

Scope of Work:

Camas Transportation Plan and Traffic Impact Fee Update

The consultant team will develop a new Camas Transportation Plan and Traffic Impact Fee program. The primary objective is to establish existing and future needs and opportunities, develop a prioritized list of projects, evaluate potential funding sources and establishing a revised traffic impact fee program. The study area will be based on the Camas urban growth area. The final plans will be compliant with the requirements of RCW 36.70A.108 and WAC 365-196-430 as well as coordinate with WSDOT, Clark County, City of Vancouver, City of Washougal and Southwest Washington Regional Transportation Council.

Specific work tasks include:

Task 1 – Background Plan Review and Goals

Work Activities:

Task 1.1 Review Current Plans, Policies, and Traffic Impact Fee Program

- Provide summary of current state, county, regional and local transportation plans and policies that are relevant to this planning effort, including:
 - 2035 Camas Comprehensive Plan
 - 2016 SR-500 & 6th Avenue and Northshore arterial corridors analyses
 - Crown Road Corridor Plan
 - 2014 Regional Transportation Plan for Clark County
 - 2007-2026 WSDOT Highway System Plan
 - 2016 Washington Department of Commerce Periodic Update Checklist for Cities
 - 2016-2035 Clark County Capital Facilities Plan
 - 2010 Clark County Bicycle and Pedestrian Plan
 - Clark County Arterial Atlas with 2017 Amendments
 - 2004 Vancouver Transportation Plan
 - Vancouver 2018-2023 Transportation Improvement Program
 - 2016 Washougal Transportation Capital Facilities Plan
 - Federal Functional Classification Map for Washington
- Provide review of current traffic impact fee program and TIF methodology
- Make recommendations regarding preliminary revisions or issues to be addressed

Task 1.2 Goals, Objectives and Evaluation Criteria

- Review 2035 Camas Comprehensive Plan goals to develop transportation planning objectives and evaluation criteria

Assumptions:

- City staff will provide relevant background plans and polices for this work task. Items could include: past transportation plan elements and traffic studies, historical count data, transit plans, regional trail plans, and the latest regional plan

Deliverables:

- *Draft and Final Technical Memo #1 - Background Plans, Policies and Traffic Impact Fee Summary*

Task 2 –System Inventory and Existing Conditions Analysis

Work Activities:**Task 2.1 Data Collection**

- Collect weekday PM peak period (4 to 6 PM) turn movement traffic counts (including motor vehicles, pedestrians, bicycles, transit, and heavy vehicles) at up to 50 study intersections
- Obtain collision data from WSDOT for the past five years at the study intersections and along collector and arterial facilities (based on city designations).
- Obtain available GIS mapping data from the City to support the system evaluation and the creation of graphics for the plan update

Task 2.2 System Inventory

- Conduct inventory of the arterial and collector roadway system for motor vehicles. Inventory items to include: number of travel lanes, type of major intersection traffic controls (signal or roundabout), posted speed limits, roadway jurisdiction, and street functional classification
- Conduct inventory of the arterial and collector roadways and trail system for walking and biking. Inventory items to include: sidewalks, enhanced pedestrian crossings (rapid flashing beacons, traffic signals), and bikeways.
- Compile readily available data about existing transit routes, ridership and bus stop locations
- Compile readily available data about deficient roadway pavement and bridges, including location, and estimated cost to repair or replace

Task 2.3 Evaluate Existing Conditions

- Review system spacing and connectivity and identify key gaps for vehicle and multimodal travel
- Review available freight plans and data to identify primary needs and routes
- Create a Synchro operations model of the study intersections to represent 2018 existing conditions. The model will be used to report intersection performance (level of service, delay, volume to capacity ratio), and identify existing operational deficiencies and local system needs based on state and local performance standards.

- Review collision data, calculate intersection and roadway crash rates and identify top five high crash corridors and top ten high crash intersections.
- Identify existing operational and safety deficiencies and system connectivity needs for all modes
- Document existing transportation system conditions in Technical Memorandum #2

Assumptions:

- City will provide a copy of their available GIS data that is relevant to the transportation system
- City will identify up to 50 study intersections
- City to provide available recent traffic count data
- City to provide Pavement Management Program Inventory
- DKS will obtain current travel demands for base year and 2040 scenarios from SWRTC

Deliverables:

- *Draft and Final Technical Memo #2 – Transportation Systems Inventory and Existing Conditions Analysis*

Task 3 – Future Multimodal Needs and Deficiencies

Work Activities:

