



Transportation & Public Works Meeting Agenda

February 3, 2022; 4:30 – 6:00 PM
“Virtual Meeting”

Due to the current COVID-19 public health emergency, this meeting will be conducted virtually. The meeting will be live streamed on Sea TV Government Access Comcast Channel 21 and the City’s website <https://www.seatacwa.gov/seatvlive> and click play. The public may also listen to the meeting by calling 206.973.4555 and muting your phone.

Peter Kwon, Chair
Takele Gobena
Jake Simpson, Mayor

Note: A quorum of the Council may be present

Other Councilmembers present:

Staff Coordinators: Will Appleton, Public Works Director; Florendo Cabudol, City Engineer;

Other Staff participating:

TIME	TOPIC	PROCESS	WHO	Time
1	Call to order		Chair	
2	<p>PUBLIC COMMENTS: In an effort to adhere to the social distancing protocols, and in order to keep our residents, Council, and staff healthy, the Committee will not hear any in-person public comments. The committee is providing remote oral and written public comment opportunities. All comments shall be respectful in tone and content. Signing-up for remote comments or providing written comments must be done by <u>2:00PM</u> the day of the meeting. Any requests to speak or provide written public comments which are not submitted following the instructions provided or by the deadline will not be included as part of the record.</p> <ul style="list-style-type: none"> Instructions for providing remote oral public comments are located at the following link: Council Committee and Citizen Advisory Committee Virtual Meetings. 		Chair	5

	<ul style="list-style-type: none"> Submit email public comments to TPWPublicComment@seatacwa.gov. The comment will be mentioned by name and subject and then placed in the committee handout packet posted to the website. 			
4	Prior Minutes Approval	Jan 20 Minutes to approve	Chair	5
5	Approve Professional Services Contract for DKS for Fleet Electrification Strategic Plan	Discussion/Action	Bryan Chappell	15
6	Approve Professional Services contract for Intelligent Transportation Systems Strategic Plan	Discussion/Action	Florendo Cabudol	15
7	<u>Future Meeting Topics:</u> 6-Year Transportation Improvement Plan; Right of Way Uses; Stormwater Code Updates; 2021 King County Surface Water Manual Adoption; Debris Management Contractor Selection; Flight Safety Boundary Line Adjustment			5
8	Adjourn	Adjourn Meeting	Chair	



Transportation & Public Works Committee Meeting Minutes

Approve Prior
Meeting Minutes

January 20, 2022
4:30 PM – 6:00 PM
** Virtual Meeting **

Members:	Present:	Absent:	Commence: 4:32 PM
			Adjourn: 5:25 PM
Peter Kwon, Chair			
Jake Simpson			
Takele Gobena			

Other Councilmembers participating: Iris Guzmán;

Staff Coordinators: Will Appleton, Public Works Director; Florendo Cabudol, City Engineer

Other Staff Participating: Kamal Mahmoud, Engineering Manager; Gwen Voelpel, Deputy City Manager; Mary Mirante-Bartolo, City Attorney; Trevor Ralph, Civil Engineer

Public Comment	No public comment
1. Approve Prior Meeting's Minutes	December 16 Minutes were approved
2. Approve Structural Design Contract for ST-141 Airport Station Pedestrian Project	<p>Discussion/Action</p> <p>Engineering Manager Kamal Mahmoud presented this topic. Airport Station Pedestrian Project ST-141 is currently at 50% design. The need for several retaining walls has become apparent at this point, several at the height necessary for retaining walls.</p> <p>The earlier Ad-Hoc Committee recommendations supported support for integrating art with the necessary retaining walls on the project. Decorative wall treatments are not currently possible on traditional (cheaper) modular block wall designs.</p> <p>Soldier pile walls and cast-in place wall systems are more expensive but are able to accommodate decorative wall fascia as listed in the Airport Station Area Urban Design Guidelines.</p>

