For the Purpose of Allocating Regional Flexible Funding for the Years 2010-2011); Amends the Metro Council Resolution 09-4017 on March 19, 2009 (For the Purpose of Allocating Regional Flexible Funding for the Years 2012-2013); Amends the Metro Council Resolution 10-4144 on May 13, 2010 (For the Purpose of Amending the 2008-2011 Metropolitan Transportation Improvement Program (MTIP) to Allocate Funds to Community Projects that Enhance Efficiency of the Regional Transportation System).

- **Anticipated Effects** Adoption of this resolution will allocate federal transportation funding to support implementation of the Regional TSMO plan.

- **Budget Impacts** A local agency match is required for funds allocated to Metro for the Regional Mobility program management project. The required local agency match applied to these federal funds is 10.27%. These funds, with the required local match, have been included in Metro's FY2011-12 base budget. The amendment commits Metro to providing local match for this MTIP sub-allocation in future years.

RECOMMENDED ACTION

Metro staff recommends the approval of Resolution No. 11-4246

Attachment 1 to Staff Report 11-4246

March 21, 2011

JPACT & Metro Council

TransPort

Oregon Department of Transportation

Washington State Department of Transportation

Metro

Southwest Washington Regional Transportation Council

TriMet

C-Tran

Clackamas County

Multnomah County

Washington County

City of Beaverton

City of Gresham

City of Hillsboro

City of Portland

Port of Portland

Portland State University

Subject: Letter of Support for Resolution 11-4246 to establish funding for management of the Regional Mobility program

Dear Metro Council and JPACT members,

TransPort, the Transportation System Management and Operations (TSMO) Subcommittee of the Transportation Policy Alternatives Committee, submits this letter of support for the Regional Mobility program as the coordinator of regional TSMO activities; and endorses amending the TSMO regional flexible fund allocation to support management of the Regional Mobility program if other funding sources cannot be secured.

The Portland metropolitan region is a nationally recognized leader in the area of transportation system management and operations. For over 17 years, TransPort has actively coordinated to ensure that the region's day-to-day travel is both safe and efficient. For many years, ad hoc regional coordination sufficed. However, with the growing sophistication of regional travel operations, TransPort recognized the need for a more formalized management structure to better support its activities. A TransPort-guided FHWA grant developed a regional collaboration framework for TSMO to be housed at Metro, the regional metropolitan planning organization.

TransPort strongly endorses maintaining the Regional Mobility program as the central point for management of regional TSMO activities. Effective collaboration and coordination among regional partners depends on dedicated resources committed to this purpose. In a span of five years this program has increased awareness and funding for TSMO activities; produced a regional vision and investment strategy; integrated TSMO into the regional transportation planning framework; and enhanced regional collaboration through new partnerships and initiatives.

With the newly minted Regional TSMO Plan entering its implementation phase, the need for dedicated management support is even greater as the region has set a high bar for advancing smart TSMO solutions. The Regional Mobility program provides the necessary management support to secure project and research funding, advance concept development, and drive TransPort activities. The bottom line is the program is integral to achieving a more efficient, performance-based transportation system for people and goods.

Sincerely,

Dennis Mitchell, ODOT Region 1
TransPort Chair

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Metro | *Memo*

Date: April 21, 2011

To: TPAC, MTAC and interested parties

From: Robin McArthur, Planning and Development Director

Re: Formation of TPAC/MTAC Scenarios Technical Work Group

This memo recommends creation of a work group to expand land use and transportation collaboration and provide technical support to the Climate Smart Communities Scenarios process in 2011.

Background

The first phase of the region's mandated scenario analysis will occur during summer 2011 and focus on learning what combinations of land use and transportation strategies may be helpful in meeting the state carbon emissions reduction targets for cars, small trucks and SUVs in the Portland metropolitan region. Potential impacts and benefits will be weighed against the region's six desired outcomes. Findings and recommendations from the analysis will be reported to Metro's policy committees in fall 2011 before being finalized for submittal to the Legislature in January 2012.

In March, the Metro Technical Advisory Committee (MTAC) requested additional opportunities to collaborate with the Transportation Policy Alternatives Committee (TPAC) as the Climate Smart Communities Scenarios process moves forward.

Creation of TPAC/MTAC Scenarios Work Group

In response, I recommend this collaboration occur through monthly meetings of a technical work group composed of members from TPAC and MTAC. Proposed members are shown in Table 1.

Table 1. TPAC/MTAC Scenarios Work Group Members (proposed)

Name	Affiliation	Membership
Lainie Smith	ODOT	TPAC alternate and MTAC
Jennifer Donnelly	DLCD	MTAC
Alan Lehto	TriMet	TPAC
Elissa Gertler	Clackamas County	TPAC
Chuck Beasley	Multnomah County	MTAC
Andy Back	Washington County	TPAC alternate & MTAC alternate
Lynda David	Regional Transportation Council	TPAC
	City	
	City	
	City	
	City	
	City	
	City	
	TPAC citizen member	
	MTAC citizen/community group	

The work group would be led by Kim Ellis, Climate Smart Communities Scenarios project manager, and would begin meeting in May. The work group meetings would be held on Mondays, from 2 p.m. to 4 p.m. at Metro. Additional meetings would be scheduled as needed.

Scenarios Work Group Charge

The work group would be charged with helping develop the Phase 1 scenarios assumptions and evaluation criteria, consistent with policy direction from the Metro Council, the Joint Policy Advisory Committee on Transportation and the Metro Policy Advisory Committee. In addition, the work group would review the preliminary technical analysis and provide guidance and consensus-based recommendations to Metro staff that reflect the range of interests and consideration of the land use and transportation strategies evaluated. Members would review and comment on draft materials and assist Metro staff with other technical coordination activities related to the scenarios analysis.

Key work group tasks would include:

- Help develop the Phase 1 scenarios evaluation framework and criteria. *(May-June 2011)*
- Help develop and review technical assumptions to be evaluated in Phase 1 scenarios. *(May-June 2011)*
- Help develop and review preliminary findings and recommendations on the Phase 1 scenarios analysis. *(Summer/early Fall 2011)*
- Help develop and review report to the 2012 Legislature and recommendations for Phase 2 of the process. *(Fall 2011)*

Implications

- Briefings on the progress of the technical work will be made to TPAC and MTAC as needed to prepare for policy committee briefings. The details of the technical work will be discussed during work group meetings.
- The work group meetings will conclude in December 2011.

With TPAC and MTAC support, I will work with staff to finalize the charge of the work group and develop a schedule of meetings for distribution to TPAC and MTAC in May.

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Metro | *Memo*

Date: April 21, 2011

To: TPAC and interested parties

From: Kim Ellis, Principal Transportation Planner

Re: Updated Phase 1 Scenario Approach and Framework

BACKGROUND

The Phase 1 Climate Smart Communities Scenarios analysis will occur during Summer 2011 and focus on learning what combinations of land use and transportation strategies are required to meet the state targets for reducing carbon emissions from light vehicles.

Staff presented the *Discussion Draft Phase 1 Scenario Approach and Framework* (dated February 23, 2011) to the Transportation Policy Alternatives Committee (TPAC) and the Metro Technical Advisory Committee (MTAC) on February 28 and March 2, respectively. The Joint Policy Advisory Committee on Transportation (JPACT) and Metro Policy Advisory Committee (MPAC) provided further input on March 3 and March 9, respectively.

The committees supported the overall approach, recognizing more information and discussion is needed to define the combinations of land use and transportation strategies to be tested this summer, and indicators to be used to evaluate the scenarios. Several committee members also expressed concern that House Bill 2001 only mandates consideration of carbon emissions from light vehicles. MTAC also recommended building in more opportunities for collaboration with TPAC throughout the scenario planning process.

The attached document reflects the comments and refinements identified to date, and provides direction to staff moving forward.

ACTION REQUESTED

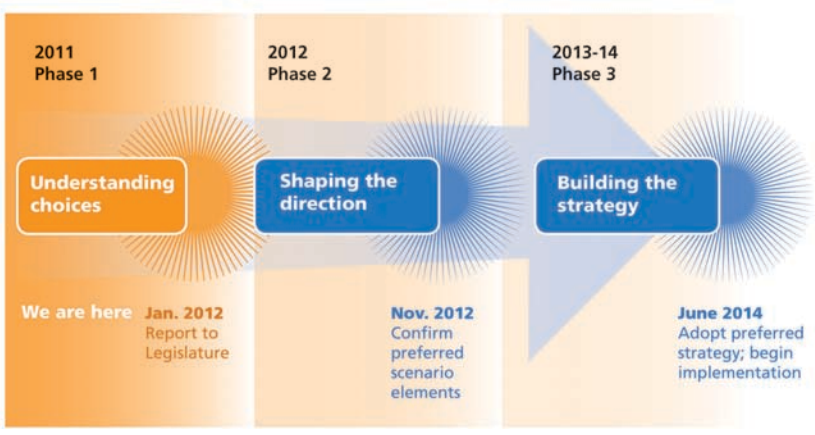
TPAC input on the overall framework, draft indicators and strategies to be tested is requested.

NEXT STEPS

Staff will work with a work group of MTAC and TPAC members to define assumptions for each strategy in May. This work will also include refining the set of indicators to be evaluated in Phase 1.

TPAC will be asked to make a recommendation to the Joint Policy Advisory Committee on Transportation at the May meeting.

CLIMATE SMART COMMUNITIES SCENARIO PLANNING



/attachments: Draft Phase 1 Scenario Evaluation Framework *(April 21, 2011)*

April 21, 2011

DRAFT Phase 1 Scenario Evaluation Framework

This framework is proposed to guide the development and evaluation of the Phase 1 scenarios in 2011 and reflects input received to date from Metro's policy and technical advisory committees and the Metro Council. The primary objective of the Phase 1 scenarios analysis is to determine the carbon emissions reduction potential of different combinations of strategies and their ability to achieve state carbon emissions reduction targets for cars, small trucks and sport utility vehicles (SUVs).

GUIDING PRINCIPLES:

- **Focus on outcomes and co-benefits:** The strategies that are needed to reduce carbon emissions can help save individuals, local governments and the private sector money, grow local businesses and create jobs and build healthy, livable communities. The multiple benefits should be emphasized and central to the evaluation and communication of the results.
- **Build on existing efforts and aspirations:** Start with local plans and 2010 regional actions[1] that include strategies to realize the region's six desired outcomes.
- **Show cause and effect:** Provide sufficient clarity to discern cause and effect relationships between strategies tested and realization of regional outcomes.
- **Be bold, yet plausible**: Explore a range of futures that may be difficult to achieve but are possible.
- **Make relevant, understandable and tangible:** Organize information so decision-makers and stakeholders can understand the choices, consequences (intended and unintended) and tradeoffs.
- **Meet state climate goals:** Demonstrate what is required to meet state carbon emissions reduction targets for cars, small trucks and SUVs, recognizing reductions that from other emissions sources must also be addressed in a comprehensive manner.

The region's six desired outcomes – adopted by the Metro Council on December 16, 2010.

WHAT WE HOPE TO ACCOMPLISH:

- Determine what combinations of land use and transportation strategies are required to meet the state carbon emissions reduction targets for light vehicles.
- Show potential impacts and benefits through a comprehensive array of measures that link back to the six desired outcomes.
- Demonstrate how well the strategies support local plans and the region's desired outcomes.
- Identify the potential challenges, opportunities and tradeoffs associated with different strategies and implications for the region and state.
- Report findings and make recommendations to the 2012 Legislature and future project phases.

OUTCOMES TO BE EVALUATED:

While the primary objective of the scenarios analysis is to understand the carbon emissions reduction potential of different combinations of strategies and their ability to achieve state targets for cars, small trucks and SUVs, the evaluation of the smaller set of scenarios will also consider:

- **Outcomes and co-benefits** – Benefits and impacts across environmental, economic, and equity goals from a business, individual/household and regional perspective will be evaluated to better understand the choices and tradeoffs.
- **Effectiveness** – Carbon emissions reduction potential will be evaluated.
- **Cost** – The costs and cost effectiveness (per ton of emissions reduced) will be evaluated.
- **Implementation opportunities and challenges** – The feasibility of implementing different strategies and the timeframe required will be assessed to inform next steps and recommendations for Phase 2 of the process.

Table 1. Indicators to Be Evaluated in Phase 1 (draft)

Business	Individuals and Households	Region
Vehicle and truck delay	Distance driven per day	Carbon emissions
Truck travel costs	Travel costs by income group	Air quality emissions
Healthcare costs	People living in areas with good mix of homes, jobs and services by income group	Energy consumption
OTHERS?	Physical activity	Water consumption
	Fuel consumption	Land consumption
	OTHERS?	Walking, biking and transit mode share
		Infrastructure costs (capital and operations)
		Investment revenues generated
		OTHERS?

Table 1 identifies the outcomes-based indicators that will be used to evaluate the Phase 1 scenarios. The indicators represent the range of outcomes that can be evaluated using the metropolitan-scale GreenSTEP[2] model. The indicators will continue to be refined in Phase 2 of the process as the evaluation effort transitions to the Envision Tomorrow[3] scenario planning tool, which will provide spatial analysis capabilities allowing for a more robust analysis of economic development, accessibility, public health and environmental justice indicators.

[1] In 2010, the Metro Council adopted the Community Investment Strategy and Regional Transportation Plan, and designated urban and rural reserves. These actions provide the policy foundation for better integrating land use decisions with transportation investments to achieve the region's six desired outcomes and state climate goals.

[2] Greenhouse Gas State Transportation Emissions Planning (GreenSTEP) is a non-spatial model used to estimate transportation carbon emissions with sensitivity to mixed-use, miles traveled, transportation vehicle, price, fuels and other factors. Inputs within the statewide model will be tailored where more current local/regional information is available to create a metropolitan GreenSTEP model for Phase 1.

[3] Envision Tomorrow is a spatial GIS-based scenario planning tool that estimates the effect of changes to land use and transportation using a combination of land use, environmental and transportation data and 2040-based land use typologies. The inputs will be tailored where more current local/regional information is available for more refined scenario analysis in Phase 2.

Table 2 provides a framework for testing a variety of regional-level strategies during the summer of 2011 with the goal of determining what combination of strategies are needed to reduce carbon emissions. **The table is for discussion and research purposes only, and does not represent a Metro Council, JPACT or MPAC endorsed policy proposal.**

- Each category includes a set of carbon reduction strategies that the metropolitan GreenSTEP model is able to test, including transportation, land use, fleet and technology strategies. The strategies are assumed to be implemented with consideration of environmental justice and equity concerns; there may be some strategies that by their very nature could pose challenges.
- A total of 36 scenarios will be created in Phase 1, reflecting different implementation levels for each strategy. Level 1 represents the Reference Case, reflecting current adopted plans and policies.

The top performing combinations of strategies will be evaluated in more detail, using the indicators listed in Table 2. Additional sensitivity analysis may be conducted after the initial set of scenarios are evaluated as time and resources allow.

Table 2. Climate Smart Communities Scenarios (DRAFT)

	2035 Implementation Levels			Strategies to be Tested (indicated in bold)
	Level 1 (Reference)	**Level 2**	**Level 3**	
COMMUNITY DESIGN	Current	Double	Triple	Households in **mixed-use areas and neighborhoods** [4] (percent)
	Current rate	½-current rate	No expansion	**Urban growth boundary** (expansion relative to population growth)
	Current	Triple		**Bicycle and pedestrian travel** (mode share)
	2035 RTP Financially Constrained (FC) System			**Road capacity** (lane mile growth relative to population growth)
	2035 RTP FC	Double	Triple	**Bus and rail transit service hours** (percent)
PRICING [5]	Current	Triple	100%	Workers paying **parkin**g fees (percent)
	Current			Non-work trips parking parking fees (percent)
	Current	*TBD*	*TBD*	Average daily **parking fee** for work and non-work trips
	Current	*TBD*		**Pay-as-you drive insurance**
	Current	*TBD*		**Fuel and emissions fees** [6]
	Current	*TBD*		**Vehicle travel fees** [7]
MARKETING & INCENTIVES	Current	*TBD*		Households participating in **individualized marking programs** (percent)
	Current	*TBD*		Workers participating in **employer-based demand management programs**[8] (percent)
	Current	*TBD*		Households participating in **carsharing** (percent)
	Current	*TBD*		Households participating in **ecodriving** (percent)
MANAGE-MENT	*Level 1/2 from State Agency Technical Report*			System management strategies such as traffic signal timing, **incident management** (percent of delay addressed)
FLEET	*To be held constant at Level 3 as defined in State Agency Technical Report and assumed in the Metropolitan GHG Reduction Targets Rule*			**Auto/truck vehicle proportions** and **fleet turnover rate**/ages, as defined in *State Agency Technical Report and assumed in the Metropolitan GHG Reduction Targets Rule*
TECHNOLOGY	*To be held constant at Level 3 as defined in State Agency Technical Report and assumed in the Metropolitan GHG Reduction Targets Rule*			**Fuel economy**, **carbon intensity of fuels**, as defined in *State Agency Technical Report and assumed in the Metropolitan GHG Reduction Targets Rule*
	Level 3 from State Agency Technical Report	*Level 4 from State Agency Report*		**Electric vehicles and plug-in hybrids market shares**

The results of the analysis will be summarized and brought forward for discussion by the region's decision-makers and community and business leaders in Fall 2011. The regional discussion will shape the findings and recommendations forwarded to the 2012 Legislature and the next phase of the process.

[4] Existing zoning and forecasted population and employment held constant across all scenarios.
[5] Reflected as the cost per mile to drive. Fuel price will held constant across all scenarios, reflecting market trends.
[6] Carbon fee, gas tax, or other instruments could be used.
[7] Vehicle miles traveled fee or other instruments could be used.
[8] Examples include transit fare reduction, carpool matching and other carpool programs, and compressed work week.

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Metro | *Memo*

Date: April 21, 2011

To: TPAC and interested parties

From: Kim Ellis, Principal Transportation Planner

Re: Strategies For Reducing Carbon Emissions From Light Vehicles

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PURPOSE

The purpose of this memo is to provide summary information on the actions, programs and incentives that local governments and Metro could implement to reduce carbon emissions from cars, small trucks and SUVs.

This information is intended to provide sufficient background information for TPAC to provide input on the combinations of strategies to be tested in the region's scenarios this summer.

BACKGROUND

The overview of actions, programs and incentives came from a literature review conducted by Cambridge Systematics as part of the Oregon Sustainable Transportation Initiative (OSTI) effort and Metro for the Climate Smart Communities Scenarios effort. The literature review considered existing national, state and regional/local research completed in the past 10 years. A bibliography is provided at the end for reference.

Strategy Organization

The strategies have been organized into seven tables for reference.

- Community design and the built environment
  - Land use *(Table 1)*
  - Active transportation *(Table 2)*
  - Public transit *(Table 3)*
- Pricing *(Table 4)*
- Marketing and travel demand management *(Table 5)*
- System management and operations/Intelligent Transportation systems *(Table 6)*
- Technology and Fleet *(Table 7)*

A more detailed "Strategy Toolbox" is being developed by Metro staff, and will be available for review in May.

Community design and the built environment

The strategies outlined Tables 1-3 aim to change community design and the built environment in ways that will reduce the number of vehicle miles traveled in the region and their corresponding emissions, and increase walking, biking and use of transit.

Table 1. Land Use Actions, Programs and Incentives

Action/Program/Incentive	Description
More mixed-use, infill and reinvestment in centers and transit corridors	Change in the mix and location of certain land use types and densities to result in: • Increased density and mix of uses in strategic locations • Increased percentage of new development in attached or small-lot detached units, with good bike/ped/transit and mix of uses • Mixing of residential and commercial so jobs and residences are in closer proximity.
Transit-oriented development (TOD)	Moderate to higher density development within walking distance to high frequency transit service, generally with a mix of residential, employment and shopping opportunities.
Infill development funding and incentives	Strategic public investment in projects such as streetscaping, walking, cycling, and transit infrastructure. Can include tools such as land assembly, system development charges, enterprise zones, urban renewal and tax increment financing to produce investments in centers and corridors. Also includes waiving/reducing fees, tax abatement and developer subsidies for infill development or other desired development.
Parking management	Manage the supply of parking provided at a particular site or area. Examples include shared parking credits, timed on-street parking, parking restrictions/minimums/maximums, structured parking and parking permit zones to prevent business customers and transit riders from using residential spaces, programs that allows businesses certain number of free permits/mo then charge for additional ones.
Parking restrictions/remove parking minimums/implement parking maximums	Limit parking allowed at a particular site or area (e.g., downtown major commercial center). Portland set a cap of approx. 40,000 parking spaces downtown in 1975. The number increased in the 1980s and 1990s, but is still said to have helped increase transit use. *(Source: Victoria Policy Transport Institute)*
Shared parking credits	System in which parking spaces are shared by multiple users to promote efficient use of parking spaces. Arrangements vary, but in some cases, allows developers to pay in lieu fees instead of private off-street parking.

Action/Program/Incentive	Description
Urban growth boundary	This regional boundary is a locational land supply tool to manage urban expansion to protect farms and forests from urban sprawl and to promote the efficient use of land, public facilities and services inside the boundary.
School siting/placement	School siting policies aimed at keeping existing schools, or constructing new schools within established communities. Schools with pedestrian and bicycle access can result in greater accessibility for students and parents without the need for a motor vehicle

Active Transportation

Table 2 summarizes the proposed active transportation actions and strategies. These strategies help reduce carbon emissions by expanding transportation options for people to walk and bike to meet some or all of their daily needs, particularly for short trips. The strategies also help make walking and biking more convenient and promote safety and access to local services and destinations.

Table 2. Active Transportation Actions and Programs

Action/Program	Description
Construct new or connect existing bicycle and pedestrian facilities	Construct both on- and off-street facilities such as bicycle boulevards, bicycle lanes, trails, and bicycle parkways to promote walking, biking, and access to transit.
"Complete Streets" policy	Policy that takes into account all users of streets rather than just autos with a goal of completing the streets with adequate facilities for all users.
Pedestrian-oriented design/Buffered sidewalks	Protect sidewalks by creating a landscaped buffer between motorized traffic and pedestrians.
Bicycle parking at destinations including transit stations	To encourage use – could be all types of parking – short term, long term, secure.
Promote bicycle and pedestrian use	Through marketing programs, safety lessons, etc.
Traffic calming	Tools employed to reduce vehicle speeds, improve safety, and enhance one's quality of life.
Increase number of crossings, curb cuts and signalized crossings and reduce crossing distances and intersections and mid-block crossings	These actions help people of all mobility levels to cross the street and access destinations. Add signals at pedestrian crossings, especially on busy streets, to increase pedestrian safety and improve traffic flow. Could include innovative signal types, such as hybrid beacons that are dark when not in use to allow traffic flow, but are triggered to flash when pedestrians activate them.

Urban nonmotorized zones	Designated areas for nonmotorized transportation modes only.

Public Transit

Table 3 identifies public transit actions and programs. These strategies increase service levels, provide incentives for using transit (and thus reduce the number of single-occupancy vehicle (SOV) trips) and/or enhance operational efficiency of transit vehicles. Together, these investments improve accessibility and can increase ridership levels, facilitating a reduction in the number of cars on the road, congestion levels and VMT. Additional improvements in comfort levels and reductions in fares also help to make transit a more attractive option.

