

# **Department of Transportation**

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# 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 30<sup>th</sup> 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:
  <a href="http://www.oregon.gov/ODOT/TD/TP/TAPM.shtml">http://www.oregon.gov/ODOT/TD/TP/TAPM.shtml</a>
- 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 50<sup>th</sup> and 95<sup>th</sup> 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 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
    - o Existing pedestrian roadway and railroad crossings
    - Existing bikeways
    - o Bridges (location only);
    - Intelligent Transportation Systems facilities;
    - o 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 <a href="http://ops.fhwa.dot.gov/freight/sw/overview/">http://ops.fhwa.dot.gov/freight/sw/overview/</a>).
  - **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<sup>th</sup> and 95<sup>th</sup> 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. Information 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:
  - o 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);
  - o 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
  - o 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**

- prepare 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 multiuse 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 section 3.08.230.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.
- **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.
- **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 crosssection, 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
- **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;

- 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)
- 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.
- **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.
- Consultant shall prepare a web-ready version of the Adopted Updated TSP, which must include the following:
  - o Links to individual Adopted Updated TSP Sections and sub-sections
  - o 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**

# **Project Cost Estimate**

	Estimated City Budget
Task 1: Establish Committees and Start Project	2 waget
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

Delivera	bles	Bud	get
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Task	Description	Total Fixed Amount Payable to Consultant Per Deliverable	Total Amount Per Task
Task 1	<b>Establish Committees and Start Project</b>		
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