

# Progress Report Sounder Program

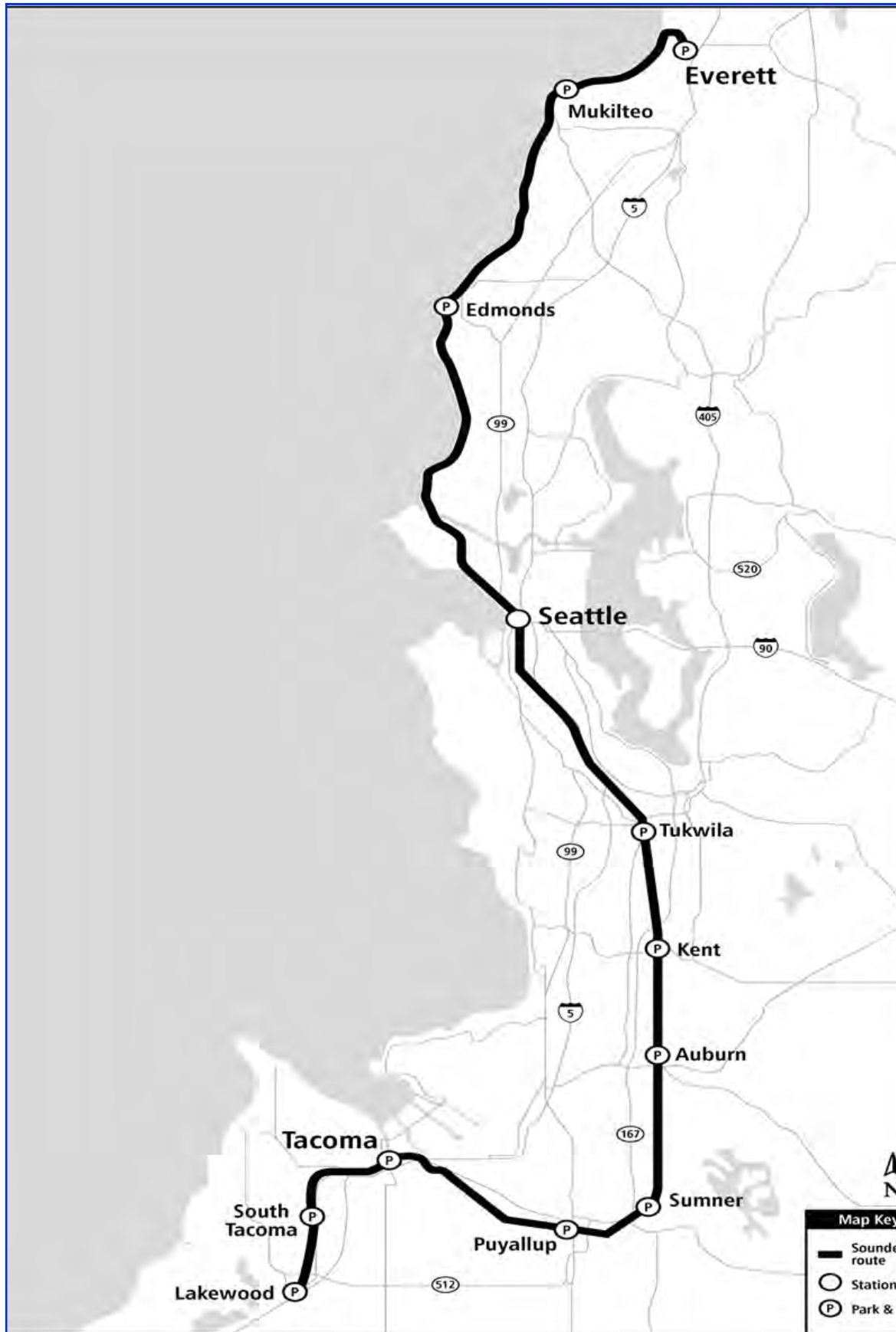


Historic Tacoma “S-Turn” Trestle is honored with stories and pictures from the past in a new commemorative display in the Tacoma Dome Station’s breezeway.

March | 2018



Prepared by Project Control & VE | Design, Engineering & Construction Management



# Sounder Commuter Rail

## Program Overview

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**Auburn Station Access Improvements:** Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Auburn Station. The purpose of the project is to improve access to the existing Auburn Sounder station for Sounder riders, bicyclists, bus riders, and drivers.

**Kent Station Access Improvements:** Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Kent Station. The purpose of the project is to improve access to the existing Kent Sounder station for Sounder riders, bicyclists, bus riders, and drivers.

**Mukilteo Station, South Platform:** Full build-out of this station included construction of a second platform, overhead pedestrian bridge, elevators, stair tower, and passenger shelters. Sounder service at the south platform began on April 11, 2016. The project page for this project has been removed. Only follow-on work remains. Cost status can be found on the Program Cost Summary table.

**Point Defiance Bypass:** Sound Transit administered the construction of the Point Defiance Bypass Track & Signal contract, which constructed a new second track adjacent to Sound Transit's existing main line between South Tacoma (66th Street Bridge) and Lakewood (Bridgeport Way) and installed new rails, ties, and ballast on Sound Transit's existing track between Lakewood and Nisqually with associated signal and PTC safety systems. The work was funded by a FRA-administered federal grant to WSDOT for improvements along the Pacific Northwest High Speed Intercity Passenger Rail corridor. Construction was completed 3Q 2017, and the track is in service. The project page for this project has been removed. Cost Status can be found on the Program Cost Summary Table.

**Positive Train Control:** Federal regulations require all passenger train routes be equipped with PTC systems before January 2019. This necessitated upgrades to Sounder wayside signals, communications, and information management systems along with additional on-board equipment. BNSF has installed wayside elements within the Everett-to-Tacoma corridor. This project includes wayside elements along the Tacoma-to-Lakewood corridor and modifications of locomotives and cab cars for installation of on-board equipment. BNSF dispatches all Sounder trains and operates the back office server (BOS) portion of Sound Transit's PTC system. Sound Transit will implement PTC operations as early as FRA approvals of its Revenue Service Demonstration Plan and completion of testing with BNSF will allow.

**Puyallup Station Access Improvements:** Project includes environmental documentation, design and construction of station access improvements at or around Puyallup Station. The purpose of this project is to accommodate and encourage future demand for Sounder ridership in an economically efficient and environmentally sustainable manner.

**Sounder Maintenance Base:** Sound Transit will construct a new railroad maintenance facility to service Sounder commuter trains at its expanded Century Yard facility in the City of Lakewood. The building will contain maintenance bays, materials storage areas, offices, and facilities for employees.

**Sounder South Expanded Service:** Sound Transit purchased four additional round trip easements from BNSF to expand service between Seattle and Tacoma/Lakewood. Sound Transit is responsible for completing environmental documentation, permitting, and mitigation associated with BNSF construction activities necessary to support those additional round trips.

**Sounder Yard Expansion:** Increased Sounder service in the Everett-to-Lakewood corridor will require additional train sets and a location to store the added trains overnight. The Century Yard facility was expanded with a third storage track to accommodate 8-car trains, the new train sets, and permanent crew reporting facilities, eliminating the need to lease space for train and engine crews.

