

Connecting Washington Bid Environment

Chris Christopher, P.E., State Construction Engineer

Rich Struna, Deputy Director, Capital Program
Development and Management

Joint Transportation Committee September 14, 2017

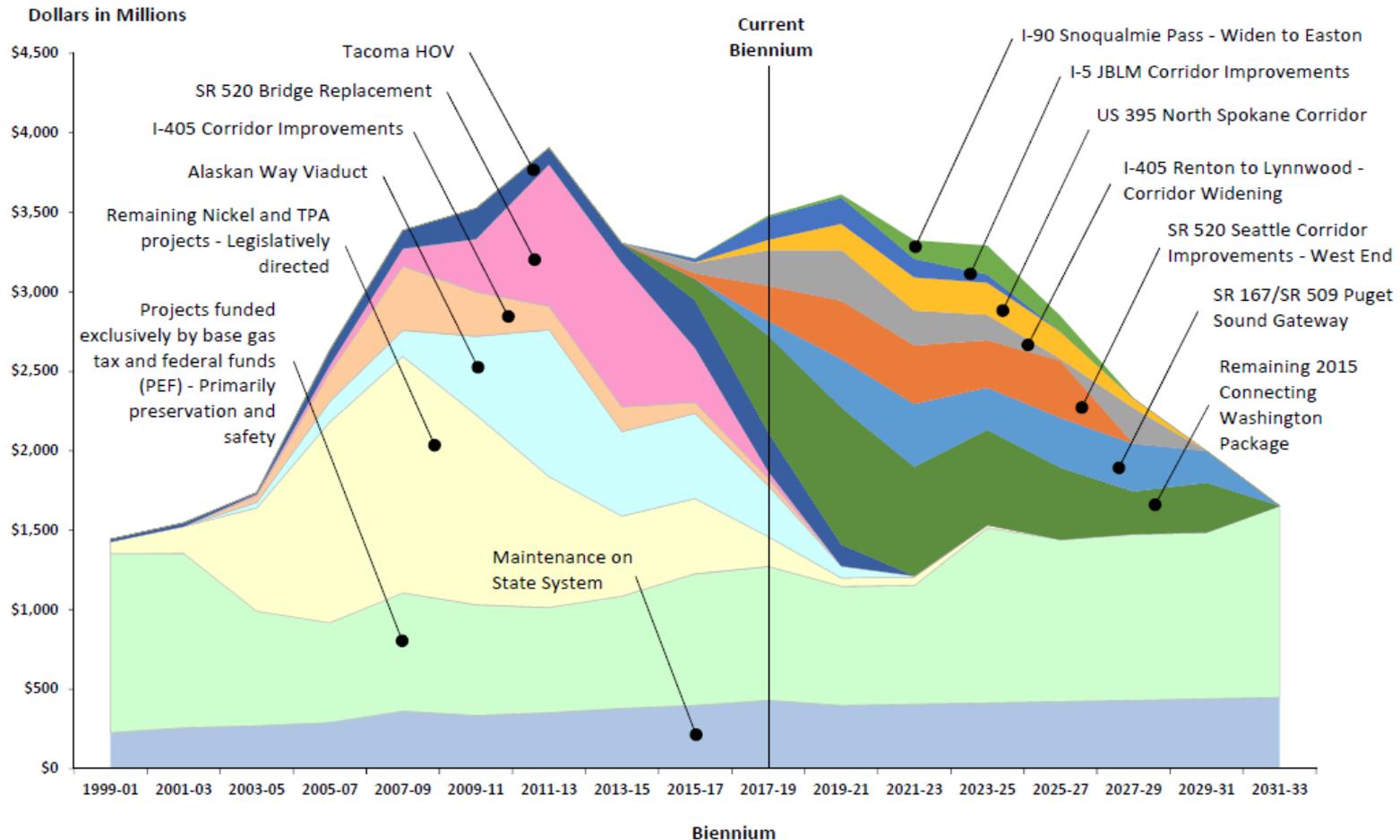
Roger Millar, Secretary of Transportation

Keith Metcalf, Deputy Secretary of Transportation

Current project delivery

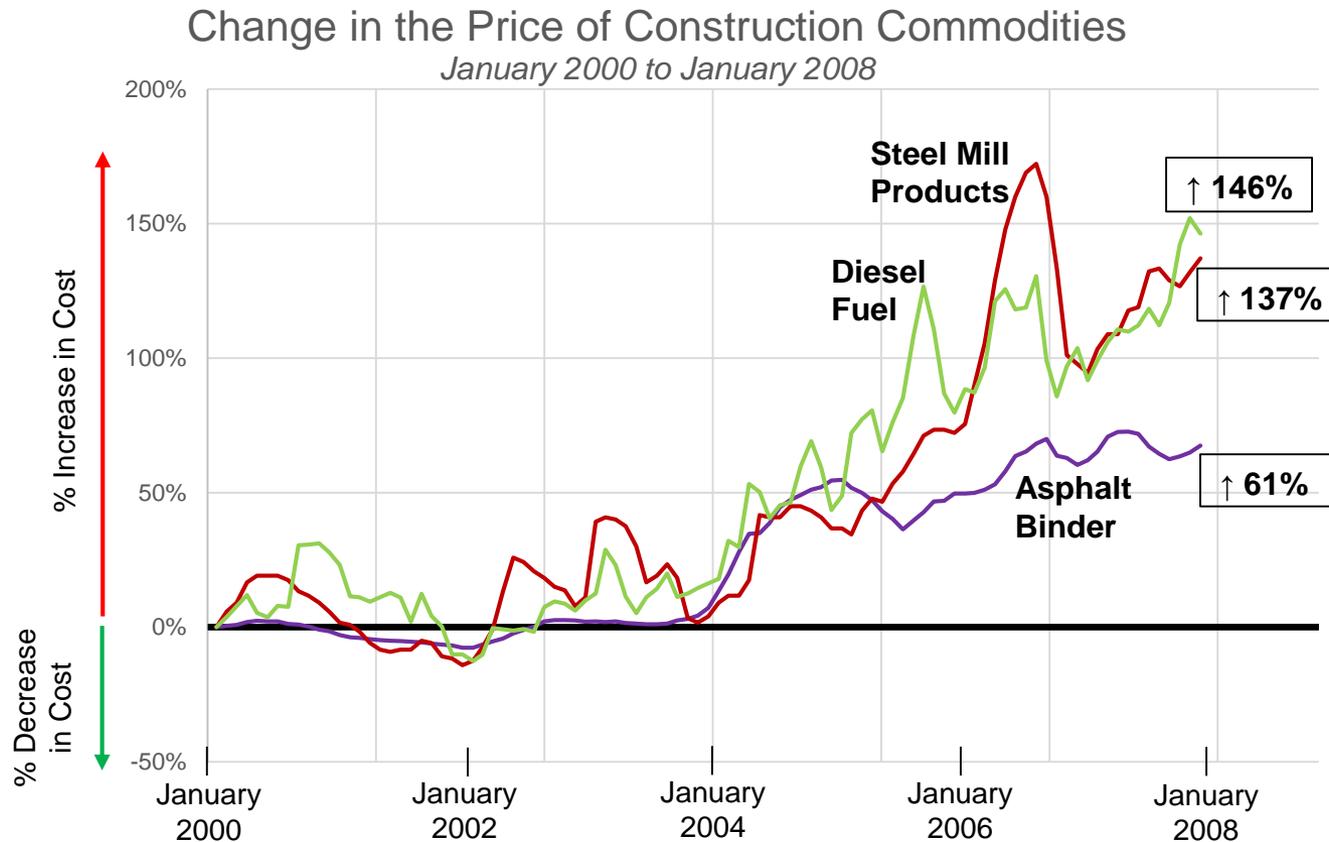
WSDOT Highway Maintenance and Construction Programs with Revenue Packages 2017 Legislative Final Budget

17LEGFIN (Excludes sub-programs 16 and 17)

