

January 8, 2018

TO: Members of the Senate and House Transportation Committees

SUBJECT: Joint Transportation Committee Activity Update

In 2017, the Joint Transportation Committee (JTC) completed three studies as directed by the Legislature, including an assessment of the Transportation Commission, an analysis of I-405 traffic data and corridor performance, and a best practice review of the Board of Pilotage Commissioners. We also began work on an 18-month study looking into the movement of air cargo within the state.

Attached are summaries of the work accomplished in the 2017 studies:

- Assessment of the Washington State Transportation Commission (p. 3)
- I-405 traffic data and corridor performance analysis (p. 5)
- Best Practices for the Board of Pilotage Commissioners (p. 9)
- Washington State Air Cargo Movement (p. 11)

The Joint Transportation Committee held four meetings in 2017:

- June 21st in Vancouver, at the Association of Washington Cities annual conference
- September 14th in Olympia
- November 15th in Olympia
- December 14th in Olympia

In addition, JTC staff organized a two-day policy and project tour on October 10 and 11 in western and central Washington, where legislators and staff, and members of the Transportation Commission, were joined by staff from WSDOT headquarters and regions, the Washington State Patrol, the Department of Licensing and the Governor's office. The tour focused on implementation of past JTC studies on issues related to weigh stations, private financing of electric vehicle charging stations, WSDOT's use of design-build, driver education, Trooper recruitment and retention at the Washington State Patrol, and road-rail conflicts. We also toured a number of projects recently funded in the Connecting Washington Program.

The JTC relocated to 606 Columbia Street NW, Suite 105 a year ago. Please feel free to stop by when you are at Budd Bay Café or Anthony's Homeport. We are right next door.

Thanks to the thirty-five members of the House and Senate who have participated in one or more JTC meetings and tours this interim. Your participation is invaluable, and contributes to the richness of discussion and the thoroughness of our work.

The <u>JTC website</u> provides links to all current and past studies, including meeting presentations and reports.

If you have any questions, please contact the JTC staff:

- Mary Fleckenstein, Committee Coordinator, (360) 786-7312, mary.fleckenstein@leg.wa.gov
- Beth Redfield, Senior Policy Analyst, (360) 786-7327, <u>beth.redfield@leg.wa.gov</u>
- Sonia Plasencia, Accountant/Committee Assistant, (360) 786-7329, sonia.plasencia@leg.wa.gov

Judy Clibbon

Representative Judy Clibborn Co-Chair

Senator Curtis King Co-Chair

Ed Draut

Representative Ed Orcutt

Hobbs

Senator Steve Hobbs



JTC's new offices: 606 Columbia Street NW, Suite 105, Olympia, WA 98501-1085

Summary of 2017 Joint Transportation Committee Studies

January 8, 2018

Assessment of the Washington State Transportation Commission

In 2017, the Legislature provided \$100,000 to the JTC to assess the roles and responsibilities of the Transportation Commission beyond those related to tolling, ferry fares and the Road Usage Charge (RUC) pilot project. The goal of the study was to recommend adjustments to the Commission to better suit today's needs.

The consulting team was led by Morningside Research and Consulting from Austin, Texas, a team with decades of experience in sunset reviews. They started work in July, and delivered their final report in December 2017.

Background

Prior to 2005, the Washington State Transportation Commission (WSTC) had a broad role overseeing the Department of Transportation (WSDOT), appointing its Secretary, proposing its budget, and authorizing its request legislation. That changed in 2005 when the Legislature made WSDOT a cabinet agency (ESB 5513), and transferred authority to propose budgets and legislation to the Governor-appointed Secretary of Transportation.

The WSTC retained some authority for statewide transportation planning, and to set tolls and ferry fares; their role as a public forum for policy development was expanded. ESB 5513 changed the job of the Transportation Commissioner from one in charge of WSDOT to one with a much more limited role.

The JTC study

This assessment was qualitative in nature, involving onsite fieldwork and observation, interviews, document review, and collection and aggregation of information from research. A staff workgroup from JTC, the House and Senate Transportation Committees, OFM, WSDOT, and the Transportation Commission assisted with the study.

Findings and Recommendations

The consultants developed findings and recommendations in three areas: statewide transportation planning; transportation policy development and community engagement; and governance and administrative operations.

Statewide transportation planning. The 2005 legislation retained the WSTC's statutory authority to develop the comprehensive and balanced statewide transportation plan known as the policy plan, while WSDOT retained authority to develop a statewide multimodal transportation plan. This left a gray area and a continuing point of contention between WSDOT and the WSTC by failing to specify the process to prepare a federally-compliant transportation plan.