**Sumner Station Access Improvements:** Project includes environmental documentation, design, and construction of station access improvements at or around Sumner Sounder Station. The purpose of this project is to accommodate and encourage future demands for Sounder ridership in an economically efficient and environmentally sustainable manner.

**Tukwila Station:** Construction of a permanent station and platforms to replace the temporary wooden structure has been completed. This project included the construction of an expanded parking lot, bus loop with passenger shelters, bicycle storage area, and new concrete platforms with improved passenger shelters, all sited to accommodate BNSF's new third mainline, now under construction. The project page for this project has been removed. Only follow-on work remains. Cost status can be found on the Program Cost Summary table.

**Tacoma Trestle Track & Signal:** Replacement of existing wooden trestle that has reached the end of its functional service life with a double track concrete structure. This project will improve overall safety, capacity, and speed in this section of the Sounder Tacoma-to-Lakewood corridor.

### Program Budget

Figures are shown in millions below.

| SOUNDER                        | Authorized Project Allocation | Commitment to Date | Incurred to Date | Forecast to Complete | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|--------------------------------|-------------------------------|--------------------|------------------|----------------------|----------------------------|-------------------------------|
| AUBURN STATION ACCESS IMPRVMT  | \$4.2                         | \$2.9              | \$0.7            | \$1.3                | \$4.2                      | \$0                           |
| KENT STATION ACCESS IMPRVMTS   | \$4.2                         | \$2.9              | \$0.7            | \$1.3                | \$4.2                      | \$0                           |
| MUKILTEO STATION-S PLATFORM    | \$18.3                        | \$16.3             | \$16.3           | \$2.0                | \$18.3                     | \$0                           |
| POSITIVE TRAIN CONTROL         | \$53.1                        | \$43.6             | \$40.4           | \$0.9                | \$44.4                     | \$8.6                         |
| PT DEFIANCE BYPASS             | \$83.6                        | \$76.6             | \$75.1           | \$2.2                | \$78.9                     | \$4.8                         |
| PUYALLUP STATION IMPROVEMENTS  | \$11.0                        | \$6.1              | \$3.8            | \$4.9                | \$11.0                     | \$0                           |
| SOUNDER MAINTENANCE BASE       | \$9.0                         | \$3.3              | \$2.8            | \$5.6                | \$9.0                      | \$0                           |
| SOUNDER SOUTH EXPANDED SERVICE | \$205.6                       | \$195.1            | \$195.0          | \$10.5               | \$205.6                    | \$0                           |
| SOUNDER YARD EXPANSION         | \$20.6                        | \$16.8             | \$16.1           | \$2.4                | \$19.2                     | \$1.3                         |
| SUMNER STATION IMPROVEMENTS    | \$17.0                        | \$14.0             | \$6.6            | \$3.0                | \$17.0                     | \$0                           |
| TACOMA TRESTLE TRACK & SIGNAL  | \$161.0                       | \$122.5            | \$117.3          | \$38.5               | \$161.0                    | \$0                           |
| TUKWILA STATION                | \$46.0                        | \$37.3             | \$37.3           | \$1.3                | \$38.6                     | \$7.3                         |
| <b>TOTAL SOUNDER</b>           | <b>\$633.4</b>                | <b>\$537.5</b>     | <b>\$512.1</b>   | <b>\$73.9</b>        | <b>\$611.4</b>             | <b>\$22.1</b>                 |

*\*The Authorized Project Allocation reflects the budget for each project through the approved project phase, meaning that for projects approved for Final Design activities only, the project budget will be amended at some point to add budget for construction activities.*

# Sounder Commuter Rail Program Overview



## Program Schedule

Schedule for active projects are summarized below.

| Activity Name                                       | Start       | Finish    | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|---|-------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|   |             |           | Q1   | Q2   | Q3   | Q4   | Q1   | Q2   | Q3   | Q4   | Q1   | Q2   | Q3   | Q4   | Q1   | Q2   | Q3   | Q4   | Q1   | Q2   | Q3   |
| <b>Sound Transit 2</b>                              | 01-Apr-13   | 24-Apr-24 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Sounder Commuter Rail - South                       | 01-Apr-13   | 24-Apr-24 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Operations/Facilities - South                       | 01-Apr-13   | 30-Dec-23 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| S300004 - Sounder Maintenance Base - DB             | 01-Apr-13   | 30-Dec-23 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| S300011 - Positive Train Control                    | 16-Jul-13 A | 28-Dec-18 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| S300021 - Tacoma Trestle - Master Schedule - DBB    | 21-Mar-16   | 25-May-18 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Station Access - South                              | 01-May-18   | 24-Apr-24 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| S300017 - Puyallup Station Access Improvements - DB | 01-May-18   | 31-Dec-22 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| S300018 - Sumner Station Access Improvements - DB   | 01-May-18   | 01-Nov-22 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| S300038 - Kent Station Access Improvements - DB     | 24-Feb-16   | 23-Apr-24 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| S300041 - Auburn Station Access Improvement - DB    | 24-Feb-16   | 24-Apr-24 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| <b>Sound Transit 3</b>                              | 01-Jan-25   | 31-Dec-36 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| ST3 Project Schedule                                | 01-Jan-25   | 31-Dec-36 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| SOUTH CORRIDOR PROJECTS                             | 01-Jan-25   | 31-Dec-36 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Sounder South Capital Program                       | 01-Jan-25   | 31-Dec-36 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

## Construction Safety

Construction and System Safety provide systematic and comprehensive oversight, resources, and guidance to eliminate recognized hazards, promote a safety culture and achieve an integrated system of compliance and continuous improvement of safety on both construction projects and transit system elements.

Agency-led active construction contracts under the Sounder program are as follows:

- Tacoma Trestle Track & Signal Project
- Sounder Yard Expansion

No reportable injury incidents in Q1 2018.

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# Sounder Commuter Rail

## Auburn Station Improvements

### Project Summary

**Scope** Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Auburn Station.

The purpose of the project is to improve access to the existing Auburn Sounder station for Sounder riders, bicyclists, bus riders, and drivers.

**Phase** Conceptual Engineering and Environmental Review

**Budget** \$4.2 Million

**Schedule** In Service: 2024



*Improving access to Auburn Station*

### Key Project Activities

- Approval received by Sound Transit Board of Directors for CDM Smith contract amendment to begin Phase II — Conceptual Engineering & Environmental for the Kent and Auburn Access projects.

## Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

From January to March 2018, the cost incurred to date increased by \$37K from \$644 to \$681. The costs incurred are primarily attributed to the consultant's preparation of the final report on the selected alternative.

### Cost Summary by Phase

| Project Phase           | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$0.8                         | \$0.2              | \$0.2            | \$0.8                      | \$0.0                         |
| Preliminary Engineering | \$3.2                         | \$2.7              | \$0.5            | \$3.2                      | \$0.0                         |
| Final Design            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction Services   | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| 3rd Party Agreements    | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| ROW                     | \$0.1                         | \$0.0              | \$0.0            | \$0.1                      | \$0.0                         |
| <b>Total</b>            | <b>\$4.2</b>                  | <b>\$2.9</b>       | <b>\$0.7</b>     | <b>\$4.2</b>               | <b>\$0.0</b>                  |

## Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and developing risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

The Auburn Station Access Improvements Project Team will develop the Risk and Contingency Management Plan (RCMP) during Preliminary Engineering phase of the project. The project team will conduct a risk assessment workshop to identify potential risks during design and construction.