	<p>This type of wall and tall wall heights requires structural engineer, a different designation of engineer than P.E., that we have on staff.</p> <p>Staff is asking for Committee to recommend moving to full Council for action at the next Council meeting a Motion to execute a structural engineering design contract with TranTech and an amendment to the existing design contract with KPG.</p> <p>The current budget has sufficient funds allocated to the project to absorb the cost of this additional work.</p> <p>This additional work does not change the timeframe of the project as planned. Construction is currently planned for mid 2023 to early 2025.</p> <p>A question was raised about permit parking program during the construction phase of the project. The City has the ability to revise the permit parking program during construction on a street by street basis. We will address this with construction notices to residents.</p> <p>We are working with Highline School District regarding bus re-routing and access for student pick-up/drop-off. A plan will be formalized prior to construction of the project.</p> <p>The Committee asked for a mock-up design of where walls are proposed. Staff responded that after the structural engineering work is complete, design plans will be brought back to committee before construction award.</p> <p>Bike lanes are planned for the project which follows our current bike network plan, which is part of our Transportation Master Plan.</p> <p>Committee approved to move the additional structural engineer contract and amendment to KPG design contract to full council on January 25.</p>
3. Adjourn	Adjourn Meeting

**Approve Prior
Meeting Minutes**



MEMORANDUM

To: Transportation and Public Works Committee
Through: William Appleton, Public Works Director
From: Bryan Chappell, Maintenance and Operations Manager
Date: February 3, 2022
Subject: Professional Services Contract for Fleet Electrification Strategy

Purpose:

City staff is asking council to approve a professional services contract for DKS Associates, Inc. to develop a Fleet Electrification Strategy/Program to prepare for and convert the City's fleet from fossil fuel to electric by 2030.

Background:

Momentum is gathering at both a State and Federal level for the transition of vehicles from fossil fuel to electric. In May of 2021, the Washington State Legislature passed several pieces of legislation promoting transition away from fossil fuels. It is expected that both grant funding opportunities and potential State and Federal incentives supporting the transition of municipal government fleets to electric will be made available as part of a nationwide clean energy movement. Developing and implementing a comprehensive fleet electrification program/strategy now will help ensure that the City is able to complete the transition by 2030, minimize our costs in doing so, and position the City to take advantage of anticipated funding opportunities.

Electrification of our vehicle fleet will benefit the City not only from an environmental perspective, but also reduce overall fleet maintenance and operating costs.

Process: The City solicited Requests for Proposals from 15 consultants for the Fleet Electrification Strategy/Program in December 2021. DKS Associates, Inc. was the only consultant to submit a response. Fortunately, DKS Associates proved to be highly qualified for this specialized work and was selected for this program. The current schedule for this study, if approved, is to begin in February 2022 and complete by July of 2022.

Funding: Staff is finalizing a scope of work at this time and expects the cost for this study to come in between \$60,000 to \$75,000. Funding in an amount up to \$75,000 is approved for this study. Prior to bringing this topic before full Council, the scope and cost will be finalized.

Options/Recommendation: City staff recommend forwarding the professional services contract for DKS Associates to prepare a fleet electrification strategy/plan to full Council for approval.

FLEET ELECTRIFICATION

2/3/2022

HEV

Hybrid Electric Vehicles



PHEV

Plug In Hybrid Electric Vehicles



BEV

Battery Electric Vehicles



PRESENTATION OVERVIEW

PURPOSE OF PRESENTATION

Provide Committee update of Fleet Electrification Strategy and approve professional services contract for DKS Associates to develop strategy.

WHY IS THIS ISSUE IMPORTANT?

