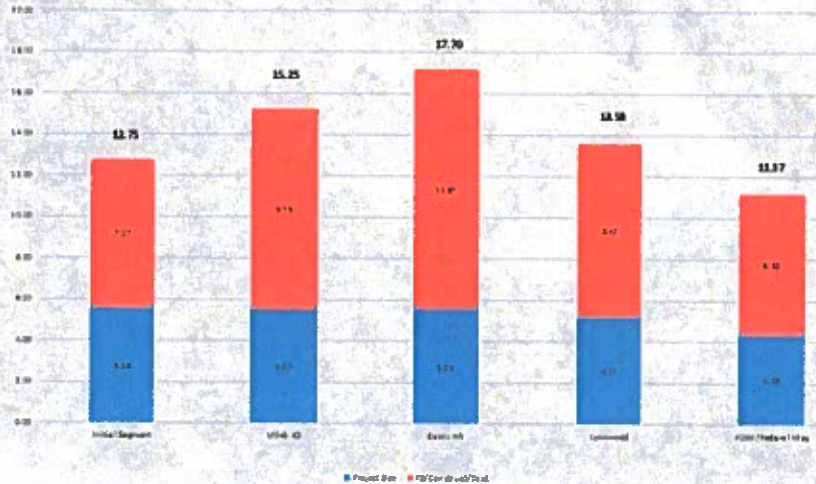




- Since the Board released the ST3 Draft Plan for public comment, many people across the region – including Board members -- are asking why it takes so long to deliver projects.
- The ST3 draft plan is bold and comprehensive and we will need to challenge the agency and the region to get it delivered.
- To tackle this challenge head on, I've asked staff to roll up their sleeves to identify the factors impacting project delivery timeframes.
- We have lots of experience here at Sound Transit and across the industry, and I want to draw on that experience and those lessons learned to see if we can do better.
- Today, I will present some initial factors impacting the schedule for project delivery, with the promise to come back to this Committee in May with some proposed recommendations.

**Light Rail Project Total Durations**



\*Initial contract not awarded until January 1998. A S&S and Addendum were published following the FDS.

Project Dev	Initial Segment	U-Link #2*	East Link	Lynnwood	Federal Way	AA = FDS
RD/Construct	Nov 98 - May 02	Jan 03 - June 06	May 06 - Nov 11	May 10 - July 15	Oct 12 - Feb 17	Start of operations
	July 09	Mar 06	July 23	Dec 23	Dec 23	

\*Began work with U-Link #2 in process

- To frame our project delivery experience to date, here is a summary of our project delivery durations for our Sound Move and ST 2 programs. The time frame illustrated for each project includes the planning phase (as shown in blue) combined with the final design/construction/rail activation phase (as shown in orange).
- One take way from this graphic is the difference in the overall durations for the projects in the various corridors, especially the durations shown in orange for the projects extending from our Initial Segment.
- The differences in these durations ties to the major factors that I will describe in a moment.

## Recent Rail Expansion Timelines in Western Cities

Agency	Munic. parts	Expansion Name	# of Light Rail Expansions	Lines Grade Separated	Include Tunnel?	% Existing RR ROW	Miles of Light Rail	Cost (billions)	First Year of AA/Scoping <sup>1</sup>	First Year of Construction <sup>2</sup>	First Year in Service	Weighted Avg. Yrs. AA to Construction	Weighted Avg. Yrs. Construction to Service	Weighted Avg. Total Years from AA to In Service
Sound Transit	Seattle, WA	Sound Move	3	40%	Yes	0%	15.6	\$2.70	1996	2003	2009	7.0	6.8	13.8
Sound Transit	Seattle, WA	ST2	6	63%	Yes	0%	39.1	\$9.77	2003	2009	2023	6.9	6.0	14.9
Metro <sup>3</sup>	Los Angeles County, CA	Measure R/ '89 Long Range Plan	3	60%	Yes	72%	92.5	\$8.89	2000	2011	2023	8.4	5.1	13.4
Valley Metro	Phoenix, AZ	Current Projects	4	0%	No	0%	18.1	\$1.76	2009	2013	2026	10.1	4.1	14.2
RTD <sup>4</sup>	Denver, CO	Pasadena	3	0%	No	49%	24.9	\$1.60	2000	2009	2018	9.4	3.9	13.3
UTA	Salt Lake City, UT	FrontRunner 2015	4	0%	No	80%	25.0	\$1.42	2000	2008	2013	7.0	5.3	12.3
TribalT	Portland, OR	Orange Line, Green Line and Portland Expo	2	0%	No	0%	15.6	\$2.00	2000	2007	2015	6.9	2.9	11.8
DART	Dallas, TX	Orange Line and Green Line	2	50%	No	0%	41.7	\$3.10	1996	2006	2014	8.3	4.1	11.7
SPMTA	San Francisco, CA	Central Subway	1	100%	Yes	0%	1.7	\$1.58	2003 <sup>5</sup>	2010	2019	7.0	10.0	17.0
Translink <sup>6</sup>	Vancouver, BC	Canada Line	1	100%	Yes	0%	11.9	\$2.05	2000 <sup>7</sup>	2005	2008	5.0	4.0	9.0
Weighted Average <sup>8</sup>									8.3	6.4	12.9			