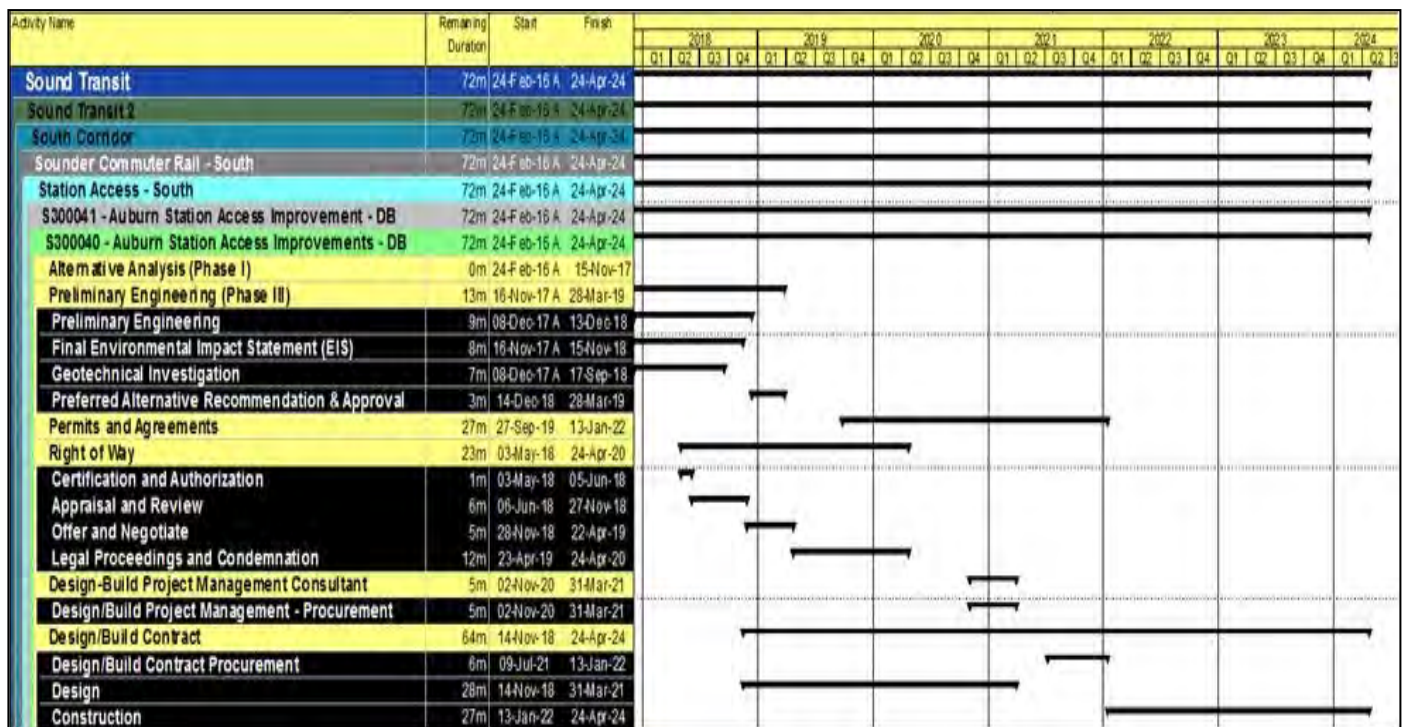
# Sounder Commuter Rail Auburn Station Improvements



## Project Schedule

Preliminary Engineering and Right-of-Way acquisition underway. Construction is forecasted to begin in 2022, and will be open for service in 2024.

## Schedule Snapshot



## Environmental

The project development consultant, CDM Smith, was issued Notice to Proceed in March 2018 to begin the Phase II—Conceptual Engineering & Environmental phase of the project. CDM Smith to develop the project schedule to outline the environmental assessment activities to begin to support the CE/Environmental phase for the project.

**Community Outreach**

- CDM Smith to develop a community outreach plan to outline the community outreach activities to begin to support the CE/Environmental phase for the project.

**Sound Transit Board Actions**

| Board Action | Description   | Date   |
|--------------|---|--------|
| M2018-19     | Authorizes the chief executive officer to execute a contract amendment with CDM-Smith to provide engineering and environmental services for Phase 2 and 3 of the Auburn Station Access Improvement project and the Kent Station Access Improvement project in the amount of \$4,371,057 with a 10% contingency of \$437,106 totaling \$4,808,163, for a total authorized contract amount not to exceed \$5,797,781. | 2/2018 |

# Sounder Commuter Rail Kent Station Improvements

## Project Summary

**Scope** Project includes alternatives identification, screening, environmental documentation, design and construction of station access improvements at or around Kent Station.

The purpose of the project is to improve access to the existing Kent Sounder station for Sounder riders, bicyclists, bus riders, and drivers.

**Phase** Conceptual Engineering & Environmental Review

**Budget** \$4.2 Million

**Schedule** In Service: 2024



*Improving Access to Kent Station*

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## Key Project Activities

- Approval received by Sound Transit Board of Directors for CDM Smith contract amendment to begin Phase II — Conceptual Engineering & Environmental for the Kent and Auburn Station Access projects.

### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

From January to March 2018, the cost incurred increased by \$41K from \$679 to \$720. The costs incurred are primarily attributed to the consultant's preparation of the final report on the selected alternative.

### Cost Summary by Phase

| Project Phase           | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$0.8                         | \$0.2              | \$0.2            | \$0.8                      | \$0.0                         |
| Preliminary Engineering | \$3.2                         | \$2.7              | \$0.5            | \$3.2                      | \$0.0                         |
| Final Design            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction Services   | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| 3rd Party Agreements    | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| ROW                     | \$0.1                         | \$0.0              | \$0.0            | \$0.1                      | \$0.0                         |
| <b>Total</b>            | <b>\$4.2</b>                  | <b>\$2.9</b>       | <b>\$0.7</b>     | <b>\$4.1</b>               | <b>\$0.0</b>                  |

### Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and developing risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

The Kent Station Access Improvements Project Team will develop the Risk and Contingency Management Plan (RCMP) during Phase III—Preliminary Engineering phase of the project. The project team to conduct a risk assessment workshop to identify all the potential risks during design and construction.