1. Industry is moving in this direction
2. Lower Maintenance and Operational Costs
3. Better for the environment



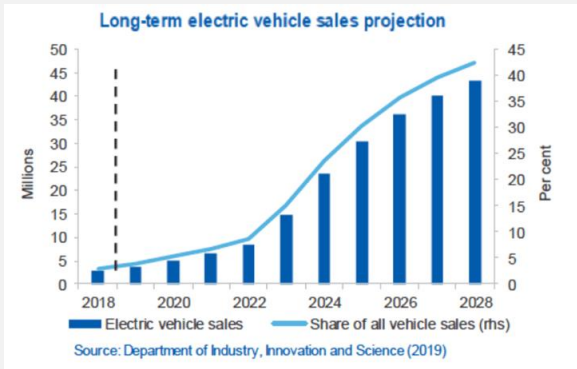
INDUSTRY MOVING TOWARDS ELECTRIFICATION

DIRECTION

Federal incentives

Future grow of vehicle types

Future mandates

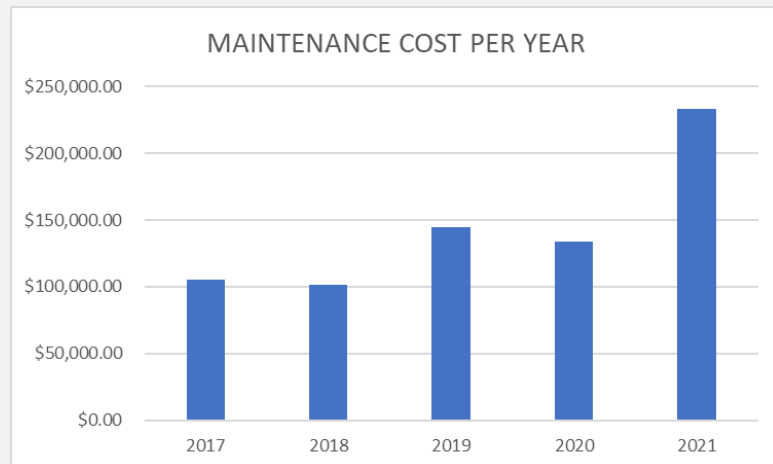
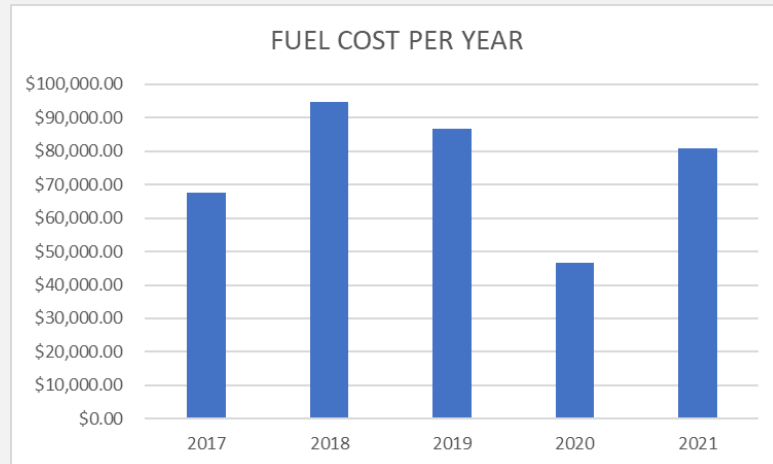


LOWER MAINTENANCE AND OPERATIONAL COST

COST PER YEAR

The top graph includes unleaded and diesel.

The bottom graph includes work performed by businesses and by City staff on our fleet