Findings: There is no clear role for the WSTC's policy plan, and this complicates cooperation and coordination with WSDOT. Stakeholders do not agree which agency should prepare and submit the federally-complaint plan. Stakeholders said the WSTC's policy plan does not drive transportation decision-making. No other state has the same bifurcated planning arrangement as Washington. Some stakeholders were concerned about WSDOT's commitment to incorporate local issues in their planning efforts.

Recommendations:

1. Transfer from the Commission to WSDOT the responsibility to develop the state policy plan

<u>Transportation policy development and community engagement</u>. The consultants found that both WSTC and WSDOT engage in policy development and have statutory responsibility to seek community input. The WSTC does this annually through a variety of means, including four to five local meetings around the state. The consultants also found there has been considerable turnover of Transportation Commissioners; since 2013, the Governor has appointed eight new Commissioners to the seven-member board to vacancies created by Commissioners resigning before the end of their terms.

Findings: While some stakeholders appreciate the opportunity the WSTC offers to present input on local issues, others questioned the value of this input, finding it lacks a clear connection to statewide transportation policy development. The WSTC's local meetings duplicate the extensive public outreach the WSTC undertakes with consultants every four years as they develop the policy plan; WSDOT consults with many of these same stakeholders. The consultants found that the local meetings contribute to the high turnover of Commissioners.

Recommendations:

- 1. Eliminate WSTC involvement in transportation policy development and the related community engagement efforts. This should reduce the number of Commission monthly meetings from 11 to about six per year.
- 2. Require WSDOT to conduct the local meetings, to provide an opportunity for local officials to present information about transportation issues important to their communities.

Governance and administrative operations

Findings: The WSTC needs a more formal operating structure for working with the Governor's office and the Legislature, and for its own governance and internal operations. It is overly reliant on the institutional memories of staff and their interpretation of roles and responsibilities, rather than on adopted policies that establish an objective operating framework.

Recommendations:

- 1. Formalize communication among the Commission, the Legislature and the Governor's office.
- 2. Match Commissioner expertise and orientation to Commission roles and responsibilities.
- 3. Clarify the differing roles of Commissioners and staff.
- 4. Conduct an annual review of the Commission's executive director.
- 5. Create complete administrative rules for the Commission, separate from WSDOT's rules.
- 6. Update and periodically review internal policies and procedures.
- 7. Revisit the Commission's base budget to determine whether its programs are funded appropriately.
- 8. Develop performance measures covering the breadth of the Commission's operations.

Overall impact of these recommendations

The proviso directing this study prohibited the consultants from making recommendations about the Commission's tolling, ferry fare and RUC functions, so they make no such recommendations. However, the consultants concluded that adopting their recommendations would leave the Commission with a narrow set of responsibilities. They stated "the disparate functions that (*would*) remain with the Commission after the planning, policy and outreach functions are removed likely could be performed by other state entities. While the assessment constraints prevented the consultant team from fully exploring this possibility, the Legislature may wish to consider doing so."

Study origin:	ESB 5096, Sec 204(4)	Study materials can be found <u>here</u> .
Report:	Delivered December, 2017	
Appropriation:	\$100,000	
Project Manager:	Mary Fleckenstein (360) 786-7312; Beth R	edfield (360) 786-7327
HTC staff:	Tricia Hasan (360) 786-7292; Mark Mattes	on (360) 786-7145
STC staff:	Kelly Simpson (360) 786-7403	

I-405 Traffic Data and Corridor Performance Analysis

The Legislature provided \$160,000 in 2017 for the JTC to contract with the University of Minnesota to independently analyze traffic data for the express toll lanes (ETL) and general purpose lanes (GPL) of the I-405 tolled corridor; review the statutory performance measures; and make recommendations for near-term and long-term strategies to improve traffic performance in the corridor. The study began in June of 2017 and the final report was delivered in January of 2018.

Background

In 2011, the Legislature authorized WSDOT to build a system of express toll lanes on the I-405 corridor to address unpredictable commute times during peak hours and increasing congestion that impeded bus transit. An initial 17-mile stretch between Bellevue and Lynnwood was opened on September 27, 2015. It included one new ETL in each direction from Bellevue to Bothell, and converting the old HOV lanes from Bellevue to Lynnwood. This resulted in two ETLs each direction from Bellevue to Bothell, and one each way from Bothell to Lynnwood.