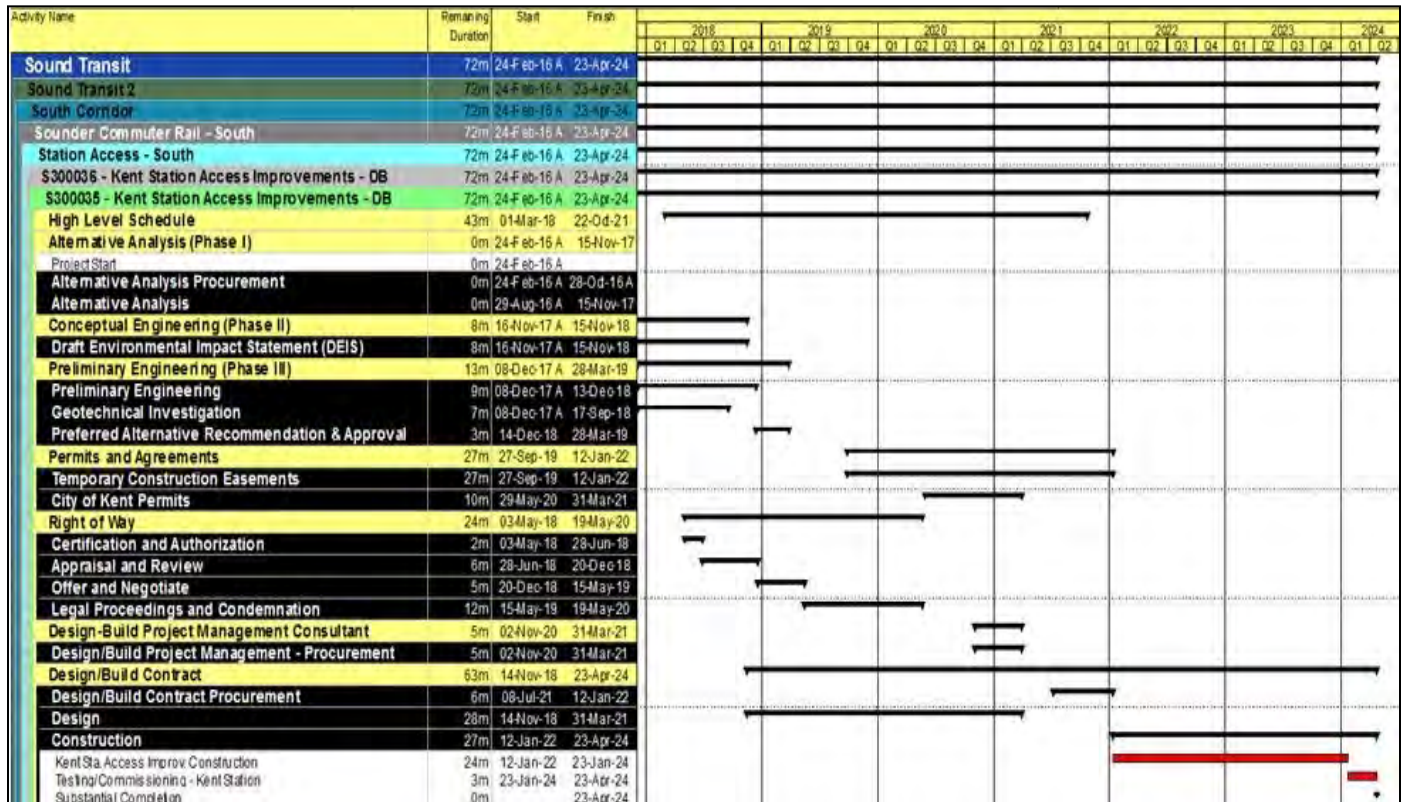
# Sounder Commuter Rail Kent Station Improvements



## Project Schedule

Preliminary Engineering and Right-of-Way acquisition underway. Construction is forecasted to begin in 2022, and will be open for service in 2024.

### Schedule Snapshot



## Environmental

- The project development consultant, CDM Smith, was issued Notice to Proceed in March 2018 to begin the Phase II—Conceptual Engineering & Environmental phase of the project. CDM Smith to develop the project schedule to outline the environmental assessment activities to begin to support the CE/Environmental phase for the project.

### Community Outreach

- CDM Smith to develop a community outreach plan to outline the community outreach activities to begin to support the CE/Environmental phase for the project.

### Sound Transit Board Actions

| Board Action | Description   | Date   |
|--------------|---|--------|
| M2018-19     | Authorizes the chief executive officer to execute a contract amendment with CDM-Smith to provide engineering and environmental services for Phase 2 and 3 of the Auburn Station Access Improvement project and the Kent Station Access Improvement project in the amount of \$4,371,057 with a 10% contingency of \$437,106 totaling \$4,808,163, for a total authorized contract amount not to exceed \$5,797,781. | 2/2018 |



# Sounder Commuter Rail Positive Train Control

## Project Summary

**Scope** Positive Train Control (PTC) systems are integrated command, control, communications, and information systems for controlling train movements. The systems improve railroad safety by significantly reducing the probability of collisions between trains, casualties to railway workers, and over speed accidents.



**Limits** Tacoma—Nisqually

**Alignment** Sounder

**Systems** Track and signal

**Phase** Construction

**Budget** \$53.1 Million

**Schedule** Project Implementation 2019



*Improving safety along the Tacoma-to-Lakewood corridor*

## Key Project Activities

- Performed final testing of Lakewood sub-division file to validate physical characteristics along the alignment.
- Activated PTC on Lakewood sub-division.
- Working through technical issues related to system initialization and enforcements.
- Working to equip nine new Crash Energy Management (CEM) cars in the Sounder fleet.



### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

- From January to March 2018, total project cost incurred were equal to \$403,718. The incurred costs are primarily attributed to finalizing remaining documentation and performing final system testing.

### Cost Summary by Phase (\$M)

| Project Phase           | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$2.2                         | \$1.5              | \$1.5            | \$1.6                      | \$0.6                         |
| Preliminary Engineering | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Final Design            | \$0.3                         | \$0.2              | \$0.2            | \$0.2                      | \$0.1                         |
| Construction Services   | \$4.1                         | \$2.3              | \$0.8            | \$1.7                      | \$2.3                         |
| 3rd Party Agreements    | \$4.3                         | \$3.9              | \$2.5            | \$3.9                      | \$0.4                         |
| Construction            | \$40.5                        | \$35.7             | \$35.3           | \$37.0                     | \$3.5                         |
| ROW                     | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Project Contingency     | \$1.7                         | \$0.0              | \$0.0            | \$0.0                      | \$1.7                         |
| <b>Total</b>            | <b>\$53.1</b>                 | <b>\$43.6</b>      | <b>\$40.4</b>    | <b>\$44.4</b>              | <b>\$8.6</b>                  |

### Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

Top project risk:

- External contractor technical resources are limited either technically or by workload.

### Project Schedule

PTC is scheduled to be Operational December 2019.

### Environmental

- NEPA /SEPA was completed May 2014

# Sounder Commuter Rail

## Puyallup Station Access Improvements

### Project Summary

#### Scope

Project includes environmental documentation, design and construction of station access improvements at or around Puyallup Station.

The purpose of this project is to accommodate and encourage future demand for Sounder ridership in an economically efficient and environmentally sustainable manner.



#### Phase

Preliminary Engineering

#### Budget

\$11.0 Million

#### Schedule

In Service: 2022



*Improving access to Puyallup Station*

### Key Project Activities

- Continued drafting Design Build procurement documents.
- Negotiations for parcel acquisitions and relocations.

### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

From January to March 2018, the cost incurred increased by \$294K from \$3,462 to \$3,756. The cost incurred this period attributed to staff costs, engineering design work, utility coordination, and drafting the construction RFP.