BENEFITS

ENVIROMENTAL BENEFITS

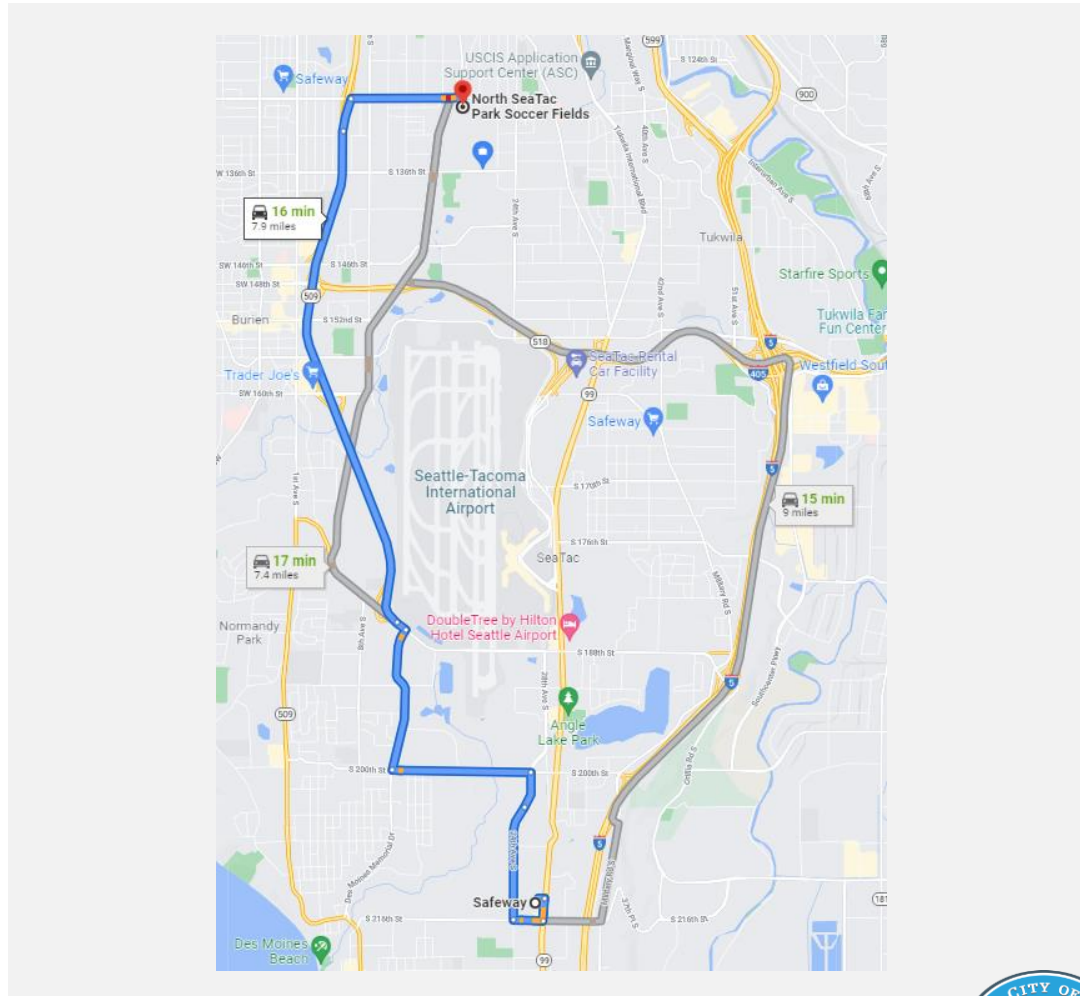
Less greenhouse gas emissions

Less noise

City is right sized for EV battery range

North SeaTac Park to
International BLVD / S
216th St – Approximately 8
miles.

Ford F150 Lighting – 230
mile range (not extended)



PROJECT TEAM

CITY OF SEATAC TEAM

- Public Works
- Parks
- Senior Management Analyst

TIMELINE

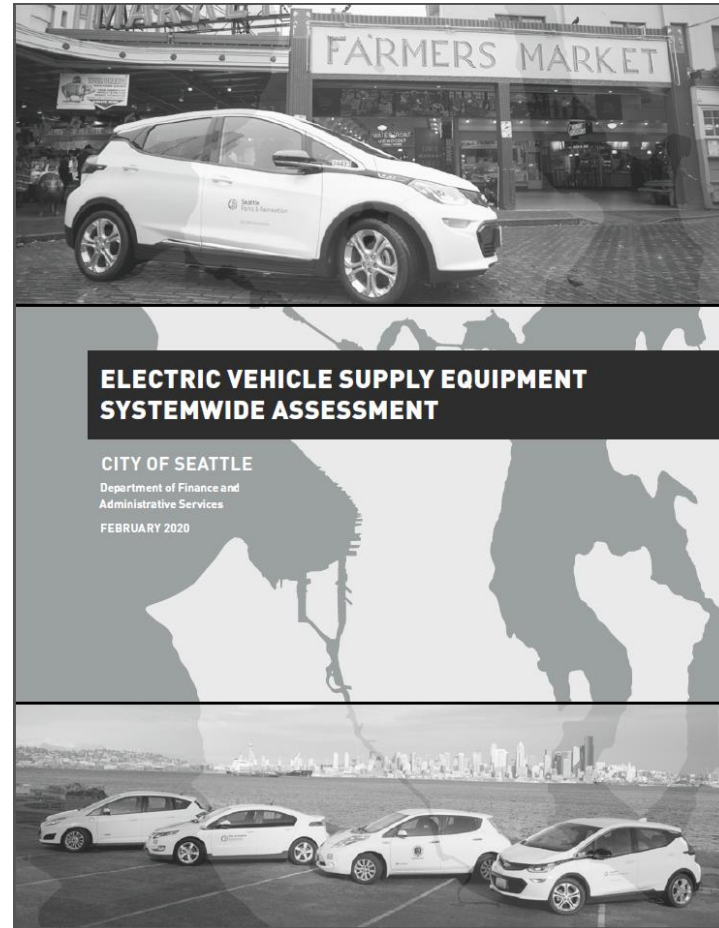
- Advertised RFP - Fleet Electrification Strategy in October 2021
- Selected DKS in November
- Snow and Covid delayed finalizing Scope of Work
- Finalizing Scope of Work with DKS by 2/11/2022
- Anticipated cost to be between \$60,000 and \$75,000. Budgeted \$75,000
- Project completion anticipated to be July 2022.