The goal was to provide drivers a choice for a faster, more reliable trip on I-405. Statutory performance measures require the ETL to maintain 45 mph at least 90% of the peak period; this is one of two performance measures the facility must meet or else state law requires termination of the two-year ETL pilot project.

The JTC study

The purpose of the study was:

- To conduct an independent and objective analysis of traffic data for the express toll lanes and generalpurpose lanes of the Interstate 405 tolled corridor;
- To analyze performance of the corridor in terms identified by the Consultant, as well as according to performance measures described in <u>RCW 47.56.880;</u> and
- To develop recommendations for near-term and longer-term strategies to improve traffic performance in the corridor.

A Staff Workgroup provided support during the study, comprised of a dozen staff members from JTC, the House and Senate Transportation Committees, the Transportation Commission, WSDOT, and OFM.

The consultants spent several days in Washington state over the course of the study, meeting with the staff workgroup, WSDOT, members of the public, members of the Legislature, and other interested parties. They received a huge volume of raw data from WSDOT from three data sets: loop detectors in the paved roadway; ETL toll transaction data; and HERE data derived from the cell phones of drivers using the HERE WE GO app. This is the data they independently analyzed throughout the course of the study.

Findings

Data. Of the three data sets reviewed for this study, two proved useful in the analysis.

- 1. <u>Loop detector data</u> is collected from detectors embedded in the pavement. It provides information about traffic volume and speed at 20-second intervals every half mile, in every lane in the corridor. This source provided 13 million records per month for analysis, beginning January of 2014 before the ETL opened, through June of 2017. This data was very useful in the study.
- 2. <u>ETL tolling transaction data</u> was available from October of 2015 through June of 2017. It is able to track trips on the ETL, and provides accurate travel time and volume information in the ETL. Four million records per month were available for analysis, providing a very useful data set for the study.

3. <u>HERE data, as well as INRIX data</u>, is derived from people using proprietary smart phone navigation apps. It is a limited data set, tracking aggregate travel time every 5 minutes for cars and trucks, but it does not provide lane or volume information, nor does it distinguish between traffic in the GPL and ETL. It is a small data set – 300,000 records per month -- and was not useful for this study.

Corridor performance. The consultants made six major findings about corridor performance.

- <u>The ETL speed performance measure (45 mph 90% of the peak period) was not met.</u> From January June 2017, speed was 45 mph or more 85% of the time going northbound, and 78% of the time going southbound.
- 2. <u>Speed improved after transforming the HOV lane to an ETL.</u> The HOV lane exceeded 45 mph 69% of the time northbound and 67% of the time southbound. (January of 2014 August of 2015).
- 3. <u>The ETL facility increased corridor throughput.</u> The ETL serve more vehicles than did the HOV lane, and even the GP lanes serve more traffic since the opening of the ETL.

	GPL	HOV/ETL	Total
Jan-Jun 2015 Average	924,600	144,342	1,068,942
Jan-Jun 2017 Average	936,339	229,857	1,166,195
Percent Increase	1.3%	59.2%	9.1%

Table 1. Northbound average daily VMT traveled in corridor for January to June (2015 and 2017)

Table 2. Southbound average daily VMT traveled in corridor for January to June (2015 and 2017)

	GPL	HOV/ETL	Total
Jan-Jun 2015 Average	983,689	137,213	1,120,903
Jan-Jun 2017 Average	1,067,442	266,858	1,334,299
Percent Increase	8.5%	94.5%	19.0%

- 4. <u>GPL speeds showed no significant change after opening the ETL.</u> Average speed in the GPL during peak periods were similar before and after opening the ETL. Improvements noted after opening the paved shoulder lane in April of 2017 have since returned to pre-ETL levels.
- 5. <u>ETL toll rates hit \$10 during 15% of the peak period.</u> The maximum \$10 toll was charged on average 15% of the time in either direction during the study period. Frequently hitting the maximum toll is a problem, because it means lane volume can no longer be managed to ensure the desired ETL speed.
- 6. <u>The tolling algorithm is not optimally responsive, and the toll rate is too low as traffic volume builds.</u> Especially during peak times, the toll algorithm and pricing are not effectively controlling traffic entering the ETL, which can result in too many vehicles in the ETL, unmanageable congestion, and unacceptably low average ETL speeds. The consultants found the toll is as much as \$4 too low to effectively manage traffic during peak periods.