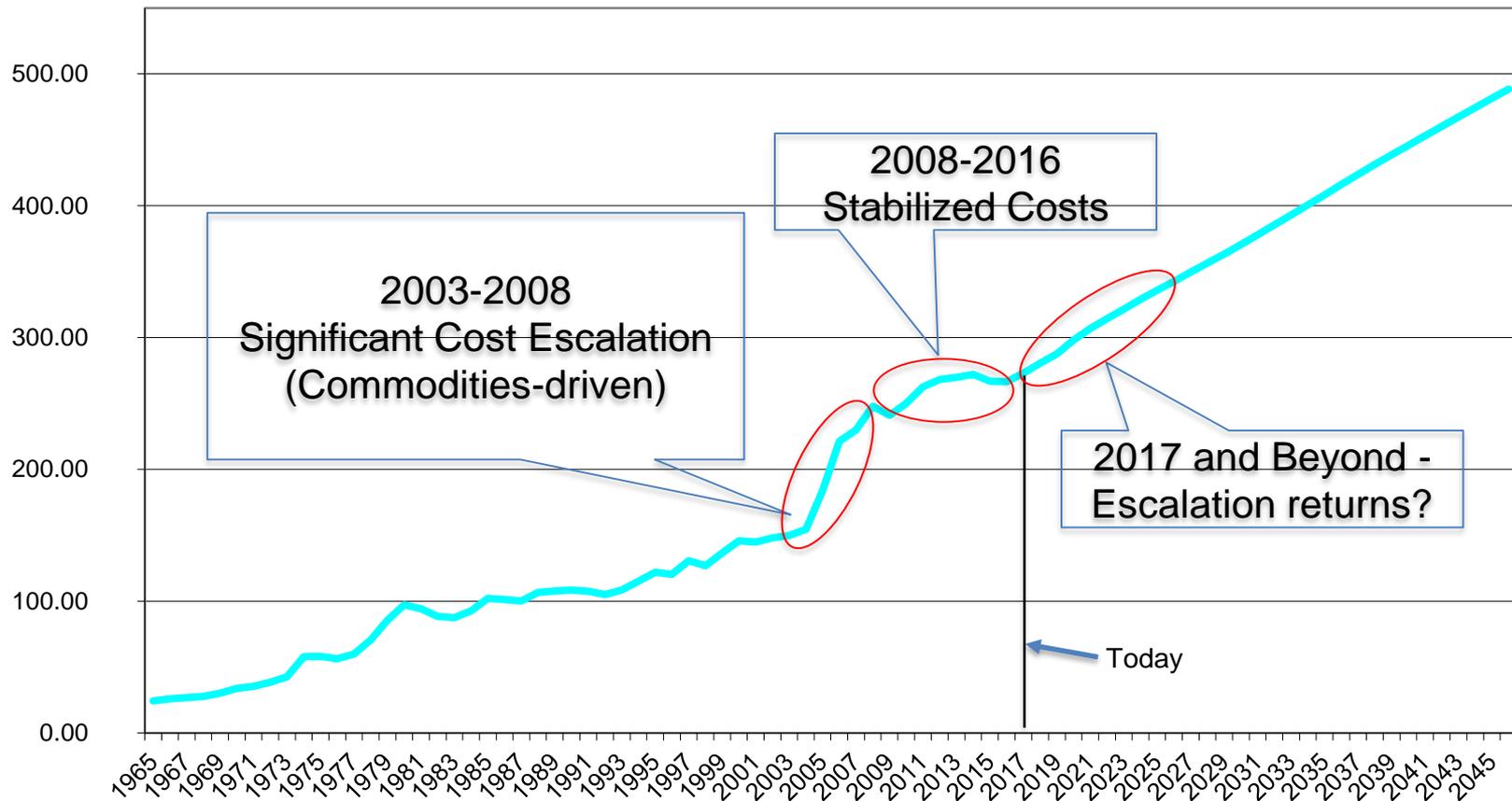


Nickel/TPA Cost Escalation

- Escalation in global material costs during the mid-2000's led to an increase in project costs
- Nickel/TPA revenue forecast didn't anticipate this cost growth



WSDOT's Construction Cost Forecast



New Challenges affecting Connecting Washington

- Indicators are pointing to another period of increasing construction costs.
- Appears to be driven by local/regional effects rather than the global effects. For example:
 - A booming Puget Sound economy
 - A large WSDOT capital projects program
 - Significant work by other public owners (Sound Transit, Port of Seattle, City of Seattle, etc.)
 - Private infrastructure projects