Task 3.1 Future Traffic Forecasts

- Prepare a local street level mesoscopic model from the regional travel demand models to include local street level speed and traffic control inventory and assign trip tables to the network utilizing Highway Capacity Manual Methodology for node delay.
- Develop TAZ land use allocation to a similar level as the 2012 TIF update. Review detailed land use inventories and work from recent planning studies to develop land use allocations for the refined TAZs. Document land use growth projections (residential and employment) by TAZ in map format.
- Document regional projects that are assumed to be constructed by 2040 and are incorporated in the SWRTC model in map format
- Forecast year 2040 PM peak hour baseline traffic volumes at the study intersections
- Identify future operational deficiencies at the study intersections. Provide roadway segment v/c ratios for key corridors based on the travel demand model.
- If operational deficiencies are identified (study intersection or roadway segment), up to three revised 2040 model runs will be conducted to test additional roadway network improvements to support Task 5.
- Assess 2040 system performance on arterial and collector roadways for walking, biking and driving trips using appropriate methods (motor vehicle level of service, bike and walking levels of traffic stress).

- Incorporate findings and recommendations from the SR-500 & 6th Avenue and Northshore arterial corridors analyses into the 2040 baseline analysis
- Conduct a detailed corridor analysis of SR 500-Everett Street between 23rd Avenue and Leadbetter Road to identify future travel needs for all users on the corridor.
- Conduct a detailed corridor analysis of NW 6th Avenue between Norwood Street and Adams Street to identify future travel needs for all users on the corridor.
- Identify additional needs to support walking, biking and transit travel with planned growth to 2040. This will include new or upgraded walking and biking facilities, enhanced arterial and collector crossing treatments (including intersections and trail crossings), bus shelters, street lighting and other amenities.
- Provide maps for transit, bikes, pedestrians, and motor vehicles that show existing network gaps
- Document future transportation needs and other operational deficiencies that are expected with planned growth to 2040 in Technical Memorandum #3

Assumptions:

- Prior to making 2040 forecasts, the City and SWWRTC will confirm the adequacy of the land use assumptions and allocations
- City to provide 2016 SR-500 & 6th Avenue and Northshore arterial corridors analyses

Deliverables:

- *Draft and Final Technical Memo #3 - Future Baseline Conditions Analysis*

Task 4 – Review Transportation Standards

Work Activities:

Task 4.1 Transportation Standards

- Review current transportation standards (for example, intersection operations for concurrency, functional classifications, access management, block spacing) and recommend revisions
- Provide examples of best practices for transportation standards in peer communities
- Consider alternatives to current roadway cross-section standards to include classifications based on adjacent land uses
- Develop pedestrian, bicycle and traffic management treatment toolboxes to support complete street policy
- Review Federal Functional Classifications for Camas and recommend revisions as needed
- Document findings and recommendations from this task in Technical Memo #4

Assumptions:

- City staff will provide existing standards and related documentation for review and will provide feedback on how the current standards are working



Deliverables:

- *Draft and Final Technical Memo #4 – Recommended Transportation Standards*

Task 5 – Solutions Identification and Alternative Analysis

Work Activities:

Task 5.1 Identify Potential Solutions

- Review identified deficiencies and needs relative to the improvement projects already identified in adopted plans, and highlight cases where new or expanded solutions are required
- Develop potential solutions to address remaining needs to serve planned growth. Alternatives analysis will include:
 - Roadway connections between Port of Camas-Washougal and downtown
 - Roadway cross-sections and intersection improvements on NW 6th Avenue between Norwood Street and Adams Street
 - Roadway cross-sections and intersection improvements on SR 500-Everett Street between 23rd Avenue and Leadbetter Road (including the SR-500-Everett Street/Lake Road intersection)
 - Verify improvements identified in the Crown Road Corridor Plan (conducted by Global Transportation Engineering)

Task 5.2 Evaluate Potential Solutions

- Evaluate potential new solutions using the evaluation criteria identified in Task 1 to assess their effectiveness in achieving community goals.
- Provide maps for transit, bikes, pedestrians, and motor vehicles that identifies solutions to existing network gaps.
- Recommend multimodal projects and strategies, focus on low-cost/high benefit solutions
- Recommend safety improvements for high crash corridors and intersections
- Review and update roadway functional classifications to reflect recommended project list
- Develop Local Street Connectivity Plan based on existing parcel map, street network and environmental constraints

Deliverables:

- *Draft and Final Technical Memo #5 – Solutions Identification and Evaluation*

Task 6 –Traffic Impact Fee Alternatives Analysis

Work Activities:

Task 6.1 Evaluate TIF Program

- Conduct an evaluation of alternatives for structuring the Traffic Impact Fee, considerations such as the following will be explored:
 - Daily vs. PM peak trips
 - Citywide vs. district areas vs. overlay areas
 - Full vs. partial project costs
 - Reimbursement costs
 - Include multi-modal improvement costs
 - Opportunities for other funding sources
 - Specific vs. general land use categories
- Identify current and future volume to capacity ratios for roadway intersections
- Identify existing and future level of service measures for bicycle and pedestrian facilities that are not part of roadway projects
- Prepare and confirm TIF cost basis and growth share assumptions for up to three alternatives (e.g., high, medium and low TIF cost per trip)
- Document findings and recommendations in Technical Memorandum #6

Assumptions:

- City will provide background funding information including TIF balance and committed debt information and TIF administration costs

Deliverables:

- *Draft and Final Technical Memo #6 – Traffic Impact Fee Alternative Analysis*

Task 7 – Finance Program

Work Activities:

Task 7.1 Funding and Projects

- Estimate future transportation funds based on historic sources and expenditures provided by the city, forecasts funds for the ten-year 2027 and long-term year 2040 planning scenarios
- Prepare a 2040 transportation capital facility project list with descriptions and an accompanying project map
- Review project cost estimates provided in other agency plans, update as needed. Provide planning level cost estimates for new or revised projects

- Provide the City's six-year Transportation Improvement Program (TIP) project list based on forecasted available funding and evaluation criteria
- Provide information on additional transportation revenue sources to consider for potential funding shortfalls, including discussion related to potential traffic impact fee

Deliverables:

- *Draft Transportation Project List and Six-Year Transportation Improvement Program*

Task 8 – Transportation Plan and Traffic Impact Fee Update

Work Activities:

Task 8.1 Draft and Final Plans

- Combine findings and recommendations to prepare Initial Draft, Hearing Draft and Final Transportation Plan
- Prepare Initial Draft, Hearing Draft and Final Transportation Capital Facilities Plan
- Consultant to complete Department of Commerce periodic update checklist for Draft Capital Facilities Plan

Deliverables:

- *Initial Draft, Hearing Draft and Final Transportation Plan*
- *Initial Draft, Hearing Draft and Final Traffic Impact Fee Update*

Task 9 – Public Involvement

Work Activities:

Task 9.1 Meetings and Hearings

- Attend and present technical materials up to 2 stakeholder advisory committee meetings at key checkpoints in the planning process
- Attend and present technical materials at up to 5 meetings with staff (Community Development and Public Works)
- Attend and present technical materials at up to 2 meetings with the ad-hoc economic development committee
- Attend and present technical materials at 1 Planning Commission and up to 2 City Council work sessions
- Present Draft Transportation Plan at up to 2 City Council hearings

Assumptions:



- The City will support and publish all materials on their web site, including project content, schedules, and deliverables
- The City will develop the roster for the advisory stakeholder committee that will review and discuss interim work products
- The City will schedule, host and facilitate all meetings and hearings

Deliverables:

- *Attend project and public meetings as described above*
- *Provide related agendas and presentations for meetings and work sessions*

BUDGET

| Task | Description | Budget |
|----------------------------------|--|------------------|
| Task 1.1 | Review Current Plans, Policies and TIF Program | \$1,460 |
| Task 1.2 | Goals, Objectives and Evaluation Criteria | \$3,570 |
| Task 2.1 | Data Collection | \$1,360 |
| Task 2.2 | System Inventory | \$8,940 |
| Task 2.3 | Evaluate Existing Multimodal System | \$15,345 |
| Task 3.1 | Future Traffic Forecasts | \$26,445 |
| Task 3.2 | Evaluate Future Multimodal System | \$18,425 |
| Task 4.1 | Standards Assessment | \$9,895 |
| Task 5.1 | Identify Potential Solutions | \$4,980 |
| Task 5.2 | Evaluate Potential Solutions | \$12,765 |
| Task 6.1 | Evaluate TIF Program | \$4,325 |
| Task 7.1 | Funding and Projects | \$8,020 |
| Task 8.1 | Draft and Final Plans | \$14,920 |
| Task 9.1 | Meetings and Hearings | \$18,970 |
| DKS Expenses and Data Collection | | \$8,500 |
| FCS Subconsultant | | \$37,760 |
| TOTAL | | \$195,680 |