SCOPE OF WORK

DRAFT SCOPE OF WORK

- Existing conditions and trends review.
 - Needs assessment and gap analysis.
 - Phased Master Plan
 - Rights A Way charging
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- Deliverables
 - Trends Research Presentation
 - Memo summarizing gap analysis
 - Prefinal and final masterplan



POTENTIAL COMMITTEE ACTION

COMMITTEE ACTION REQUESTED

- Forward this item to full council for review, with a recommendation for approval

STAFF RECOMMENDATION

- Forward to council for approval

REVIEWS TO DATE

- Study and funding was approved through decision card process in 2021





MEMORANDUM

To: Transportation and Public Works (TPW) Committee

Through: William Appleton, Public Works Director

From: Florendo Cabudol, City Engineer

Date: 2/3/22

Subject: Authorization to execute professional services contract with DKS for the Intelligent Transportation Systems Strategic (ITS) Plan project

Purpose:

The purpose of this item is obtain TPW Committee's recommendation for Council to approve a Motion to authorize execution of a professional services contract with DKS Associates, Inc. to develop an ITS, in an amount not to exceed \$143,172.

Background:

The SeaTac Intelligent Transportation System (ITS) Strategic Plan is phase 1 of implementing the Intelligent Transportation Systems Program listed in the City's 2022-2027 Transportation Improvement Plan (TIP) as (Priority #5 - Public Works Project ST-887). The purpose of the ITS Program is to deploy infrastructure that manages travel, improves safety, mobility, and efficiency on the City's transportation network. The ITS Program includes (but is not limited to) improving signal coordination and management, transit signal priority, roadway monitoring and response, and travel data collection. ITS systems typically include communications equipment, traffic signal equipment, video surveillance and monitoring, video detection, or a satellite traffic management center. The ITS Strategic Plan will provide the City a roadmap for the implementation of an ITS Program.

Three consultant teams were solicited based on their qualifications in accordance with RCW Chapter 39.80. All three consultants submitted Statements of Qualifications. A selection committee comprised of three staff members scored the Statements of Qualifications and participated in a competitive interview process where each consultant was asked the same set of interview questions. Their responses were evaluated, and DKS Associates Inc. was selected as the most highly qualified firm to conduct the study.

Options/Recommendation:

Staff recommends moving this item forward for Council action with a recommendation to approve the Motion at the February 8 Regular Council Meeting.