Puget Sound 5 year construction outlook



Construction Project Starts 2018-2022

Sound Transit

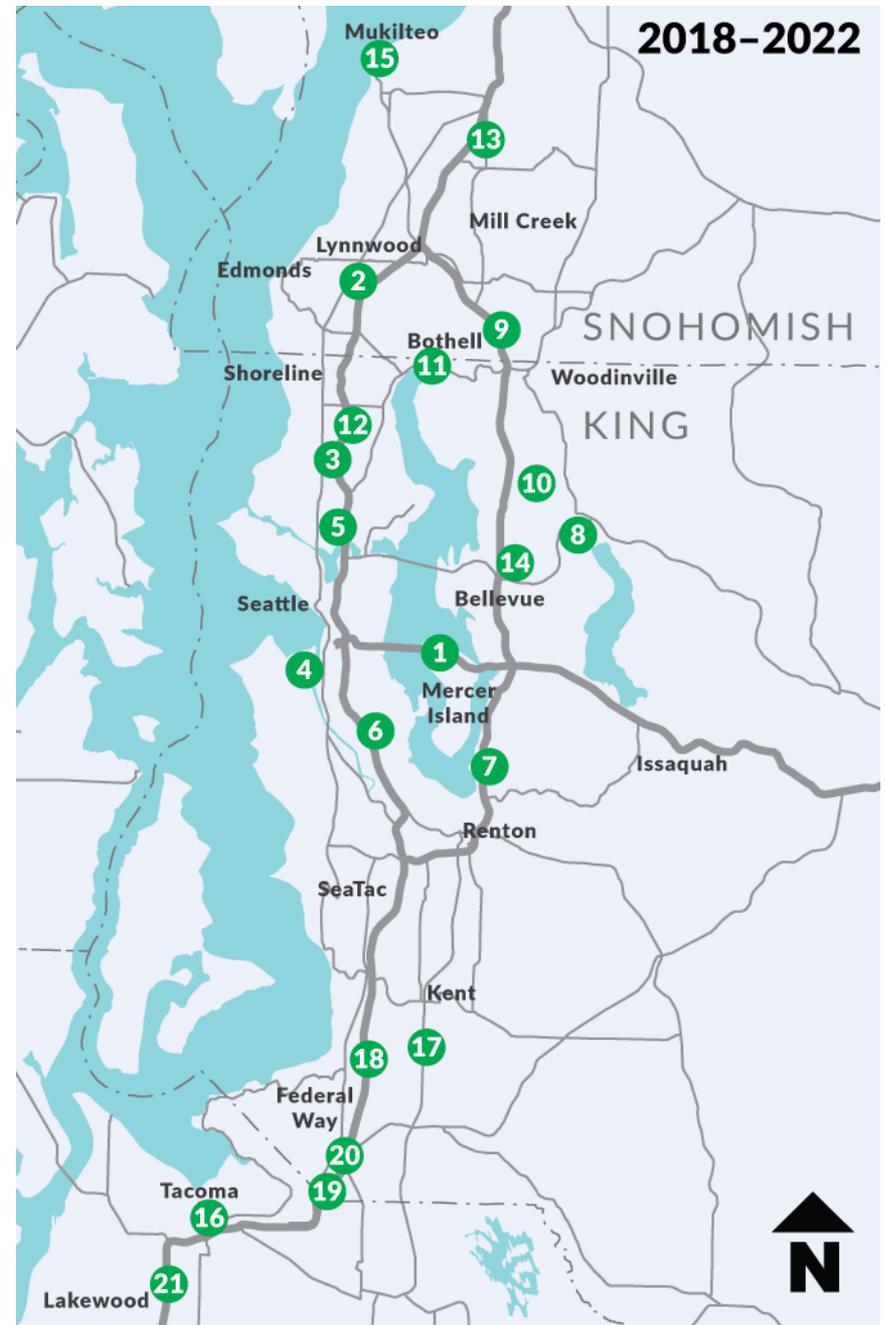


Construction Project Starts 2018-2022

Sound Transit

1: East Link (Mercer Island, Bellevue, Redmond)	\$2.4 Billion
2: Lynnwood Link (Northgate to Lynnwood)	\$2.3 Billion
3: Northgate Link (Northgate to UW)	\$1.9 Billion
4: West Seattle to Downtown	\$1.43 Billion
5: Ballard to Downtown	\$2.3 Billion
6: Graham St & Boeing Access Infill Station	\$201 Million
7: I-405 BRT	\$869 Million
8: North Sammamish Park and Ride	\$227 Million
9: BRT Maintenance Base	\$149 Million
10: Downtown Redmond	\$1 Billion
11: SR 522 & 145 th BRT	\$389 Million
12: 130 th St Infill Station	\$65 Million
13: Lynnwood TC to Everett	\$2.9 Billion
14: OMF (North)	\$1.3 Billion
15: North Sounder Park & Access Improve	\$227 Million
16: Tacoma Link Expansion	\$145 Million
17: Kent & Auburn Station	\$57 Million
18: Federal Way Link Extension	\$995 Million
19: Federal way to Tacoma Link Extension	\$1.9 Billion
20: OMF (South)	\$1.1 Billion
21: South Sound Capital Program	\$934 Million

