

# TRIUNITY



Ott - Sakai

& Associates, LLC



COMMONSTREET  
CONSULTING



CAPO  
PROJECTS GROUP



ARCADIS

## SOUND TRANSIT: ST3 COST ASSESSMENT TASK 2 FINAL REPORT

June 24, 2021

# 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

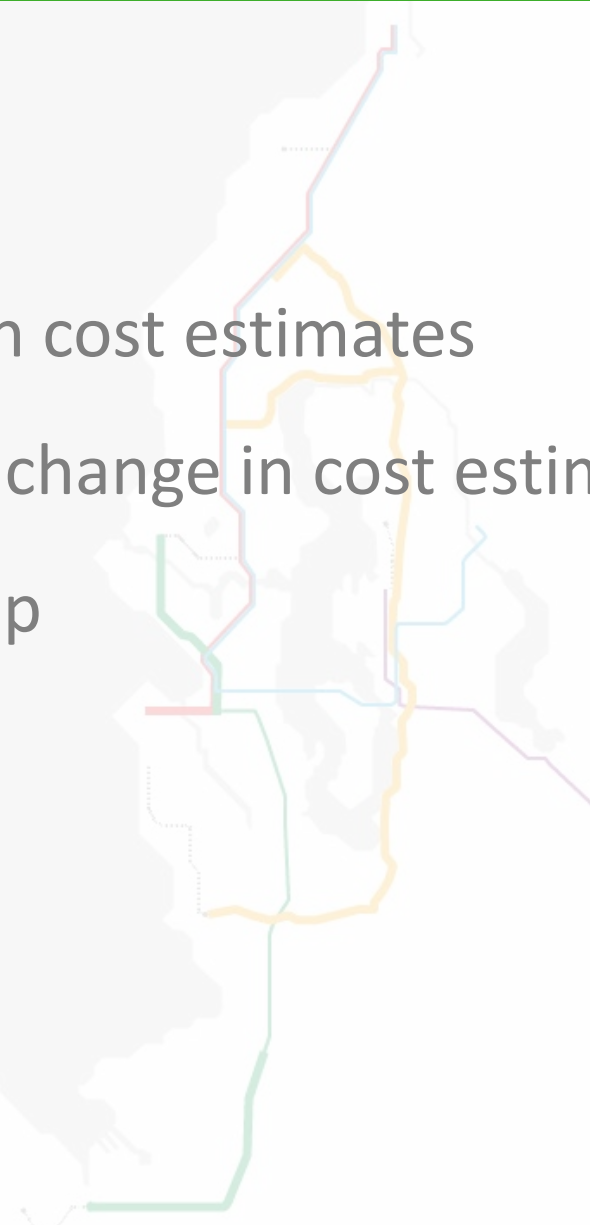
## Task 2 Final: Estimating Methodology Review and Recommendations

- » 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



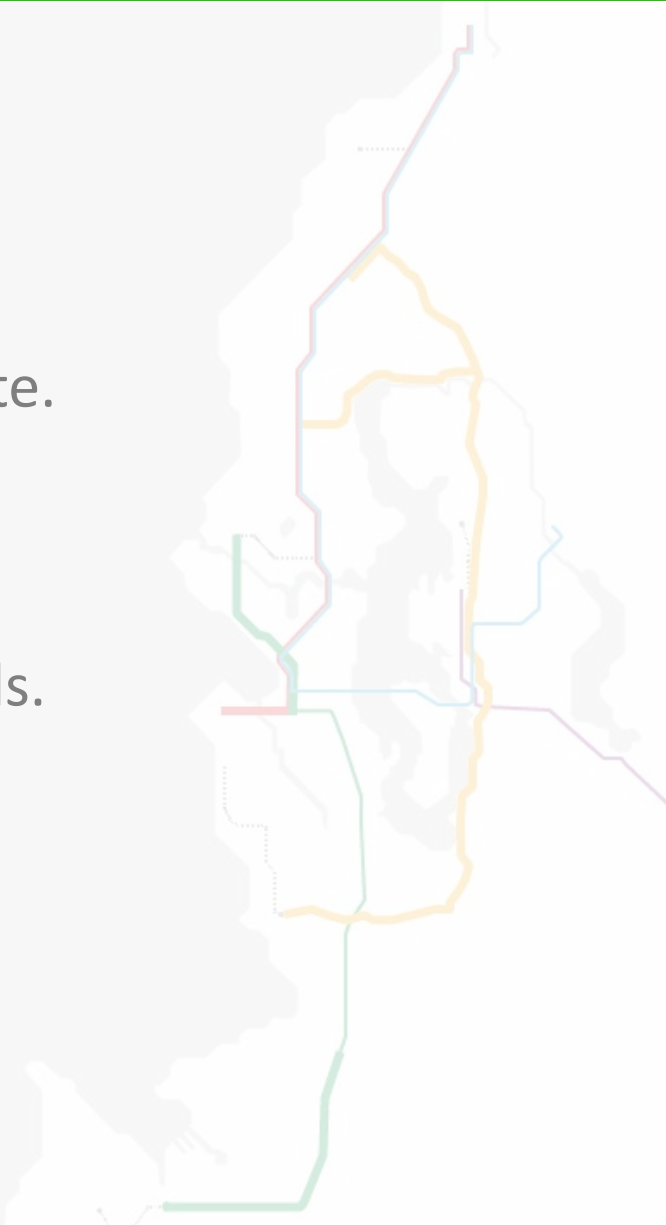
# DRIVERS IMPACTING CHANGES TO COST ESTIMATES