Table 3. Public Transit Actions, Programs and Incentives

Action/Program/Incentive	Description
Discount transit passes/decrease fares	Reduce the cost of using transit.
Increase frequency of transit service	Expand service frequency to increase ridership.
Limited-stop service	Particularly useful for commuting, common routes into downtowns and major employment centers.
Expand public transportation options (LRT/BRT/Express bus/circulators)	Introduce new types of transit and add more service, routes, etc.
Park & ride facilities	These can include parking facilities at rail and bus stations, as well as near highway on-ramps to encourage ridesharing.

Pricing

Actions and programs related to pricing are included in Table 4. These actions and programs focus on raising the cost of vehicle miles traveled (VMT) and fuel consumption, which have been shown to result in people driving less – thereby reducing carbon emissions. These strategies also can help improve system operations by mitigating congestion.

Table 4. Pricing Actions, Programs and Incentives

Action/Program/Incentive	Description
Parking pricing	Fees charged for all parking in a certain area; could include: • Central business districts (CBD), employment areas, and retail areas • Higher fees on previously free parking lots • All downtown workers pay for parking • Requirements for residential parking permits and for visitors • Dynamic pricing is another form of parking pricing; it involves changing pricing based on the time of day; pricing could be higher during peak traffic periods to create a disincentive to drive. A flat fee-per-space on parking spaces provided by businesses would discourage automobile-dependent development, encouraging more efficient land use, and – to the extent the fees are passed on to parkers – encourage non-auto transportation choices. The revenue generated by such a fee (on parking spaces, not their use) could be used for transit and other transportation investments not eligible for highway dollars.
Traffic Impact Fee	A charge on new development to cover the full cost of the additional transportation capacity, including transit, required to serve the development. Only those developments that result in an increase in vehicle trips would be charged.
Emissions-based vehicle registration fees	Fees based on emissions.
Vehicle Miles Traveled (VMT) fee	Fee charged based on how many miles a car is driven; odometer readings determine the exact fee charged; a city or county could modify the structure of the fee to include a carbon fee; VMT fees can by layered to be higher or lower based on the fuel economy of one's car.
Congestion pricing/road user fees	Tolls are charged to drivers using congested roadways; toll based on specific level of service goal; refers to parking, tolling, or other road user fees where prices increase during congested times in congested locations.

Cordon pricing/area pricing	Requires all motorists who pass through a certain area, generally an area around a CBD or other major employment or retail area, to pay a fee.
Traditional toll roads	Payment charged for passage on roads, bridges or ferries that carry cars.
Nontraditional toll roads • Managed lanes • High-occupancy toll (HOT) lanes	• Managed Lanes – A lane or lanes designed to increase freeway efficiency through a combination of operational and design actions. • HOT Lanes – High Occupancy Vehicle (HOV) lanes that allow a limited number of low-occupancy vehicles to use the lane if a fee is paid

Marketing and Travel Demand Management

Table 5 identifies marketing and transportation demand management actions and programs including ridesharing. These actions and strategies reduce carbon emissions by reducing trips, shifting trips to other modes and thus reducing vehicle-miles traveled (VMT).

Table 5. Marketing and Travel Demand Management Actions, Programs and Incentives

Action/Program/Incentive	Description
Trip reduction ordinances/ Transportation Management Associations (TMAs)	Organizations that provide transportation services in a particular area that are controlled by association members.
Financial support for public, private, or nonprofit car-sharing organizations	Increased financial support show commitment to this program.
Car-sharing • Standard • Personal Vehicle Car-Sharing (PVCS)	• Standard – Program in which automobile rental services are used to substitute private vehicle use and ownership. Programs are designed to be accessible to residences, affordable, follow easy check-in/out processes, and reliable. • PVCS – Enables private car owners to make their vehicle available on a temporary basis to a carsharing company for rental. In return, the vehicle owner gets a substantial portion of the rental revenue from the carsharing company. When not rented, the vehicle owner can continue to use their car as before. Also called “peer to peer carsharing” (abbreviated P2P carsharing).

Action/Program/Incentive	Description
Employer-based programs: • Alternative work schedules • Telecommuting • Teleconferencing/videoconferencing • Ride-sharing • Vanpool programs • Park & ride • Mandatory SOV reduction programs for large employers • Parking cash-out • Guaranteed ride home	• Commuter incentive programs take advantage of a variety of options used to reduce SOV trips for workplace travel. Employers can adopt programs that best suit the needs of their employee base, including: • Alternative work schedules – Schedules other than 9:00 a.m.-5:00 p.m.) • Telecommuting – Employees work from home rather than a central office • Teleconferencing/videoconferencing – Use of live video connections in place of physical meetings • Ride-sharing – Practice of commuting with other people (generally those that live nearby), often aided by a service or program that matches people going to the same employment area • Vanpool programs – Similar to ride-sharing but on a larger scale, allowing many people to ride in one vehicle • Park & ride – Parking facilities at transit stations, bus stops, and highway on-ramps, generally charging lower fees than in CBDs; these help facilitate transit use and ride-sharing • Mandatory SOV-reduction programs for large employers – Employers of a certain size would be required to reduce the number of SOV that commute to their offices • Parking cash-out – Program in which an employer offers a choice between a paid-for parking space or a cash allowance, equivalent to the market value of the parking place, giving employees an opportunity to save money if they avoid driving. • Guaranteed ride home – Provides subsidized ride home from work to commuters who use alternative modes. For example, a commuter would receive a ride if his/her carpool driver must stay late at work or a bus rider must return home in an emergency. This addresses challenges to the use of alternative modes.
Tire Fuel Efficiency Programs	Public education program to encourage the purchase of fuel efficient replacement tires.
Pay-as-you-drive insurance (PAYD)	A system where participants are assessed based on the number of vehicle miles traveled in combination with traditional risk based rates. PAYD goes beyond what current insurance companies are offering in premiums to low distance drivers. Shifting to this type of mileage-based auto-insurance system allows motorists to reduce their costs while encouraging them to drive less.

System Management and Operations/Intelligent Transportation Systems (ITS)

Table 6 identifies actions and programs related to operations and ITS. These strategies improve system operations using technology to provide information about roadway conditions or other data and other management strategies.

Table 6. System Management and Operations/ITS Actions and Programs

Action/Program	Description
Incident management	Restore "normal service operation" after roadway incidents (accidents or other actions that interrupt standard operation of roadways) as soon as possible after an incident.
Ramp-metering	Control entry of traffic onto freeways to improve traffic flow and decrease accidents. Cars are stopped and allowed to enter via ramp at intervals determined by current congestion levels.
Electronic message signs	Signs located along roadways providing drivers with traveler information, such as accidents, detours, etc.
Transportation Management Center (TMC)	A facility into which real-time traffic data from roadways flows that provides coordinated transportation management on transportation facilities (e.g., state highways, other parts of system). Data is processed and decisions are made (such as rerouting, etc.) in order to maintain best possible system operations. In an emergency, TMC is command center that directs relief efforts.
Freeway Management System	Provides highway conditions data, including freeway traffic camera, and information on related programs and services.
Traffic Signal Coordination/Arterial System Management	When a group of two or more traffic signals work together so that cars moving through the group will make the least number of stops.
Active Traffic Management (ATM)	Use of automatic systems and human intervention to manage traffic flow, aka "managed lanes" or "smart lanes."
Integrated Corridor Management	Using all possible capacity in a transportation system to get out most of entire network. For example, using formerly underused parallel routes to help mitigate heavy traffic on freeways or using the nonpeak direction during peak hours.
Road weather management	Includes three types of strategies applied during inclement weather: advisory (fog warnings, etc.); control strategies (speed limit reductions using Variable Speed Limit (VSL) signs, etc.); and treatment strategies (sand, salt, ice).
Arterial management	Program designed to improve traffic signal systems operation, improve flow of traffic, and reduce arterial congestion.
Access management	Coordination between land use and design of roadways to improve transportation.

"Eco-driving" training programs	Programs that train drivers to use techniques that reduce gas consumption, such as avoiding rapid acceleration and braking, driving at lower speeds, proper gear changes, and other strategies; also includes proper vehicle maintenance, including tire pressure, etc.
Traffic signal timing coordination	When a group of two or more traffic signals work together so that cars moving through the group will make the least number of stops.
Transit priority treatments (includes signal prioritization)	Tools used to reduce transit vehicle delay. Could include bus lanes, queue-jumper lanes, bus-priority traffic signals, intersection reconfiguration, and grade separation so transit is not delayed by cross-streets and traffic congestion.
Traveler information system	Dissemination of traveler information through radio, traffic hotline (511) and other technologies such as the internet and smart phone applications.
Vehicle Infrastructure Integration (VII)	Research and applications dedicated to linking road vehicles to their physical surroundings to improve road safety.
Reduce speed limit	Lower speeds on city and county roads, possibly to 20 mph to increase bicycle/pedestrian safety.
Yield signs	Increase use of yield signs, as opposed to stop signs, which reduces car idling and helps bicycles move along faster. It would take driver education, but it's common in Europe. In the U.S., research has shown that completely unmarked intersections and roundabouts are safe.

Technology and Fleet Actions and Programs

Table 7 identifies fleet actions and programs. These provide incentives or disincentives to change travel behavior in a way that will reduce VMT and/or improve system operations.

Table 7. Technology and Fleet Actions/Programs

Action/Program	Description
Electric vehicle infrastructure	Build electric vehicle charging stations/infrastructure.
Vehicle Age Programs	Policies to influence the age of vehicles on the road (may be incentive or regulatory-based).
Vehicle Type Programs	Policies to influence vehicle type such as CAFE standards, etc.

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Climate Smart Communities Scenarios Project

PROJECT GOALS

- **Build on existing efforts and aspirations:** Start with local plans and 2010 regional actions to develop a preferred land use and transportation strategy that meets state climate goals and advances the 2040 Growth Concept, community aspirations and the region's six desired outcomes.
- **Engage and educate:** Actively engage and inform the region's decision-makers, public agencies and business and community leaders on land use and transportation strategies needed to achieve the state carbon emissions reduction target for cars, small trucks and sport utility vehicles in the Portland metropolitan region.
- **Collaborate:** Work together to build ownership and support for the preferred land use and transportation strategy and policies, investments, and actions that will be recommended by the region.
- **Focus on outcomes and co-benefits:** Consider the economic, equity, environmental and community benefits and impacts to demonstrate how strategies may affect realization of the region's six desired outcomes. These outcomes may be realized by the potential for strategies to save money for individuals, local governments and the private sector, grow local businesses, create jobs and build healthy, livable communities.

KEY TASKS

	Phase I **Understanding Choices** *Jan. – Dec. 2011*	Phase II **Shaping the Direction** *Jan. – Dec. 2012*	Phase III **Building the Strategy** *Jan. 2013 – Dec. 2014*
TECHNICAL WORK AND POLICY DEVELOPMENT	▪ Participate in development of Statewide Transportation Strategy and transportation-related carbon emissions reduction target for the region *(LCDC adoption by June 2011)* ▪ Develop tools and enhance regional data, tools and methods ▪ Define outcomes-based criteria and 2040 development typologies ▪ Research local and regional climate strategies to be tested ▪ Evaluate "broad-level" scenarios with GreenSTEP to learn "what it will take" to meet state target and understand the potential challenges, opportunities, tradeoffs and effectiveness of different strategies ▪ Prepare the region's findings and recommendations for the 2012 Legislature and Phase II	▪ Evaluate more tailored alternative scenarios with Envision Tomorrow applying the lessons learned from Phase I and incorporating strategies identified in local and regional planning efforts that are underway ▪ Continue to develop and enhance regional data, tools and methods; refine evaluation criteria, as needed ▪ Prepare the region's findings and recommendations for narrowing the range of alternatives, and prioritizing and phasing strategies to be included in the preferred scenario ▪ Consider amending the 2035 RTP	▪ Evaluate the preferred scenario with regional models ▪ Prepare the region's findings and implementation recommendations ▪ Recommend a preferred land use and transportation strategy and needed changes to regional and local plans to support implementation o Regional Framework Plan and 2040 Growth Concept o Regional Transportation Plan o Regional Functional Plans o Local transportation system plans, comprehensive plans and land use regulations
ENGAGEMENT	▪ Conduct focus groups, public opinion research and targeted stakeholder outreach on values, beliefs and climate strategies *(Winter 2011)* ▪ Convene region's elected officials and community leaders on policy choices and tradeoffs *(Spring and Fall 2011)* ▪ Conduct stakeholder outreach on preliminary findings *(Fall 2011)*	▪ Continue stakeholder outreach on findings and recommendations *(Winter 2012, Fall 2012)* ▪ Convene subarea scenario planning workshops *(Spring-Summer 2012)* ▪ Conduct focus groups on choices and tradeoffs *(Spring 2012)* ▪ Convene region's elected officials and community leaders to provide input on preferred scenario *(Fall 2012)*	▪ Conduct stakeholder outreach on findings and recommendations *(Spring 2013)* ▪ Convene region's elected officials and community leaders to provide input on preferred scenario *(Fall 2013)* ▪ Conduct stakeholder outreach and public review of preferred strategy as part of RTP update *(Spring 2014)*
MILESTONE	▪ Confirm scenario evaluation approach and policy assumptions to test *(MPAC, JPACT and Council by June 2011)* ▪ Approve findings and recommendations report for consideration by the 2012 Legislature and Phase II *(MPAC, JPACT and Council in Dec. 2011)*	▪ Report findings and make recommendations to the 2012 Legislature (*Jan. 2012*) ▪ Approve policy recommendations to direct development and evaluation of preferred scenario *(MPAC, JPACT and Council by Dec. 2012)*	▪ Release preferred land use and transportation strategy for public and stakeholder review *(March 2014)* ▪ Approve preferred land use and transportation strategy *(June 2014)* ▪ Approve updated regional plans and policies, and new local government implementation requirements *(; Dec. 2015)*
RELATED METRO ACTIONS	▪ Portland-Vancouver Greater Indicators, June 2011 ▪ Regional Flexible Fund Allocation, Dec. 2011 ▪ Draft. East Metro Connections Plan Investment Strategy, Dec. 2011 ▪ Urban Growth Boundary decision, Dec. 2011	▪ 2040 regional growth forecast, Jan. 2012 ▪ East Metro Connections Plan Investment Strategy, March 2012 ▪ Active Transportation Action Plan, June 2012 ▪ Regional Transportation Plan Update Work Plan, Dec. 2012 ▪ Draft SW Corridor Plan Investment Strategy, Dec. 2012	▪ SW Corridor Plan Investment Strategy, June 2013 ▪ Federal Regional Transportation Plan, June 2014 ▪ Urban Growth Report, Dec. 2014 ▪ *State Regional Transportation Plan, Dec. 2015* ▪ *Functional plans, Regional Framework Plan and 2040 Growth Concept amended, Dec. 2015*

April 11, 2011

Climate Smart Communities Scenarios Resources for FY 11-12

	Requirements:		Resources:	
FY 11-12	*Personnel services*	*$1,932,500*	*ODOT House Bill 2001 funding [1]*	*$1,531,000*
	Materials and services	*$274,000*	*Metro sources [2]*	*$675,500*
	TOTAL	**$2,206,500**	**TOTAL**	**$2,206,500**
	Full-time Equivalent Staffing	*14.18*		

Notes:

[1] This amount has been tentatively agreed to by ODOT but is pending final negotiation and an IGA amendment. The COO budget currently assumes $1.1 million in House Bill 2001 funding.

[2] This amount includes a combination of Communications Department ($140,000), Research Center ($344,000) and Planning and Development Department ($191,500) sources.

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Metro | *Memo*

Date: Thursday, April 21, 2011

To: TPAC

From: Sherry Oeser, Josh Naramore and Brian Harper, Planning and Development Department

Subject: Implementation Guidance: High Capacity Transit System Expansion Policy, Regional Transportation and Urban Growth Management Functional Plans, and State of the Centers II Report

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With the adoption of the Regional Transportation Plan and the Capacity Ordinance (10-1244B) in 2010, the Metro Council indicated their support for developing a community investment strategy that would leverage regional and local investments with private investments to achieve the region's desired outcomes and implement the 2040 Growth Concept. Included in the TPAC packet are draft documents that reflect that direction: 1) a System Expansion Policy for future High Capacity Transit. 2) implementation guidance for the new titles in the Regional Transportation Functional Plan (RTFP) and the Urban Growth Management Functional Plan (UGMFP), and an update of the State of the Centers report.

System Expansion Policy (SEP)

When the High Capacity Transit (HCT) plan was adopted as part of the 2035 Regional Transportation Plan (RTP) last year, it established a framework for a community to compete for future high capacity transit investments by proposing a system expansion policy. This policy describes how communities can increase their eligibility for future regional investments in high capacity transit by developing a decision-making process and performance measure targets, as well as defining local and regional actions consistent with the goals of the RTP and the 2040 Growth Concept. This draft SEP responds to one of the unresolved issues identified in Chapter 6 of the RTP that were intended to be addressed post-RTP adoption.

Staff will be introducing the draft SEP policy at the April 29 TPAC meeting. MTAC discussed the draft SEP at their April 20 meeting and staff will present MTAC's comments at the meeting. Since the RTP commits Metro to bringing the process for implementing the SEP policy to JPACT, MPAC and Metro Council for future policy discussion and adoption, TPAC will be asked to make recommendations to JPACT, currently scheduled for the May 27 TPAC meeting.

Functional Plan Guidance

Also adopted as part of the RTP was the Regional Transportation Functional Plan which directs how city and county plans will implement the RTP through their respective comprehensive plans, local transportation system plans (TSPs), and other land use regulations. The RTFP codifies existing and new requirements that local plans must comply with to be consistent with the RTP. Also included in the agenda packet is a draft template for a TSP Scope of Work. This template has been reviewed by TriMet, ODOT and Metro.

Additionally, as part of the Capacity Ordinance adopted last year, many changes were made to the Urban Growth Management Functional Plan (UGMFP) which may require changes to local comprehensive plans and implementing ordinances to implement regional growth management

policies. As part of the adoption of changes to the RTFP and UGMFP, Metro committed to releasing guidance to local governments to assist in implementing the changes.

Staff seeks TPAC comments on the draft guidance attached. Staff will use these comments to refine the transportation and land use handbooks to provide guidance that is useful to local planners and decision –makers. Staff would like to discuss Title 6 (Centers, Corridors, Station Communities and Main Streets) in conjunction with the SEP and RTFP guidance because of its connection to transportation issues.

State of the Centers II Report

Linked to this guidance is the update of the State of the Centers which illustrates the existing conditions for many of the measures described in the System Expansion Policy and includes other factors to evaluate current conditions and barriers in centers. The State of the Centers report will help local jurisdictions see how their center performs today, how it compares to other centers, and highlight potential investments and policies that can support implementation of their local aspirations.

The report will be available by the end of April. Included in the agenda packet is a sample page. Staff is proposing to distribute the report to TPAC and MTAC members, planning directors, city managers and mayors and would appreciate other suggestions for how to distribute and present the results.

www.oregon**metro.gov**

High Capacity Transit System Expansion Policy Implementation Guidance

for the Portland metropolitan region

A handbook for local implementation

April 2011

Metro | *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 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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HIGH CAPACITY TRANSIT SYSTEM EXPANSION POLICY GUIDELINES

In June 2010, the Portland Metropolitan region adopted the 2035 Regional Transportation Plan (RTP) that included an outline for developing a high capacity transit (HCT) system expansion policy. The system expansion policy emphasizes fiscal responsibility by ensuring that limited resources for new HCT are spent where local jurisdictions have committed supportive land uses, high quality pedestrian and bicycle access, management of parking resources and demonstrated broad based financial and political support.

The purpose of the system expansion policy is to: 1) provide a transparent process by which local jurisdictions can work to advance their priorities for future HCT and 2) establish quantitative and qualitative performance measures to guide local land use and transportation planning and decision making. It also provides for a process to reprioritize regional funding for HCT in the form of future RTP amendments based on actions taken by local jurisdictions. The following defines the system expansion policy and provides a resource to local jurisdictions to begin working on advancing HCT priorities.

Following the system expansion policy guidelines does not guarantee a regional investment in HCT. The ultimate decision rests with JPACT and the Metro Council. The purpose of this document is to help local jurisdictions and consultants understand and implement recent regional policy and regulatory changes with adoption of the 2035 Regional Transportation Plan, Regional Transportation Functional Plan (RTFP), and amendments to the Urban Growth Management Functional Plan (UGMFP). Additional implementation guidelines have been developed for the changes in the RTFP and UGMFP.

1.0 INTRODUCTION

Transit is necessary to implement the 2040 Growth Concept, which calls for focusing future growth in regional and town centers, station communities, main streets, and 2040 corridors. Investments in transit, particularly high capacity transit (HCT) help the region concentrate development and growth in centers and corridors, achieve local aspirations and serve as the region's most powerful tools for community building. The 2035 Regional Transportation Plan (RTP) lays out the region's transportation concepts and policies that will result in a complete and interconnected transportation system that supports all modes of travel and implementation of the 2040 Growth Concept. Chapter 2 of the RTP details the policies for the regional transit system aiming to optimize the existing system, attract future riders and ensure transit-supportive land uses are implemented to leverage the region's current and future transit investments.

In 2008 the Metro Council, with guidance from the Metro Policy Advisory Committee (MPAC), agreed that our planning efforts should start with defining the desired outcomes that the residents of this region have consistently expressed when asked. To that end, the Metro Council and our regional partners adopted six desired outcomes to guide regional planning for the future. The 2035 RTP establishes an outcomes-based planning and decision-making framework to ensure transportation decisions support the six desired outcomes.

WHAT OUTCOMES ARE WE TRYING TO ACCOMPLISH?

VIBRANT COMMUNITIES – People live and work in vibrant communities where they can choose to walk for pleasure and to meet their everyday needs.

ECONOMIC PROSPERITY – Current and future residents benefit from the region's sustained economic competitiveness and prosperity.

SAFE AND RELIABLE TRANSPORTATION – People have safe and reliable transportation choices that enhance their quality of life.

LEADERSHIP ON CLIMATE CHANGE – The region is a leader in minimizing contributions to global warming.

CLEAN AIR AND WATER – Current and future generations enjoy clean air, clean water and healthy ecosystems.

EQUITY – The benefits and burdens of growth and change are distributed equitably.

As adopted by the Metro Council and MPAC in 2008.

The ability of this region to grow toward the 2040 Growth Concept vision hinges upon the ability to develop and sustain high capacity transit. However, the number of additional high capacity transit corridors that can be implemented in this region are limited by several factors, including:

- Local funding and community support.
- Competition with other regions for scarce federal funding.
- Institutional and financial capacity to develop, build and operate additional high capacity transit corridors.

Because this region cannot implement all of the desired high capacity transit corridors in the near term and we want to ensure we invest limited resources in the best way possible, it is necessary to prioritize which corridors are completed first. The High Capacity Transit System plan and system expansion policy provide a framework for the region to understand how transit can best deliver on the six outcomes for a successful region and the outcomes-based framework of the 2035 RTP.