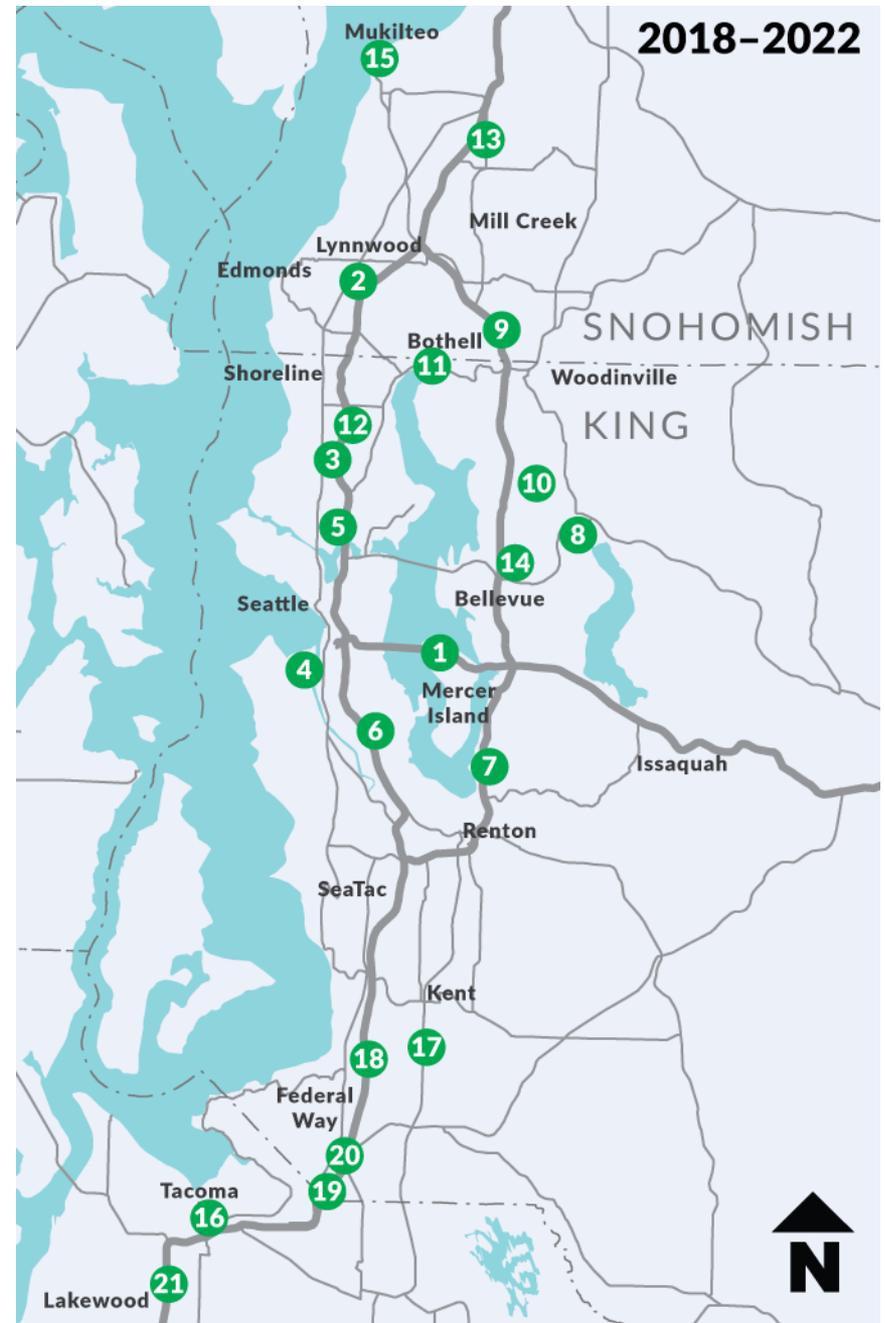
Total: \$22.6 Billion



Construction Project Starts 2018-2022

Sound Transit **\$22.6 B**

SDOT



Construction Project Starts 2018-2022

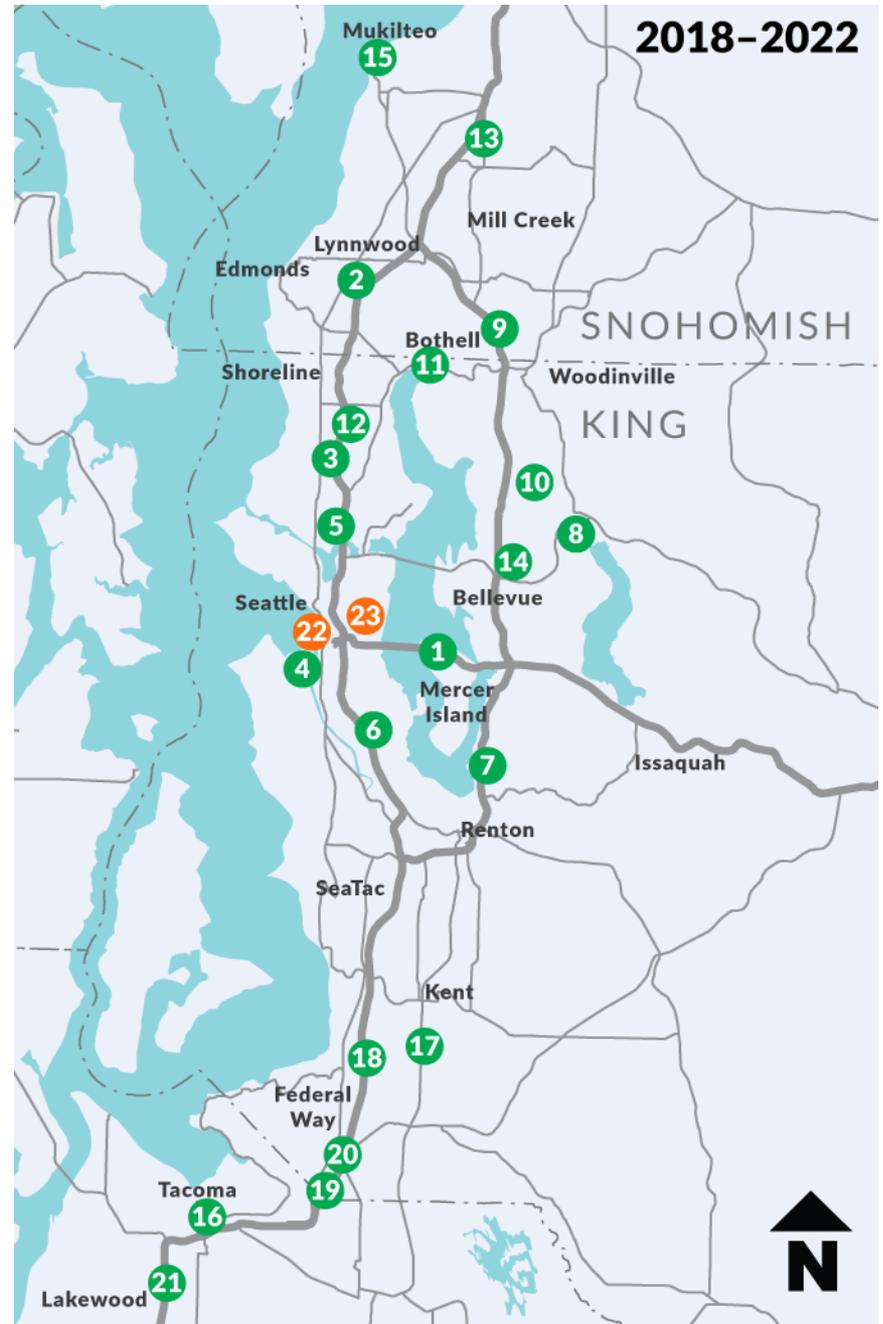
Sound Transit \$22.6 B

SDOT

22: Seattle Waterfront Project \$688 Million

23: Madison St Bus Rapid Transit \$120 Million

Total: \$808 Million

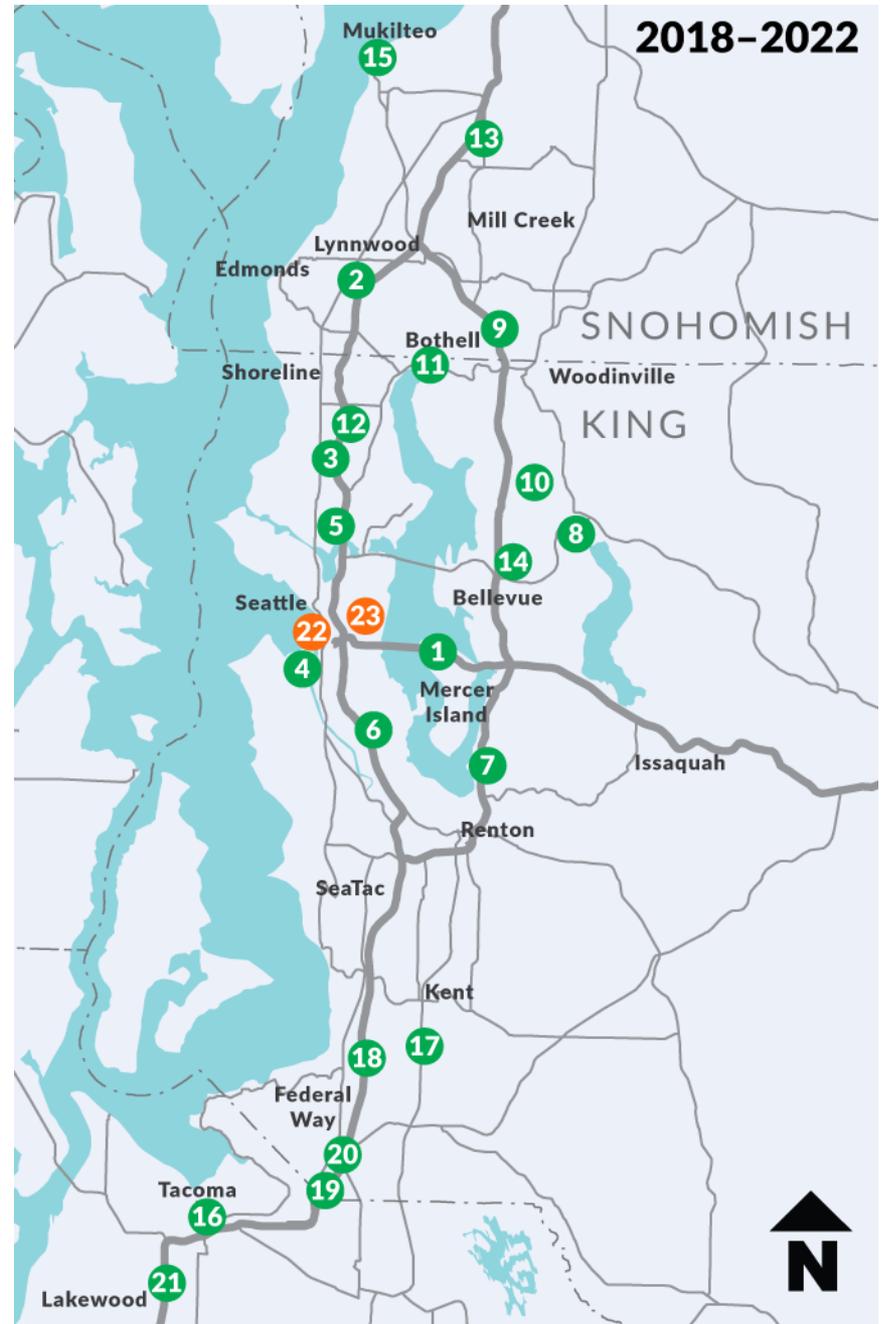


Construction Project Starts 2018-2022