### Cost Summary by Phase

| Project Phase           | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$1.2                         | \$1.0              | \$1.0            | \$1.2                      | \$0.0                         |
| Preliminary Engineering | \$3.0                         | \$2.3              | \$2.2            | \$3.0                      | \$0.0                         |
| Final Design            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction Services   | \$0.1                         | \$0.0              | \$0.0            | \$0.1                      | \$0.0                         |
| 3rd Party Agreements    | \$0.1                         | \$0.0              | \$0.0            | \$0.1                      | \$0.0                         |
| Construction            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| ROW                     | \$6.6                         | \$2.8              | \$0.6            | \$6.6                      | \$0.0                         |
| <b>Total</b>            | <b>\$11.0</b>                 | <b>\$6.1</b>       | <b>\$3.8</b>     | <b>\$11.0</b>              | <b>\$0.0</b>                  |

### Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and developing risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

The following are the top identified risks:

- Environmental– Contamination (Soil &/or Water)
- Real Estate / Right Of Way General or Miscellaneous
- Development Agreement process. As a result of the still undefined development agreement language and process, the permit could be delayed.

# Sounder Commuter Rail

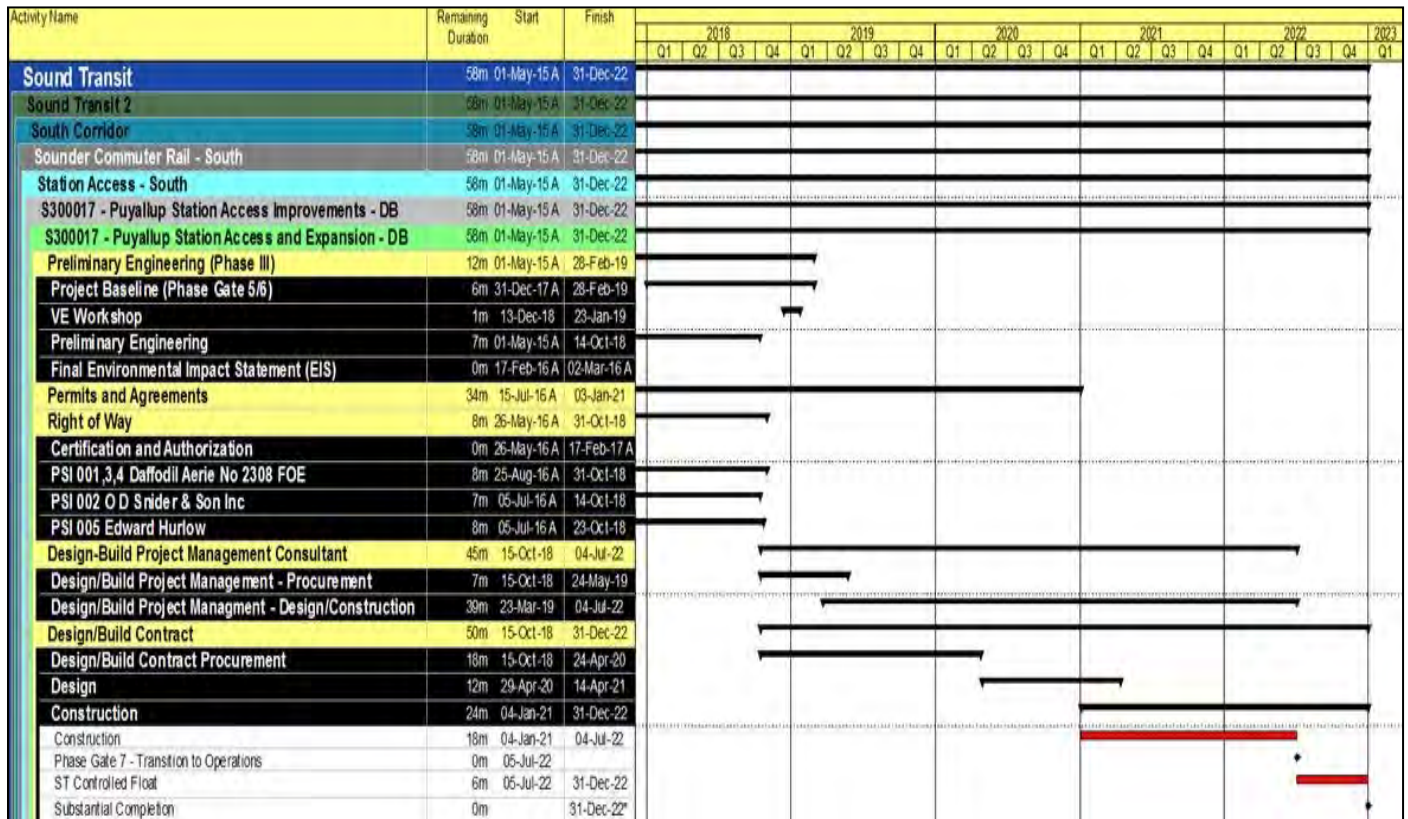
## Puyallup Station Access Improvements



### Project Schedule

Preliminary Engineering and Right of Way acquisition are currently underway. Construction is forecasted to begin in 2022.

### Schedule Snapshot



### Environmental

- SEPA Checklist/DCE completed 2016.
- Pursuant to the SEPA checklist, an “Archaeological Resource Monitoring and Inadvertent Discovery Plan, the SEPA checklist will be prepared during Final Design.

**Sound Transit Board Actions**

| Board Action | Description                    | Date |
|--------------|--------------------------------|------|
|              | Nothing to report at this time |      |

### Project Summary

**Scope** Sound Transit to design and construct a Sounder commuter rail maintenance facility in Lakewood, Washington.

**Limits** The maintenance facility will be located on Sound Transit's railroad right of way on the Lakeview sub-division between Steilacoom Boulevard and 100th Street SW at the Century Yard.

**Phase** Conceptual Engineering & Environmental

**Budget** \$9.0 Million

**Schedule** In Service: 2023



*Amtrak currently provides Sounder vehicle maintenance*

### Key Project Activities

- The project development consultant, WSP Engineers, transmitted the shop and site layouts for Sound Transit staff to review and comment.
- Sound Transit met with Tacoma Power, Puget Sound Energy and Lakeview Light & Power to discuss utility conflicts on the project site.
- Sound Transit reached a settlement agreement on the Burgess parcel that is required for the project. The Federal Transit Administration to review and approve the settlement agreement amount on the value for the property.

### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

This period approximately \$0.1M was incurred, bringing the total project expenditures from \$2.7M to \$2.8M. The cost incurred this period attributed to staff costs and engineering design work.

### Cost Summary by Phase

| Project Phase           | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$0.9                         | \$0.7              | \$0.7            | \$0.9                      | \$0.0                         |
| Preliminary Engineering | \$5.0                         | \$2.3              | \$1.9            | \$5.0                      | \$0.0                         |
| Final Design            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction Services   | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| 3rd Party Agreements    | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| ROW                     | \$3.0                         | \$0.3              | \$0.2            | \$3.0                      | \$0.0                         |
| <b>Total</b>            | <b>\$9.0</b>                  | <b>\$3.3</b>       | <b>\$2.8</b>     | <b>\$9.0</b>               | <b>\$0.0</b>                  |

### Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and developing risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks. The risk review workshop anticipated to be scheduled in 3rd QTR 2018.