1.1 HIGH CAPACITY TRANSIT SYSTEM PLAN

As part of the RTP, the region undertook a comprehensive assessment of the existing and potential future high capacity transit network. In July 2009, the Metro Council adopted the Regional High Capacity Transit (HCT) System Plan. The HCT Plan identifies corridors where new HCT is desired over the next 30 years. It prioritizes corridors for implementation, based on a set of evaluation criteria, and sets a framework to advance future corridors, consistent with the goals of the RTP and the region's 2040 Growth Concept. The HCT system plan provides the framework for transit

investments to be implemented as part of a broad corridor strategy that includes supportive land use and transit-oriented development (TOD), comprehensive parking programs, access systems for pedestrians and cyclists, park and rides and feeder bus networks. It assigned near- and long-term regional HCT priorities one of four priority tiers:

- Near-term regional priority corridors: Corridors most viable for Federal Transit Administration (FTA) alternatives analysis in the next four years (2010-2014).
- Next phase regional priority corridors: Corridors where future HCT investment may be viable if recommended planning and policy actions are implemented.
- Developing regional priority corridors: Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation, but which have long-term potential based on political aspirations to create HCT supportive land uses.
- Regional vision corridors: Corridors where projected 2035 land use and commensurate ridership potential are not supportive of HCT implementation.

To help simplify future analyses, the *next phase regional priority corridors* and *developing regional priority corridors* have been consolidated into *Emerging Corridors*. The HCT System Plan corridors are shown in **Table 1** and **Figure 1.**

Table 1 – HCT System Plan Corridors

Tier	Corridors
Near-term regional priority corridors	10 – Portland Central City to Gresham (in general Powell Boulevard corridor) 11 – SW Corridor 34 - Beaverton to Wilsonville (in general WES commuter rail corridor)
Emerging Corridors	8 - Clackamas Town Center to Oregon City Transit Center via I-205 9 - Milwaukie to Oregon City TC via McLoughlin Boulevard 17 – Sunset Transit Center to Hillsboro 17D - Red Line extension to Tanasbourne 28 - Washington Square Transit Center to Clackamas Town Center (via I- 205) 29 - Washington Square Transit Center to Clackamas Town Center (via abandoned railroad) 32 - Hillsboro to Hillsdale 12 - Hillsboro to Forest Grove 13 - Gresham to Troutdale extension
Regional vision corridors	13D - Troutdale to Damascus 16 - Clackamas TC to Damascus 38S - Tualatin to Sherwood

1.2 SYSTEM EXPANSION POLICY OVERVIEW

The System Expansion Policy (SEP) provides the framework to advance future regional HCT corridors by establishing performance measures and defining regional and local actions that will guide the selection and advancement of those projects. The SEP framework is designed to provide a transparent process to advance high capacity transit projects and the key objectives are to:

- Promote transit supportive land uses in future HCT corridors
- Promote local policies that increase value of future HCT investments (i.e., parking management, street design and connectivity, Transportation Demand Management, etc)
- Provide local jurisdictions with a fair and measurable process for developing future HCT corridors
- Provide Metro with a tool to allocate limited planning resources to the most supportive, prepared communities
- Ensure that transit serves cost-burdened households

The SEP is designed to provide clear guidance to local jurisdictions and community partners in identified HCT corridors about the key elements that support high capacity transit system investments. It is designed to protect public investments and ensure limited resources are used to maximize adopted regional transportation and land use outcomes. The SEP is designed to provide:

- *Flexibility* (responsive to local aspirations) – no two communities or corridors in the region face the same set of land use and transportation planning conditions. Nor do any two communities have the same aspirations for future community form and land development. The SEP is flexible and allows communities and corridors an opportunity to promote transit development within the context of local priorities.
- *Local control* – the SEP process provides a framework for local jurisdictions in a corridor to initiate a constructive corridor development process. While no jurisdiction is required to participate, those desiring HCT investments will need to work with local partners to establish a working group and to develop a corridor purpose and needs statement. The SEP creates a new level of transparency in decision making, which provides local jurisdictions a clearer path to project advancement that has been available in the past.
- *Corridor level cooperation* – since most HCT projects cross jurisdictional boundaries and since both HCT itself and HCT-supportive land uses potentially affect State facilities, the SEP requires cooperation between local jurisdictions, TriMet, ODOT and Metro by establishing a Corridor Working Group. By requiring local jurisdictions to work together to meet SEP targets, the policy helps guide local jurisdictions to set joint priorities and balance tradeoffs associated with meeting land use and financial targets. Through the Corridor Working Group, local jurisdictions can take the lead in identifying the extent of a future HCT corridor, identifying possible future stations areas, and revising zoning policies.

- *Simplicity* – the SEP is straightforward and uncomplicated to enable local jurisdictions to work through the process easily.

The SEP is not intended to dramatically increase administrative requirements; rather it provides a fair and flexible process for corridor advancement and prioritization.

1.3 USING THE TRANSIT SEP HANDBOOK

The purpose of this handbook is to provide local jurisdictions that are located within one of the 18 corridors included in the 2009 HCT System Plan (**Figure 1**) a path to move their HCT corridor toward a regionally supported project development and funding process. The handbook is divided into five sections:

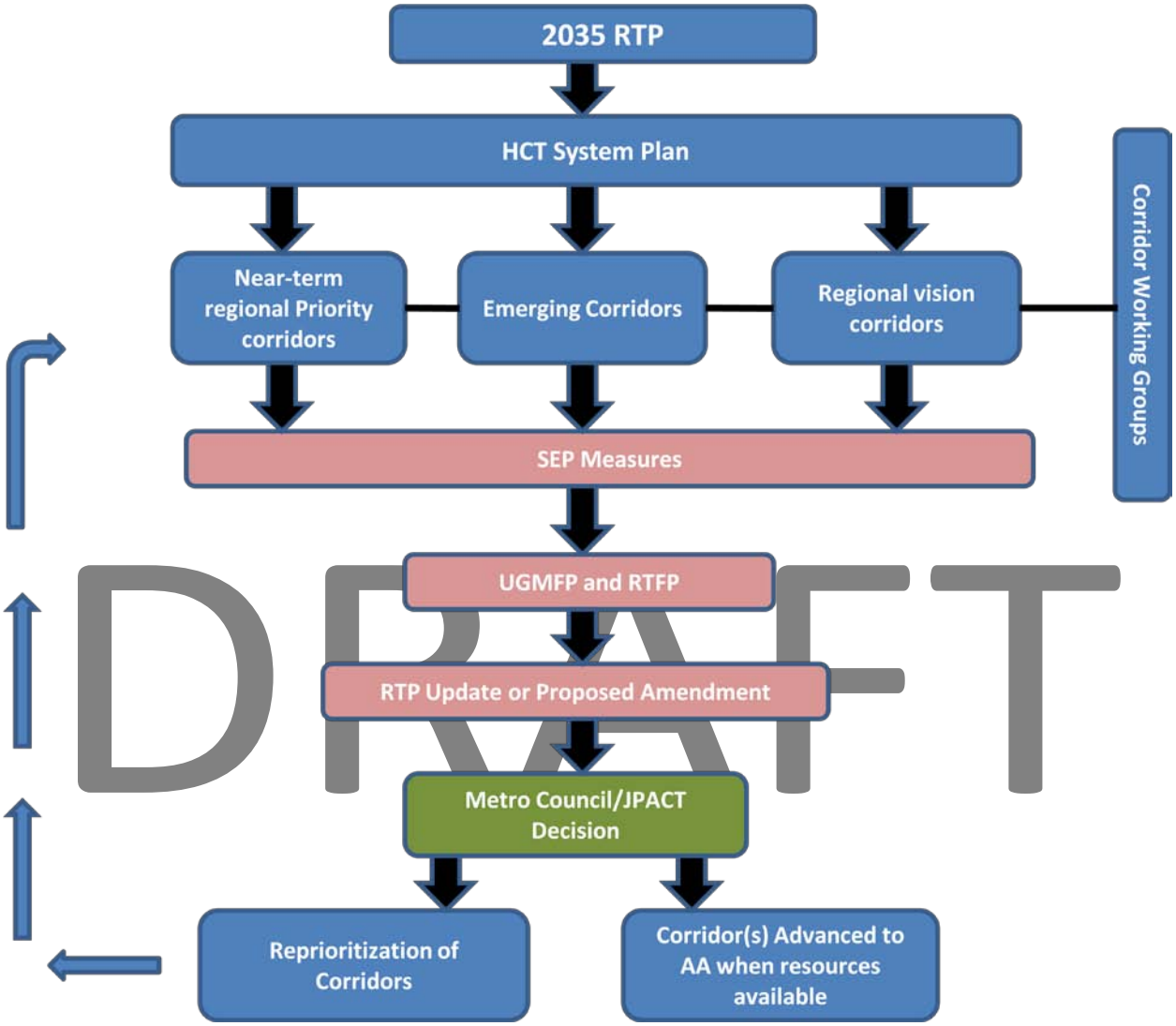
1. SEP Decision-making framework
2. Corridor Working Groups
3. Evaluating performance
4. Updating the 2035 RTP

The handbook also serves as a tool to educate local jurisdiction staff and policymakers about the investments needed to support transit.

1.3.1 SEP Decision-Making Framework

At the foundation of the SEP is a clear and transparent decision-making process for both local land use and transportation planning, and for future RTP amendments . As depicted in **Figure 2** below, the 2035 RTP serves as the umbrella for the HCT System plan and the SEP.

Figure 2 – SEP Decision-Making Framework



All of the corridors (Near-term regional priority, Emerging, and Regional Vision) will have the SEP targets in section 1.3.3 as well as requirements from the Urban Growth Management Functional Plan (UGMFP) and Regional Transportation Functional Plan (RTFP) applied to them as part of the SEP. This analysis will be conducted as part of each RTP update every four years or as a proposed RTP amendment initiated by local governments. Section 1.3.4 details the process for local governments to propose amendments to the RTP.

The results of the analysis will be used to inform Metro Council and JPACT's decision on prioritizing and advancing corridors to the FTA alternatives analysis (AA) process based on available resources. Corridors that are not selected for advancement will be reprioritized and will continue to work through the SEP for future RTP updates or amendments.

1.3.2 Corridor Working Groups

Corridor Working Groups (CWG) are the core organizational body that will be working to implement the SEP. All local jurisdictions seeking to advance HCT priorities must utilize the following minimum requirements for CWGs:

Formation of a Corridor Working Group

1. Needs to include all of the local jurisdictions in the corridor.
2. Assembled using the Mobility Corridors framework identified in Chapter 4 of the 2035 RTP. All of the HCT corridors are part of a larger Mobility Corridor and should coordinate with work underway as part of Metro's Congestion Management Process and any Mobility Corridor Refinement Plans.
3. Initiated by the local jurisdictions but must coordinate with staff from Metro, Tri Met and ODOT. Once corridors are selected by Metro Council and JPACT for advancement Metro will assume staffing and coordination responsibilities.

The following are minimum activities expected to be carried out by CWGs.

A) *Develop HCT Corridor Purpose & Needs Statement* – The CWG is responsible for developing a purpose and needs statement that establishes the purpose and need for the proposed high capacity transit investment (i.e., congestion mitigation, economic development, etc.). It assesses the role of the project in addressing other regional land use and transportation priorities and identifies opportunities for integration with other transportation system improvements in the corridor. It will need to reference how the HCT corridor investment would help the region address multiple desired outcomes.

B) *Develop an IGA or MOU* - This to get agreement on scope of work for the HCT-supportive corridor plan and the necessary state, regional and local actions needed to advance the HCT corridor.

C) *Identification of High Capacity Transit Focus Areas*. Defining focus areas is important to conduct evaluation against the measures, but also helps local jurisdictions to begin planning for future areas that are highly supportive of a transit investment. It should be recognized that these "focus areas" do not represent a formal decision to site a HCT station, a decision that would be made at a later phase of planning. A basic principle should be to plan for one to two focus areas per mile on average along the corridor.

The CWG structure would carry forward as corridors move into the FTA alternatives analysis process.

1.3.3 Evaluating Corridor Performance

The 2035 RTP emphasizes measurable performance and linking investments in land use and transportation to support local community aspirations. Because of a combination of limiting factors, this region cannot implement all of the desired transit expansion in a short time. The SEP establishes a set of measures and targets for evaluating performance. This analysis will assist in the prioritization of corridors for future high capacity transit expansion by Metro Council and JPACT. The following provides details on the quantitative and qualitative performance measures.

2040 Context Tool

For the Regional HCT System Plan, Metro and its agency and jurisdictional partners used a Multiple Account Evaluation (MAE) approach to evaluating project potential to deliver desired regional outcomes. Twenty-five evaluation criteria were developed to measure potential HCT corridor attainment across four outcome categories: Community, Environment, Economy and Deliverability. Intensive involvement by regional stakeholders, including local jurisdictions and agencies, was used to develop the evaluation framework and to guide the evaluation of corridors against the multiple criteria.

The MAE analysis conducted as part of the HCT plan was an expensive and resource-intensive process and is currently not easily replicable for evaluating corridor performance over time. As Metro staff started the process of creating this System Expansion Policy, it was clear that a simpler method was needed to supplement the MAE that will be utilized on a 5-year RTP cycle to re-evaluate the HCT Plan. Building on the HCT plan analysis framework, Metro has been exploring new tools to measure *existing conditions* that contribute towards a transit supportive environment. Using Metro's Regional Land Information System (RLIS), Metro's Data Resource Center staff have developed an innovative GIS based analysis tool that measures specific aspects of the built and natural environment to help illustrate the character of a place.

Known as the 2040 Context Tool, the idea came about as Metro staff thought of new ways to engage policy makers, community groups, and others to better understand how to achieve their aspirations using objective measures to evaluate elements that can be controlled with policy. The 2040 Context Tool can be used to measure existing conditions, perform diagnostics on a given area and track change over time. Even more importantly, the RLIS Data used by the 2040 Context Tool is updated region-wide, on a quarterly basis by all subscribers, allowing for the best data to be used in any analysis.

Specifically, the 2040 Context Tool is a walk accessibility model where a one minute walk time is the spatial resolution of the data. This is a simple additive model where each location knows its distance from individual land use, transportation and environmental variables. Taken together, the model gives a quantitative measure of the characteristics of a place based on a defined outcome. This analysis was developed as part of the TOD Strategic Plan to help prioritize station areas for future TOD investment that can best leverage additional private investment to increase land use efficiency and increase transit ridership. **Table 2** below shows the2040 Context Tool measures.

Table 2 – SEP 2040 Context Tool Measures

Measure	Description (within distance of HCT Corridor)
Density of People	Current households and jobs per net acre within ½ mile
Density of ULI Businesses	Number of ULI Businesses within ½ mile
Transit Oriented Zoning	Assigning values to regional zoning classifications within ½ mile
Average Block Size	Density of acres of blocks within ½ mile
Sidewalk Coverage	Completeness of sidewalk infrastructure within ½ mile
Bicycle Facility Coverage	Access to bicycle infrastructure measured as distance to nearest existing bicycle facility within ½ mile
Transit Frequency	Transit frequency within ½ mile of corridor

Household and employment density is a primary determinant of transit ridership and have been combined as *density of people*.[1] As demonstrated in Metro's State of the Centers Report, there is a basic relationship between the number of people living and working in a district and the number of urban amenities. The Urban Living Infrastructure (ULI) amenities are a set of land use amenities that together comprise an active urban environment and are captured in *density of ULI businesses*. To measure the transit supportive land use that is currently adopted by local governments, Metro's TOD group developed a *transit-oriented zoning* measure. The methodology behind each quantitative measure and the 2040 Context Tool can be found in Attachment X [under development].

As part of the UGMFP and RTFP there are also a number of other measures that will need to be considered as part of the SEP and listed in **Table 3**.

[1] Here in the Portland region, a 1995 study by Nelson\Nygaard Consulting Associates found that 93 percent of the variation of transit demand is explained by employment and housing density. These findings were the result of a regression analysis that controlled for 40 land use and socio-demographic variables. A study of 129 San Francisco Bay Area rail stations found that the commute mode split was 24.3 percent in neighborhoods with densities of 10 housing units per gross acre. This figure jumps to 43.4 percent and 66.6 percent, respectively, in station areas with densities of 20 and 40 housing units per gross acre.

Table 3 – Other SEP Measures

Measure	Description
Housing & Transportation Affordability	Demonstrating that potential transit investment will serve communities with high rate of cost burdened households
Parking Requirements	Implement parking requirements in corridor that meet or exceeds Title 4 of the RTFP.
Local Funding Mechanisms	Implement funding mechanisms in corridor communities that could help fund capital or operations to support transit investment and station area development, including urban renewal, tax increment financing, local improvement district, parking fees, or other proven funding mechanisms.
Equity	Improving options for serving low-income, minority, senior and disabled populations within corridor.

Each of the quantitative and qualitative measures will be evaluated by Metro staff in coordination with local governments and CWGs as part of each RTP update. CWGs wishing to initiate an RTP amendment and petition for corridor advancement will need to document changes to each of these measures.

The intent of this group of measures is to ensure that a minimum level of density, pedestrian and bicycle connectivity, urban form, zoning and urban living infrastructure is in place or planned for proposed corridors/station areas. The SEP does not propose actual targets for any of the measures. Instead, the measures from the 2040 Context Tool are to be used as a regional yardstick for a relative comparison of all of the HCT corridors. Local governments can use the results of each measure to prioritize different elements requiring local investment. Improving the 2040 Context Tool measures is likely to improve a corridor's MAE score because they are strongly linked with the MAE outcome categories of Community, Environment, and Economy.

1.3.4 RTP Updates and Initiating an RTP Amendment

The RTP establishes a comprehensive policy direction for the regional transportation system and recommends a balanced program of transportation investments to implement that policy direction. However, the recommended investments do not solve all transportation problems and are not intended to be the definitive capital improvement program on the local transportation system for the next 20 years.

Rather, the RTP identifies the projects, programs, refinement plans, and project development activities required to adequately meet regional transportation system needs during the planning period based on known available funding levels. The RTP is updated every four years to comply with federal and state regulations. As part of each RTP update all of the HCT corridors will be evaluated using the performance measures and targets. The analysis will be considered for potential action by Metro Council and JPACT as part of the RTP update.

If between RTP updates a CWG wishes to advance a corridor it can request an RTP amendment. The CWG will need to draft a written application to Metro that demonstrates a set of actions adopted and work performed that would improve performance against each of the SEP evaluation measures.

Metro staff would conduct a reevaluation of the corridor using the SEP evaluation measures, in coordination with the CWG local governments, as well as schedule consideration of the proposed amendment by resolution using the Metro advisory committee process. A Metro staff report would be prepared including a ridership forecast, land use forecast and input from TriMet. Metro Council and JPACT would then decide whether or not to take action and reprioritize and/or advance the corridor for alternatives analysis. Requests for RTP amendments and reevaluation using the SEP may be done no more than once a year or during an RTP update.

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Transportation and land use

Implementation Guidance

for the Portland metropolitan region

A handbook for local implementation of the Regional Transportation Functional Plan and the Urban Growth Management Functional Plan

March 2011

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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 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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PURPOSE AND BACKGROUND

The Regional Transportation Functional Plan (RTFP) was adopted as part of the 2035 Regional Transportation Plan (RTP). The RTFP directs how city and county plans will implement the RTP through their respective comprehensive plans, local transportation system plans (TSPs), and other land use regulations. The RTFP codifies existing and new requirements that local plans must comply with to be consistent with the RTP. Additionally, as part of the Urban Growth Capacity Ordinance adopted by Metro in December 2010, many changes were made to the Regional Framework Plan and the Urban Growth Management Functional Plan (UGMFP) which may require changes to local comprehensive plans and implementing ordinances to implement regional policies. As part of the adoption of changes to the RTFP and UGMFP, Metro committed to releasing guidance to local governments to assist in implementing the changes.

The purpose of this document is to help local jurisdictions, consultants and stakeholders understand and implement recent regional policy and regulatory changes. This draft focuses on the RTFP and Title 6 of the UGMFP. Revisions to Title 6 broaden Metro's investment strategy beyond city centers and light rail stations to transit corridors and main streets throughout the region. Title 6 offers investment and other incentives to cities and counties to develop their own strategies and actions to better utilize zoned capacity in a way that enhances each community and helps them achieve their aspirations in their own 2040 Centers, Corridors, Main Streets and Station Communities. A summary of other titles is provided.

REGIONAL TRANSPORTATION FUNCTIONAL PLAN

Relationship to 2035 Regional Transportation Plan

The Regional Transportation Plan provides the long-range blueprint for transportation in the Portland region. The RTP presents the overarching policies and goals, system concepts for all modes of travel, and strategies for funding and local implementation. This RTP update has been shaped by looking ahead to 2035 to anticipate 21st century needs and these desired outcomes for the region:

- promote jobs and create wealth in the economy
- reduce greenhouse gas emissions
- improve safety throughout the transportation system
- promote healthy, active living by making walking and bicycling safe and convenient
- move freight reliably and make transportation accessible, affordable and reliable for commuting and everyday life
- promote vibrant communities while preserving farm and forest land

The Regional Transportation Functional Plan (RTFP) directs how city and county plans will implement the RTP through their respective comprehensive plans, local transportation system

plans (TSPs) and other land use regulations. The RTFP codifies existing and new requirements that local plans must comply with to be consistent with the RTP. It establishes an outcomes-based framework that is performance-driven and includes policies, objectives and actions that direct future planning and investment decisions to consider economic , equity and environmental objectives. If a TSP is consistent with the RTFP, Metro shall deem it consistent with the RTP.

Template for Developing a local Transportation System Plan (TSP)

The following template is designed to help a local jurisdiction develop its TSP. It is organized in the order of a typical TSP statement of work (SOW) funded through the State of Oregon's Transportation Growth Management program.

Assess local update needs

For example, has the Urban Growth Boundary (UGB) been amended since the previous TSP was completed? Do the results of other plans need to be incorporated into the TSP? Are there specific local transportation problems, issues, complaints that need to be resolved? Has growth been significantly faster or slower than was anticipated in previous TSP? Have transportation issues come up in the course of development review cases?

Develop Scope, Schedule, and Budget

- Include project management, interagency coordination, public involvement. Allow sufficient time in schedule for local staff, consultants, CAC, TAC, and elected officials to become familiar and comfortable with the new RTP Policy framework.
- Coordinate with Metro, TriMet, ODOT and DLCD in development of SOW.

Develop Goals and Objectives for the TSP

- Use 2035 RTP Goals as a starting point.

Revisit TSP Policies

Revisit the TSP policy framework to be consistent with the RTP policy framework including performance measures and targets, and with the current local plan/vision/policy direction.