DKS Associates - SeaTac ITS Fee Estimate

January 25th, 2022

TASK	DKS	UL	Total
TASK 1 - Project Management	\$17,740	\$0	\$17,740
Project Kickoff Meeting	\$1,250	\$0	\$1,250
Progress Reports and Invoices	\$3,800	\$0	\$3,800
Project Management Meetings	\$4,800	\$0	\$4,800
Technical Advisory Committee (TAC) Meetings	\$6,930	\$0	\$6,930
Project Management Website	\$960	\$0	\$960
TASK 2 - Existing System Inventory	\$15,230	\$0	\$15,230
Document Review	\$2,340	\$0	\$2,340
Existing System Workshop	\$1,580	\$0	\$1,580
Field Visit	\$6,320	\$0	\$6,320
GIS Database and Inventory Table	\$4,990	\$0	\$4,990
TASK 3 - City ITS Standard Specifications and Details	\$12,080	\$0	\$12,080
County Standards Review	\$1,920	\$0	\$1,920
County Standards Memo	\$1,920	\$0	\$1,920
City ITS Special Provisions and Details	\$4,400	\$0	\$4,400
City ITS Design Guidelines	\$3,840	\$0	\$3,840
TASK 4 - Stakeholder Needs Assessment	\$12,080	\$2,420	\$14,500
Survey	\$1,920	\$435	\$2,355
Needs Assessment Workshops (3 total)	\$5,760	\$1,985	\$7,745
Stakeholder Needs Memo	\$4,400	\$0	\$4,400
TASK 5 - ITS Implementation Plan	\$41,000	\$0	\$41,000
Draft ITS Implementation Plan	\$25,600	\$0	\$25,600
Project Prioritization Workshop	\$3,560	\$0	\$3,560
Final ITS Implementation Plan	\$9,360	\$0	\$9,360
GIS Database	\$2,480	\$0	\$2,480
TASK 6 - Data Strategic Plan	\$960	\$12,315	\$13,275
Data Source Mapping & Audit	\$480	\$7,150	\$7,630
Data Acquisition Roadmap	\$480	\$5,165	\$5,645
TASK 7 - Data Acquisition	\$480	\$10,250	\$10,730
UrbanLogiq Data Platform	\$480	\$10,250	\$10,730

LABOR COST	\$99,570	\$24,985	\$124,555
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EXPENSES

Mileage (Local Travel - 200 mi @ \$0.585)	\$117		\$117
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MANAGEMENT RESERVE

LYT Data Platform Pilot (Contingent on Task 6)		\$18,500	\$18,500
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TOTAL LABOR + EXPENSES	\$99,687	\$24,985	\$124,672
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TOTAL NTE AMOUNT			\$143,172
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Exhibit A: Scope of Services

SeaTac ITS Strategic Plan January 28th, 2022

Project Background

The SeaTac ITS Strategic Plan is identified in the City's 2022-2027 Transportation Improvement Plan (TIP) under ST-887 (Priority #5) Intelligent Transportation Systems (ITS) Program. The purpose of the ITS Program is to Implement an ITS Program to improve signal coordination and management, transit signal priority, roadway monitoring and response, ITS device management, and data collection. Systems could include communications equipment, traffic signal equipment, video surveillance and monitoring, video detection, or a satellite traffic management center. The ITS Strategic Plan will provide the City a roadmap in support of the ITS Program.

Task 1 – Project Management

The Consultant shall manage the project tasks to control costs, maintain schedule, and provide quality products appropriate to the goals and completion of the project. For the purpose of this scope, the project duration is assumed to be 11 months with contract expiration on December 31st, 2022.

Subtask 1.1 – Project Kickoff Meeting

The Consultant shall schedule, lead, participate in, and document a project kickoff meeting. The Consultant shall work with the City to develop the agenda and facilitate the meeting. The Consultant shall prepare and distribute the meeting notice, agenda, and minutes.

Subtask 1.2 – Monthly Progress Reports and Invoices

The Consultant shall prepare and submit monthly progress reports that will identify what was specifically accomplished during the reporting period and what is planned for the next billing period.

Subtask 1.3 – Bi-Monthly Project Management Meetings

The Consultant shall schedule and facilitate a bi-monthly project management call with the City Project Manager to provide project updates and identify any project needs or concerns. The Consultant will document any action items generated via email to City Project Manager.