# Sounder Commuter Rail

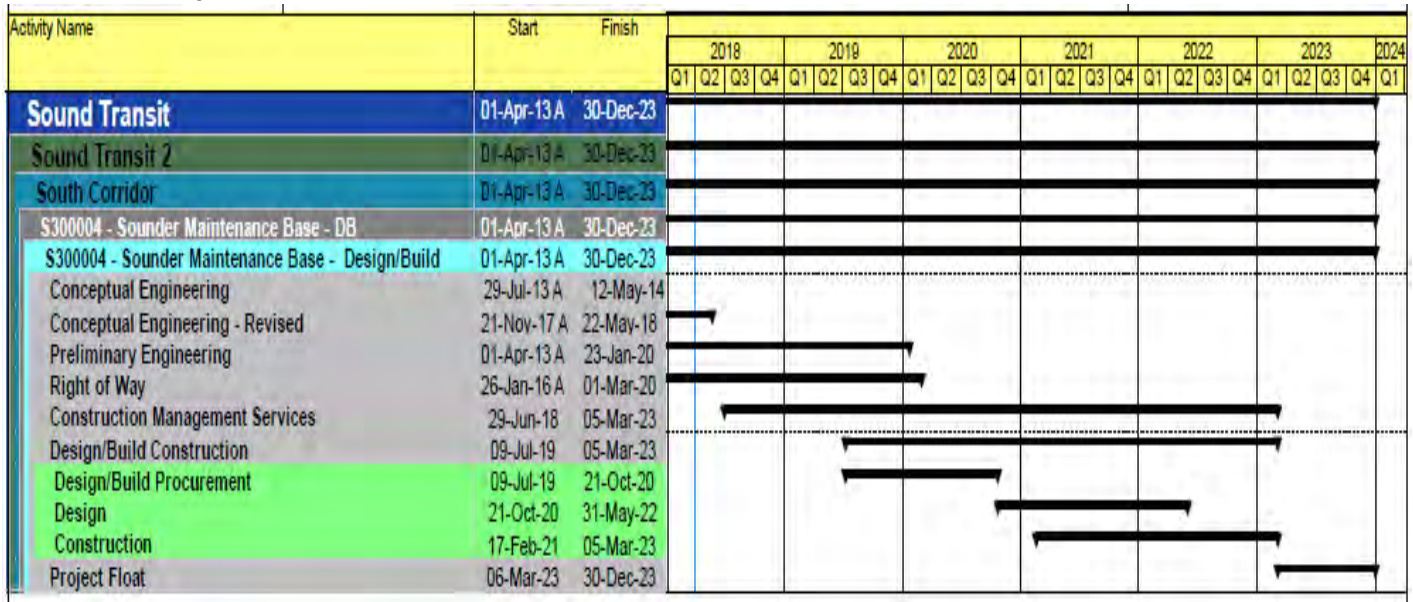
## Sounder Maintenance Base



### Project Schedule

Sounder Maintenance Base is expected to open for Service in 4th QTR 2023. Design Build procurement documents are currently being prepared. It is expected the Design/Build procurement will commence in late 2019.

#### Schedule Snapshot



### Environmental

- The Federal Transit Administration (FTA) is reviewing the draft NEPA reevaluation documents. The project plans to expand the footprint of the maintenance facility up to 60,000 square feet.

### Sound Transit Board Actions

| Board Action | Description     | Date |
|--------------|-----------------|------|
|              | None to report. |      |

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# Sounder Commuter Rail

## Sounder South Expanded Service



### Project Summary

**Scope** Purchase of four additional commuter rail easements from BNSF for expanding Sounder service between Seattle and Lakewood. Additional Sounder South service was implemented in 2016 and two more round trips were added in 2017.

As part of environmental mitigation requirements, Sound Transit is partnering with King County to replace an existing fish culvert in the Auburn area with a larger structure.

**Phase** Design and Permitting

**Budget** \$205.6 Million

**Schedule** Project Completion: Fall 2019



*Additional morning and evening service between Seattle and Lakewood*

### Key Project Activities

- Sound Transit Environmental Compliance received permission to extend the Corps mitigation permit allowing construction of the project to take place in 2019.
- Working with King County and other agencies to apply for local and state required permits.
- Execute the construction and maintenance agreement with King County for the culvert replacement project.

### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

The project cost incurred to date increased by \$109K. from \$194.9M to 195.0M. The cost incurred can primarily be attributed to staff salaries, fish passage design, and King County design review.

### Cost Summary by Phase

| Project Phase           | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$1.7                         | \$1.3              | \$1.3            | \$1.7                      | \$0.0                         |
| Preliminary Engineering | \$0.5                         | \$0.5              | \$0.5            | \$0.5                      | \$0.0                         |
| Final Design            | \$0.9                         | \$0.6              | \$0.5            | \$0.9                      | \$0.0                         |
| Construction Services   | \$0.1                         | \$0.0              | \$0.0            | \$0.1                      | \$0.0                         |
| 3rd Party Agreements    | \$3.8                         | \$0.1              | \$0.1            | \$3.8                      | \$0.0                         |
| Construction            | \$12.1                        | \$7.4              | \$7.4            | \$12.1                     | \$0.0                         |
| ROW                     | \$186.5                       | \$185.2            | \$185.2          | \$185.5                    | \$0.0                         |
| <b>Total</b>            | <b>\$205.6</b>                | <b>\$195.1</b>     | <b>\$195.0</b>   | <b>\$205.6</b>             | <b>\$0.0</b>                  |

### Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and developing risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

The following are the top project wide risks:

- Schedule risk—King County's process for obtaining a required grading permit can take up to eight months. Project team is coordinating a pre-application meeting with County staff and seeking possible use of expedited review process for obtaining permit.
- Schedule risk—In-water construction can only take place during the months of July - September due to presence of fish in the creek. Close coordination with King County staff is taking place in order for the design to be completed in time for King County to be able to procure a contractor and order box culvert structure in time.
- Schedule risk - Puget Sound Energy has high-pressure gas line that is in conflict with the project and needs to be removed/relocated in time before the contractor can complete its work. Close coordination between ST, its design consultant, King County, and PSE is taking place in order to ensure that PSE can complete its relocation work and leave sufficient time for the contractor to complete its work within the fish construction window.

### Project Schedule

- Permitting: Fall 2018
- Final Design: Winter 2019
- Construction: Fall 2019

The critical path of the culvert replacement is the approval of the King County grading permit. Once approved, final design can be completed and then the construction contract package will be turned over to the County to advertise and construct.

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### Environmental

- Complete additional archaeological survey work.
- Received agreement from US Army Corps on extension of fish passage culvert work to summer of 2019.
- Submit permit applications for fish passage culvert work.

### Community Outreach

- Updated Community Outreach Public Involvement Plan in coordination with King County Community Outreach.
- Coordinated with Sound Transit Real Property and King County Road Services for preparing acquisition of temporary construction easements.