Update Inventories/Existing Conditions

- Update inventories and assess existing conditions of all transportation systems/modes as needed
- Identify population and employment assumptions used in Metro 2035 RTP forecast. Cities and counties may use an alternative forecast, coordinated with Metro, only to account for changes to comprehensive plans or regulations adopted after adoption of the RTP.
- Compile and summarize plans/policies/standards that have changed since last TSP was developed – including the RTP and RTFP
- Conduct inventory and assessment of current TSP funding plan

Elements of the TSP and implementing ordinances/regulations

- Street system (RTFP 3.08.110)

- Street Design
  - Must allow implementation of *Creating Livable Streets, Green Streets*, and transit-supportive street designs (per 3.08.120B)
  - Must allow implementation of skinny streets (pavement width less than 28 feet from curb face to curb face); sidewalks with at least 5 feet of pedestrian through zone; buffer strips; traffic calming; short and direct public streets and pathways that connect residences with commercial uses, parks, schools, hospitals, institutions, transit corridors, regional trails, and other neighborhood activity centers; opportunities to extend streets incrementally, including posted notification on streets to be extended
  - Must be consistent with arterial and throughways design concepts in Table 2.6 and Figure 2.11 of the RTP, i.e. throughways typically 6 through lanes plus auxiliary lanes and grade-separation, major arterials 4 through lanes plus turn lanes, minor arterials 2 lanes plus turn lanes.
  - Must be consistent with RTP Street Design Classifications (Figure 2.10) and RTP Arterial and Throughway Network (Figure 2.12), a.k.a "vehicular functional classification."
- Street Connectivity
  - Arterials: Provide network of major arterials spaced one mile apart, and minor arterials or collectors spaced ½ mile apart, unless precluded by topography, rail lines, freeways, pre-existing development, and Title 3 natural resources.
  - Local streets: Incorporate a conceptual map in TSP of new streets for contiguous areas of vacant and redevelopable lots and parcels >5 acres zoned residential or mixed-use; regulations to implement the map. Spacing of local streets must be < 530 feet unless prevented by topography, rail lines, freeways, pre-existing development, and Title 3 natural resources. If streets must cross water features, crossings must be provided every 800-1200 feet. If full street connections are precluded, provide bike/ped accessways spaced < 330 feet apart (or 530 feet if they must cross water features).
  - Limit cul de sacs and where they are allowed, limit length to 200 feet and < 25 residences.
  - Establish local street standards for local street connectivity for redevelopment of parcels less than 5 acres.
- Interchange management
  - Restrict driveway and street access in the vicinity of interchange ramp terminals consistent with OHP access management standards.
  - Accommodate local circulation on the local system.

        - Public street connectivity requirements supersede access management standards, but may be limited to right in right out or other appropriate configuration near ramp terminals. Pedestrian crossings and on-street parking shall be allowed where appropriate.

- Transit System (RTFP 3.08.120)
    - Include a transit system map in TSP, consistent with RTP transit classification – Figure 2.15, that shows major transit stops, transit centers, HCT stations, intercity bus and rail passenger terminals, transit-priority treatments, park and ride facilities, regional bike transit facilities, and bicycle and pedestrian routes between essential destinations and transit stops. Essential destinations are defined as hospitals, medical centers, grocery stores, schools, and social service centers with > 200 monthly LIFT pick-ups.
    - Include in development code site development standards for new retail, office, multi-family and institutional buildings located near or at major transit stops (per RTP transit map), that (i) provide reasonably direct pedestrian connections between transit stops and building entrances; (ii) provide safe, direct, and logical pedestrian crossings at all transit stops; (iii) locate buildings within 20 feet of major transit stops; (iv) provide an accessible passenger landing pad; (v) dedication or easement for a shelter if requested by transit provider; (vi) lighting; and (vii) traffic management improvements to enable marked crossings.
        - Alternatively to these site design standards, establish pedestrian districts (this can also be established within the comprehensive plan or development code), that include the following elements: connected street and pedestrian network; inventory of existing facilities, gaps and deficiencies in pedestrian network; interconnection of ped., bike, and transit systems; parking management strategies; access management strategies; sidewalk and accessway location and width; landscaped or paved buffer strip; street tree location and spacing; pedestrian crossing and intersection design; pedestrian-scale street lighting and furniture; and a mix of types and densities of land uses that support a high level of pedestrian activity.
    - TSP must include investments, policies, standards, and criteria to provide pedestrian and bicycle connections to all existing transit stops and major transit stops designated in Figure 2.15 of the RTP.
- Pedestrian System (RTFP 3.08.130)
    - TSP must include pedestrian plan, i.e. inventory of existing facilities, identification of needs (gaps and deficiencies), assessment of needs for pedestrian access to transit and essential destinations, including direct, comfortable and safe routes, and a list of improvements to meet needs and to help achieve non-SOV modal targets.
    - Provide safe crossings of streets including controlled crossings on major arterials.

    - Provide sidewalks along arterials, collectors, and most local streets (but not along freeways).
    - Development code must require new development to provide on-site streets and accessways that offer reasonably direct routes for pedestrian travel.

- Bicycle System (RTFP 3.08.140)
    - TSP must include bicycle plan, i.e. inventory of existing facilities, identification of needs (gaps and deficiencies), assessment of needs for bicycle access to transit and essential destinations including direct, comfortable and safe routes and bicycle parking (considering *TriMet Bicycle Parking Guidelines*), and a list of improvements to meet needs and to help achieve non-SOV modal targets.
    - Provide bikeways along arterials, collectors and local streets
    - Provide bicycle parking in centers, at major transit stops, park and ride lots, and institutions.
    - Provide safe bicycle crossings of streets and controlled bicycle crossings of major arterials.
- Freight System (RTFP 3.08.150)
    - TSP must include a freight plan, including inventory of existing facilities, identification of needs (gaps and deficiencies), evaluation of freight access to freight intermodal facilities, employment and industrial areas, and commercial districts, and a list of improvements to meet needs and to increase reliability of freight movement, reduce freight delay, and meet RTP/OHP mobility standards.
- Transportation System Management & Operations (3.08.160)
    - TSP must include a Transportation System Management & Operations (TSMO) Plan, including an inventory of existing facilities, programs and strategies, identification of gaps and opportunities, and a list of projects and strategies.
        - TSMO projects or investments include traffic management (e.g. signal timing, access management, arterial performance monitoring, active traffic management), traveler information, incident management, and TDM.

<u>Needs Assessment</u>

- Identify local needs for all modes, based on (a) population and employment in acknowledged comprehensive plans ,i.e. not including urban reserves (b) updated inventories of existing conditions; (c) gaps and deficiencies as defined by the RTP policy framework (street system design, i.e. local and arterial street connectivity, street design, and TSMO, freight, transit, bike, and ped. system design concepts; (d) identification of facilities that exceed mobility standards, based on current and future year traffic analysis; (e) regional needs identified in the RTP Mobility Corridors Strategies.
- The determination of needs must be consistent with (i) RTP population and employment forecast; (ii) RTP system maps i.e. functional classification for all modes and street design classification; (iii) RTP non-sov modal targets and mobility standards.

- Update model horizon year to 2035. TSPs generally require a greater level of analysis than was included in the RTP in order to identify and evaluate operational needs and solutions. Ideally we would be able to use a meso-model such as a dynamic assignment model, but this is not yet available at the regional level. Typically consultants will start with the trip tables from the 2035 Metro demand model, developing a more refined system of TAZs, and assign trips to the more refined network using the EMME 2 demand model (but not running the full 4-step model). Not all consultants have the capability of running the EMME 2 model; those that don't must assure that Metro can run the model for them, and they must still do the post-processing per ODOT requirements. The scope should identify a specific number or list of locations/intersections to do a micro-simulation level of analysis on, which should include most intersections with state highways – especially those locations which are already projected to fail in the 2035 RTP.
- Encourage use of the NCHRP Multimodal Level of Service (MMLOS) methodology.

Solutions

- Revisit/re-evaluate all previously identified solutions (in the financially constrained and "state" RTP, current local TSP, and elsewhere) and identify solutions for needs that weren't previously identified or that don't have a proposed solution yet.
- Prioritize solutions in the order prescribed in RTFP section 3.08.220, i.e. TSMO (including TDM); transit, bike, ped; traffic calming; land use strategies; arterial and local street connectivity improvements (filling gaps); arterial capacity improvements - first up to the number of lanes prescribed in the design concept (4 through lanes for arterial, 6 through lanes for throughways); and at the very last: capacity improvements beyond what the design concept calls for.
- Generally ODOT will not require or fund a land use strategy as part of a TSP. The reference in the RTFP is to land use strategies in OAR 660-012-0035(2) which essentially refers to 2040 Growth Concept implementation. Title 6 of the Urban Growth Management Functional Plan identifies more specific standards for implementing the 2040 Growth Concept, encouraging compliance through incentives rather than regulation. (For more information on Title 6, see page 20). One of those incentives is allowing a reduction in assumed vehicular trips for purposes of plan amendments subject to the TPR section -0060. The traffic analysis for TSPs is typically based on the Metro demand model, so reduced trip assumptions do not apply. However, if the TSP does not meet OHP mobility standards, ODOT may require consideration of a land use alternative to meet the requirements of OHP Actions IF5 or 1F3.
- Evaluate the packages of solutions for consistency with the RTP and TSP performance targets and measures and with the RTP and TSP functional classifications for all modes and street design classifications. The evaluation includes qualitative and quantitative assessments against all of the performance measures and targets – not just transportation modeling.
- Proposed improvements must be coordinated with the owner of the facility or the service provider.

- The RTP Policy framework is based on completeness of the system as defined by the street design and arterial connectivity concepts – not on meeting certain V/C or LOS standards, based on demand. Alternatives or packages of solutions should be evaluated and modeled incrementally – thus there should be one or more packages of improvements that include everything except for capacity improvements, and one or more packages that include all the previous improvements plus capacity improvements up to the 4/6 lanes in the Arterial and Throughway Design Concept.
- Select preferred package of solutions.

The Transportation System Plan

- The TSP must include a system of planned transportation facilities and services. That includes modes, functions (i.e. type or functional classification for all modes), planned performance or capacity, general location of improvements, and facility parameters such as min. and max. ROW width and the number and size of lanes (i.e. typical cross-sections). The planned system for all modes must be adopted by ordinance.
- Distinguish between the parts of the TSP that are adopted by ordinance as land use decisions ("mode, function, planned performance, general location of improvements, and typical cross-sections") and the elements that are background or supporting information such as inventories, existing and future conditions, alternatives description and evaluation, financing plan, cost estimates, etc.
- It is important that the planned facility of state highways includes not just typical cross-sections but also operational improvements such as signals, turn lanes and medians, so that the local jurisdiction can ask for these to be provided as part of development review or to be included on the SDC project list.
- Adopt the RTP performance measures or develop/refine local measures for safety, VMT per capita, freight reliability, congestion, and non-sov modal targets if not already included. Note - this includes performance measures for congestion (mobility standards). The RTP still includes interim mobility standards (from the Oregon Highway Plan (OHP)), and TSPs need to be consistent with those, or demonstrate they "did the best they can" (under OHP Action 1F5), or request alternative mobility standards (under OHP Action 1F3 and RTFP 3.08.230.B). It will not be known which of these is the best option until a jurisdiction is well into its TSP process. Thus, development of alternative mobility standards may be included as a contingency task.
- Revisit the functional classification for all modes and street design classifications as necessary especially for facilities within Mobility Corridors.
- Prepare findings justifying any capacity improvements, documenting why lower level solutions are not adequate or appropriate. Any planned widening beyond the 6/4 lane Throughway and Arterial Design Concept will require substantial justification.
- Prepare findings demonstrating that the planned system of solutions meets the RTP non-sov modal targets and mobility standards.

Financing Plan

- Revisit the financing plan and any SDC ordinances etc. The financing plan should be sufficient to implement the financial assumptions underlying the "state RTP" (note - this is not a RTFP requirement).
- The Financing Plan must include a constrained and a “preferred” list of improvements. The constrained plan must be consistent with the financially constrained RTP. Jurisdictions may request changes to the Financially Constrained RTP at the time of the next RTP Update.
- The TSP must include investments to provide pedestrian and bicycle connections to all existing transit stops and major transit stops designated in Figure 2.15 of the RTP (RTFP 3.08.120.A).

Parking Management

- Review minimum and maximum parking ratios in Centers and Corridors and revise as necessary.
- Develop and adopt parking policies, management plans and regulations for Centers and Station Communities.

Implementing Regulations

- Develop and adopt regulations/code amendments to implement the street system design and street design elements and the transit, pedestrian, bicycle and parking management elements of the TSP. This should also include any remaining items to implement the TPR section -045 (2) through (7).

Frequently Asked Questions

Will Metro require locals to consider widening major arterials that are not 4 lanes?
No. Metro’s arterial design concepts (RTP Table 2.6) describe a “typical” number of planned lanes for major and minor arterials, but acknowledges that either classification type can be 2 or 4 lanes (with turn lanes) depending on local context.

Checklists for local compliance in TSP, development code and comprehensive plan/other adopted documents

The following checklists are designed to help local jurisdictions comply with the RTFP within their TSP, development code or comprehensive plan/other adopted document. There is a separate checklist for each of the documents that should include RTFP related content.

Regional Transportation Functional Plan Requirement	Local TSP reference?
Include, to the extent practicable, a network of major arterial streets at one-mile spacing and minor arterials or collectors at half-mile spacing, considering: • existing topography; • rail lines; freeways; pre-existing development, leases, easements or covenants; • requirements of Metro's Urban Growth Management Functional Plan Title 3 (Water Quality and Flood plains) and Title 13 (Nature in Neighborhoods), such as streams, rivers, flood plains, wetlands, riparian and upland fish and wildlife habitat areas. • arterial design concepts in chapter 2 of RTP • best practices and designs as set forth in regional state or local plans and best practices for protecting natural resources and natural areas **(Title 1, Street System Design Sec 3.08.110C)**	
Include a conceptual map of new streets for all contiguous areas of vacant and re-developable lots and parcels of five or more acres that are zoned to allow residential or mixed-use development. The map shall identify street connections to adjacent areas and should demonstrate opportunities to extend and connect new streets to existing streets, provide direct public right-of-way routes and limit closed-end street designs consistent with Title 1, Sec 3.08.110E **(Title 1, Street System Design Sec 3.08.110D)**	
Applicable to both Development Code and TSP To the extent feasible, restrict driveway and street access in the vicinity of interchange ramp terminals, consistent with Oregon Highway Plan Access Management Standards, and accommodate local circulation on the local system. Public street connections, consistent with regional street design and spacing standards, shall be encouraged and shall supersede this access restriction. Multimodal street design features including pedestrian crossings and on-street parking shall be allowed where appropriate. **(Title 1,Street System Design Sec 3.08.110G)**	
Include investments, policies, standards and criteria to provide pedestrian and bicycle connections to all existing transit stops and major transit stops designated in Figure 2.15 of the RTP. **(Title 1, Transit System Design Sec 3.08.120A)**	
Include a transit plan consistent with transit functional classifications shown in Figure 2.15 of the RTP that shows the locations of major transit stops, transit centers, high capacity transit stations, regional bike-transit facilities, inter-city bus and rail passenger terminals designated in the RTP, transit-priority treatments such as signals, park-and-ride facilities, and bicycle and pedestrian routes, consistent with sections 3.08.130 and 3.08.140, between essential destinations and transit stops. **(Title 1, Transit System Design Sec 3.08.120B(1))**	
Include a pedestrian plan, for an interconnected network of pedestrian routes within and through the city or county. The plan shall include: • An inventory of existing facilities that identifies gaps and deficiencies in the pedestrian system; • An evaluation of needs for pedestrian access to transit and essential destinations for all mobility levels, including direct, comfortable and safe	

Regional Transportation Functional Plan Requirement	Local TSP reference?
pedestrian routes; • A list of improvements to the pedestrian system that will help the city or county achieve the regional Non-SOV modal targets in Table 3.08-1 of the RTFP, and other targets established pursuant to section 3.08.230; • Provisions for sidewalks along arterials, collectors and most local streets, except that sidewalks are not required along controlled roadways, such as freeways; • Provision for safe crossings of streets and controlled pedestrian crossings on major arterials **(Title 1, Pedestrian System Design Sec 3.08.130A)**	
Include a bicycle plan for an interconnected network of bicycle routes within and through the city or county. The plan shall include: • An inventory of existing facilities that identifies gaps and deficiencies in the bicycle system; • An evaluation of needs for bicycle access to transit and essential destinations, including direct, comfortable and safe bicycle routes and secure bicycle parking, considering *TriMet Bicycle Parking Guidelines*; • A list of improvements to the bicycle system that will help the city or county achieve the regional Non-SOV modal targets in Table 3.08-1 of the RTFP and other targets established pursuant to section 3.08.230; • Provision for bikeways along arterials, collectors and local streets, and bicycling parking in centers, at major transit stops shown in Figure 2.15 in the RTP, park-and-ride lots and associated with institutional uses; • Provision for safe crossing of streets and controlled bicycle crossings on major arterials **(Title 1, Bicycle System Design Sec 3.08.140)**	
Include a freight plan for an interconnected system of freight networks within and through the city or county. The plan shall include: • An inventory of existing facilities that identifies gaps and deficiencies in the freight system; • An evaluation of freight access to freight intermodal facilities, employment and industrial areas and commercial districts; • A list of improvements to the freight system that will help the city or county increase reliability of freight movement, reduce freight delay and achieve targets established pursuant to section 3.08.230. **(Title 1, Freight System Design Sec 3.08.150)**	
Include a transportation system management and operations (TSMO) plan to improve the performance of existing transportation infrastructure within or through the city or county. A TSMO plan shall include: • An inventory and evaluation of existing local and regional TSMO infrastructure, strategies and programs that identifies gaps and opportunities to expand infrastructure, strategies and programs • A list of projects and strategies, consistent with the Regional TSMO Plan, based upon consideration of the following functional areas: o Multimodal traffic management investments o Traveler Information investments o Traffic incident management investments o Transportation demand management investments **(Title 1, Transportation System Management and Operations Sec 3.08.160)**	
Incorporate regional and state transportation needs identified in the 2035 RTP as well as local transportation needs. The determination of local transportation needs based upon: • System gaps and deficiencies identified in the inventories and analysis of transportation system pursuant to Title 1; • Identification of facilities that exceed the Deficiency Thresholds and Operating Standards in Table 3.08-2 or the alternative thresholds and standards established pursuant to section 3.08.230;	

Regional Transportation Functional Plan Requirement	Local TSP reference?
• Consideration and documentation of the needs of youth, seniors, people with disabilities and environmental justice populations within the city of county, including minorities and low-income families. A local determination of transportation needs must be consistent with the following elements of the RTP: • The population and employment forecast and planning period of the RTP, except that a city or county may use an alternative forecast for the city or county, coordinated with Metro, to account for changes to comprehensive plan or land use regulations adopted after adoption of the RTP; • System maps and functional classifications for street design, motor vehicles, transit, bicycles, pedestrians and freight in Chapter 2 of the RTP; • Regional non-SOV modal targets in Table 3.08-1 and the Deficiency Thresholds and Operating Standards in Table 3.08-2. When determining its transportation needs, a city or county shall consider the regional needs identified in the mobility corridor strategies in Chapter 4 of the RTP. **(Title 2, Transportation Needs Sec 3.08.210)**	
Consider the following strategies in the order listed, to meet the transportation needs determined pursuant to section 3.08.210 and performance targets and standards pursuant to section 3.08.230. The city or county shall explain its choice of one or more of the strategies and why other strategies were not chosen: • TSMO, including localized TDM, safety, operational and access management improvements; • Transit, bicycle and pedestrian system improvements; • Traffic-calming designs and devices; • Land use strategies in OAR 660-012-0035(2) • Connectivity improvements to provide parallel arterials, collectors or local streets that include pedestrian and bicycle facilities, consistent with the connectivity standards in section 3.01.110 and design classifications in Table 2.6 of the RTP, • Motor vehicle capacity improvements, consistent with the RTP Arterial and Throughway Design and Network Concepts in Table 2.6 and Section 2.5.2 of the RTP, only upon a demonstration that other strategies in this subsection are not appropriate or cannot adequately address identified transportation needs A city or county shall coordinate its consideration of the above strategies with the owner of the transportation facility affected by the strategy. Facility design is subject to the approval of the facility owner. If analysis under subsection 3.08.210A (Local Needs determination) indicates a new regional or state need that has not been identified in the RTP, the city or county may propose one of the following actions: • Propose a project at the time of Metro review of the TSP to be incorporated into the RTP during the next RTP update; or • Propose an amendment to the RTP for needs and projects if the amendment is necessary prior to the next RTP update. **(Title 2, Sec 3.08.220 Transportation Solutions)**	
Demonstrate that solutions adopted pursuant to section 3.08.220 (Transportation Solutions) will achieve progress toward the targets and standards in Tables 3.08-1, and 3.08-2 and measures in subsection D (local performance measures), or toward alternative targets and standards adopted by the city or county. The city or county shall include the regional targets and standards or its alternatives in its TSP.	

