Magnolia Bridge Planning Study

07/17/2018

Stakeholder Meeting

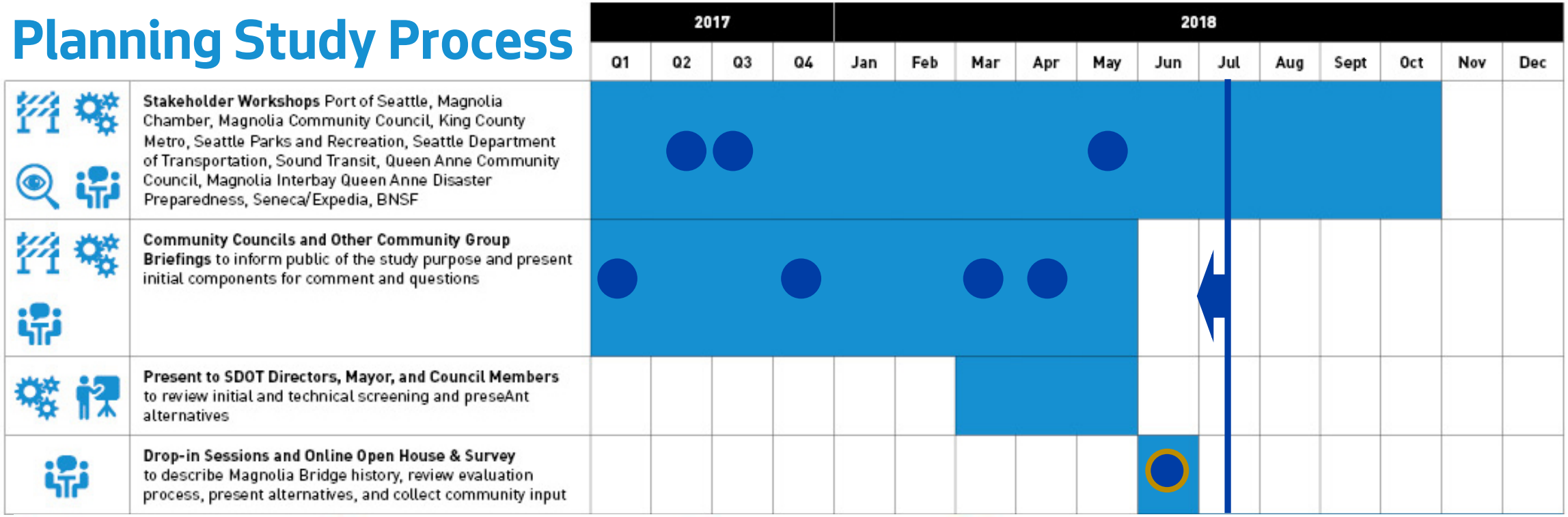
City of Seattle

Agenda

- WELCOME
- UPDATES
  - JUNE ENGAGEMENT RESULTS
  - UPDATED SCOPE & SCHEDULE
  - ALTERNATIVE ANALYSIS STATUS
- DISCUSSION OF 3 ALTERNATIVES
  - COST ESTIMATE DETAILS
  - TRAFFIC MODELING DETAILS
  - REMAINING CONCERNS/QUESTIONS
- NEXT STEPS

