

TRIUNITY









SOUND TRANSIT: ST3 COST ASSESSMENT TASK 2 FINAL REPORT



TIMELINE OF REPORTS

Task 1: Review and Assessment of Past Cost Estimates and Trends

- » Draft Report March 2021
- » Final Report April 2021

Task 2: Estimating Methodology Review and Recommendations

- » Draft Report June 2021
- » Final Report June 2021

Task 3: Management Methodology Review and Recommendations

- » Draft Report July 2021
- » Final Report After Receiving Board Comments











FOCUS OF THIS REPORT

Task 2 Final: Estimating Methodology Review and Recommendations

- » Why
- » Methodology
- » Recommendations
- » Next Steps

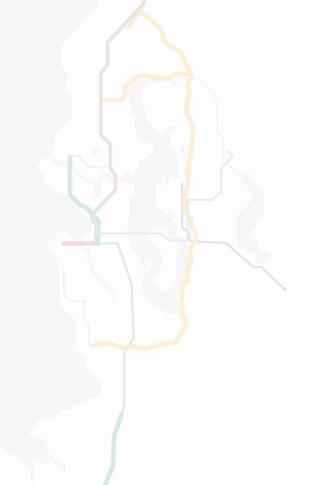












SINCE WE WERE LAST HERE

- » Cost Estimating Responsibility Matrix
- » Rank of each Driver's impact to the change in cost estimates
- » Amount each Driver contributed toward the change in cost estimates
- » Sound Transit & WSDOT Estimating Workshop











DRIVERS IMPACTING CHANGES TO COST ESTIMATES

Construction cost estimating:

- » Prescriptive process with little flexibility.
- » Unit costs were updated.
- » Some original design assumptions were inaccurate.
- » Second opinions were not utilized.

Right of Way (ROW) cost estimating:

- » Buffer method underestimated right of way needs.
- » Changes to the formula approach.
- » Unpredictable market conditions.
- » Unclear ownership for early estimates.













DRIVERS IMPACTING CHANGES TO COST ESTIMATES

| No. | Category | Driver | Estimate Impact (%) |
|-----|--------------|--|---------------------|
| 1 | Construction | Inaccurate Original Assumptions | 40% |
| 2 | ROW | Right Of Way (ROW) Formula (including contingency) | 20% |
| 3 | ROW | Right Of Way (ROW) Quantities (buffer method) | 20% |
| 4 | ROW | Market conditions (as pertains to real estate) | 10% |
| 5 | Construction | Unit Cost Library Updates | 10% |
| 6 | Construction | Prescriptive Estimating Practices* | N/A |
| 7 | Construction | Second Opinions* | N/A |
| 8 | ROW | Right Of Way (ROW) Estimating Ownership * | N/A |

^{*} Driver is not quantifiable.











RECOMMENDATIONS

- » Right Of Way (ROW) Estimating Methodology
 - » Involve ROW specialists early in the process.
 - » Identify when deviations from methodology in estimating ROW are necessary and appropriate.
- » Sound Transit Policies and Procedures
 - » Procure an independent opinion to validate early cost estimates.
 - » Active use of a Responsibility matrix.
 - » Include a program level management reserve in addition to project level contingency.











RECOMMENDATIONS

» Internal Communication

- » Portfolio Services Office involvement in Program level process oversight.
- » Involve Subject Matter Experts early and often.
- » Develop and maintain a fully developed risk register with associated cost implications.
- » Tools to Communicate with the Board
 - » Annual Program Evaluation to share yearly project status with the Board.
 - » Dashboard for project status update.
- » Communication to the Public
 - » Use of ranges with initial cost estimates.













NEXT STEPS

- » Estimating 101 Workshop
 - » Schedule: TBD
 - » Scope development in progress
- » Task 3 Draft Report Management Methodology
 - » Due July 19th week of monthly Board meeting