Regional Transportation Functional Plan Requirement	Local TSP reference?
A city or county may adopt alternative targets or standards in place of the regional targets and standards upon a demonstration that the alternative targets or standards: • Are no lower than the modal targets in Table 3.08-1 and no lower than the ratios in Table 3.08-2; • Will not result in a need for motor vehicle capacity improvements that go beyond the planned arterial and throughway network defined in Figure 2.12 of the RTP and that are not recommended in, or are inconsistent with, the RTP; and • Will not increase SOV travel to a degree inconsistent with the non-SOV modal targets in Table 3.08-1. If the city or county adopts mobility standards for state highways different from those in Table 3.08-2, it shall demonstrate that the standards have been approved by the Oregon Transportation Commission. Each city and county shall also include performance measures for safety, vehicle miles traveled per capita, freight reliability, congestion, and walking, bicycling and transit mode shares to evaluate and monitor performance of the TSP. To demonstrate progress toward achievement of performance targets in Tables 3.08-1 and 3.08-2 and to improve performance of state highways within its jurisdiction as much as feasible and avoid their further degradation, the city or county shall adopt the following: • Parking minimum and maximum ratios in Centers and Station Communities consistent with subsection 3.08.410A; • Designs for street, transit, bicycle, freight and pedestrian systems consistent with Title 1: and • TSMO projects and strategies consistent with section 3.08.160; and • Land use actions pursuant to OAR 660-012-0035(2). **(Title 2, Performance Targets and Standards Sec 3.08.230)**	
Specify the general locations and facility parameters, such as minimum and maximum ROW dimensions and the number and width of traffic lanes, of planned regional transportation facilities and improvements identified on general location depicted in the appropriate RTP map. Except as otherwise provided in the TSP, the general location is as follows: • For new facilities, a corridor within 200 feet of the location depicted on the appropriate RTP map; • For interchanges, the general location of the crossing roadways, without specifying the general location of connecting ramps; • For existing facilities planned for improvements, a corridor within 50 feet of the existing right-of-way and • For realignments of existing facilities, a corridor within 200 feet of the segment to be realigned as measured from the existing right-of-way depicted on the appropriate RTP map. A City or county may refine or revise the general location of a planned regional facility as it prepares or revises impacts of the facility or to comply with comprehensive plan or statewide planning goals. If, in developing or amending its TSP, a city or county determines the general location of a planned regional facility or improvement is inconsistent with its comprehensive plan or a statewide goal requirement, it shall: • Propose a revision to the general location of the planned facility or improvement to achieve consistency and, if the revised location lies outside the general location depicted in the appropriate RTP map, seek an amendment to the RTP; or • Propose a revision to its comprehensive plan to authorize the planned facility or improvement at the revised location. **(Title 3, Defining Projects in Transportation System Plan Sec 3.08.310)**	

Regional Transportation Functional Plan Requirement	Local TSP reference?
Could be adopted in TSP or other adopted policy document) Adopt parking policies, management plans and regulations for Centers and Station Communities. Plans may be adopted in TSPs or other adopted policy documents and may focus on sub-areas of Centers. Plans shall include an inventory of parking supply and usage, an evaluation of bicycle parking needs with consideration of *TriMet Bicycle Parking Guidelines*. Policies shall be adopted in the TSP. Policies, plans and regulations must consider and may include the following range of strategies: • By-right exemptions from minimum parking requirements; • Parking districts; • Shared parking; • Structured parking; • Bicycle parking; • Timed parking; • Differentiation between employee parking and parking for customers, visitors and patients; • Real-time parking information; • Priced parking; • Parking enforcement. **(Title 4, Parking Management Sec 3.08.410I)**	
If a city or county proposes a transportation project that is not included in the RTP and will result in a significant increase in SOV capacity or exceeds the planned function or capacity of a facility designated in the RTP, it shall demonstrate consistency with the following in its project analysis: • The strategies set forth in subsection 3.08.220A(1-5) (TSMO, Transit/bike/ped system improvements, traffic calming, land use strategies, connectivity improvements) • Complete street designs consistent with regional street design policies • Green street designs consistent with federal regulations for stream protection. If the city or county decides not to build a project identified in the RTP, it shall identify alternative projects or strategies to address the identified transportation need and inform Metro so that Metro can amend the RTP. This section does not apply to city or county transportation projects that are financed locally and would be undertaken on local facilities. **(Title 5, Amendments of City and County Comprehensive and Transportation System Plans Sec 3.08.510C)**	

Regional Transportation Functional Plan Requirement	Local Development Code Reference?
Allow complete street designs consistent with regional street design policies **(Title 1, Street System Design Sec 3.08.110A(1))**	
Allow green street designs consistent with federal regulations for stream protection **(Title 1, Street System Design Sec 3.08.110A(2))**	
Allow transit-supportive street designs that facilitate existing and planned transit service pursuant 3.08.120B **(Title 1, Street System Design Sec 3.08.110A(3))**	
Allow implementation of: • narrow streets (<28 ft curb to curb); • wide sidewalks (at least five feet of through zone); • landscaped pedestrian buffer strips or paved furnishing zones of at least five feet, that include street trees; • Traffic calming to discourage traffic infiltration and excessive speeds; • short and direct right-of-way routes and shared-use paths to connect residences with commercial services, parks, schools, hospitals, institutions, transit corridors, regional trails and other neighborhood activity centers; • opportunities to extend streets in an incremental fashion, including posted notification on streets to be extended. **(Title 1, Street System Design Sec 3.08.110B)**	
Require new residential or mixed-use development (of five or more acres) that proposes or is required to construct or extend street(s) to provide a site plan (consistent with the conceptual new streets map required by Title 1, Sec 3.08.110D) that: • provides full street connections with spacing of no more than 530 feet between connections except where prevented by barriers • Provides a crossing every 800 to 1,200 feet if streets must cross water features protected pursuant to Title 3 UGMFP (unless habitat quality or the length of the crossing prevents a full street connection) • provides bike and pedestrian accessways in lieu of streets with spacing of no more than 330 feet except where prevented by barriers • limits use of cul-de-sacs and other closed-end street systems to situations where barriers prevent full street connections • includes no closed-end street longer than 220 feet or having no more than 25 dwelling units **(Title 1, Street System Design Sec 3.08.110E)**	
Establish city/county standards for local street connectivity, consistent with Title 1, Sec 3.08.110E, that applies to new residential or mixed-use development (of less than five acres) that proposes or is required to construct or extend street(s). **(Title 1, Street System Design Sec 3.08.110F)**	
<u>Applicable to both Development Code and TSP</u> To the extent feasible, restrict driveway and street access in the vicinity of interchange ramp terminals, consistent with Oregon Highway Plan Access Management Standards, and accommodate local circulation on the local system. Public street connections, consistent with regional street design and spacing standards, shall be encouraged and shall supersede this access restriction. Multimodal street design features including pedestrian crossings and on-street parking shall be allowed where appropriate. **(Title 1,Street System Design Sec 3.08.110G)**	
Include Site design standards for new retail, office, multi-family and institutional buildings located near or at major transit stops shown in Figure 2.15 in the RTP:	

Regional Transportation Functional Plan Requirement	Local Development Code Reference?
• Provide reasonably direct pedestrian connections between transit stops and building entrances and between building entrances and streets adjoining transit stops; • Provide safe, direct and logical pedestrian crossings at all transit stops where practicable At major transit stops, require the following: • Locate buildings within 20 feet of the transit stop, a transit street or an intersection street, or a pedestrian plaza at the stop or a street intersections; • Transit passenger landing pads accessible to disabled persons to transit agency standards; • An easement or dedication for a passenger shelter and an underground utility connection to a major transit stop if requested by the public transit provider; • Lighting to transit agency standards at the major transit stop; • Intersection and mid-block traffic management improvements as needed and practicable to enable marked crossings at major transit stops. **(Title 1, Transit System Design Sec 3.08.120B(2))**	
(Could be in Comprehensive plan or TSP as well) As an alternative to implementing site design standards at major transit stops (section 3.08.120B(2), a city or county may establish pedestrian districts with the following elements: • A connected street and pedestrian network for the district; • An inventory of existing facilities, gaps and deficiencies in the network of pedestrian routes; • Interconnection of pedestrian, transit and bicycle systems; • Parking management strategies; • Access management strategies; • Sidewalk and accessway location and width; • Landscaped or paved pedestrian buffer strip location and width; • Street tree location and spacing; • Pedestrian street crossing and intersection design; • Street lighting and furniture for pedestrians; • A mix of types and densities of land uses that will support a high level of pedestrian activity. **(Title 1, Pedestrian System Design Sec 3.08.130B)**	
Require new development to provide on-site streets and accessways that offer reasonably direct routes for pedestrian travel. **(Title 1, Pedestrian System Design Sec 3.08.130C)**	
Establish parking ratios, consistent with the following: • No minimum ratios higher than those shown on Table 3.08-3. • Mo maximum ratios higher than those shown on Table 3.08-3 and illustrated in the Parking Maximum Map. If 20-minute peak hour transit service has become available to an area within a one-quarter mile walking distance from bus transit one-half mile walking distance from a high capacity transit station, that area shall be removed from Zone A. Cities and counties should designate Zone A parking ratios in areas with good pedestrian access to commercial or employment areas (within one-third mile walk) from adjacent residential areas.	

Regional Transportation Functional Plan Requirement	Local Development Code Reference?
Establish a process for variances from minimum and maximum parking ratios that include criteria for a variance. Require that free surface parking be consistent with the regional parking maximums for Zones A and B in Table 3.08-3. Following an adopted exemption process and criteria, cities and counties may exempt parking structures; fleet parking; vehicle parking for sale, lease, or rent; employee car pool parking; dedicated valet parking; user-paid parking; market rate parking; and other high-efficiency parking management alternatives from maximum parking standards. Reductions associated with redevelopment may be done in phases. Where mixed-use development is proposed, cities and counties shall provide for blended parking rates. Cities and counties may count adjacent on-street parking spaces, nearby public parking and shared parking toward required parking minimum standards. Use categories or standards other than those in Table 3.08-3 upon demonstration that the effect will be substantially the same as the application of the ratios in the table. Provide for the designation of residential parking districts in local comprehensive plans or implementing ordinances. Require that parking lots more than three acres in size provide street-like features along major driveways, including curbs, sidewalks and street trees or planting strips. Major driveways in new residential and mixed-use areas shall meet the connectivity standards for full street connections in section 3.08.110, and should line up with surrounding streets except where prevented by topography, rail lines, freeways, pre-existing development or leases, easements or covenants that existed prior to May 1, 1995, or the requirements of Titles 3 and 13 of the UGMFP. Require on-street freight loading and unloading areas at appropriate locations in centers. Establish short-term and long-term bicycle parking minimums for: • New multi-family residential developments of four units or more; • New retail, office and institutional developments; • Transit centers, high capacity transit stations, inter-city bus and rail passenger terminals; and • Bicycle facilities at transit stops and park-and-ride lots. **(Title 4, Parking Management Sec 3.08.410)**	

Regional Transportation Functional Plan Requirement	Local Comprehensive Plan/other Adopted Plan Reference?
(Could be located in Development code or Comprehensive Plan) As an alternative to implementing site design standards at major transit stops (section 3.08.120B(2), a city or county may establish pedestrian districts with the following elements: • A connected street and pedestrian network for the district; • An inventory of existing facilities, gaps and deficiencies in the network of pedestrian routes; • Interconnection of pedestrian, transit and bicycle systems; • Parking management strategies; • Access management strategies; • Sidewalk and accessway location and width; • Landscaped or paved pedestrian buffer strip location and width; • Street tree location and spacing; • Pedestrian street crossing and intersection design; • Street lighting and furniture for pedestrians; • A mix of types and densities of land uses that will support a high level of pedestrian activity. **(Title 1, Pedestrian System Design Sec 3.08.130B)**	
When proposing an amendment to the comprehensive plan or to a zoning designation, consider the strategies in subsection 3.08.220A as part of the analysis required by OAR 660-012-0060. If a city or county adopts the actions set forth in 3.08.230E (parking ratios, designs for street, transit, bicycle, pedestrian, freight systems, TSMO projects and strategies, and land use actions) and section 3.07.630.B of Title 6 of the UGMFP, it shall be eligible for an automatic reduction of 30 percent below the vehicular trip generation rates recommended by the Institute of Transportation Engineers when analyzing the traffic impacts, pursuant to OAR 660-012-0060, of a plan amendment in a Center, Main Street, Corridor or Station Community. **(Title 5, Amendments of City and County Comprehensive and Transportation System Plans Sec 3.08.510A,B)**	
(Could be located in TSP or other adopted policy document) Adopt parking policies, management plans and regulations for Centers and Station Communities. Plans may be adopted in TSPs or other adopted policy documents and may focus on sub-areas of Centers. Plans shall include an inventory of parking supply and usage, an evaluation of bicycle parking needs with consideration of *TriMet Bicycle Parking Guidelines*. Policies shall be adopted in the TSP. Policies, plans and regulations must consider and may include the following range of strategies: • By-right exemptions from minimum parking requirements; • Parking districts; • Shared parking; • Structured parking; • Bicycle parking;	

Regional Transportation Functional Plan Requirement	Local Comprehensive Plan/other Adopted Plan Reference?
• Timed parking; • Differentiation between employee parking and parking for customers, visitors and patients; • Real-time parking information; • Priced parking; • Parking enforcement. **(Title 4, Parking Management Sec 3.08.410I)**	

TITLE 6 OF THE URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN

Title 6 (Metro Code Sections 3.07.610 – 3.07.650) – Centers, Corridors, Station Communities and Main Streets

The Regional Framework Plan identifies Centers, Corridors, Station Communities and Main Streets throughout the region and recognizes them as the principal centers of urban life in the region. Title 6 calls for actions and investments by cities and counties, complemented by regional investments, to spur development in these areas.

As part of the Urban Growth Capacity Ordinance 10-1244B adopted by Metro in December 2010, many changes were made to the Regional Framework Plan and the Urban Growth Management Functional Plan (UGMFP), including Title 6.

Previously, Title 6 covered only Centers and Station Communities and required local governments to develop a strategy to enhance all centers by December 2007. The previous version also required jurisdictions to submit progress reports to Metro every two years. This approach was not effective in encouraging center development and did not address other important 2040 design types. The new version adds corridors and main streets because of their potential for redevelopment and infill; aligns local and regional investment to support local aspirations; and better links land use and transportation to support mixed-use, pedestrian-friendly, and transit-supportive development.

The new version of Title 6 moves away from reporting requirements to an incentive-based approach. Available incentives are:

- Eligibility for a regional investment, currently defined as new high capacity transit lines only. In the future, the Metro Council, in consultation with the Metro Policy Advisory Committee (MPAC) and the Joint Policy Advisory Committee on Transportation (JPACT) could add other major investments to this definition.
- Ability to use a higher volume-to-capacity standard under the Oregon Highway Plan when considering amendments to comprehensive plans or land use regulations, and
- Eligibility for an automatic 30 percent trip reduction credit under the Transportation Planning Rule when analyzing traffic impacts of new development in plan amendments for a center, corridor, station community, or main street

In order to be eligible for a regional investment in a Center, Corridor, Station Community or Main Street, cities and counties must:

- Formally adopt a boundary for the area;
- Perform an assessment of current conditions, opportunities and barriers to development in the area; and
- Adopt a plan of actions and investments to address barriers and focus public investments in the area.

To be eligible for the lower mobility standards, a city or county must:

- Formally adopt a boundary for the area; and
- Adopt land use regulations to allow a mix of uses

To be eligible for the automatic 30 percent trip reduction credit, a city or county must:

- Formally adopt a boundary for the area;
- Adopt land use regulations to allow a mix of uses; and
- Adopt a plan to achieve the non-Single Occupancy Vehicle mode share targets in the Regional Transportation Functional Plan including 1) transportation system designs for streets, transit, bicycles, and pedestrians; 2) a transportation system or demand management plan; and 3) a parking management program for the Center, Corridor, Station Community or Main Street.

The chart that follows summarizes the required steps. Metro will review materials submitted by local jurisdictions to ensure compliance with the purpose and requirements of Title 6 and upon approval will issue written confirmation of compliance.

Urban Growth Management Functional Plan, Title 6 Requirement	Eligibility for	Reference and/or Action Taken
1. Establish a boundary for the designation or portion thereof (3.07.620A) *Provide proof of boundary adoption, via plan or stand alone action by the legislative body of the local jurisdiction. Local jurisdiction must provide Metro the ordinance/resolution and the applicable sections of the plan.*	Regional investment Lower mobility standards 30% trip reduction credit	
2. Analyze physical and market conditions in the area (3.07.620C)	Regional investment	
3. Analyze physical and regulatory barriers to mixed-use, pedestrian-friendly and transit-supportive development in the area (3.07.620C)	Regional investment	
4. Analyze the city or county development code that applies to the area to determine how the code might be revised to encourage mixed-use, pedestrian-friendly and transit-supportive development (3.07.620C)	Regional investment	
5. Examine existing and potential incentives to encourage mixed-use pedestrian-friendly and transit supportive development in the area (3.07.620C)	Regional investment	
6. For Corridors and Station Communities in areas shown as Industrial Area or Regionally Significant Industrial Area under Title 4, analyze barriers to a mix and intensity of uses sufficient to support public transportation at the level prescribed in the RTP. (3.07.620C)	Regional investment	

Urban Growth Management Functional Plan, Title 6 Requirement	Eligibility for	Reference and/or Action Taken
7. Describe actions to eliminate, overcome or reduce regulatory and other barriers to mixed-use, pedestrian-friendly and transit-supportive development (3.07.620D)	Regional investment	
8. Revisions to the comprehensive plan and land use regulations, if necessary, to allow: a. In Regional Centers, Town Centers, Station Communities and Main Streets, the mix and intensity of uses specified in section 3.07.640; and b. In Corridors and those Station Communities in areas shown as Industrial Area or Regionally Significant Industrial Area in Title 4 of this chapter, a mix and intensity of uses sufficient to support public transportation at the level prescribed in the RTP (3.07.620D)	Regional investment Lower mobility standards 30% trip reduction credit	
9. Describe public investments and incentives to support mixed-use pedestrian-friendly and transit supportive development (3.07.620D)	Regional investment	
10. A plan to achieve the non-SOV mode share targets, adopted by the city or county pursuant to subsections 3.08.230A and B of the Regional Transportation Functional Plan (RTFP), that includes: a. The transportation system designs for streets, transit, bicycles and pedestrians consistent with Title 1 of the RTFP; b. A transportation system or demand management plan consistent with section 3.08.160 of the RTFP; and c. A parking management program for the Center, Corridor, Station Community or Main Street, or portion thereof, consistent with section 3.08.410 of the RTFP. (3.07.620D)	Regional investment 30% trip reduction credit	

OTHER TITLES OF THE URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN

As previously mentioned, Metro Ordinance 10-1244B, adopted in December 2010, changed several sections of the Urban Growth Management Functional Plan (Metro Code Chapter 3.07). General implementation guidelines are included below that apply to all functional plan requirements. Guidelines for implementing specific titles follow below.

General

- Local jurisdictions have two years after acknowledgement by the Oregon Land Conservation and Development Commission to change comprehensive plans or land use regulations to come into compliance with the Metro Code changes. After LCDC acknowledgement, Metro staff will notify local jurisdictions when they must come into compliance.
- Local governments that amend their comprehensive plans or land use regulations are required to make such amendments in compliance with the new Metro Code requirement.
- Local governments whose comprehensive plans and land use regulations do not comply with the new Metro Code requirement are required, after one year following acknowledgement, to make land use decisions consistent with the Metro Code requirement. Metro staff will notify local jurisdictions the date that Metro Code requirements become applicable to land use decisions at least 120 days before that date.

Title 1 Housing Capacity (3.07.110-120)

Purpose: To achieve regional policy that calls for a compact urban form by each city and county maintaining or increasing its housing capacity.

- A local government must submit any proposed amendment to a comprehensive plan or land use regulation that may reduce or increase a jurisdiction's housing capacity to Metro's Chief Operating Officer (COO) at least 45 days before the first evidentiary hearing. In submitting the amendment, the local government should explain the proposal and demonstrate how the amendment complies with the functional plan.
- Each city and county is required to adopt a minimum dwelling unit density for each zone in which dwelling units are authorized except for zones that authorize mixed-use. If a city or county has not adopted a minimum density for such a zone before March 16, 2011, the city or county is required to adopt a minimum density that is at least 80 percent of the maximum density.
- A local government must increase housing capacity elsewhere prior to reducing housing capacity in another area.
- If a local government has not amended its comprehensive plan or land use regulations to conform to Title 1 (within one year after LCDC acknowledgement), the local government is required to apply Metro Code sections 3.07.120 C, D, E and F to any land use decisions.
- A local government may reduce the minimum zoned capacity of a single lot or parcel as long as the reduction has a negligible effect on the local government's overall minimum zoned residential capacity.

Title 2 Regional Parking Policy
Purpose: To encourage more efficient use of land, promote non-auto trips, and protect air quality

NOTE: Although Title 2 of the Urban Growth Management Functional Plan was repealed in 2010 by Ordinance 10-1244B, it was added to the Regional Transportation Functional Plan (RTFP) as Title 4 (Metro Code Chapter 3.08.410) in the same ordinance. The requirements remain the same.

Title 4 Industrial and Other Employment Areas (3.07.410-450)

Purpose: To protect industrial and employment sites by limiting non-industrial uses in designated Regionally Significant Industrial Areas, Industrial Areas, and Employment Areas.

- Changes made to Title 4 in 2010 affect only those local governments that have a designated Regionally Significant Industrial Area (RSIA) on the Title 4 map.
- Within two years of LCDC acknowledgement, those local governments with a designated RSIA are required to review and if necessary revise their land use regulations to prohibit the siting of schools, places of assembly larger than 20,000 square feet, or parks intended to serve people other than those working in the RSIA. The local government is required to submit the proposed land use regulation revision to the COO at least 45 days before the first evidentiary hearing.
- Other requirements remain

Title 6 Centers, Corridors, Station Communities and Main Streets (3.07.610-650)

Purpose: To enhance centers, corridors, station communities and main streets as the principal centers of urban life, local governments are called on to take actions and make investments complemented by regional investments

See pages 20-23 for Title 6 guidelines

Title 11 Planning for New Urban Areas (3.07.1110-1140)

Purpose: To ensure that areas brought into the Urban Growth Boundary are urbanized efficiently and contribute to mixed-use, pedestrian-friendly, and transit-supportive communities

- Concept planning for urban reserves must now be completed before an area is added to the urban growth boundary
- A concept plan is developed by the county and any city likely to provide governance or an urban service for the area in conjunction with Metro and appropriate service districts.
- Until comprehensive plan provisions and land use regulations are adopted by the appropriate local government, interim protection measures are required.
- Title 11 becomes applicable on December 31, 2011
- For more detailed information on concept planning, contact Metro Planning staff.

Appendix A:
COMPLIANCE DATES FOR THE URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN

Functional Plan Requirement	When Local Decisions Must Comply		
	Plan/Code Amendment 3.07.810(C)[1]	**Land Use Decision** 3.07.810(D)[2]	**Adoption** 3.07.810(B)[3]
Title 1: Adopt minimum dwelling unit density (3.07.120.B)	12/16/2010		2 years after acknowledgement by LCDC
Title 1: Allow accessory dwelling unit in SFD zones (3.07.120.G) *(provision included in previous version of Metro Code as 3.07.140.C)*	12/8/2000		12/8/2002
Title 3: Adopt model ordinance or equivalent and map or equivalent (3.07.330.A)	12/8/2000		12/08/2002
Title 3: Floodplain management performance standards (3.007.340.A)	12/8/2000	12/08/2001	12/08/2002
Title 3: Water quality performance standards (3.07.340.B)	12/08/2000	12/08/2001	12/08/2002
Title 3: Erosion control performance standards (3.07.340.C)	12/08/2000	12/08/2001	12/08/2002

[1] A city or county that amends its plan to deal with the subject of a Functional Plan requirement any time after the effective date of the requirement (the date noted) must ensure that the amendment complies with the Functional Plan

[2] A city or county that has not yet amended its plan to comply with a Functional Plan requirement must, following one year after acknowledgement of the requirement (the date noted), apply the requirement directly to land use decisions

[3] Cities and counties must amend their plans to comply with a new Functional Plan requirement within two years after acknowledgement of the requirement (the date noted)

Functional Plan Requirement	When Local Decisions Must Comply		
	Plan/Code Amendment 3.07.810(C)[1]	**Land Use Decision** 3.07.810(D)[2]	**Adoption** 3.07.810(B)[3]
Title 4: Limit uses in Regionally Significant Industrial Areas (3.07.420)	7/22/2005	7/22/2006	7/22/2007
Title 4: Prohibit schools, places of assembly larger than 20,000 square feet, or parks intended to serve people other than those working or residing in the area in Regionally Significant Industrial Areas (3.07.420D)	12/16/2010	1 year after acknowledgement by LCDC	2 years after acknowledgement by LCDC
Title 4: Limit uses in Industrial Areas (3.07.430)	7/22/2005	7/22/2006	7/22/2007
Title 4: Limit uses in Employment Areas (3.07.440)	7/22/2005	7/22/2006	7/22/2007
Title 6: (Title 6 applies only to those local governments seeking a regional investment or seeking eligibility for lower mobility standards and trip generation rates)			
Title 7: Adopt strategies and measures to increase housing opportunities (3.07.730)			6/30/04
Title 8: Compliance Procedures (45 day notice to Metro for amendments to a comprehensive plan or land use regulation) (3.07.820)	2/14/03		
Title 11: Develop a concept plan for urban reserve prior to its addition to the UGB (3.07.1110)			2 years after acknowledgement by LCDC

Functional Plan Requirement	When Local Decisions Must Comply		
	Plan/Code Amendment 3.07.810(C)[1]	**Land Use Decision** 3.07.810(D)[2]	**Adoption** 3.07.810(B)[3]
Title 11: Prepare a comprehensive plan and zoning provisions for territory added to the UGB (3.07.1120)	12/08/2000	12/08/2001	2 years after the effective date of the ordinance adding land to the UGB unless the ordinance provides a later date
Title 11: Interim protection of areas added to the UGB (3.07.1130) *(provision included in previous version of Metro Code as 3.07.1110)*	12/8/2000	12/08/2001	12/08/2002
Title 12: Provide access to parks by walking, bicycling, and transit (3.07.1240B)			7/7/2005
Title 13: Adopt local maps of Habitat Conservation Areas consistent with Metro-identified HCAs (3.07.1330.B)	12/28/2005	1/5/2008	1/5/2009
Title 13: Develop a two-step review process (Clear & Objective and Discretionary) for development proposals in protected HCAs (3.07.1330.C & D)	12/28/2005	1/5/2008	1/5/2009
Title 13: Adopt provisions to remove barriers to, and encourage the use of, habitat-friendly development practices (3.07.1330.E)	12/28/2005	1/5/2008	1/5/2009

How to use this book

Urban amenities

What makes a center livable? The coffee, grocery, hardware, flower and specialty shops that serve residents and the theaters, restaurants and pubs that keep visitors coming. Urban amenities are retail outlets or services that support urban lifestyles and preferences. These private investments increase the livability and market value of an area. As shown by the activity spectrum, as the number of people (residents plus employees) increases, so does the number of amenities. Examples of urban amenities include brewpubs, bookstores and coffee shops, among others. Public investments help leverage the private investment needed to bring more amenities to an area. Public amenities include schools, libraries, community centers, fire stations and civic buildings.