Sound Transit **\$22.6 B**

SDOT **\$0.8 B**

Transit & Others



Construction Project Starts 2018-2022

Sound Transit **\$22.6 B**

SDOT **\$0.8 B**

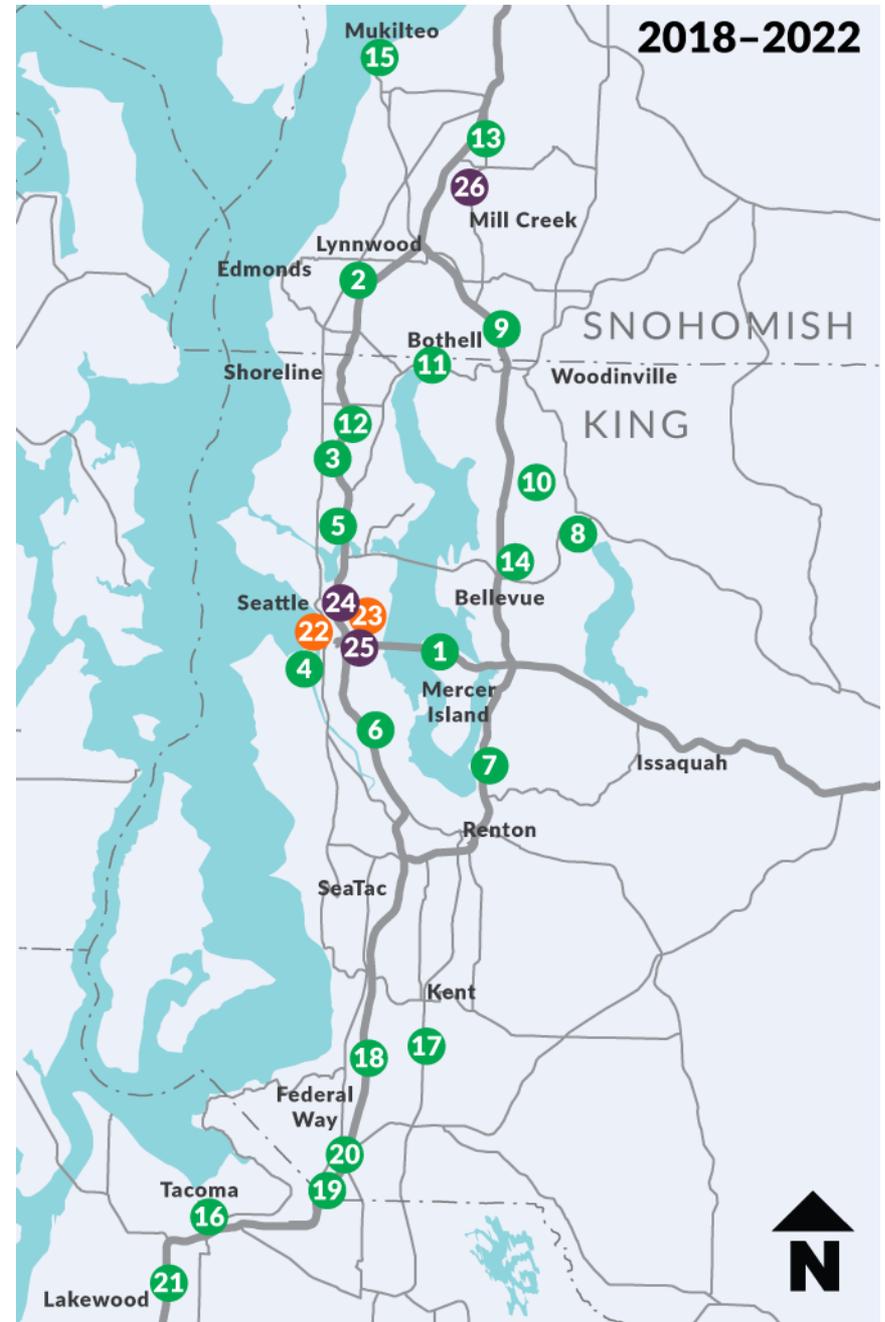
Transit & Others

24: Washington State Convention Center Expansion **\$1.6 Billion**

25: 3rd Ave Improvements (Belltown to Pioneer Square) - King Co. Metro **\$8 Million**

26: Swift Green Line BRT (Paine Field to Bothell) – Community Transit **\$73 Million**