- To better understand the factors, we took a look at recent rail projects from peer western cities and compared them with Sound Transit's Sound Move and ST2 projects ...
- While the lines aren't directly comparable (several cities use existing railroad ROW to build their new lines, for example), some general project schedule comparisons can be made.

## Recent Rail Expansion Timelines in Western Cities

Agency	Municipality	Miles of Light Rail	Cost (billions) <sup>1</sup>	Weighted Avg Yrs: AA to Construction	Weighted A.g. yrs: Construction to Service	Weighted Avg. Total Years from AA to In Service
Sound Transit	Seattle, WA	15.6	\$2.70	7.0	6.0	13.0
Sound Transit	Seattle, WA	39.1	\$9.77	8.9	6.0	14.9
Metro <sup>2</sup>	Los Angeles County, CA	32.5	\$8.89	8.4	5.1	13.4
Valley Metro	Phoenix, AZ	18.1	\$1.76	10.1	4.1	14.2
RTD <sup>3</sup>	Denver, CO	24.9	\$1.60	9.4	3.9	13.3
UTA	Salt Lake City, UT	25.0	\$1.42	7.0	3.3	10.3
TriMet	Portland, OR	15.6	\$2.00	8.9	2.9	11.8
DART	Dallas, TX	41.7	\$3.10	8.3	4.3	12.7
SFMTA	San Francisco, CA	1.7	\$1.58	7.0	10.0	17.0
Translink <sup>4</sup>	Vancouver, BC	11.9	\$2.05	5.0	4.0	9.0
Weighted Average <sup>5</sup>				8.3	4.6	12.9

- Sound Transit's current project durations (SM and ST2) are close to the cities averages, despite ST's larger expansion programs.
- The average total project duration for these cities was 12.9 years, Sound Move was 13.0 years and ST2 is expected to be 14.9 years.
- AA to Construction averages about 8 years, Construction to Service averages about 5 years.
- ST staff will be further assessing ST3 schedule assumptions using this data

## Project delivery factors

- Consensus around the project to be built
  - Puget Sound geography and dense, built environment
  - Permits from local jurisdictions and agreements with partners
  - Property acquisition
  - Financing and cash flow
- 
- Getting agreement around the scope of the project takes time; we see this even now as the region is discussing “representative projects” in the ST3 draft. But it begins in earnest when we initiate the environmental review process, and it continues throughout project development, final design and construction.
  - It’s a challenge to build these projects – not only is the Puget Sound region already built up and in some places, quite dense, but we have hills and bodies of water and glacial soils.
  - ST has to work with local jurisdictions to secure the permits required to build projects – we don’t have land use authority, and while our projects are considered Essential Public Facilities under the Growth Management Act, we still need to get land use and construction permits. We also need agreements from other partners – from federal and state agencies, and with utility companies and property owners.
  - And finally, the agency’s finances constrain how fast we can build projects.
  - The draft plan uses all the local revenue tools at our disposal, but there may be other options – through partnerships with the private sector and creative financing mechanisms.
  - Cash flow is a constraint, too: we collect taxes over time, not in one lump sum. And our federal funding comes over time, not in one lump sum.

## Next steps

- **Potential recommendations – May Capital Committee**
  - **Possible language in ST3 Draft Plan?**
- 
- **We are going to continue this work over the next several weeks, and bring back to your next Committee meeting possible recommendations to improve project delivery timeframes**
  - **You can consider whether there are tools or incentives that could be included in the final ST3 plan**



Questions?