Hollywood Town Center

Private amenities

0	Bakery
3	Bar
0	Bike shop
1	Bookstore
0	Brewpub
1	Child care
1	Cinema
3	Clothing store
3	Coffee shop
0	Department store
3	Dry cleaners
2	Fitness gym
6	Grocery store
0	Music store
22	Restaurant
1	Specialty snacks & beverages

Public amenities

0	Community center
0	Fire station
0	Government building
1	Library
1	School

The Hollywood town center surrounds the intersection of Sandy Boulevard and Northeast Halsey Avenue. The area is high in employment concentrations and housing relative to its size. The center serves the local population with retail services, but also draws from the region due to the development of a concentration of specialty retail. The center has direct access to Interstate 84, is serviced by one MAX stop, and has multiple bus lines that include frequent service routes. The center has 1,100 residents, 3,030 employees and 829 dwelling units. Hollywood town center contains 105 gross acres.

By the numbers	Hollywood town center	Town center average	One-mile buffer
Net acreage	69	222	2,201
Total population	1,100	2,326	34,234
Total employees	3,031	1,745	16,155
Non-SOV mode share (all trips)	53%	52%	n/a
Market value per square foot	$145	$39	$75
People per acre	60.3	20.1	22.9
Dwelling units per acre	12.1	5.0	8.1
Total businesses per acre	2.70	0.73	0.43
Home ownership	35.9%	47.4%	58.2%
Median household income	$38,215	$60,133	$63,569
Median household size	1.35	2.42	2.21
Median age	48.3	36.0	41

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2011 State of the Centers | Town Centers

Employment breakdown

2010 Household income

Metro context tool results

Heat maps

Composite score: 66.77

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2011 State of the Centers | Town Centers

By the numbers

A successful, vibrant center needs a critical mass of people, both residents and workers, to sustain local business and to provide for efficient transit and other services. By comparing a center's population, use of transportation mode, home ownership, businesses per acre, market value per square foot and other socio-economic indicators to unweighted town or regional center averages, a picture emerges of the vibrancy, economic strength and diversity of the center. The same measures for one mile out, or a 20 minute walk, from the center's boundary indicate who benefits from investments made in the centers.

Employment breakdown

Employment within the center is broken down into three general categories: retail, service and other. "Other" includes office, industrial and manufacturing jobs. These data can help indicate if the job mix aligns with local aspirations and can inform future economic development activities.

2010 household income

Household income levels within the center and within the one-mile buffer provide a look at who is influenced by a specific center and the segments of the market that local jurisdictions should consider when planning for their centers.

Center map

Centers vary greatly in size, form and transportation access. Proximity to interstates, street networks, light rail and bus lines provide a snapshot of access to, from and within the center by automobile and transit. Bus stops and light rail stops indicate options for travel within the center. Building footprints display the relative location and size of the built environment. Viewed together, they give an indication of the level of development within a center boundary.

Metro context tool results

Heat maps

How do measure the character of a center? The Metro context tool helps visualize character by producing heat maps that illustrate the accessibility of sidewalk, bike routes, block size, transit service and park access relative to the region as a whole. Sidewalks, the quality of the bike routes, frequent transit services and smaller block sizes score higher. The heat maps also illustrate relative density of business and people per acre. They provide an at-a-glance indication of the level of services available, the intensity of development and the relative strengths within the center. For each measure, the heat map displays the relative concentration – from low to high – represented by cool to warm colors. The measures reflect data in a 264 foot grid level, representing a one minute walk distance.

Composite score

How does the center measure up? In addition to showing a visual representation of the data, the context tool results produce a composite score for each center. A score of 1 to 5 is based on the average score for each measure within a 264-foot grid. The composite score is the sum of each of the scores for the seven measures, unweighted, and normalizes to a 100-point scale. The result is an at-a-glance score card that shows the relative strengths of the center on average.

METRO-AREA TRANSPORTATION SYSTEM PLAN

STATEMENT OF WORK TEMPLATE

Definitions

Agency/ODOT	Oregon Department of Transportation
City	City of
City PM	City Project Manager
DLCD	Department of Land Conservation and Development
OAR	Oregon Administrative Rule
PC	Planning Commission
PMT	Project Management Team
RTFP	Regional Transportation Functional Plan
RTP	2035 Regional Transportation Plan
SAC	Stakeholder Advisory Committee
SOV	Single Occupancy Vehicle
TAC	Technical Advisory Committee
TDM	Transportation Demand Management
TPR	Transportation Planning Rule
TSMO	Transportation System Management and Operations
TSP	Transportation System Plan
V/C	Volume-to-Capacity
WOCPM	Work Order Contract Project Manager

Project Purpose/Transportation Relationship and Benefits

The current City of ___ Transportation System Plan (TSP) was adopted in _____. This Project will update the current TSP to reflect physical and regulatory changes that have occurred in the City, Region, and State since _____, and to provide a 20-year horizon for transportation planning. Updated TSP will implement and be consistent with the State Transportation Planning Rule (TPR), the Metro 2035 Regional Transportation Plan (RTP), and the Regional Transportation Functional Plan (RTFP). The Project will update all elements of the TSP and add new elements. The Project will also identify potential amendments to the RTP, the City Development Code, and possibly other implementing documents.

Project Area

The Project Area encompasses the _____City limits and adjacent land within the Metro urban growth boundary and within the City's Urban Services Boundary.

Background

Changes in City since TSP was adopted

Changes in Regional Policy and Planning Framework . The new Metro 2035 RTP provides updated regional policies and performance measures, as well as new requirements of local TSPs. New RTP elements include the High Capacity Transit Plan and Systems Expansion Policy, Regional Mobility Corridors, the Active Transportation Partnership, Freight Mobility Plan, and the Regional Transportation System Management and Operations (TSMO) Plan. This update to the TSP Update will evaluate local applicability of these plans and will ensure consistency of the City transportation system with the regional direction.

Project Objectives

Examples:
A balanced and connected multimodal transportation system**.**
Increased convenience, safety, and availability of transit, bicycle, and pedestrian modes.
Consideration of alternative solutions before major capacity improvements.
Reduced greenhouse gas emissions through reduced vehicle miles travelled (VMT)
Compliance with State Policies, Plans, Standards, and Requirements
Preservation of the function and capacity of state facilities.
Consistency with the Metro RTP and Regional Transportation Functional Plan (RTFP).

Expectations about Written and Graphic Deliverables

[Language regarding Expectations about Deliverables, Traffic Analysis, Public Involvement, and Project Management is optional, intended as an example, and not required to meet TPR or RTFP requirements]

The Updated TSP must be written concisely and use a simple and direct style, both to minimize the length of the final document and to make the document understandable to as large an audience as is reasonable. Where possible, information must be presented in tabular and/or graphic format, with a simple and concise accompanying narrative (e.g. system inventories, traffic conditions).

Unless otherwise specified:

Deliverables: Consultant shall prepare project deliverables, and circulate them to agency staff and committee members for review and comment. Consultant shall provide a draft of all written deliverables to the City Project Manager (City PM) and Work Order Contract Project Manager (WOCPM) in electronic format at least two weeks prior to broader distribution. City and WOCPM shall review the deliverables and submit comments to Consultant within one week. Conflicting comments must be resolved by the Project Management Team (PMT). Consultant shall incorporate City PM and WOCPM comments into amended deliverables for broader distribution, e.g. the public, Technical Advisory Committee (TAC) or Stakeholder Advisory Committee (SAC) or distribution on project web site.

Consultant shall revise all deliverables in accordance with the comments received from the City PM, WOCPM, meeting participants and public following TAC, SAC, Community Meetings, Planning Commission and City Council meetings, and provide the revised deliverables to the City and WOCPM within one week or other agreed upon amount of time.

Electronic versions must be in Microsoft Word format or an editable format agreed upon by City and WOCPM. All Tech Memos must be written in a format similar to the 2001 TSP and suitable for inclusion in the Updated TSP.

Consultant shall prepare and provide *maps and graphic deliverables* in PDF format to replicate Consultant products and ESRI format (AutoCad 2007 or newer for engineered graphics and Geographic Information System format for maps) to City and WOCPM. The City and WOCPM shall approve alternative map delivery formats in advance. Maps and graphics must include details necessary to ensure usability. Maps must include, at a minimum: a scale; a north direction indicator; a color scheme that ensures readability in black and white; a legend; source; and date for the underlying information. All graphics must be provided to City and WOCPM in electronic format.

The Consultant shall be responsible for the following deliverables, as indicated in each of the tasks:

- Handout materials for meetings unless otherwise noted.
- Project material for posting on City website during the entire Project. Consultant material for the City website includes, at a minimum: draft and revised Tech Memos; all Geographic Information System products and graphics developed for Project; and meeting information (times, locations, agendas, summaries, and meeting materials).
- Presentation graphics for use at committee meetings and Community Meetings to convey key information. Size and content of graphics must be suitable for large-group presentations. Preparation of electronic versions of presentation materials is encouraged.
- Facilitation of all meetings and leading the discussion of technical issues and analyses.
- Progress reports with each invoice, to be submitted to the City PM and WOCPM. The Progress Reports must document the work accomplished that month and any outstanding or potential Project issues. One copy of each Deliverable must be submitted with the invoice in which payment for the Deliverable is requested.

Expectations about Traffic Analysis

All data and calculations must be submitted to ODOT Region 1 Traffic and City for review and record-keeping. Electronic file copies of analysis data are required. These written and electronic products must be in ODOT and City compatible formats.

All traffic analysis work must comply with the following requirements:

- An Oregon-registered professional engineer must perform or oversee all traffic analysis work.

- The Updated TSP must be developed consistent with the 2008 ODOT Transportation System Planning Guidelines.
- Traffic count data is required for Study Area intersections as determined necessary by the City. Consultant shall compile traffic count data from City, County and State sources for plan intersections as available. ODOT will conduct traffic counts for all other plan intersections. Intersection counts must include mid-week weekday 2-hour P.M. Peak (4-6 P.M.) manual classification turning movement counts, including truck, bicycle and pedestrian data. Count collection must be avoided in the following months: December, January and February.
- All traffic volumes must be adjusted to reflect the 30th highest hour.
- Intersection performance shall be determined using the latest Highway Capacity Manual published by the Transportation Research Board. All traffic analysis software programs used must follow Highway Capacity Manual procedures. For all signalized intersections, use Synchro/SimTraffic or similar package to perform the traffic analysis. The City Engineer may approve a different intersection analysis method prior to use for City intersections.
- Traffic analysis must be consistent with ODOT's Transportation Planning Analysis Unit's analysis procedures, available on the Internet at: http://www.oregon.gov/ODOT/TD/TP/TAPM.shtml
- Operational standards for state facilities must be volume to capacity (v/c). Standards for non-state facilities can be v/c, level-of-service, or a combination of v/c and level-of-service, depending on the applicable City, County, and Metro standards.
- The v/c ratio for each lane group for each movement must be identified and considered in the determination of intersection performance. Signal progression must also be considered using Synchro/SimTraffic analysis procedures as described in the ODOT Analysis Procedures Manual.
- The existing conditions analysis must include a safety analysis and an evaluation of existing driveway and intersection spacing on state highways.
- Future build network assumptions (alternatives) must be consistent with applicable City, County and ODOT design standards. Alternative improvements may be proposed subject to the approval of the facility's jurisdiction.
- Where queuing analysis of existing and future conditions is required per Task descriptions, analysis shall be performed using Synchro/SimTraffic methodologies and must assess the 50th and 95th percentile queue lengths for all intersection approaches.
- Modeling must be done using the Metro regional transportation model (EMME2 or VISUM) to identify transportation road network deficiencies.
- The planning horizon year shall be 2035 to provide consistency with the RTP and other local and regional planning efforts.
- Model volumes must be post-processed following National Cooperative Highway Research Program Report 255 guidelines.

Expectations about Planning for Transit

Transit plans and proposals shall be developed collaboratively with TriMet and/or other applicable transit providers before they are incorporated into plans. Recognizing the need for a realistic and informative final product, the TSP will not call for fixed-route bus service that

cannot be provided cost-effectively. The City will strive to include in the TSP physical improvements and any needed changes in policy, design standards, or design practices needed to maximize safe, comfortable, and attractive pedestrian access to transit stops.

Expectations about Public Involvement

Public involvement must comply with Statewide Planning Goal 1 (Citizen Involvement), which calls for "the opportunity for citizens to be involved in all phases of the planning process." The City shall be responsible for the Citizen Involvement component with some Consultant involvement. Specific information regarding the deliverable and responsibility of Citizen Involvement is listed under the appropriate task. The major way Citizen Involvement will occur is through notices to all property owners within the urban growth boundary, three Community Meetings, TAC meetings, SAC meetings, web site updates, and adoption through a legislative process by the Planning and City Councils.

In carrying out the Citizen Involvement, the City and Consultant shall ensure meetings include outreach to and opportunity for representatives of the following interests to be heard: freight, business, residents-at-large, property development, active transportation, public health, affordable housing, and environmental justice.

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment means that no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

Meaningful involvement means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all participants involved will be considered in the decision making process; and (4) the decision makers seek out and facilitate the involvement of those potentially affected.

The City shall consider Title VI regarding outreach to minorities, women, and low-income populations. Special efforts shall be directed to ensuring outreach to and representation of minorities, women, and low income populations.

Expectations about Project Management Team and Advisory Committee Roles and Meetings

Project Management Team Meetings

The PMT shall consist of the City PM, Consultant Project Manager and WOCPM. The purpose of the PMT is to ensure completion of tasks and deliverables in accordance with the Project Scope, Schedule and Budget, and to provide strategic policy and technical input. The PMT shall

review and comment on draft deliverables prior to distribution to the TAC, SAC, Planning Commission (PC), City Council, and the public. PMT shall meet at least monthly, either in person or by conference call. Meetings may take place on a regular schedule or as needed. Any PMT member may request a meeting, up to the number of meetings specified in the statement of work. Consultant shall facilitate meetings, provide a draft agenda at least two business days prior to meeting, and provide a PMT meeting summary with decisions and action items no later than one week following the meeting.

Stakeholder Advisory Committee

The SAC shall serve as the voice of the community and the caretakers of the goals and objectives of the Updated TSP. SAC will assist with the development of goals and objectives that support the City's mission and vision by developing evaluation criteria and performance measures used to evaluate and select the preferred programs and projects and reviewing technical memoranda and the draft Updated TSP. The City shall develop SAC roster and confirm membership within four weeks of Notice to Proceed. City shall ensure outreach to freight organizations, businesses, residents, property developers, the active transportation community, public health officials, affordable housing groups, and environmental justice communities.

Technical Advisory Committee

The TAC will provide technical guidance and coordination throughout the Project. The TAC will actively work to address and resolve technical and jurisdictional issues in order to produce a timely and complete Updated TSP. The TAC will consist of representatives of partnering agencies that have jurisdiction of facilities in City; provide transportation services to the community; share common political boundaries; and/or serve in an advisory role. TAC shall be assembled by the City and is strongly advised to include staff from County, Metro, ODOT, Department of Land Conservation and Development (DLCD), TriMet and a business representative involved in some aspect of freight delivery.

Meeting Logistics

The City shall schedule meetings, arrange meeting rooms, provide meeting notices, and be responsible for other meeting logistics. Consultant shall distribute draft notices, agendas, and relevant materials at least two weeks prior to each meeting for review by the City and WOCPM. The City and WOCPM shall review all relevant materials and agendas and return corrections to the Consultant at least one week prior to the meeting. Consultant shall distribute revised materials at least three days prior to meeting. The Consultant shall facilitate the SAC and TAC meetings, present materials and answer questions, with a minimum of 2 consultant team members present. Within a week after each meeting, the Consultant shall prepare and distribute meeting summaries and incorporate recommendations into the final deliverables.

PROJECT WORKSCOPE

Task 1: Establish Committees and Start Project

Objective

To provide the foundational project management, technical review, interagency coordination, and public involvement tools necessary for successful development of the Project.

Subtasks

1.1 **Committee Rosters** - City shall appoint and notify SAC and TAC members. City shall develop Committee Roster and confirm membership within four weeks of Notice to Proceed.

1.2 **PMT Kick-off Meeting** - Within two weeks of Notice to Proceed, City shall arrange a kick-off meeting with the PMT. The PMT shall attend the kick-off meeting to provide an introduction to the Project, review the statement of work, identify each agency's role in the process, provide contact information, determine study intersections (relating to Subtask 3.2.C), discuss the schedule, and set a standard date for PMT Meetings.

The Consultant shall provide a draft and final meeting guidelines for the SAC for PMT discussion at the PMT Kick-off Meeting. The City shall provide a list of public involvement opportunities occurring during the Project schedule and recommend which opportunities the City should provide Project related outreach. The Consultant shall be responsible for the meeting summary notes and the final meeting guidelines within two weeks of the meeting.

1.3 **Project Schedule** - Consultant shall prepare a detailed Project Schedule using MS Project compatible software, and deliver to City PM and WOCPM within two weeks of PMT Kick-Off Meeting. Where reasonable, Consultant shall schedule tasks concurrently, to minimize time. Consultant shall update Project Schedule as needed, and distribute updated schedule to City PM and WOCPM for approval.

1.4 **Project Website** – City shall establish a Project Website and shall post materials provided by Consultant on Project Website throughout the Project.

1.5 **PMT Meetings -** City PM, WOCPM, and Consultant Project Manager shall meet between 8 and 15 times throughout the Project. PMT Meetings may be via phone conference as agreed upon in advance by PMT members.

City Deliverables

1A Committee Rosters (Subtask 1.1)
1B PMT Kick-Off Meeting (Subtask 1.2)
1C Review Project Schedule (Subtask 1.3)
1D Establish Website; post materials online (Subtask 1.4)
1E PMT Meetings (between 2 and 18) (Subtask 1.5)

Consultant Deliverables

1A PMT Kick-Off Meeting (Subtask 1.2)
1B Project Schedule (Subtask 1.3)
1C PMT Meetings (between 2 and 18) (Subtask 1.5)

Task 2: Policy and Planning Requirements, Project Principles and Evaluation Criteria, and Funding Assumptions

Objective

- Review existing plans, studies, reports, laws, standards and policies applicable to the City to ensure consistency in the development of the Updated TSP.
- Identify elements to be incorporated, removed or changed in the 2001 TSP and implementing Comprehensive Plan elements.
- Recommend policy changes to comply with current plans and regulations.
- Update Section 2.
- Develop evaluation criteria.

Subtasks

2.1 City Background Information/Documents - City shall provide or direct the Consultant to online versions of necessary City Background Information/Documents, including but not limited to the following:

- A map of the City and Urban Growth Boundary
- 2001 TSP
- City Capital Improvement Plan
- City Comprehensive Plan (2004)
- City McLoughlin Boulevard Enhancement Plan
- City Downtown Community (Regional Center) Plan
- City Urban Renewal Plan
- City Downtown Main Street Program
- City Municipal Code
- Goal 5 Inventory and Map
- Inventory of all major development or transportation projects and annexations constructed since 2001
- List of current funding mechanisms including any City projections from System Development Charges or other existing funding mechanisms
- City Downtown Circulation Plan and Parking Study
- City's Goal 9 Buildable Lands Inventory
- Parks & Recreation Master Plan and Trails Plan
- City's Economic Opportunities Analysis Report

2.2 Draft Tech Memo 1: Plans & Policies Framework - Consultant shall prepare Draft Tech Memo #1 to summarize the baseline of existing local, regional and state policies, plans, standards, rules, regulations, and other applicable documents as they pertain to

updating the 2001 TSP. The memo shall also guide decisions regarding selection of preferred solutions.

Consultant shall obtain necessary Background Information/Documents from relevant agencies including the most recent version of the following documents:

- Transportation System Planning Guidelines
- County TSP
- TriMet Transit Investment Plan
- TriMet Bike Parking Design Standards
- TriMet Elderly and Disabled Transportation Plan
- TriMet Elderly & Disabled Transportation and Land-Use Study
- TriMet Pedestrian Network Analysis
- Metro Transit Oriented Development Strategic Plan
- Metro 2035 RTP – adopted in 2010 (including attached plans such as Freight Mobility and High Capacity Transit)
- Metro 2035 RTP - Federal Component
- Metro 2035 RTFP
- Metro Regional Trails Plan and Active Transportation Plans and Priorities
- County Trails and Active Transportation Plans and Priorities
- Metro 2040 Concept objectives
- Metro Non-Single Occupancy Vehicle (SOV) Target Actions study
- TPR (See DLCD administrative rule, Oregon Administrative Rule (OAR) 660-012-0010)
- Oregon Statewide Planning Goals
- Oregon Access Management Rule (See ODOT Highway Division administrative rule, OAR 734-051-0155)
- Oregon Transportation Plan
- ODOT Highway Design Manual
- Current State Transportation Improvement Program

The summary shall indicate:

- How the documents relate to the 2001 TSP update distinguishing the mandated or consistency required policies or regulations from the background information or guidance documents;
- For mandated aspects provide requirements and standards applicable to the 2001 TSP update;
- Any conflicts and discrepancies between current 2001 TSP and the mandated requirements and standards; and
- Identification of elements and sections of the 2001 TSP, 2004 Comprehensive Plan, and/or the City Municipal Code that must be added, removed or changed in order to meet the applicable requirements and standards.

Tech Memo 1 must also include a visual diagram to show the relationship(s) (or hierarchy between the Draft Tech Memo 1, Plans and Policy documents summarized and the Project.