## 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

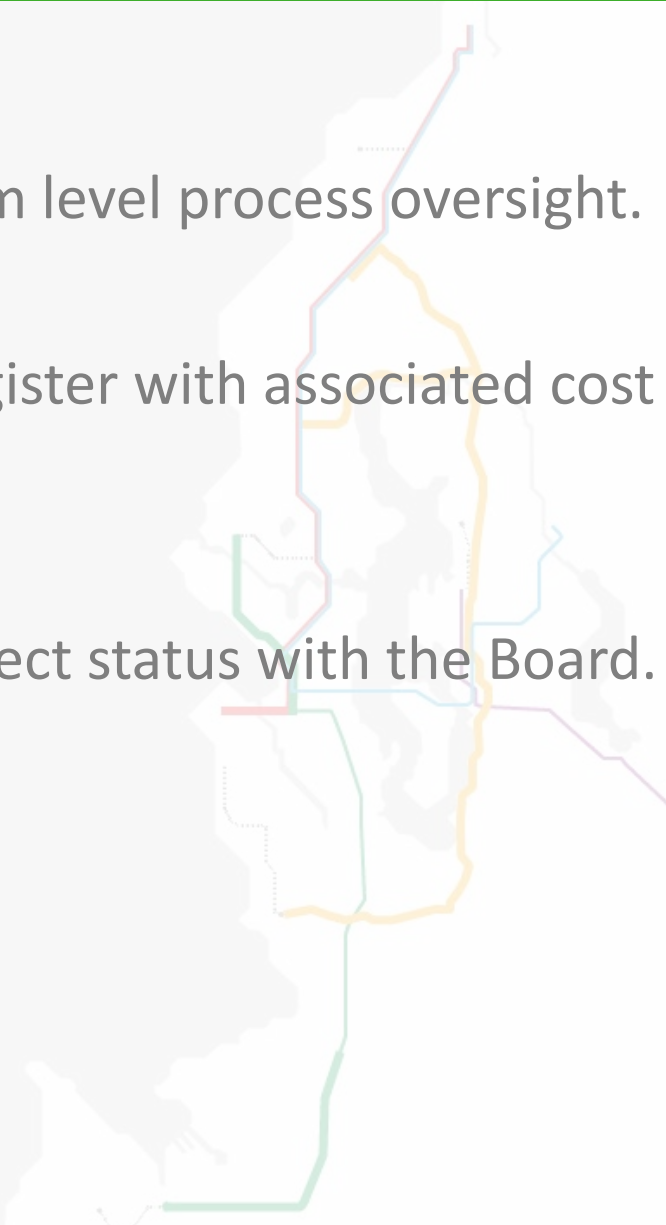
- » Portfolio Services Office involvement in Program level process oversight.
- » Involve Subject Matter Experts early and often.
- » Develop and maintain a fully developed risk register with associated cost implications.

## » 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
  - » Scheduled for July 8<sup>th</sup>
  - » Scope development in progress
- » Task 3 Draft Report – Management Methodology
  - » Due July 19<sup>th</sup> – week of monthly Board meeting