### Sound Transit Board Actions

| Board Action | Description     | Date |
|--------------|-----------------|------|
|              | None to report. |      |

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# Sounder Commuter Rail

## Sounder Yard Expansion



### Project Summary

**Scope** Project includes design and construction of a third storage track and civil improvements to accommodate seventeen, eight-car Sounder train sets at the Lakewood layover facility and Century Yard.

**Phase** Construction Close Out

**Budget** \$20.6 Million

**Schedule** Project Completed: June 20, 2017



*Sounder Yard Expansion will increase storage capacity for Sounder 7th train set*

### Key Project Activities

- Preparation and submittal of LEED application to USGBC.
- Project punch list items have been fully addressed by the Contractor.

### Project Cost Summary

The Sounder Yard Expansion project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

- The overall project Estimated Final Cost (EFC) for this period reflects \$19.2M, a savings projection of \$1.3M. This period approximately \$0.1M was incurred, bringing the total project expenditures from \$16.0M to \$16.1M.

### Cost Summary by Phase

| Project Phase           | Baseline Budget | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-----------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$1.4           | \$1.4                         | \$1.2              | \$1.2            | \$1.4                      | \$0.0                         |
| Preliminary Engineering | \$1.8           | \$1.8                         | \$1.8              | \$1.2            | \$1.8                      | \$0.0                         |
| Final Design            | \$0.0           | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction Services   | \$1.4           | \$1.4                         | \$1.2              | \$1.2            | \$1.4                      | \$0.0                         |
| 3rd Party Agreements    | \$0.0           | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction            | \$15.5          | \$15.5                        | \$12.3             | \$12.3           | \$14.2                     | \$1.3                         |
| ROW                     | \$0.4           | \$0.4                         | \$0.2              | \$0.2            | \$0.4                      | \$0.0                         |
| <b>Total</b>            | <b>\$20.6</b>   | <b>\$20.6</b>                 | <b>\$16.8</b>      | <b>\$16.1</b>    | <b>\$19.2</b>              | <b>\$1.3</b>                  |



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# Sounder Commuter Rail

## Sumner Station Access Improvements

### Project Summary

**Scope** Construction of a new garage adding 505 parking spaces, along with sidewalk and lighting enhancements.

**Phase** Preliminary Engineering

**Budget** \$17.0 Million

**Schedule** Project Completion: 2022



*Improving access to Sumner Station*

### Key Project Activities

- Continued drafting Design Build procurement documents.
- Continued negotiation offers with parcel owners for relocation and acquisition.

### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

From January to March 2018, the cost incurred by \$365K \$6,186M to \$6,550M. The costs incurred are attributed to staff costs, engineering design work, utility coordination, and drafting the construction RFP.

### Cost Summary by Phase

| Project Phase           | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$1.4                         | \$0.9              | \$0.9            | \$1.4                      | \$0.0                         |
| Preliminary Engineering | \$3.0                         | \$2.4              | \$2.2            | \$3.0                      | \$0.0                         |
| Final Design            | \$0.0                         | \$0.0              | \$0.0            | \$0.0                      | \$0.0                         |
| Construction Services   | \$0.4                         | \$0.0              | \$0.0            | \$0.4                      | \$0.0                         |
| 3rd Party Agreements    | \$7.7                         | \$7.6              | \$0.5            | \$7.7                      | \$0.0                         |
| Construction            | \$0.1                         | \$0.1              | \$0.1            | \$0.1                      | \$0.0                         |
| ROW                     | \$4.4                         | \$3.0              | \$2.8            | \$4.4                      | \$0.0                         |
| <b>Total</b>            | <b>\$17.0</b>                 | <b>\$14.0</b>      | <b>\$6.6</b>     | <b>\$17.0</b>              | <b>\$0.0</b>                  |

### Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

The following are the top project wide risks:

- Third Party Agreements
- Environmental-Contamination (Soil &/or Water)

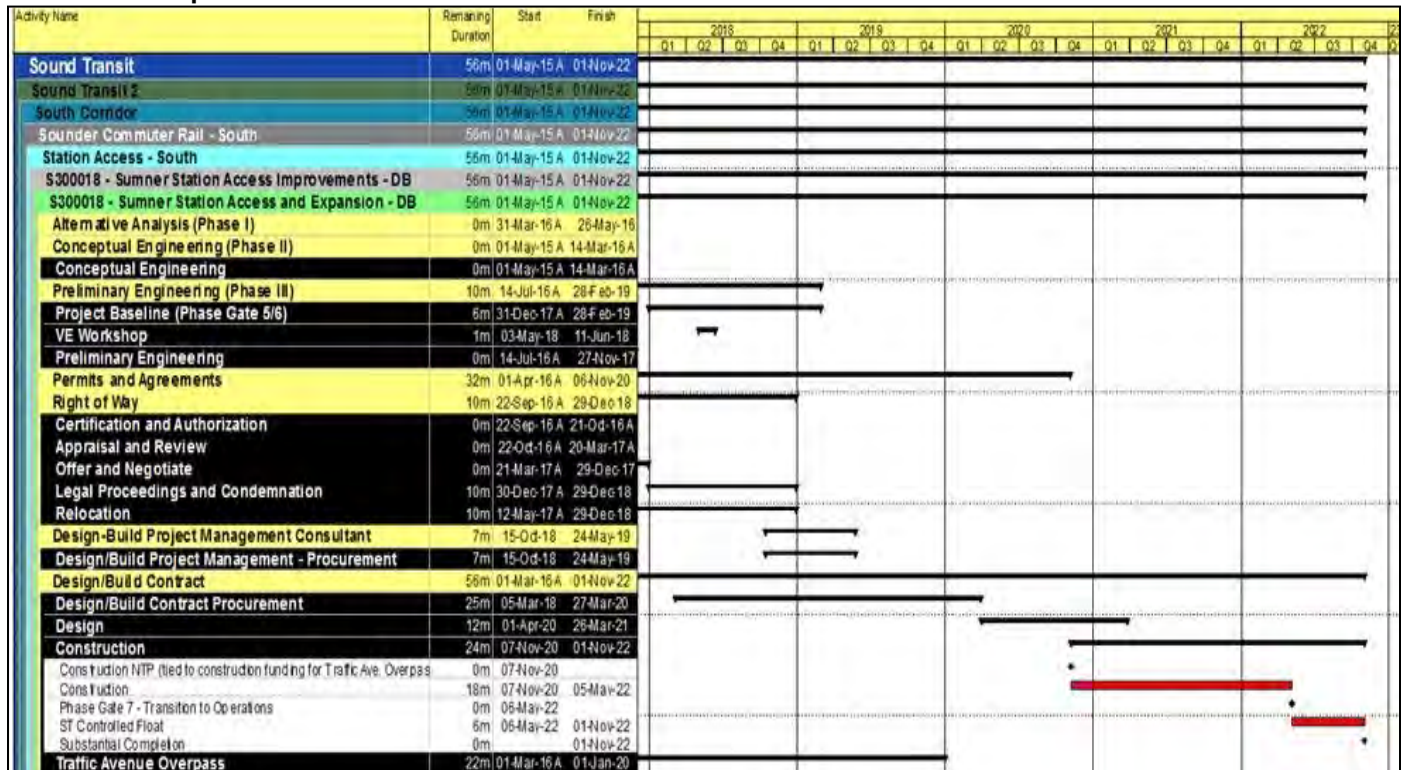
# Sounder Commuter Rail Sumner Station Access Improvements



## Project Schedule

Preliminary Engineering and Right-of-Way acquisition are currently underway. Construction is forecasted to begin in 2022.