Recommendations

The consultants made the following eight recommendations which they say are "both actionable and have a high likelihood of addressing challenges identified in (*their*) data analysis." The first five are near-term recommendations, and the last three are longer-term recommendations.

Top tier recommendations, implementable in the short term and offering the greatest promise to improve performance.

1. Improve ETL speed through a more responsive dynamic toll algorithm.

The consultants found that the toll rate is too low as traffic volume builds in the ETL, as much as \$4 too low to effectively manage traffic during peak periods. A higher toll will discourage people from entering the ETL, thereby reducing ETL congestion and helping to achieve the target 45 mph speed 90% of the peak travel time.

2. Improve ETL speed through segmented corridor tolling.

Drivers currently lock in a corridor-long toll rate at the beginning of their trip. The consultants found that for a facility as long as the 17-mile I-405 corridor, a single rate has significant traffic management disadvantages. It is more effective to divide the corridor into multiple segments and charge a rate for each segment; this is a common practice in many U. S. cities. The consultants envision dividing the corridor into a small number of segments, perhaps two or three.

Second tier recommendation, implementable in the relative short term and will help improve performance.

3. Move toward an "open access" ETL facility to smooth lane transfer.

The corridor currently is striped to limit entrance from and exit to the GPL; while this has some advantages, it concentrates lane transfer and can impede traffic flow and reduce speed overall. The consultants recommend implementing an open access strategy <u>on some parts of the facility</u> to improve traffic flow and throughput. They recommend this be done in concert with segmented tolling.

4. Increase the maximum toll rate to reduce ETL breakdown.

The maximum toll rate of \$10 was applied about 15% of the time both northbound and southbound throughout the study period. This is an indication of ETL breakdown; ideally the maximum toll on this facility should be reached only rarely. Once the maximum is reached, the lane volume can no longer be managed through pricing to ensure ETL speed.

The consultants recommend additional study to identify a higher more effective maximum toll rate. They believe that doing this in conjunction with the other three top tier recommendations should significantly reduce ETL congestion, and significantly reduce the frequency the maximum toll is charge.

5. Adjust the AM peak period times to increase ETL speed.

The consultants recommend extending the AM peak period to 5-10 AM (currently 5-9 AM) to improve the ETL performance. They found that traffic volumes between 9-10 AM are as high as during the earlier peak hours, but currently 2+ HOVs do not pay a toll to use the ETL at this hour. This means they are using the ETL at a time when it does not have capacity to support them.

Alternately, the peak could be shifted to 6-10 AM. This keeps a four-hour peak period, and includes the 9-10 AM slot. However, it would allow traffic to build up in the ETL between 5-6 AM, thus potentially

leading to unintended congestion from 5-6 AM.

Long-term recommendations, requiring a longer time to implement but offering promise to improve performance.

6. Extend second full ETL in each direction to improve ETL speed.

Because this is a high population growth corridor and traffic volumes are increasing at a rate much greater than in the rest of the state, extending two full ETLs from 160th Street NE in Woodinville to I-5 in Lynnwood would remove current ETL bottleneck conditions and improve traffic flow along the facility.

7. Add capacity to ensure lane continuity and ease bottlenecks.

The corridor has a number of bottlenecks on both GPL and ETL, where lane loss, on-ramps and other features cause traffic volumes to converge. The consultants recommend adding lane capacity at these bottlenecks to improve corridor continuity. They recommend additional study to better inform a final decision.

8. Increase transit options to improve throughput and speed.

The consultants observed that growth in VMT (vehicle miles travelled) along the I-405 corridor is well outpacing state and national averages. They believe that short-term benefits of added lane capacity will be reduced over time by increasing traffic on the corridor. Long-term corridor performance requires a balance of infrastructure improvements and transit options. They noted the I-405 master plan includes additional transit improvements, and the consultants recommend they be implemented to reduce congestion and increase passenger throughput in this high-growth corridor.

Study materials can be found here.

Study origin:	ESB 5096, Sec. 204(2)
Report:	January 8, 2018
Appropriation:	\$160,000
Project Manager:	Mary Fleckenstein (360) 786-7312; Beth Redfield (360) 786-7327
HTC staff:	Jennifer Harris
STC staff:	Erica Bramlet

Board of Pilotage Commissioners Best Practices Review

In 2017, the Legislature directed the Joint Transportation Committee to study marine pilotage in Washington state, with a goal of recommending best practices for an analytically-driven pilotage tariff and fee setting process, increasing pilot diversity, and governance structures for the oversight and management of pilotage activities.