Subtask 1.4 – Technical Advisory Committee (TAC) Meetings

The Consultant shall schedule and facilitate up to six (6) TAC coordination calls with the City, key City stakeholders and other project stakeholders as identified by the City (e.g. King County Roads,

Sea-Tac Airport, WSDOT) as necessary to coordinate work activities and provide project status updates. The Consultant will develop meeting agendas, summaries, and action items.

Subtask 1.5 – Project Management Website

The Consultant shall set up an online project management website (via Basecamp) to manage the project and share deliverables. The City will have direct access to the site.

Assumptions:

- All meetings will be held virtually or via phone, until agreed upon by the City and the Consultant
- One (1) representative from the Consultant team will attend the monthly project management meetings. Additional representatives from the Consultant team will attend the monthly TAC meetings, as needed, and limited to three (3) additional staff at six (6) of the meetings.

Deliverables:

- Meeting agendas, summaries, and action items from eleven (11) monthly project management meetings and six (6) TAC meetings, including a project kickoff meeting.
- Eleven (11) Monthly progress reports.
- Internal project website to share files and document meetings

Task 2 – Existing System Inventory

The purpose of this task is to identify, request, review, and document existing infrastructure (e.g., conduit, communications, signal/detection equipment). The Consultant will coordinate with the City and project stakeholders to obtain existing as-builts and inventory documentation. The Consultant will schedule a field visit with the City and King County Roads (“County”) to define, verify, and document the existing condition focusing specifically on the traffic signal system and communications network. The Consultant will summarize the findings from the surveys and workshops into a stakeholder needs memo comparing against industry standards and regional specifications developed by partner jurisdictions including, but not limited to the County and WSDOT.

Assumptions:

- The Consultant shall establish a project site (Basecamp) for document upload.
- The City and the County will upload existing as-builts and inventory documentation.
- The County will be on-site for traffic signal cabinet access.
- The City will provide GIS Data Delivery Standards.

Deliverables:

- Proposed data schema for GIS database
- GIS database
- Equipment inventory table (Excel)

Task 3 – City ITS Standard Specifications and Details

The purpose of this task is to review existing County signal and ITS standard specifications and details and recommend City modifications, as necessary. Standards may consider Advanced Transportation Controllers (ATC), vehicle detection in support of Automated Traffic Signal Performance Measures (ATSPMs), central management platforms for monitoring and performance measurement, and network communications equipment including hardwired and wireless technologies.

Assumptions:

- The Consultant shall summarize ITS-related design components, current County standard, and recommendations for City modifications with justification.
- The Consultant may develop City ITS special provisions and design details per the direction of the City, if deemed necessary.
- The Consultant may develop ITS Design Guidelines per the direction of the City, if deemed necessary.

Deliverables:

- City ITS design standards approach memo
- OPTIONAL – City ITS special provisions and details
- OPTIONAL – City ITS Design Guidelines memo

Task 4 – Stakeholder Needs Assessment

The purpose of this task is to discuss and understand the needs for the City from a technology and data standpoint. A survey will be provided to stakeholders to help identify highest priority needs. One (1) internal and two (2) external follow-on needs assessment workshops will verify survey results and introduce potential solutions. The first needs assessment workshop will be hosted with City engineering, planning, and IT staff. The second and third needs assessment workshops will be hosted with partner agency stakeholders, as determined by the City. Partner agency stakeholders may include the County, WSDOT, and SeaTac International Airport.

Assumptions:

- The Consultant shall develop the survey in conjunction with City staff.
- The City will identify City and partner agency stakeholders including contact information.
- The Consultant shall coordinate with stakeholders to schedule workshop meeting dates and times.
- The City will be responsible for stakeholder participation incentives, if needed.
- Workshops will be up to two-hours in length.
- The Consultant shall develop the workshop agenda and provide meeting minute notes.
- The City will introduce the project objective to kick-off the workshops.
- The Consultant shall lead the technical discussion during the workshops.