### Schedule Snapshot



## Environmental

- SEPA Checklist/DNS completed 2016.
- Pursuant to the SEPA checklist, an “Archaeological Resource Monitoring and Inadvertent Discovery Plan,” is being prepared during Final Design.

**Sound Transit Board Actions**

| Board Action | Description                 | Date |
|--------------|-----------------------------|------|
|              | None to report this period. |      |

# Sounder Commuter Rail Tacoma Trestle Track & Signal

## Project Summary

|                 |   |
|-----------------|---|
| <b>Scope</b>    | Replacing the wooden, single-track railroad trestle east of Freighthouse Square with a new concrete, double-track bridge. |
| <b>Limits</b>   | L Street — C Street Tacoma, WA  |
| <b>Systems</b>  | Track and signal  |
| <b>Phase</b>    | Construction  |
| <b>Budget</b>   | \$161 Million   |
| <b>Schedule</b> | Project completion 2018   |



*Project will replace existing Tacoma Trestle*

## Key Project Activities

- Continued work to complete sanitary sewer installation, retaining wall construction and platform finished work.
- Working to complete safety certification submittals.

## Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

There has been no changes to the Baseline Budget since the last reporting period. This period approximately \$3.7M was incurred, bringing the total project expenditures from \$113.7M to \$117.4M.

## Cost Summary by Phase

| Project Phase           | Baseline Budget | Authorized Project Allocation | Commitment to Date | Incurred to Date | Estimated Final Cost (EFC) | Authorized Allocation vs. EFC |
|-------------------------|-----------------|-------------------------------|--------------------|------------------|----------------------------|-------------------------------|
| Administration          | \$8.1           | \$8.1                         | \$4.8              | \$4.8            | \$8.1                      | \$0.0                         |
| Preliminary Engineering | \$4.1           | \$4.1                         | \$4.1              | \$4.1            | \$4.1                      | \$0.0                         |
| Final Design            | \$15.2          | \$15.2                        | \$12.3             | \$10.9           | \$15.2                     | \$0.0                         |
| Construction Services   | \$7.6           | \$7.6                         | \$5.7              | \$4.9            | \$7.6                      | \$0.0                         |
| 3rd Party Agreements    | \$1.8           | \$1.8                         | \$0.4              | \$0.3            | \$1.8                      | \$0.0                         |
| Construction            | \$114.2         | \$114.2                       | \$88.3             | \$85.7           | \$114.2                    | \$0.0                         |
| ROW                     | \$10.1          | \$10.1                        | \$6.9              | \$6.7            | \$10.1                     | \$0.0                         |
| <b>Total</b>            | <b>\$161.0</b>  | <b>\$161.0</b>                | <b>\$122.5</b>     | <b>\$117.3</b>   | <b>\$161.0</b>             | <b>\$0.0</b>                  |

## Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and developing risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

Top project risk: Contractor requesting time impact delays to be added to their schedule.



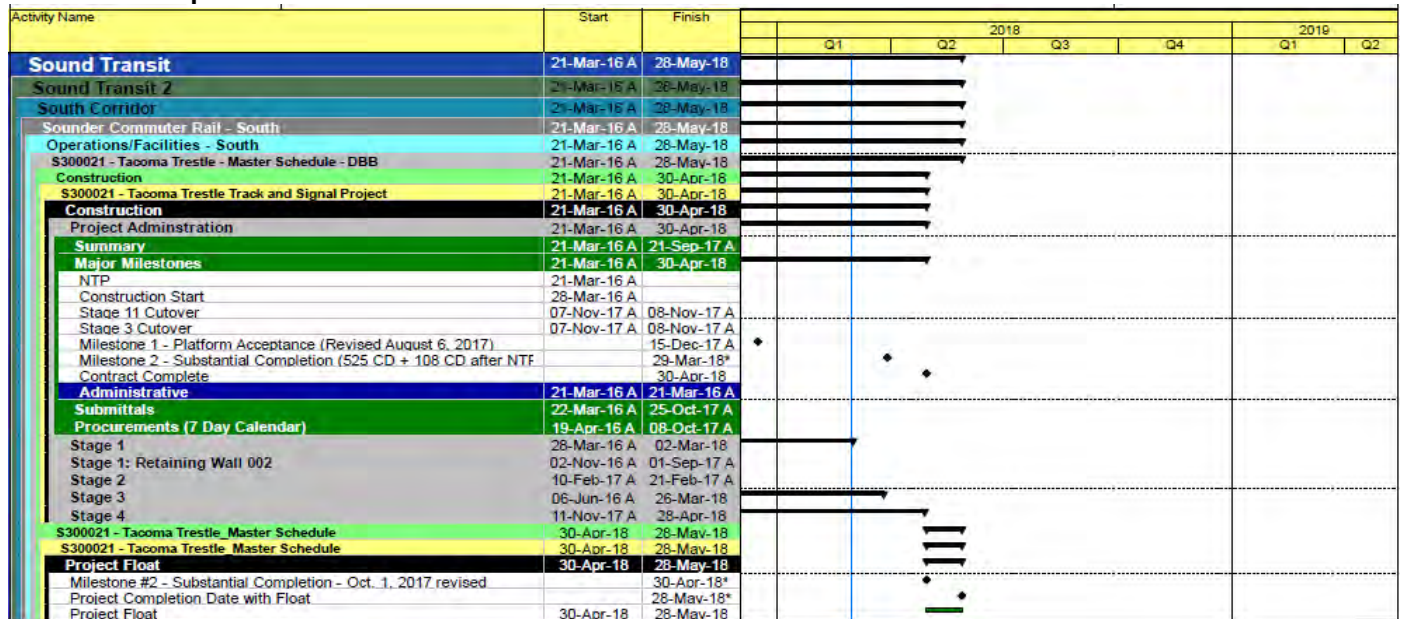
# Sounder Commuter Rail Tacoma Trestle Track & Signal



## Project Schedule

No project schedule update was received for March 2018. Milestone #1 Platform Acceptance and Milestone #2 Substantial Completion is expected in April 2018. Both North and South Platforms and trestle are currently being utilized by Sound Transit customers and Sounder trains. The contractor is currently nearing completion of sewer bypass work and miscellaneous contract work required for issuance of substantial completion.

## Schedule Snapshot



## Environmental

- Environmental staff monitored contractor's wetland restoration activities and verified that all wetland areas impacted by the project have been restored in accordance with our Nationwide Permit #14.

## Community Outreach

- On-going coordination with the contractor and property owners to close out Temporary Construction Easements required for construction and removed monitoring equipment from properties.
- Provided public notices of full & partial street closures; and/or placing copies at the Tacoma Dome Station.
- Provided weekly updates to Pierce Transit regarding planned impacts to roads and bus stops.

**Sound Transit Board Actions**

| Board Action | Description     | Date |
|--------------|-----------------|------|
|              | None to report. |      |