Total: \$1.7 Billion



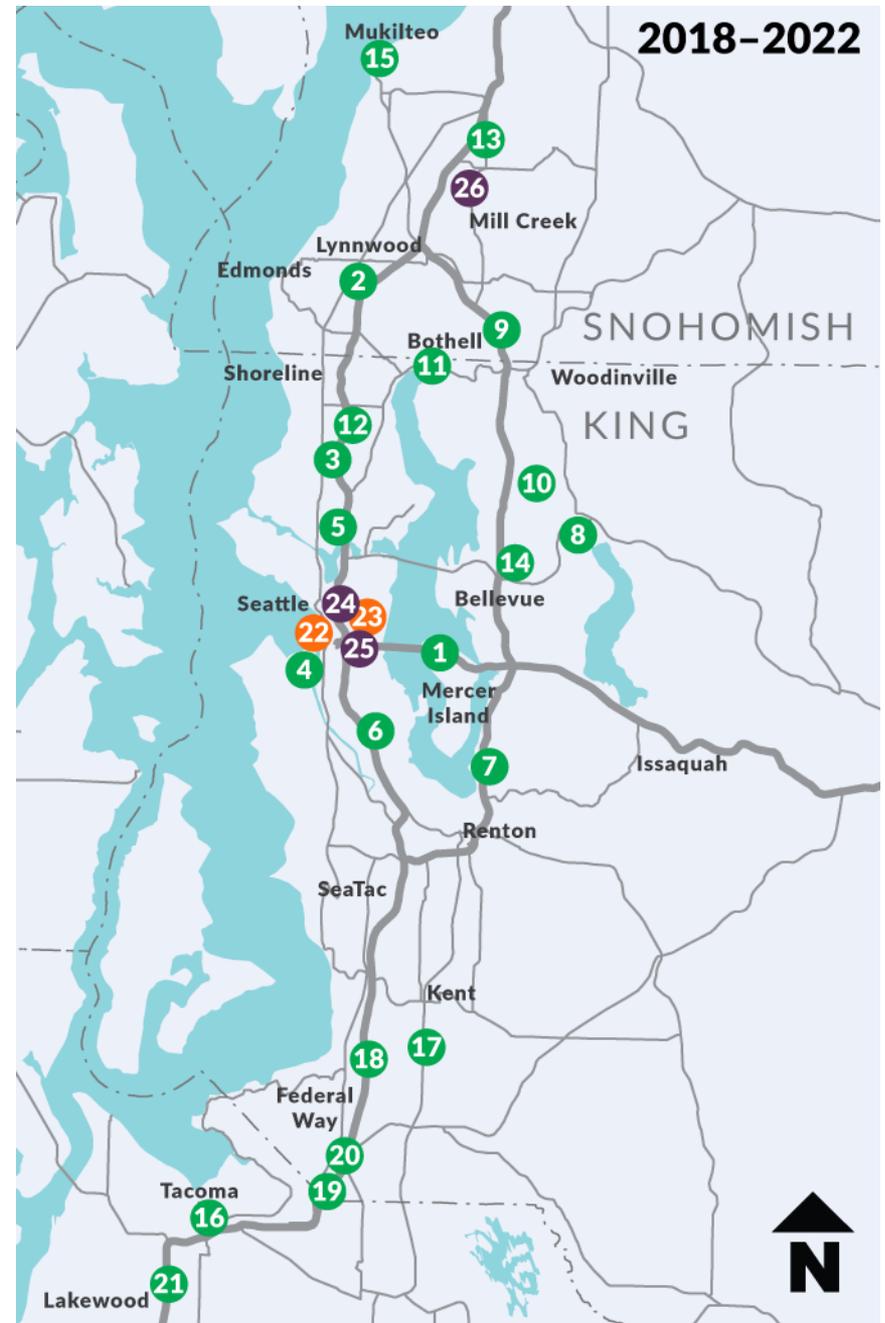
Construction Project Starts 2018-2022

Sound Transit **\$22.6 B**

SDOT **\$0.8 B**

Transit & Others **\$1.7 B**

WSDOT



Construction Project Starts 2018-2022

Sound Transit **\$22.6 B**

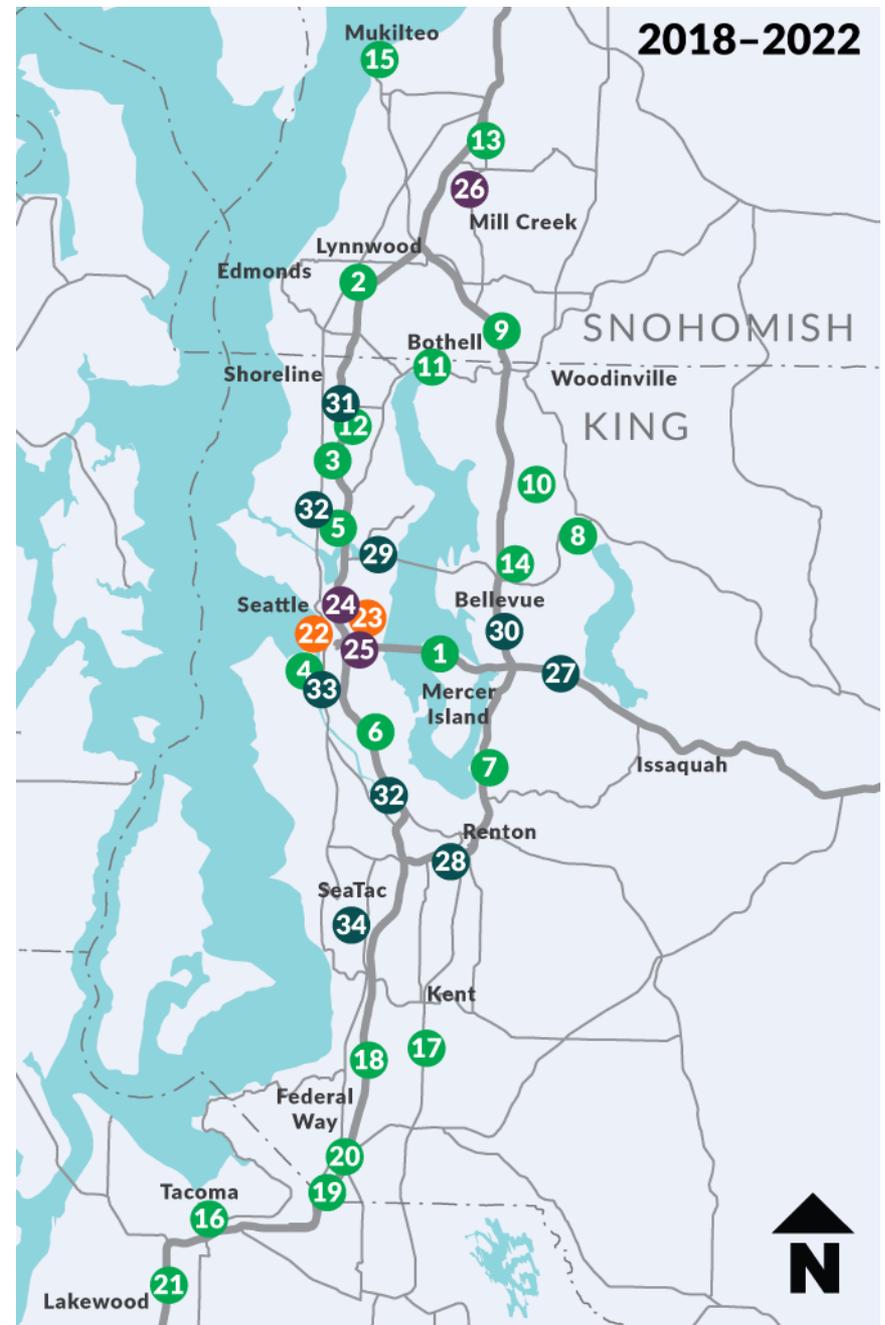
SDOT **\$0.8 B**

Transit & Others **\$1.7 B**

WSDOT

- 27: I-90 (Eastgate in Bellevue to SR 900 in Issaquah) **\$73 Million**
- 28: I-405 & SR 167 in Renton **\$116 Million**
- 29: SR 520 (I-5 in Seattle to Medina) **\$1.5 Billion**
- 30: I-405 Bellevue to Renton **\$1.3 Billion**
- 31: I-5 northbound and southbound
(Edmonds to Auburn area) various projects **\$126 Million**
- 32: SR 99 (From Shoreline to SODO) **\$148 Million**
- 33: Seattle Multimodal Terminal at Colman Dock **\$323 Million**
- 34: Gateway project (SR 509 & SR 167) **\$1.8 Billion**