The consulting team chosen to conduct the study included Community Attributes, Inc. and Gleason & Associates. The six-month study began in July 2017 and the final report is due in January 2018. A staff work group made up of legislative and OFM staff provided feedback on the study, meeting five times over the course of the summer and fall.

Background

The Board of Pilotage Commissioners (BPC) was created to prevent the loss of human lives, loss of property and vessels, and to protect the marine environment. The Board must achieve these goals while also maintaining and developing Washington's competitive position for waterborne commerce, in relation to other ports and nations of the world. The major responsibilities of the Board are to license pilots, identify potential pilot trainees through an examination process, develop an appropriate training program, set tariffs for pilotage services, and investigate marine incidents.

Foreign-flagged vessels entering the Puget Sound or Grays Harbor must hire a licensed pilot to guide the vessel safely to port. The 52 pilots serving the Puget Sound are independent contractors, organized under the Puget Sound Pilots Association. The two pilots serving Grays Harbor are employees of the Port of Grays Harbor.

The 2017 Transportation Budget included funding for a settlement of a recent discrimination lawsuit. The issues of concern raised by Legislators as a result of the lawsuit settlement included diversity in recruitment and training, as well as public financial management of marine pilotage revenues.

The JTC study

The study analysis began with a review of existing practices relating to marine pilotage in the State of Washington. Research on best practices focused on the key issues, challenges, and problems identified in Washington's current system. Best practices in other states were identified as those practices that exemplified both: 1) applicability to Washington; and 2) provided evidence that the outcomes of those practices represented a potential improvement over Washington's current system.

Findings and Recommendations

In the area of diversity, the study made three finding and recommendation pairs:

- 1. Washington's BPC and other commissions around the nation do not collect data on gender and ethnicity of pilot candidates. The BPC should establish a voluntary data collection protocol to allow the ability to evaluate the impact of efforts to improve diversity of applicants, trainees, and licensed pilots.
- The BPC's Train the Trainer course, Joint Diversity committee, and hiring of outside experts to review the examination are good faith efforts to address bias in the system. These efforts should expand and continually seek to improve fairness in the steps of becoming a licensed pilot, while maintaining the high standards of safety necessary in marine pilotage.

3. The greatest challenge to increasing diversity in pilotage is the wider diversity problem in the marine industry pipeline that supplies pilot candidates, a challenge beyond the scope and capabilities of any one agency or organization. A new Task Force on Maritime Sector Workforce Development, established by the Legislature and the Governor, should convene public and private stakeholders to address marine workforce issues, including a more diverse pool of candidates working their way up through the sea-going marine professions.

In the area of tariff and fee rate setting, the study makes four findings, and offers two approaches to addressing these findings. The consultant team's preferred option is to transfer marine pilotage tariff setting to the Washington Utilities and Transportation Commission (UTC). The UTC's processes can provide the structure, rigor, and transparency to address comprehensively each of the tariff-setting findings below. Each finding could also be addressed by making improvements at the BPC as noted.

- 4. Washington law requires that pilotage tariffs be set annually. This incentivizes continuous advocacy for adjustment and takes time away from other duties of the BPC. This annual requirement should be replaced by initiation of tariff changes by stakeholders on an as-needed basis. This change in law would be accompanied by an evidentiary, petition-based process, with timelines for data submission, which the BPC can establish in rule.
- 5. The BPC makes decisions on tariff adjustments without the benefit of an established analytical methodology and lacks the staff capacity to provide objective analysis. A BPC-hired staff analyst or consulting economist would work out processes and methodologies for predictable and transparent rate-setting. The BPC should also consider automatic adjusters to rate elements, allowing for multi-year tariffs.
- 6. Data submissions to the BPC are not consistent or timely. By rule, the BPC can establish specific data requirements and enforcement provisions. For instance, no rate adjustments would be considered if submission requirements were not met.
- 7. Capital expense financing has no defined process and it is difficult to track the tariff revenue financing these expenses. A revised process would include the submission of a capital funding plan, the establishment of a sub-committee specializing in capital expense review, and consideration of temporary surcharges to finance capital expenses.

Finally, in the area of board composition, the study found that the BPC membership is not well suited to the task of tariff setting. The votes of the pilots' and shippers' representatives cancel each other out, leaving the decision to public interest and environmental representatives, who may not have the financial expertise. For just the tariff setting function, the UTC would provide an arms-length alternative, while also bringing to bear experience in addressing the other tariff-setting findings.