2.3 Draft Tech Memo 2: Project Goals and Objectives and Evaluation Criteria - Consultant shall prepare Draft Tech Memo 2, that refines the Project Objectives into detailed Project Goals and Objectives and Evaluation Criteria that will guide the development of the Updated TSP and ensure that planned transportation solutions (projects and programs) and meet identified regional and local needs (gaps and deficiencies). The Draft Evaluation Criteria must be clear, concise and comprehensive, reflect the mandatory policy framework (per Subtask 2.2), and express the community's values relative to the Project. The Project Goals and Objectives and Evaluation Criteria will be used to identify the planned and financially-constrained transportation systems, to refine the TSP policies, and to help prioritize capital projects or programs for implementation. Draft Tech Memo 2 shall either be written to be suitable for a lay person to understand or include a summary that is suitable for a lay person to understand. The PMT will determine is a summary is necessary based on the Draft Tech Memo 2.

2.4 Final Tech Memos 1 and 2 - Consultant shall prepare Final Tech Memos 1 and 2 within two weeks of PMT comments. Final Tech Memo 1 must be in the form of an updated TSP chapter similar to the 2001 TSP Section 1 "Planning Requirements", suitable for incorporation into the final updated TSP with the exception to the recommended policy refinements which shall be prepared in a stand-alone document for future use.

2.5 Project Mailing - Consultant shall prepare draft and final Project Mailing, a full page, double-sided information sheet with graphics (e.g. photos and flow-charts) to all households and businesses in City to inform citizens of the Project purpose, Project schedule with major deliverables and to announce the first Community Meeting date and location. Consultant shall provide draft and final versions of the Project Mailing to incorporate the PMT comments. City shall mail Project Mailing.

City Deliverables

2A City Background Information/Documents (Subtask 2.1)
2B Comments on Draft Tech Memo 1 (Subtask 2.2)
2C Comments on Draft Tech Memo 2 (Subtask 2.3)
2D Review of draft Project Mailing (Subtask 2.5)

Consultant Deliverables

2A Draft Tech Memo 1 (Subtask 2.2)
2B Draft Tech Memo 2 (Subtask 2.3)
2C Final Tech Memos 1 and 2 (Subtask 2.4)
2D Project Mailing (Subtask 2.5)

Task 3: Existing Transportation System and Planned Improvements

Objective

Develop an inventory of the current existing and planned City transportation system to serve as a basis for the Task 4 needs analysis.

Subtasks

3.1 **Draft Tech Memo 3: Street Network and Connectivity -** Consultant shall prepare Draft Tech Memo 3, an analysis of the City's transportation system to see the extent to which it complies with the RTP policy, including but not limited to spacing and connectivity requirements for areas that were not already analyzed as part of the 2001 TSP and areas that need updating. Consultant shall analyze the City's pedestrian and bicycle system to identify missing sidewalks and the basic dimensional and design characteristics that determine whether existing sidewalks are safe and comfortable or inadequate. Consultant shall develop illustrations showing needed connections. Consultant shall analyze the completeness of the existing roadway system connectivity and of the existing City Development Code provisions relative to street connectivity, and shall recommend revisions to the 2001 TSP and Development Code to ensure a safe, well-defined and well connected arterial, collector and local street, pedestrian and bicycle, and trail system consistent with the TPR provisions of OAR 660-0012(045)(3), (4), and (5) and the RTFP Section 3.08.110 Street System Design requirements. The information must be presented in the form of maps showing the existing and proposed arterial, collector, and local streets, pedestrian and bicycle and trail connections, proposed street classifications, and typical cross-sections.

3.2 **Draft Tech Memo 4: Existing Conditions and Traffic Performance -** Consultant shall prepare Draft Tech Memo 4 to update the 2001 TSP Section 2, Existing Conditions, using City based maps. The City PM shall provide the Consultant PM the existing City transportation and land use GIS data layers. Tech Memo 4 must include the following elements in text, graphic, or table format appropriate to the topic:

A. Roadway Existing Conditions - Consultant shall update the 2001 TSP Figures and Tables listed below, and document the location, function, and condition of the following:

- Existing Functional Classification System for state, county and local roads
- Existing Lane Geometry, Traffic Control Devices and Number and Width of Lanes
- Existing sidewalks
- Existing pedestrian roadway and railroad crossings
- Existing bikeways
- Bridges (location only);
- Intelligent Transportation Systems facilities;
- Intermodal connections and facilities (e.g., park-and-ride lots, highway to freight and passenger rail transfer facilities);
- State and local freight and motor carrier routes;
- National Highway System facilities;
- Highways that are part of the National Network (see http://ops.fhwa.dot.gov/freight/sw/overview/).

B. Traffic Speeds and Volumes – City shall provide Consultant with information on speed zone changes since the adoption of 2001 TSP (April, 2001). Consultant shall

identify existing Speed Zones with current posted speed data. Consultant shall update the existing traffic volumes and provide traffic volume data for the Project Area intersections and provide traffic volume summaries in intersection diagram and table format. The data sources are expected to be a combination of the most current data collected by ODOT and the City. Consultant shall prepare a summary map depicting either ADT or PM peak hour traffic counts on arterial and collector streets throughout the City.

C. Roadway System and Intersection Performance – Consultant shall conduct and document the performance of the existing roadway system. Consultant shall apply the methodology outlined in "*Expectations about Traffic Analysis*", and shall be responsible for obtaining all necessary travel analysis data. Travel analysis data must include existing link volumes, and intersection volumes. To identify existing roadway deficiencies, the Consultant shall compare the performance of the Project Area roadway system to the operational standards of RTFP table 3.08-2 for the weekday p.m. peak hour. Consultant shall provide intersection performance information for up to twenty (20) signalized intersections. Intersection locations shall be identified at the PMT kick-off meeting. Consultant shall report queuing estimates for the 50^{th} and 95^{th} percentile queue, and identify possible spillback to adjacent intersections. Where queue spillback or other interference is anticipated, simulations must be used to assess the overall impact of interconnected signal systems.

D. Safety – Consultant shall update the 2001 TSP with a current analysis of accident/collision data for the past 5 years on streets classified arterial street or higher throughout the Project Area, including city, state, and county roads, and among all users (i.e., vehicles, pedestrians, bicyclists). The analysis must identify collision patterns, types, severity (property damage, injury, or fatality), high-frequency collision locations, severe collision locations, evaluation of causes, and potential counter measures considered. **I**nformation from ODOT's most recent Safety Priority Inventory System list may be used when preparing the safety analysis for state highways and interchanges. Consultant shall analyze off-set arterial intersections and determine which of those pose a safety problem. Consultant shall analyze pedestrian crossings with pedestrian-involved crashes and determine which of those pose a safety problem.

E. Freight – Consultant shall summarize information regarding freight connections, reliability, and deficiencies in Project Area using data from the Metro 2035 RTP and Regional Freight Plan. The freight system inventory must provide the basis for identification of needs (gaps and deficiencies) in Subtask 4.1, and must be consistent with Section 3.08.150 of the RTFP, Freight System Design.

F. Public Transit – Consultant shall update 2001 TSP text and figures about Public Transportation, including Figure 2-5 Transit Routes, to reflect current transit trips, travel times, headways, and ridership by stop for all transit routes. Information must be acquired from TriMet and City. Consultant shall identify any deficiencies in the sidewalk network that affect access to transit stops and identify any missing safe

pedestrian crossings near transit stops. If there are corridors where more or new transit service is desired, they should be identified along with the supporting infrastructure investments, land use, and policy solutions the City intends to implement in order to make the area transit supportive. Any language addressing recommendations for changes in transit service will be developed in collaboration with TriMet. The public transit chapter shall identify and acknowledge LIFT paratransit service and present summary data if provided by TriMet.

G. Active Transportation Options for Bicyclists and Pedestrians – Consultant shall update the 2001 TSP text and maps for Figure 2-3 Existing Pedestrian Facilities and Generators and Figure 2-4 Existing Bicycle Facilities and Generators, to reflect current pedestrian and bicycle system conditions. Both updated figures must be in color and show topography. Available City, Metro and ODOT data must be incorporated into the pedestrian and bicycle inventory.

H. Transportation System Management Operations and Transportation Demand Management - Consultant shall prepare a new Existing Conditions section addressing TSMO and TDM. Consultant shall inventory the existing local and regional TSMO infrastructure within or through the Project Area including strategies and programs. The TSMO inventory must provide the basis for identification of the gaps and deficiencies for Subtask 4.1 and be consistent with Section 3.08.160, TSMO of the RTFP. The TSMO and TDM section must include a progress assessment for the City's Non SOV Modal Targets relative to the 2020 year target. Consultant shall use Metro's most recent mode split analysis and RTP assumptions for the 2005 base year and the 2035 forecast year from existing Metro modeling analysis. Consultant shall coordinate with Metro to compile data, and aggregate Transportation Analysis Zone level mode shares to reflect City mode shares.

I. Environmental Justice - Consultant shall provide an Existing Conditions section to identify in map format the socio-economically sensitive populations within City for the purposes of meeting the City's needs and avoiding undue adverse impacts when examining future projects and needs. Consultant must use the existing Metro sensitive populations data developed for the 2035 RTP using either Transportation Analysis Zone-level data from the Metro model, or 2000 Census data. The Environmental Justice section must consist of maps and brief text identifying the locations of the following socio-economically sensitive populations:

- Minority groups (all persons who did not self-identify as white, non-Hispanic);
- Low-income (persons who earned between 0 and 1.99 times the federal Poverty Level in 1999);
- Elderly persons (persons 65 years of age or older in 2000);
- Non-English speakers (people who stated that they didn't speak any English at all in 2000); and
- People with disabilities (all persons 5 years or older with any type of disability: sensory, physical, mental, self-care, go-outside-the-home or employment).

The information shall be mapped to a planning level for the purposes of avoiding undue impacts to said populations. The mapping need not be sufficient for current or future National Environmental Policy Act analyses.

J. Rail, Air, Pipeline, and Water Transportation - Consultant shall document any changes in the rail, air, pipeline, and water transportation systems in the Project Area and vicinity since the development of the 2001 TSP.

3.3 Draft Tech Memo 5: Model Assumptions - Consultant shall prepare Draft Tech Memo 5 to gain the TAC's agreement on land use and transportation network assumptions to be used for the model runs and for the Needs Analysis (Subtask 4.1). Consultant shall obtain and document Metro 2035 RTP projected population and employment for the Project Area. Consultant shall, with direction from PMT determine if any Metro or local adjustments subsequent to the Metro 2035 RTP projections should be applied. The assumption is future p.m. peak hour motor vehicle traffic volumes will be forecast using Metro Travel Demand Model data and National Cooperative Highway Research Program Report 255. The traffic volumes must be assigned to the existing City transportation network, including scheduled improvements, to assess future deficiencies.

Using the City's street inventory, Consultant shall identify any system improvements programmed (constrained projects) since the 2001 TSP. Consultant shall identify planned roadway improvements from the 2035 federal and state RTP projects lists in and near the City. Consultant shall include a citywide cost-constrained set of projects based on City PM input. Planned Improvements must be in text, system map and table format.

3.4 Draft Tech Memo 6: Future Traffic Performance on the Major Street Network – Consultant shall develop initial and draft Tech Memo 6 to estimate the future traffic performance on the major street network using the traffic forecast data from Metro's regional transportation model. Consultant shall assess the rate of growth in major corridors using information from Metro's regional transportation plan. Consultant shall assess the adequacy of corridor capacity based on the volume-to-capacity ratios using Metro's assumed link capacities. Consultant must adjust future traffic volumes to account for differences between actual volumes and model volumes in the Base Year consistent with National Cooperative Highway Research Program 255 methods. Consultant shall coordinate with City PM and Metro to obtain appropriate model runs based on the Financially Constrained 2035 RTP and the City's Capital Improvement Plan.

Draft Tech Memo 6 must generally follow the 2001 TSP format and content to explain in a reader-friendly manner the modeling assumptions and population and employment forecast and data (from Subtask 3.3). Draft Tech Memo 6 must include a text description of the data modeling process, a financially constrained system defined in Tech Memo 5, and a description of conditions deficiencies.

Consultant shall provide initial version to City PM and WOCPM. Consultant shall prepare revised draft Tech Memo 6 for TAC following City PM and WOCPM comments.

3.5 Final Tech Memos 3, 4, 5, and 6 - Consultant shall prepare Final Tech Memos 3, 4, 5, and 6 to reflect the comments received. Each memo shall include summary suitable for a lay person to understand. Consultant shall provide copies of final memos to City PM and WOCPM within 2 weeks of Community Meeting #1.

City Deliverables

3A Review of Draft Tech Memo 3 (Subtask 3.1)
3B Review of Draft Tech Memo 4 (Subtask 3.2)
3C Review of Draft Tech Memo 5 (Subtask 3.3)
3D Review of Draft Tech Memo 6 (Subtask 3.4)
3E Direction for preparation of Final Tech Memos 3, 4, 5, and 6 (Subtask 3.8)

Consultant Deliverables

3A Draft Tech Memo 3 (Subtask 3.1)
3B Draft Tech Memo 4 (Subtask 3.2)
3C Draft Tech Memo 5 (Subtask 3.3)
3D Draft Tech Memo 6 (Subtask 3.4)
3E Final Tech Memos 3, 4, 5, and 6 (Subtask 3.8)

Task 4: Future Transportation Conditions and (2035) Needs Analysis

Objective

To identify future transportation conditions, to identify gaps and deficiencies, and to develop the initial lists of potential solutions.

Subtasks

4.1 Draft Tech Memo 7: Needs (Gaps and Deficiencies) Analysis - Consultant shall prepare Draft Tech Memo #7, a Needs Analysis to determine future system performance and unmet needs under existing and future base conditions, to update Section 3 of the City's 2001 TSP. Needs are defined as either gaps or deficiencies. A deficiency is a capacity or design constraint that limits, but does not prohibit the ability to travel by a given mode. Deficiencies include facilities or services that fail to meet applicable standards, such as v/c standards or street design standards. Gaps are missing links or barriers in the planned system for any mode that functionally prohibit travel by a given mode, such as missing sidewalks. The TPR, OAR 660-012-0030, provides guidance for "determination of need" as does the RTFP section 3.08.210. The RTP identifies regional needs in chapter 4, for Mobility Corridors # 7, 8, and 14. Draft Tech Memo 7 must be provided to the PMT and include a summary and full report including the following elements:

A. Street Network and Connectivity Needs Analysis - Consultant shall summarize the recommendations and conclusions of the analysis performed in Tech Memo 3 to identify gaps in the existing arterial, collector, and local street networks compared to the regional Arterial and Local Street connectivity requirements set forth in the RTFP, section 3.08.110;

B. Roadway Future Conditions Performance and Capacity Needs Analysis - Consultant shall prepare a future conditions analysis to update Section 3 of the 2001 TSP. Written text shall include a description of the data modeling process, a forecast of future traffic volumes, and a description of future base conditions deficiencies for the year 2035. Consultant shall identify future roadway V/C Operating Standards deficiencies for the 20 Project Area intersections. The Consultant shall compare the performance of the roadway system and the 20 intersections to the operational standards of RTFP table 3.08-2 for the weekday p.m. peak hour. For each deficiency, Consultant shall clearly describe the deficiency. The analysis must be based on Tech Memo 5.

C. Roadway Design and Mobility Corridor Needs Analysis - Consultant shall a) identify arterial streets and throughways with cross-sections inconsistent with the planned capacity of the Regional Arterial and Throughway Network and Design Classifications of RTP Table 2.6 and Figures 2.10 and 2.C; and b) identify and evaluate regional needs identified in the RTP chapter 4 Mobility Corridor Strategies for Mobility Corridors # 7, 8, and 14.

D. Safety Needs Analysis - Consultant shall perform safety needs analysis using information obtained in Tech Memo 4, identifying locations that need safety improvements including pedestrian crossings of streets. City shall provide Consultant with information about observed and perceived speeding and traffic diversion problems on local streets, and Consultant shall analyze needs for city identified common problems and possible traffic calming measures and estimated costs.

E. Freight Needs Analysis - Consultant shall identify gaps and deficiencies in the freight system from the information collected for Tech Memo 4, including gaps and deficiencies associated with through freight movement and freight access to any freight intermodal facilities, employment and industrial areas and commercial districts.

F. Public Transportation and Inter-modal Connections Analysis - Consultant shall identify desired transit service levels and routes in the community, along with the actions and investments needed to support this level of transit service. In addition, the consultant shall identify key pedestrian and bicycle needs that will provide better access to transit stops including sidewalks and safe roadway crossings consistent with RTFP Section 3.08.120. Needed inter-modal connections between passenger rail, commuter rail, light rail, and bus transit must also be identified.

G. Pedestrian Needs Analysis - Consultant shall perform needs analysis for pedestrian facilities. This work must identify key pedestrian origins and destinations, missing links, crossing locations, geometric deficiencies, and safety needs for pedestrians. The pedestrian needs analysis must reflect the pedestrian system design requirements of RTFP section 3.08.130 and the transit system design requirements of RTFP section

3.08.120.A and B. Consultant shall identify connections needed to local trails and to the Regional Trails and Greenways network.

H. Bicycle Needs Analysis - Consultant shall perform needs analysis for bicycle facilities. This work must identify key bicycle origins and destinations, missing links, crossing locations, geometric deficiencies, and safety needs for facilities. The bicycle needs analysis must be consistent with RTFP section 3.08.140. Consultant shall evaluate providing bicycle connections to the Regional Trails and Greenways network.

OPTIONAL: Multimodal-Modal Level of Service Analysis and Pedestrian Safety Audit for Urban Streets Analysis - Consultant shall conduct a Bicycle and Pedestrian Level of Service analysis as described in NCHRP Report 616 "Multimodal-Modal Level of Service for Urban Streets", and a pedestrian safety audit, as described in FHWA's July 2007 "Pedestrian Road Safety Audit Guidelines and Prompt Lists" for three to four arterial corridors. The corridors will be determined by the PMT based on the Consultant's recommendation.

I. TSMO and Access Management Needs Analysis – Consultant shall analyze deviations from jurisdictional access management standards for non-freeway state facilities and up to 4 City or County arterial segments. The PMT shall determine the number and location of segments for analysis. Consultant shall also evaluate the existing local and regional TSMO strategies and programs (collected under Subtask 3.2) and identify gaps and opportunities to expand TSMO investments, strategies and programs, including multimodal traffic management, traveler information, and TDM, consistent with section 3.08.160(2) of the RTFP.

J. Air, Rail, Pipeline, and Water Needs Analysis - Consultant shall identify whether existing facilities and services are inconsistent with relevant state, regional, or local plans. Rail section must include discussion about the potential high speed passenger rail through Project Area.

K. Menu of Potential Solutions – Consultant shall identify a menu of solutions to help solve or address the identified gaps and deficiencies. Committee members and city officials will use this menu to identify or add solutions during the outreach meetings in Task 4.

4.2 Draft Tech Memo 8: TSP Funding Assumptions - Consultant shall document the financial resources forecasted to be available for transportation infrastructure and programs to 2035 in the form of Draft Tech Memo 8: TSP Funding Assumptions. City shall provide to Consultant data regarding existing and historic local funding amounts and sources. Consultant shall include Metro RTP funding assumptions. Draft Tech Memo 8 must be provided with a separate summary. Draft Tech Memo 8 must also include the funding levels summarized in text, graphic and table format and must include a brief narrative explaining each of the following:

- Committed funding sources (e.g. Capital Improvement Plan, Metropolitan

Transportation Improvement Program, Statewide Transportation Improvement Program);

- Future projections of likely available funding through 2035;
- An evaluation of funding shortfalls;
- Potential new funding sources; and
- Funding assumptions for the Financially Constrained and Planned systems.

4.3 **TAC Meeting #1** – City shall organize and Consultant shall facilitate TAC Meetings #1 to review and receive feedback on Draft Tech Memo 7 and 8. Consultant shall present Tech Memo 7 and 8 and be responsible for draft and final meeting agenda and summary notes.

4.4 **SAC Meeting #1** – City shall organize and Consultant shall facilitate SAC Meeting #1 to review and receive feedback on Draft Tech Memo 7 and 8. Consultant shall present Tech Memo 7 and 8 and be responsible for draft and final meeting agenda and summary notes.

4.5 **Community Meeting #1** – City shall organize and Consultant shall facilitate Community Meeting #1 to introduce citizens to the Project's purpose, process and intended outcomes; and to receive citizen comments on work to date. Consultant shall prepare a draft and final meeting plan and agenda for PMT review and meeting. At Community Meeting #1 Consultant shall present information on the Project process and present the Tech Memo summaries so that citizen feedback can be obtained. Consultant shall revise the Tech Memo Summaries for the Community Meeting #1 if directed by PMT in order to refine or improve message(s). Consultant shall produce draft and final meeting notice(s), handouts and materials for PMT review and City distribution. City shall provide meeting notice(s), meeting location and logistics and provide copies of meeting material. A minimum of two Consultant team members shall attend Community Meeting #1 and City shall provide staff support. Consultant shall provide the PMT a summary of the comments and recommendations received at Community Meeting #1 in the form of meeting summary notes within two weeks of the meeting.

4.6 **Final Tech Memo 7 and 8 -** Consultant shall finalize Tech Memos 7 and 8 to reflect the direction of PMT to incorporate comments of the SAC and TAC. Consultant shall provide copies of final memos and revised summaries (if warranted from feedback) to City PM and WOCPM within 2 weeks of SAC and TAC meetings.

4.7 **PC Meeting #1 -** Consultant shall facilitate PC Meeting #1 discussion and City shall provide meeting logistics to update PC on TSP work and receive feedback. Consultant shall prepare draft and final meeting agenda for PMT to review and discussion prior to distribution to PC.

4.8 **City Council Meeting #1 -** Consultant shall facilitate City Council Meeting #1 discussion and City shall provide meeting logistics to update City Council on TSP work and receive feedback. Consultant shall prepare draft and final meeting agenda for PMT to review and discussion prior to distribution to PC.

City Deliverables

4A Review of Draft Tech Memo 7 (Subtask 4.1)
4B Review of Draft Tech Memo 8 (Subtask 4.2)
4B TAC Meeting #1 (Subtask 4.3)
4C SAC Meeting #1 (Subtask 4.4)
4D Community Meeting #1 (Subtasks 4.5)
4E Direction for preparation of Final Tech Memo 7 and 8 (Subtask 4.6)
4F PC Meeting #1 (Subtask 4.7)
4G City Council Meeting #1 (Subtask 4.8)

Consultant Deliverables

4A Draft Tech Memo 7 (Subtask 4.1)
4B Draft Tech Memo 8 (Subtask 4.2)
4B TAC Meeting #1 (Subtask 4.3)
4C SAC Meeting #1 (Subtask 4.4)
4D Community Meeting #1 (Subtask 4.5)
4D Final Tech Memo 7 and 8 (Subtask 4.6)
4E PC Meeting #1 (Subtask 4.7)
4F City Council Meeting #1 (Subtask 4.8)

Task 5: Solutions: Development and Evaluation

Objective

- Refine and evaluate potential solutions to the deficiencies and needs;
- Screen solutions for obvious environmental, engineering, land use, or financial "fatal flaws", and evaluate feasible Solutions against the Project Evaluation Criteria; and
- Update section 4 of the 2001 TSP.