Total: \$6.7 Billion



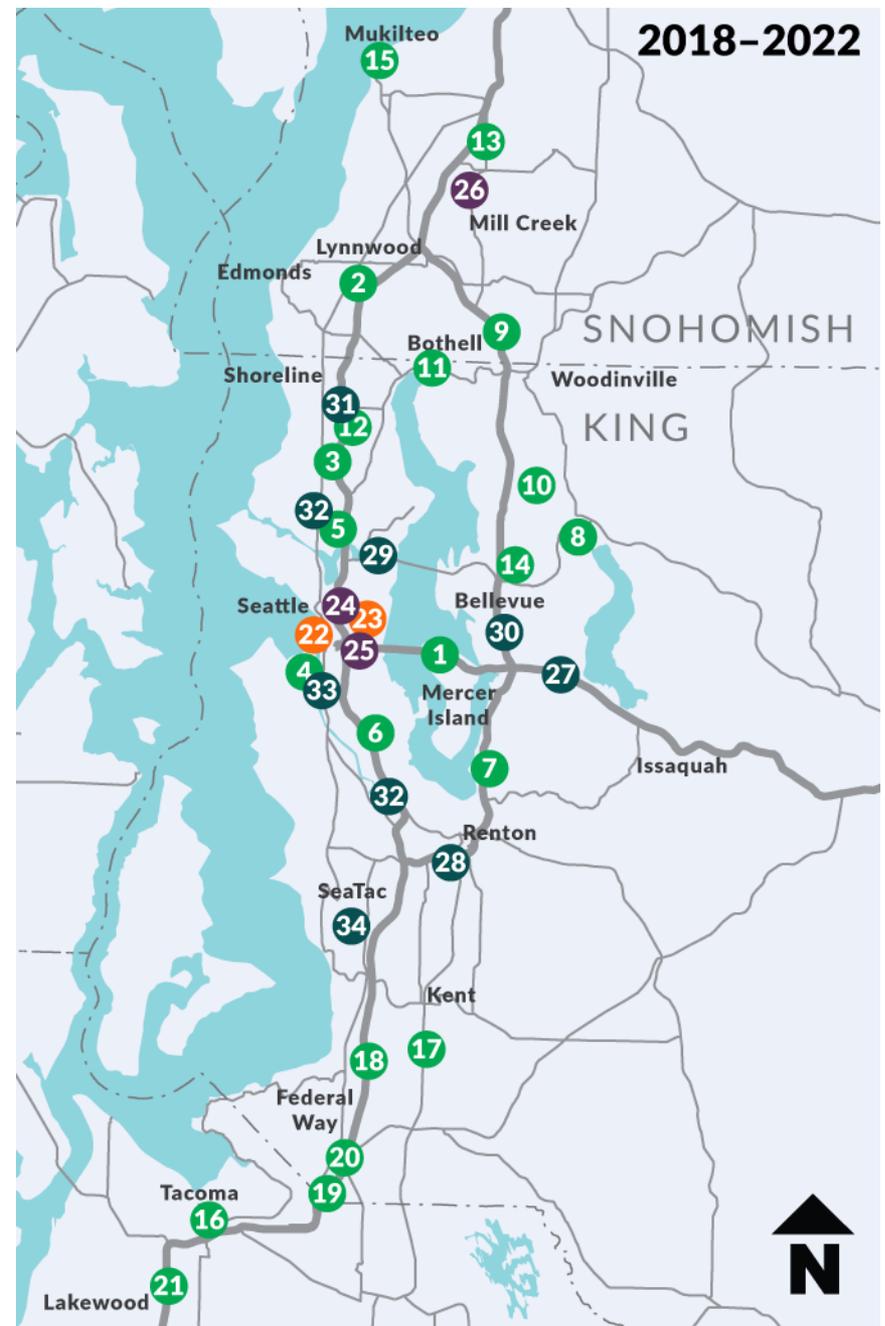
Construction Project Starts 2018-2022

Sound Transit **\$22.6 B**

SDOT **\$0.8 B**

Transit & Others **\$1.7 B**

WSDOT **\$6.7 B**



Construction Project Starts 2018-2022

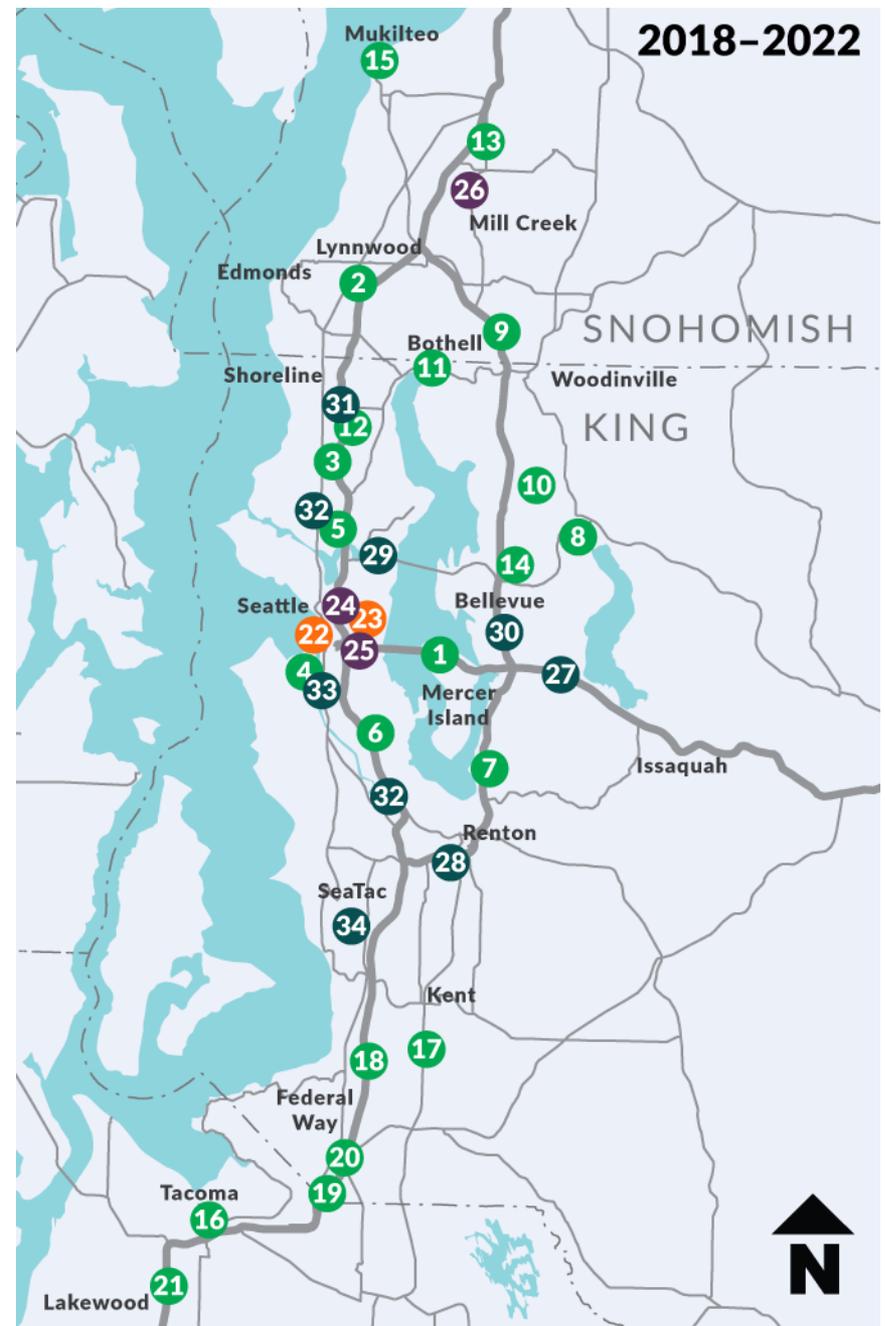
Sound Transit **\$22.6 B**

SDOT **\$0.8 B**

Transit & Others **\$1.7 B**

WSDOT **\$6.7 B**

TOTAL **\$31.8 B**

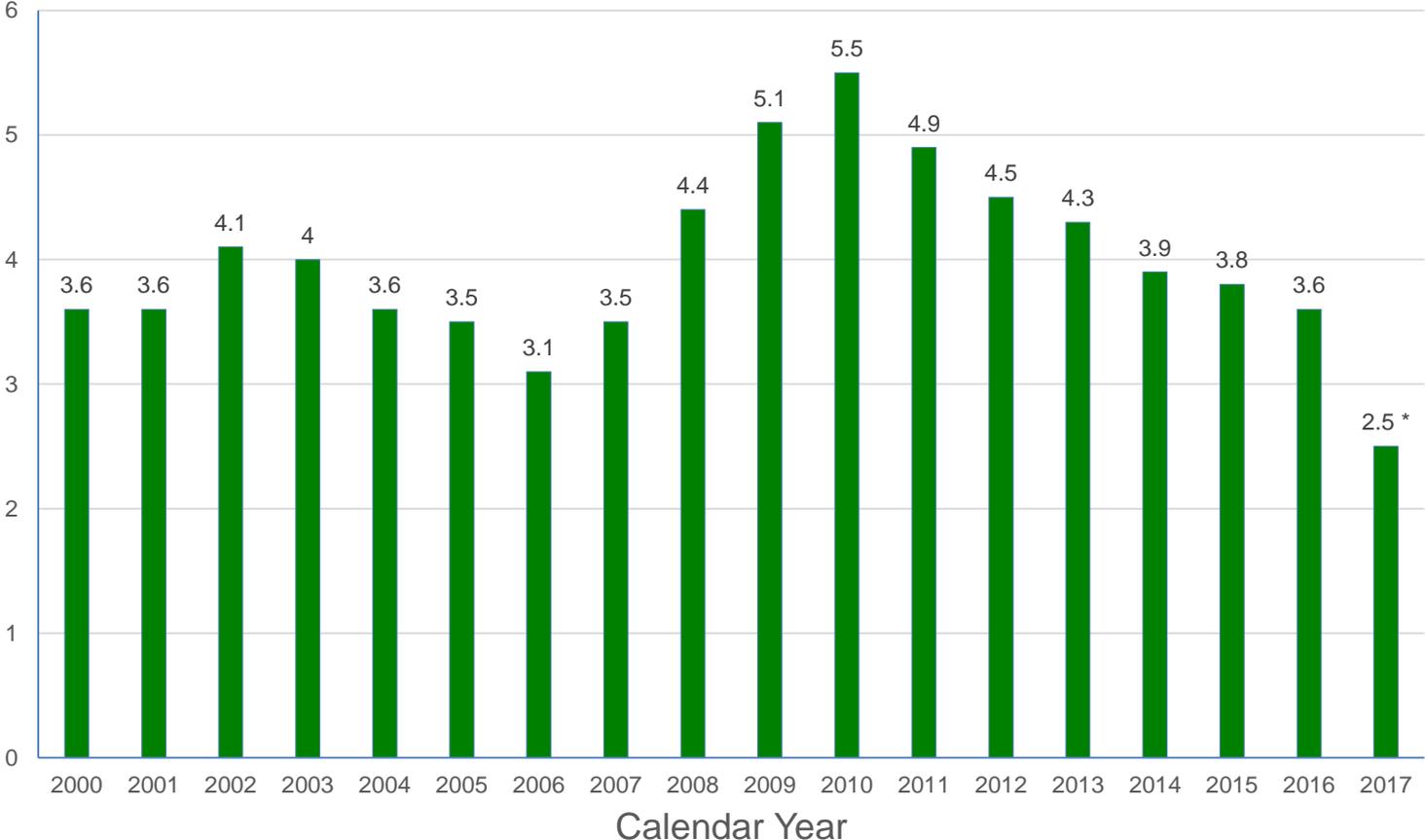


New Challenges affecting Connecting Washington

- The abundance of work in the Puget Sound region is affecting WSDOT. Indicators include:
 - Number of Contractors bidding on our projects
 - Bid prices