Study materials can be found <u>here</u>.

Study origin:	ESB 5096, Sec. 204(1)
Report:	January 8, 2018
Appropriation:	\$200,000
Project Manager:	Beth Redfield (360) 786-7327; Mary Fleckenstein (360) 786-7312
HTC staff:	Jennifer Harris
STC staff:	Hayley Gamble

Washington State Air Cargo Movement Study

The 2017 Legislature provided \$500,000 for a study of air cargo movement in Washington State, with a particular focus on identifying opportunities and constraints for using existing capacity at airports around the state to meet the increasing demand for cargo operations, potentially reducing the growth that Sea-Tac must accommodate. An 18-month study, the final report is due in December of 2018.

The consulting team selected to conduct the study is led by WSP and also includes Keiser Phillips and PRR, Inc. WSP brings a broad freight-based practice to the project, supplementing its own air freight expertise with the aviation consulting firm Keiser Phillips. PRR provides facilitation for the Stakeholder Panel discussions.

Background

In 2014, 22 Washington State airports handled 518,688 metric tons of air cargo. The distribution of this activity among airports is widely divergent, with three airports accounting for 96% of the air cargo market (Sea-Tac, Boeing Field, and Spokane International). Sea-Tac alone handled fully 63% of air cargo in the state.

Similarly, available capacity for growth in airport operations is uneven across airports. All three Puget Sound region airports operated at more than 60% of their capacity. However, most airports in the state have capacity to spare, with total statewide aircraft operations at only about 14% of capacity in 2014.

With about 40% of air cargo transported in the lower deck, or belly, of passenger flights, cargo and passenger operations are interdependent. Additionally, the two modes of air transport may compete for scarce space available for on-airport facilities.

The movement of air cargo is a public-private partnership. The dominant airports moving air cargo in Washington State are owned and operated by local government jurisdictions. These airports individually conduct planning efforts to guide capital and operating investments to meet growing demand. The air cargo industry is made up of private sector entities, such as commercial passenger airlines, integrated/express carriers (domestic and international), and freight forwarding and logistics companies.

State government generally plays a supporting role in air cargo delivery, providing transportation infrastructure for freight movement, and defining the rules under which the airports and businesses operate in the state.

The JTC Study

As directed by the proviso, the study will:

- Describe the state's air cargo system facilities,
- Evaluate current and projected capacity,
- Identify underutilized capacity,
- Describe the market forces which determine demand for air cargo services at different locations,
- Develop a definition of air cargo congestion, and
- Evaluate what would be needed to more effectively use existing capacity at airports across the state.

The study's recommendations must address options to reduce air cargo congestion, more efficiently use available capacity at Washington airports, as well as identify the state's interest in reducing air cargo congestion on a statewide basis.

A Stakeholder Panel made up of legislators, industry representatives and top agency officials provides a venue for

discussion of the results and recommendations produced by the consultant team. Panelists bring their own expertise and experience to the discussion, ensuring transparency of the deliverables throughout the study process. The contributions from the panel will be an important input to the study, however the final recommendations of the study will be those of the consultant team.

The study is also assisted by a staff working group, which provides technical feedback to the consulting team.

Progress to date

In the fall of 2017, the study team convened the first meeting of the Stakeholder Panel at Boeing Field. During the meeting the study work plan was described, air cargo key concepts were introduced, a draft definition of air cargo congestion was discussed, and all participated in a roundtable discussion of goals for the study.

The consulting team, interested legislators, and the staff working group toured Sea-Tac's air cargo facilities in November. Following the Stakeholder Panel meeting in December, participants took a short tour of Boeing Field facilities.

Next Steps

The first white paper describing Washington's air cargo system, including markets, commodity flows, forecasts, and facility requirements is expected to be completed by the end of February 2018.

Subsequent tasks and white papers will address air cargo congestion, the opportunities and constraints for air cargo around Washington state, and a strategy for developing air cargo and logistics services for the state as a whole.

Three additional meetings are planned for the Stakeholder panel: tentatively in early April, late June, and mid-September. At the final meeting the Panel will review the draft findings and recommendations. The final report is due December 14, 2018.

Study materials can be found <u>here</u>.

Study origin:	ESB 5096, Sec. 204(3)
Report:	December 14, 2018
Appropriation:	\$500,000
Project Manager:	Beth Redfield (360) 786-7327; Mary Fleckenstein (360) 786-7312
HTC staff:	David Munnecke
STC staff:	Hayley Gamble