Deliverables:

- Workshop survey
- Workshop agendas and meeting minutes
- Stakeholder needs memo

Task 5 – ITS Implementation Plan

The purpose of this task is to create an ITS project priority list in support of the overall ITS Strategic Plan. The ITS Implementation Plan prioritizes corridors and intersections for future ITS upgrades. Priority is based on a gap analysis leveraging inventory information from Task 2. The list includes project write-ups detailing project description, priority level, location, design and construction budget, associated projects, and staffing plan. The list can be used for grant funding applications and City Capital Improvement Program (CIP) alignment. The ITS Implementation Plan will be comprised of up to 10 near-term (within next 5-10 years) ITS-specific projects. The ITS Implementation Plan will be a living document that City staff can continue to revise, update, and add projects as the ITS Program progresses. Example projects could include:

- Corridor communications installation (multiple locations)
- Wireless communications deployment for remote locations
- Signal control upgrades and performance monitoring central software
- Vehicle detection standardization and proposed upgrades
- CCTV camera deployment and video analytics identifying near-miss collisions
- City-wide LED lighting control system
- Signal timing updates and adaptive signal control Systems Engineering
- Electric Vehicle (EV) initiatives and ITS project alignment
- Partner agency center-to-center system integration
- Virtual Traffic Management Center
- City staffing need and training assessment to implement and run the ITS Program.

Assumptions:

- The Consultant shall cross-reference recommended projects with stakeholder needs.
- The Consultant will present recommendations and solicit feedback as part of the TAC meetings.
- The City will perform a prioritization exercise per direction of the Consultant.

Deliverables:

- Draft and Final ITS Implementation Plan
- GIS database showing locations of proposed projects

Task 6 – Data Strategic Plan

The purpose of this task is to document where and how the City can collect transportation related data leveraging deployed equipment, new detection technologies, and external third-party data sources. The plan will define the desired performance metrics and the available data sources. More importantly, the approach will provide guidance to City staff on how the data can be used

for planning purposes and trend analysis including egress/ingress from major traffic generators including Sea-Tac Airport and I-5 interchanges. The intent of the Data Strategic Plan is to accommodate the transportation data needs of multiple City departments beyond Public Works.

Subtask 6.1 – Data Source Mapping & Audit

The Consultant will perform a data audit of all data currently available to the City, i.e., Citywide GIS, Open Data, GeoEvent Server, ArcGIS Velocity, historical data counts, and where possible, data from Sea-Tac Airport and/or King County Roads. This includes understanding data from other departments in SeaTac as well, such as GIS, public works, community and economic development, fire, police, etc.

The Consultant will review City Data Delivery Specifications and adhere to these specifications or suggest revisions.

Subtask 6.2 – Data Acquisition Roadmap

The Consultant will perform a data use case for the Transportation Master Plan update helping the City identify key performance metrics. Metrics could include volume counts; travel time and travel time variability; vehicle miles traveled; multimodal metrics such as bike, pedestrian, and transit; speed studies; peak hour analysis; etc.

The Consultant will perform a market scan of available data sources that provide data aligning with the key performance metrics while also considering data cost (upfront and on-going), funding opportunities, and SeaTac staffing, processing, and maintenance requirements.

Assumptions:

- The Consultant will consider integration of partner agency data as well as sharing City data with these agencies.
- The Consultant will review data pricing, available metrics, and integration requirements with existing City data sources, management tools, and performance reporting needs.
- The City will coordinate efforts with multiple departments to ensure all City transportation data needs are being met.

Deliverables:

- Data audit findings, performance metrics, and data acquisition recommendation memo

Task 7 – Data Acquisition – Contingent on Task 6

The purpose of this task is to help implement the data acquisition roadmap in support of the Transportation Master Plan update. The Consultant will upload and map data to a pilot UrbanLogiq data platform to visualize all SeaTac data identified through the audit for City staff interaction. The City will purchase the external third-party data contingent on Task 6 recommendations and available City budget. The Consultant will clean and integrate the

external third-party data into the City's data platform as outlined in the data acquisition roadmap.

Assumptions:

- The Consultant will develop the data platform and review integration requirements from data providers.
- The Consultant will provide training (up to 4 hours) to City staff on use of the data platform.
- The City will be responsible for purchasing and providing data to the Consultant.
- The City may provide access to partner agencies.

Deliverables:

- Live pilot UrbanLogiq data platform for foundational data visualization and mapping