Reduced number of bidders

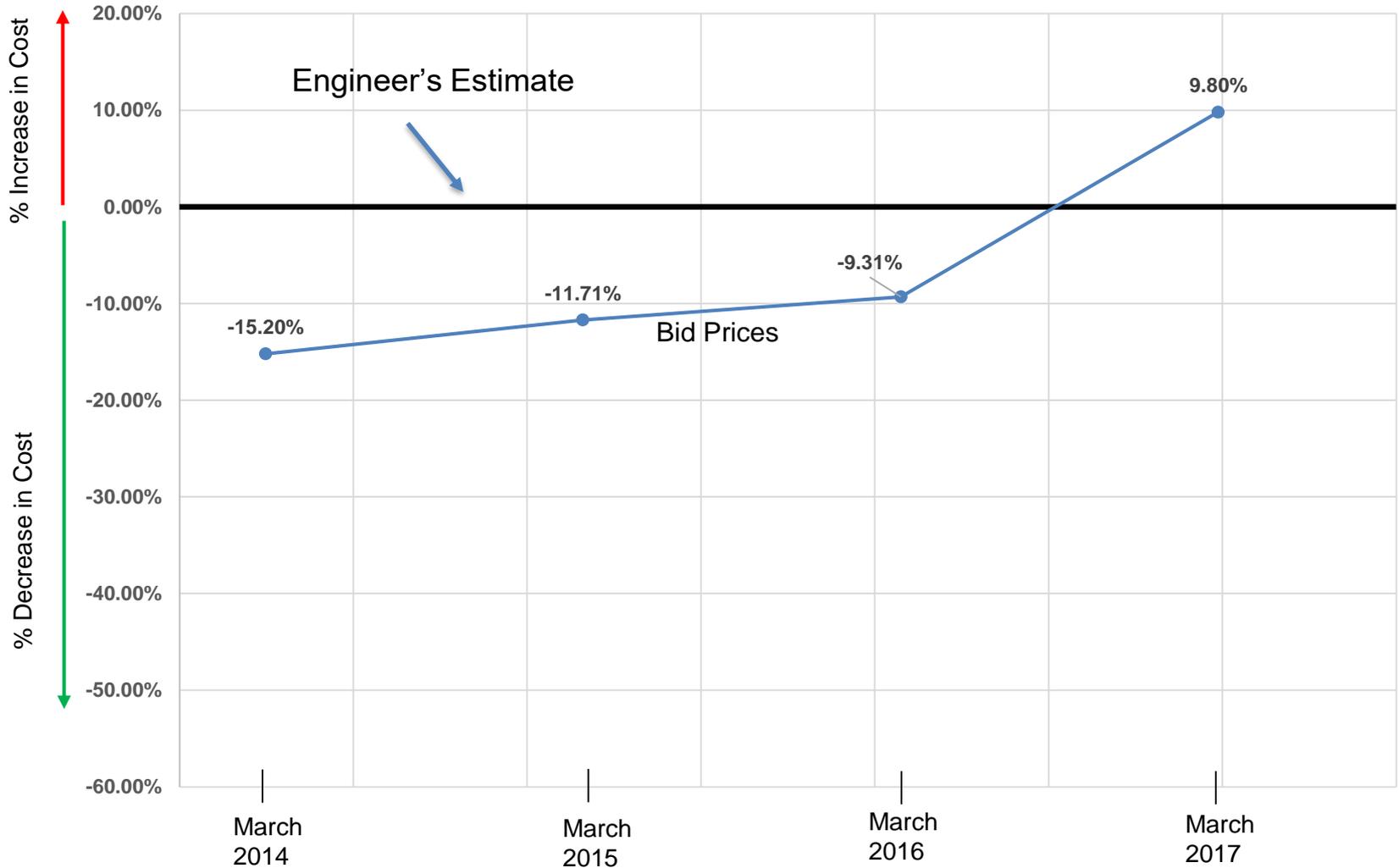
Average Number of Bidders on WSDOT Contracts



* 2017 data through June 30 (56 projects)

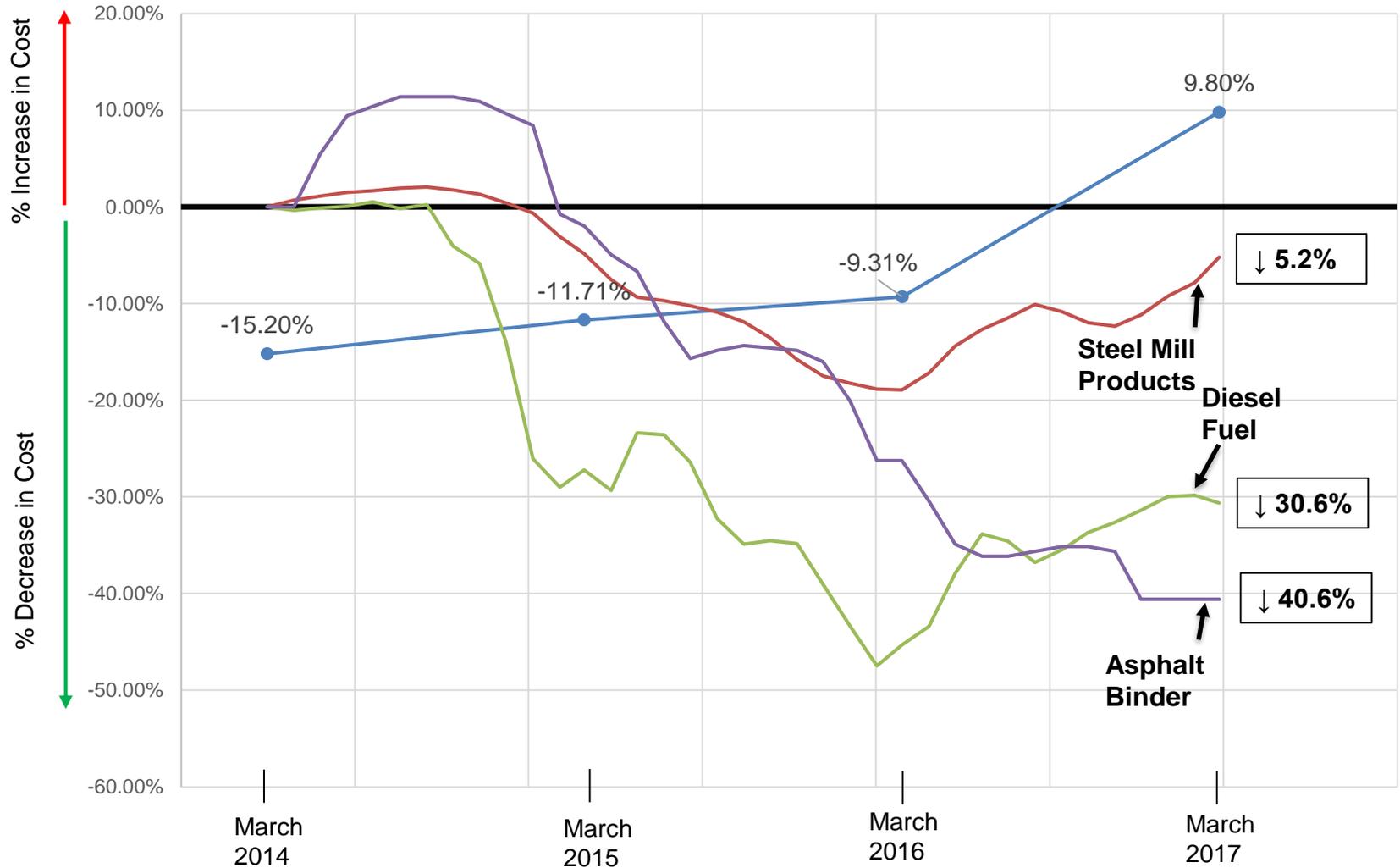
Increase in Bid Prices

Bid Price Percentages Above/Below Engineer's Estimate
For all bid openings in the month of March from 2014 to 2017



Driven by material costs?

Change in the Price of Construction Commodities
March 2014 to March 2017



Potential Impacts to Connecting Washington

- When compared to the September 2015 forecast, the current forecast for Connecting Washington revenues indicates:
 - Revenue is tracking closely to original projections
 - Growth in the Construction Cost Index is higher than growth in fuel tax revenues
- WSDOT is pursuing ways to reduce costs on our projects

Factors affecting cost escalation

Collaborating with our Contractors to fully understand the causes of the recent escalation

Two broad categories:

- A. Outside of WSDOT's control
- B. Within WSDOT's control

Factors Outside of WSDOT's Control

1. Global economy
2. Regional economy
3. Contractor/subcontractor capacity
4. Material prices
5. Labor supply

Need to ensure our estimating practices reflect the influences these factors exert on bid prices

Factors Within WSDOT's Control

- Contract time
- Daily work windows
- Timing of project advertisements
- Using full closures rather than nightly lane closures
- How projects are packaged
- Delivery method (Design Bid Build vs. Design Build)
- Flexible contracting that allows innovation
- Risk allocation
- Quantity and complexity of Contractor reporting requirements (e.g. Apprenticeship, DBE)
- Cash flow constraints
- Other?

But, implementation needs to carefully consider:

- Impacts to the travelling public
- Long-term performance of the system
- Local community impacts and commitments
- WSDOT workforce impacts
- Environmental impacts
- Safety
- Quality
- Availability of funds

Next Steps:

- Continue to incorporate innovative practices and practical design
- Ongoing discussion with the contracting community
- Identify factors to move forward while considering the impacts
- Implementation in consultation with industry

Questions?

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