Subtasks

5.1 Draft Tech Memo 9: Solutions - Consultant must identify and evaluate solutions, projects, and strategies for each identified system need, listed in Tech Memo 7, consistent with the RTFP section 3.08.220. Solutions must meet the standards, goals and objectives, and criteria identified in Tech Memos 1 and 2. Consultant shall identify one to three alternative solutions depending upon the identified system need (gap or deficiency). City PM and WOCPM shall provide direction on the number of alternative solutions if there is a debate or question. Solutions must reflect and implement the Metro 2035 RTP Corridor Investment Strategies. Projects included in the 2001 TSP and in the Financially Constrained and “State” RTP systems of investments (project lists), Regional TSMO Plan, Regional Freight Plan, and Regional High Capacity Transit Plan must be considered and re-evaluated against the new Policy Framework (Tech Memo 1) and Project Evaluation Criteria (Tech Memo 2). Solutions must be packaged by mode and project

type in the order suggested in RTFP section 3.08.220. Order of magnitude planning cost estimates will be included. Tech Memo 9 must include the following elements:

A. List of Safety Solutions and Improvements. Consultant shall propose recommended safety improvements for pedestrian, bicycle, and vehicle travel, including realignment and other geometric improvements. The description of proposed solutions must include the needed acquisition of easements and rights-of-way.

B. List of TSMO Solutions and Improvements - Including TDM, geometric, and operational improvements including consideration of transit and freight signal priority. Consultant shall identify projects within the city, county, and region that provide transportation system and demand management benefit for travelers to, through, and within Project Area. Consultant shall use planning-level evaluation of potential strategies that effect signal timing (e.g., transit signal priority, freight signal priority, and Intelligent Transportation Systems strategies).

C. Access Management Solutions - Consultant shall recommend access management and spacing solutions for state facilities and City and County arterials. Solutions may be physical improvements or recommendations for Code or street standard amendments. Consultant shall identify facilities or segments thereof where a future more detailed access management plan would encourage smoother traffic flows with fewer crashes and fewer conflicts with pedestrians and bicycles.

D. Prioritized Lists of Pedestrian, Bicycle, Trail, and Transit Solutions and Improvements - Consultant shall recommend improvements to the existing transit system, both locally and regionally including sidewalk access and safe crossings of roadways to access transit stops, to meet identified transit needs. Consultant shall identify new routes and areas requiring new or additional transit service and identify whether these routes are likely to be cost-effective to serve. Consultant shall recommend solutions to meet identified bicycle and pedestrian needs, including recommendations to improve connectivity to transit stops and to the existing multi-use trails system. Consultant shall recommend new multi-use trail locations within City. Consultant shall conduct an access to transit opportunities analysis utilizing data from TriMet with geospatial analysis techniques similar to the Pedestrian Network Analysis and identify two to five target areas that provide the most opportunity for improvement. Solutions and improvements related to these opportunity areas shall be highlighted in the prioritized list. Consultant shall determine if the Metro non-SOV mode split targets have been met and if not, Consultant shall assess why the target is or will not likely be met, and recommend actions the City can take to meet the 2035 targets. To help inform potential new actions, the Consultant shall consider actions for achieving non-SOV mode split targets recommended by the 2005 Metro TGM Non-SOV Modal Target study. Bicycle and pedestrian projects shall be shown as stand alone projects, while indicating which of those offer the potential to be rolled into larger roadway projects.

E. List of Improvements to Improve System Connectivity - Consultant shall recommend improvements to the local, collector and arterial street network to improve connectivity.

F. List of Solutions and Improvements to Maintain Freight Mobility and Reliability - Consultant shall recommend freight route improvements (including rail) to meet identified freight needs, including freight access to designated industrial and commercial land uses and freight mobility and reliability.

G. List of Solutions and Improvements to Maintain or Improve Roadway Capacity - Consultant shall recommend capacity improvements to address identified locations that do or will not meet regional mobility standards, even with all previously identified solutions in place, consistent with regional street design classifications.

H. Screening and Evaluation – Consultant shall screen solutions proposed under subtask 5.1, A through H, for obvious environmental, engineering, land use, or financial "fatal flaws", and perform an evaluation of feasible solutions, including where there are alternative solutions for a given need, against the Evaluation Criteria developed in Tech Memo 2. This evaluation can be qualitative or sketch level, and need not include a full system wide traffic analysis, but does require operational analysis where alternative solutions to a specific localized operational or capacity need are proposed.

I. Performance Measures and Targets – Consultant shall identify potential transportation performance measures and targets consistent with RFTP Section 3.08.230 and the Project Evaluation Criteria (Tech Memo #2). Consultant shall propose alternative mobility standards for facilities where the regional mobility standards in Table 3.08-2 of the RTFP will not likely be met, consistent with RTFP section3.08.230.B and C.

5.2 Draft Tech Memo 10: Regulatory Solutions – Consultant shall prepare Draft Tech Memo 10, recommendations for regulatory solutions, including amendments and additions to the Municipal Code. Tech Memo 10 must address the code deficiencies identified in Tech Memo 1, to ensure compliance with the Metro RTFP and TPR section -045. Revised Development Code language will be recommended to address deficiencies, in a format suitable for the adoption hearings. Regulatory solutions must address, at a minimum, but not limited to, the following:

A. Updated **roadway design standards** for roads, bicycle and pedestrian facilities, trails, and transit facilities, allowing implementation of complete street designs as set forth in Metro's "*Creating Livable Streets: Street Design Guidelines*", and green street designs set forth in Metro's "*Green Streets: Innovative Solutions for Stormwater and Street Crossings*", and "*Trees for Green Streets: an Illustrated Guide"*.

B. Access management standards, including spacing standards based on road classification.

5.3 TAC Meeting #2 – City shall organize and Consultant shall facilitate TAC Meeting #2 to review and receive feedback on draft Tech Memos 9 and 10. Consultant shall present materials and be responsible for draft and final meeting agenda and summary notes.

5.4 SAC Meeting #2 – City shall organize and Consultant shall facilitate SAC Meeting #2 to review and receive feedback on draft Tech Memos 9 and 10. Consultant shall present materials and be responsible for draft and final meeting agenda and summary notes.

5.5 Revised Tech Memo 9 - At the Direction of the PMT, Consultant shall prepare Revised Tech Memo #9 incorporating TAC and SAC comments.

5.6 Community Meeting #2 – City shall organize and Consultant shall facilitate Community Meeting #2 to gain citizen feedback on work complete since last Community Meeting.. Consultant shall produce handouts and materials and the City shall provide meeting notice(s), meeting location and logistics and provide copies of meeting material. A minimum of two Consultant team members shall attend Community Meeting #2 and City shall provide staff support. Consultant shall provide a presentation of the Project thus far in a format to convey the material and to gain citizen input. Consultant shall provide to City PM and WOCPM a summary of the citizen comments and recommendations received at Community Meeting #2 in the form of meeting summary notes.

5.8 Final Tech Memos 9 and 10 - Consultant shall prepare Final Tech Memos 9 and 10 to reflect direction of PMT to incorporate comments of the public, SAC, and TAC. Consultant shall provide copies to City PM and WOCPM within 2 weeks of Community Meeting #2.

City Deliverables

5A Review of Draft Tech Memo 9 (Subtask 5.1)
5B Review of Draft Tech Memo 10 (Subtask 5.2)
5C TAC Meeting #2 (Subtask 5.3)
5D SAC Meeting #2 (Subtask 5.4)
5E Direction for preparation of Revised Tech Memo 9 (Subtask 5.5)
5F Community Meeting 2 (Subtask 5.6)
5G Direction for preparation of Final Tech Memos 9, and 10 (Subtask 5.7)

Consultant Deliverables

5A Draft Tech Memo 8 (Subtask 5.1)
5B Draft Tech Memo 9 (Subtask 5.2)
5C TAC Meeting #2 (Subtask 5.3)
5D SAC Meeting #2 (Subtask 5.4)
5E Revised Tech Memo 9 (Subtask 5.5)

5F Community Meeting #2 (Subtask 5.6)
5G Final Tech Memos 9, and 10 (Subtask 5.7)

Task 6: Develop Draft Planned and Financially Constrained Transportation Systems and TSP Policy

Objective

- Develop a planned and a financially-constrained system of transportation facilities and services for all modes;
- Prioritize programs and projects, based on the Project Evaluation Criteria, to reflect available funds and the timing of when the need occurs.
- Define the financially constrained system of improvements that can be assumed to be provided by the end of the planning period for the purpose of future Comprehensive Plan and Zoning amendments subject to the TPR, section -0060.
- Define a planned transportation system that would be provided if additional financial resources were to become available,

Subtasks

6.1 Draft Tech Memo 11: Planned and Financially Constrained Transportation Systems - Consultant shall prepare Draft Tech Memo 11 to describe the Planned and Financially Constrained Transportation Systems. The description of each of the Systems must be sufficient to describe the planned mode, function, performance standards, typical cross-section, and general location of facilities, services, and improvements. Projects or planned improvements that involve financial contributions from sources outside City must include a statement as to the likelihood of funding availability, developed in concert with the jurisdiction or agency expected to provide funding. One-time capital funds must be distinguished clearly from continuing operating expenditures. The development of the Planned and Financially Constrained Transportation Systems must be consistent with the Project Goals and Objectives, and must be based on Evaluation Criteria. In developing the Financially Constrained and Planned Transportation Systems, the Consultant shall consider the feedback from the PMT, TAC, SAC, PC and City Council in previous tasks.

6.2 SAC Meeting #3 - City shall organize and Consultant shall facilitate SAC Meeting #3 to discuss draft Tech Memos 11 and to gain consensus on what should constitute the Financially Constrained and Planned Transportation Systems and TSP policies

6.5 Revised Tech Memos 11 - Consultant shall prepare Revised Tech Memos 11 at the direction of PMT to reflect the feedback of SAC and TAC. Consultant shall provide copies of revised Tech Memos to City PM and WOCPM within 2 weeks of SAC and TAC meetings.

6.6 Joint PC/City Council Work Session - City shall organize and Consultant shall facilitate a joint meeting to update PC and City Council on Project work and gain consensus on what should constitute the Financially Constrained and Planned Transportation Systems and TSP Policy.

City Deliverables

6A Review Draft Tech Memo 11 (Subtask 6.1)
6B SAC Meeting #5 (Subtask 6.2)
6C Direction for preparation of Revised Tech Memo 11 (Subtask 6.3)
6D Joint PC/City Council Work Session (Subtask 6.4)

Consultant Deliverables

6A Draft Tech Memo 11 (Subtask 6.1)
6B SAC Meeting #5 (Subtask 6.2)
6C Revised Tech Memo 11 (Subtask 6.3)
6D Joint PC/City Council Work Session (Subtask 6.4)

Task 7: Evaluate Draft Planned and Financially Constrained Transportation Systems

Objective

Evaluate the Planned and Financially Constrained Transportation Systems;

7.1 **Draft Tech Memo 12: Performance Analysis of Financially Constrained and Planned Transportation Systems** - Consultant shall analyze the performance of the financially constrained and planned systems consistent with *Expectations for Traffic Analysis* including vehicle queues, and summarize the results in Draft Tech Memo 12. Based on the performance analysis, Consultant shall recommend any revisions to the Draft Financially Constrained and Planned Systems. If and where the recommended Planned System does not satisfy regional and state mobility standards, consultant shall propose alternative mobility standards including justification consistent with the RTFP and Oregon Highway Plan Action 1F3. Consultant shall evaluate performance of the Planned System under the proposed alternative mobility standards. Consultant shall also recommend phasing and sequencing of projects.

7.2 **TAC Meeting # 3 -** City shall organize and Consultant shall facilitate this meeting to review and gather comments on Draft Tech Memo 12.

7.3 **SAC Meeting # 4 -** City shall organize and Consultant shall facilitate this meeting to review and gather comments on Draft Tech Memo 12.

7.4 **Community Meeting #3** – City shall organize and Consultant shall facilitate Community Meeting #3 to gain citizen feedback on Revised Tech Memos 11, and Draft Tech Memo 12. A minimum of two Consultant team members shall attend the Community Meeting #3 and City shall provide staff support at Community Workshop. Consultant shall provide to City PM and WOCPM a summary of the citizen comments and recommendations received at the Community Meeting #3 in the form of meeting summary notes.

7.5 **Final Tech Memos 11 and 12** - Consultant shall prepare Final Tech Memos 11 and 12 to reflect the direction of PMT to incorporate the comments of the public, SAC, and TAC. Consultant shall provide copies of final Tech memos to City PM and WOCPM within 2 weeks of Community Meeting #3.

City Deliverables

7A Comments on Draft Tech Memo 12 (Subtask 7.1)
7B TAC Meeting #6 (Subtask 7.2)
7C SAC Meeting #6 (Subtask 7.3)
7D Community Meeting #3 (Subtask 7.4)
7E Direction for preparation of Final Tech Memos 11 and 12 (Subtask 7.5)

Consultant Deliverables

7A Draft Tech Memo 12 (Subtask 7.1)
7B TAC Meeting #3 (Subtask 7.2)
7C SAC Meeting #4 (Subtask 7.3)
7D Community Meeting #3 (Subtask 7.4)
7E Final Tech Memos 11 and 12 (Subtask 7.5)

Task 8: Draft Updated TSP, Implementing Ordinances and Adoption Findings

Objective

Prepare a Draft Updated TSP, Implementing Ordinances, Findings, and Recommended RTP Amendments for consideration by City officials and Metro.

Subtasks

8.1 Draft Updated TSP and Draft Adoption Findings- Consultant shall prepare Draft Updated TSP incorporating earlier Tech Memos, in a format that distinguishes between elements to be adopted as a land use decision, i.e. TSP Policy and the Financially Constrained and Planned Systems, and background elements. Some or part of the Tech Memos prepared earlier in the Project may be included as an Appendix to the Draft Updated TSP.

Consultant shall prepare accompanying Draft Adoption Findings addressing City, regional and state standards for adoption.

8.2 Draft Implementing Ordinances and Draft Recommended RTP Amendments – Based on Tech Memo 10, Consultant shall prepare Draft Amendments to the Municipal Code and to other implementing Ordinances necessary to implement the Draft Updated TSP. Consultant shall prepare Draft Recommended RTP Amendments, a brief report recommending changes to the RTP, including the RTP project lists

8.3 Revised Updated TSP, Revised Adoption Findings, Revised Implementing Ordinances and Revised Recommended RTP Amendments - Consultant shall revise Draft Updated TSP, Draft Adoption Findings, Draft Implementing Ordinances, and Draft Recommended RTP Amendments, incorporating comments from City, WOCPM, TAC and PC, and shall submit revised versions to City PM and WOCPM. Consultant shall submit twenty paper copies and one electronic copy of compact discs of the Revised Updated TSP to City.

City Deliverables

8A Review Draft Updated TSP and Draft Adoption Findings (Subtask 8.1)
8B Review Draft Implementing Ordinances and Draft Recommended RTP Amendments (Subtask 8.2)
8C Direction for preparation of Revised Updated TSP, Revised Adoption Findings, Revised Implementing Ordinances, and Revised Recommended RTP Amendments (Subtask 8.3)

Consultant Deliverables

8A Draft Updated TSP (Subtask 8.1)
8B Draft Adoption Findings (Subtask 8.1)
8C Draft Implementing Ordinances (Subtask 8.2)
8D Draft Recommended RTP Amendments (Subtask 8.2)
8E Revised Updated TSP, Revised Adoption Findings, Revised Implementing Ordinances and Revised Recommended RTP Amendments (Subtask 8.3)

Task 9: Final Updated TSP, Implementing Ordinances and Adoption Findings

Objective

Adoption of a Final Updated TSP and Implementing Ordinances

Subtasks

9.1 **Metro and DLCD Notice** - Consultant shall submit a copy of the Revised Updated TSP to Metro's Chief Operating Officer at least 45 days prior to the first public hearing as directed in the RTFP and make all corrections as designated by Metro prior to the public hearing. Consultant shall also submit a copy of the Revised Updated TSP to DLCD at least 45 days prior to the first evidentiary hearing as directed by ORS 197.610 and OAR 660-018-000 and make all corrections as designated by DLCD prior to the public hearing.

9.2 **TSP Work Sessions and Adoption Hearings** - City shall prepare staff report to support adoption of the TSP, and Implementing Ordinances amendments.

City Council and PC Joint Work Sessions – Consultant shall attend one to two work sessions between the PC and City Council to provide a brief overview of the Revised Updated TSP and its documentation and to answer questions. City shall be responsible for arranging, noticing, and conducting the meetings.

PC Hearings - City shall conduct the PC Hearings to consider recommendation of adoption Revised Updated TSP, Revised Implementing Amendments, Revised Adoption Findings and associated Legislative application; Consultant shall attend and present. City shall be responsible for arranging and noticing the meetings.

City Council Adoption Hearings – City shall conduct the City Council Adoption Hearings to consider adoption of Revised Updated TSP, Revised Implementing Ordinance Amendments, and Revised Adoption Findings; Consultant shall attend and present. City shall be responsible for arranging and noticing the meetings.

9.3 **Adopted Updated TSP and Adopted Implementing Ordinances** – Once the TSP and Implementing Ordinance Amendments are approved by the City Council, the Consultant shall:

- Prepare a final version incorporating City Council actions and submit ten bound copies of the Adopted Updated TSP and Adopted Implementing Ordinances to City, plus 3 copies to WOCPM;
- Submit an electronic copy of all documentation on compact discs to City and WOCPM in PDF and a modifiable format;
- Submit a copy of the Adopted Updated TSP to Metro's Chief Operating Officer within 14 days after adoption.and
- Consultant shall prepare a web-ready version of the Adopted Updated TSP, which must include the following:
  - Links to individual Adopted Updated TSP Sections and sub-sections
  - Interactive maps showing proposed projects, with links from the map "hot spots" to individual project prospectus sheets.

City Deliverables

9A Legislative Application (Subtask 9.2)
9B City Council and PC Joint Work Sessions (Subtask 9.2)
9C PC Hearings (Subtask 9.2)
9D City Council Adoption Hearings (Subtask 9.2)

Consultant Deliverables

9A Metro and DLCD Notice (Subtask 9.1)
9B City Council and PC Joint Work Sessions (Subtask 9.2)
9C PC Hearings (Subtask 9.2)
9D City Council Adoption Hearings (Subtask 9.2)
9E Adopted Updated TSP/Adopted Implementing Ordinances (Subtask 9.3)

Schedule

By December 31, 2012

Project Cost Estimate

	Estimated City Budget
Task 1: Establish Committees and Start Project	
Task 2: Policy and Planning Requirements, Project Principles and Evaluation Criteria, and Funding Assumptions	
Task 3: Existing Transportation System and Planned Improvements	
Task 4: Future Transportation Conditions and (2035) Needs Analysis	
Task 5: Solutions: Development and Evaluation	
Task 6: Develop Draft Planned and Financially Constrained Transportation Systems and TSP Policies	
Task 7: Evaluate Draft Planned and Financially Constrained Transportation Systems	
Task 8: Draft Updated TSP, Implementing Ordinances and Adoption Findings	
Task 9: Final Updated TSP, Implementing Ordinances and Adoption Findings	
Task 10: Contingent Meetings	
City Total Estimated Labor Cost	
Materials and Postage	
TOTAL ESTIMATED CITY BUDGET	

Consultant
Deliverables Budget
Consultant
Deliverables Budget

Task	*Description*	*Total Fixed Amount Payable to Consultant Per Deliverable*	*Total Amount Per Task*
Task 1	**Establish Committees and Start Project**		
1.A	PMT Kick-off Meeting		
1.B	Project Schedule		
1.C	Bi-Monthly PMT Teleconferences		
	Subtotal - Task 1		
Task 2	**Policy and Planning Requirements, Project Principles and Evaluation Criteria, and Funding Assumptions**		
2.A	Draft Tech Memo 1		
2.B	Draft Tech Memo 2		
2.E	Final Tech Memos 1 and 2		
2.F	Project Mailing		
	Subtotal - Task 2		
Task 3	**Existing Transportation System and Planned Improvements**		
3.A	Draft Tech Memo 3		
3.B	Draft Tech Memo 4		
3.C	Draft Tech Memo 5		
3.D	Draft Tech Memo 6		
3.H	Final Tech Memos 3, 4, 5, and 6		
	Subtotal - Task 3		
Task 4	**Future Transportation Conditions and (2035) Needs Analysis**		
4.A	Draft Tech Memo 7		
4.B	Draft Tech Memo 8		
4.C	TAC Meeting #1		
4.D	SAC Meeting #1		
4.E	Community Meeting #1		
4.F	Final Tech Memo 7 and 8		

4.G	PC Meeting #1		
4.H	City Council Meeting #1		
	Subtotal - Task 4		
Task 5	**Solutions: Development and Evaluation**		
5.A	Draft Tech Memo 9		
5.B	Draft Tech Memo 10		
5.C	TAC Meeting #2		
5.D	SAC Meeting #2		
5.E	Revised Tech Memo 9		
5.F	Community Meeting #2		
5.G	Final Tech Memos 9 and 10		
	Subtotal – Task 5		
Task 6	**Develop Draft Planned and Financially Constrained Transportation Systems and TSP Policy**		
6.A	Draft Tech Memo 11		
6.B	SAC Meeting #3		
6.C	Revised Tech Memo 11		
6.D	Joint PC/City Council Work Session		
	Subtotal – Task 6		
Task 7	**Evaluate Draft Planned and Financially Constrained Transportation Systems**		
7.A	Draft Tech Memo 12		
7.B	TAC Meeting #3		
7.C	SAC Meeting #4		
7.D	Community Meeting #3		
7.E	Final Tech Memos 11 and 12		
7.F	Final Tech Memos 9		
	Subtotal – Task 7		
Task 8	**Draft TSP, Implementing Ordinances and Adoption Findings**		
8.A	Draft TSP Findings		
8.B	Draft Adoption Findings		
8.C	Draft Implementing Ordinances		
8.D	Draft Recommended RTP Amendments		
8.E	Revised TSP, Revised Adoption Findings, Revised Implementing Ordinances and Revised Recommended RTP Amendments		
	Subtotal – Task 8		

Task 9	**Final TSP, Implementing Ordinances and Adoption Findings**		
9.A	Metro and DLCD Notice		
9.B	City Council-PC Joint Work Sessions		
9.C	PC Hearings		
9.D	City Council Adoption Hearings		
9.E	Adopted Updated TSP and Adopted Implementing Ordinances		
	Subtotal – Task 9		
	TOTAL		

SCHEDULE

Task	Months from Notice to Proceed
1 – Establish Committees and Start Project	1
2 – Policy and Planning Requirements, Project Principles and Evaluation Criteria, and Funding Assumptions	2-3
3 – Existing Transportation System and Planned Improvements	3-4
4 – Future Transportation Conditions and (2035) Needs Analysis	3-4
5 – Solutions: Development and Evaluation	5-7
6 – Develop Draft Planned and Financially Constrained Transportation Systems and TSP Policy	6-10
7 – Evaluate Draft Planned and Financially Constrained Transportation Systems	11-13
8 – Draft TSP, Implementing Ordinances and Adoption Findings	12-16
9 – Final TSP, Implementing Ordinances and Adoption Findings	16-18