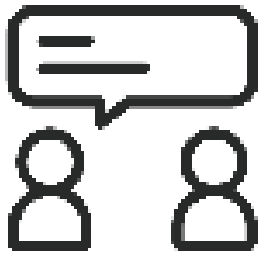
Where We've Been

Planning Study Process

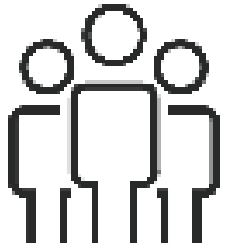


JUNE 2018

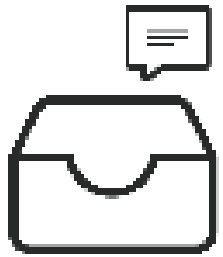
4 Drop-in sessions



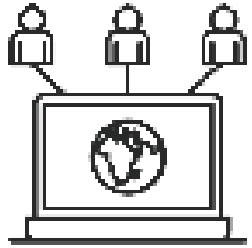
277 Drop-in session participants



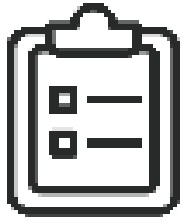
94 Written comments



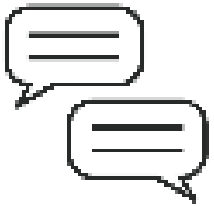
1 Online open house



186 Online alternatives survey participants

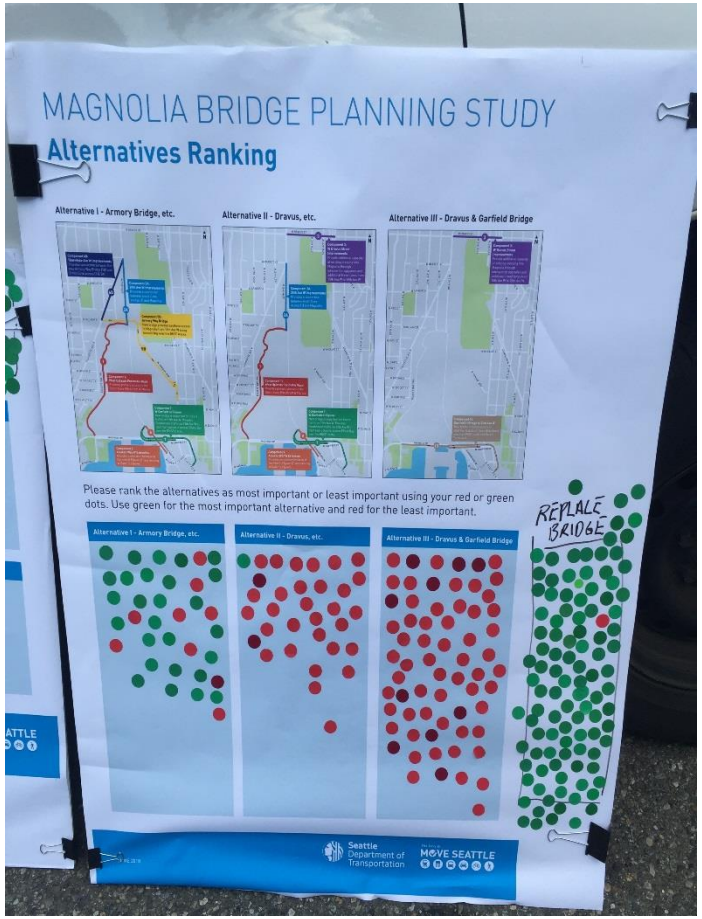


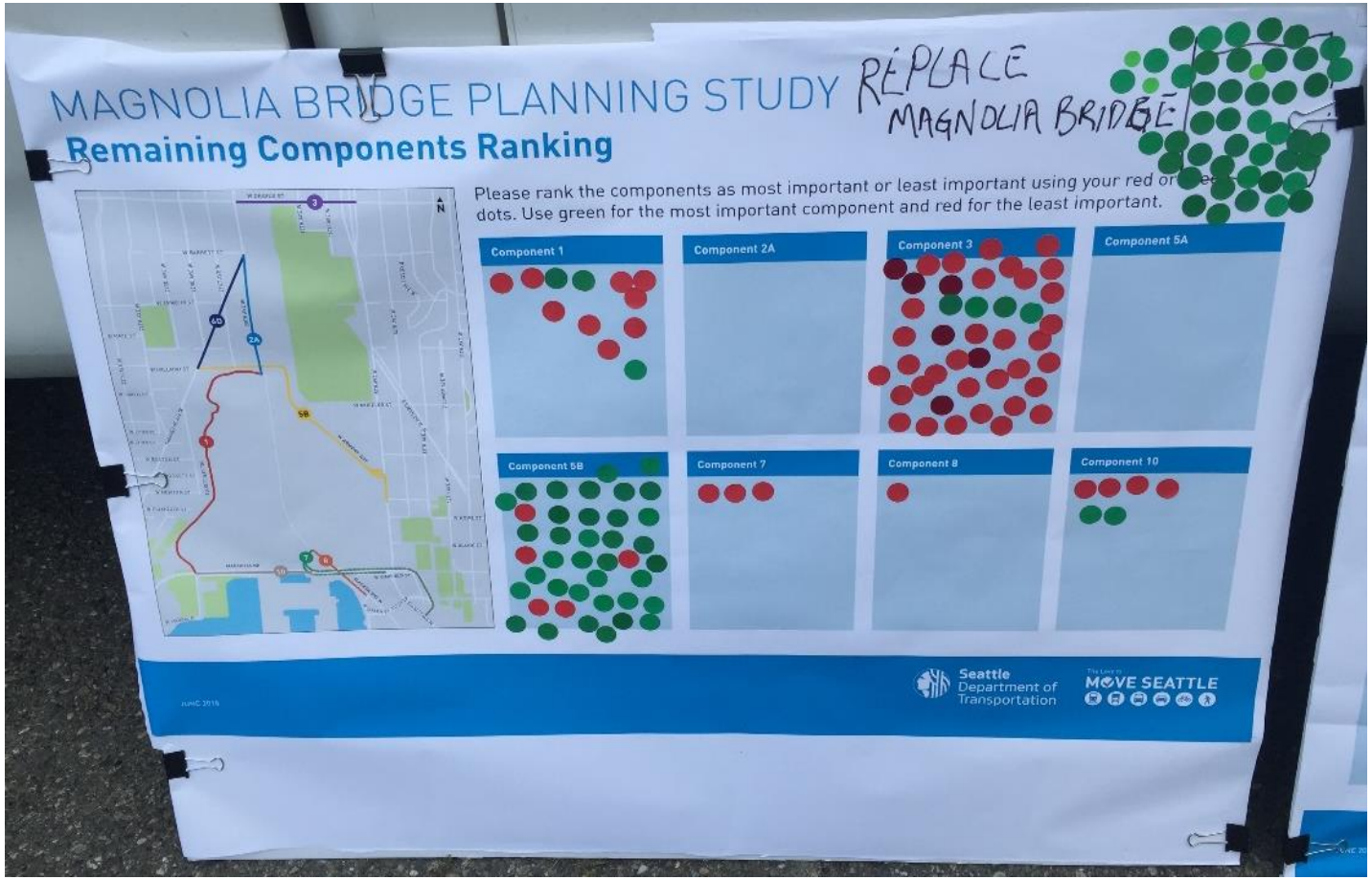
200 Online open house comments



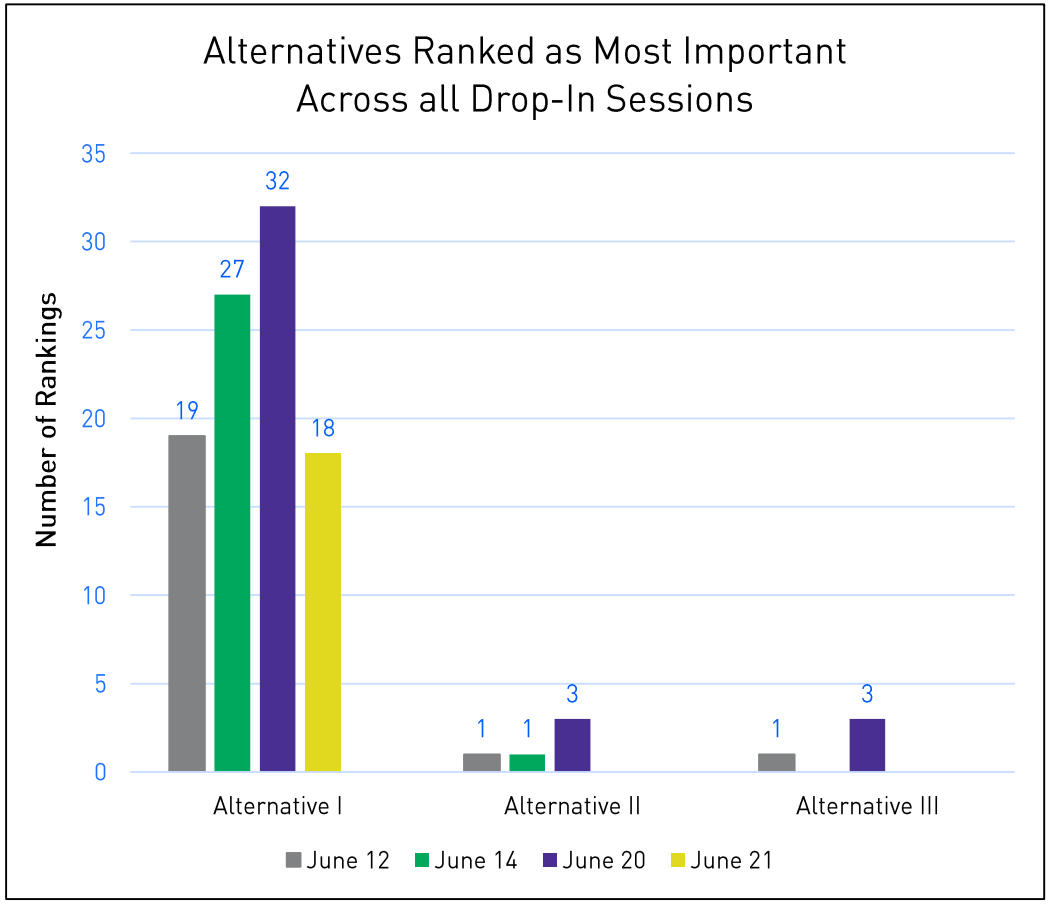
June Community Engagement

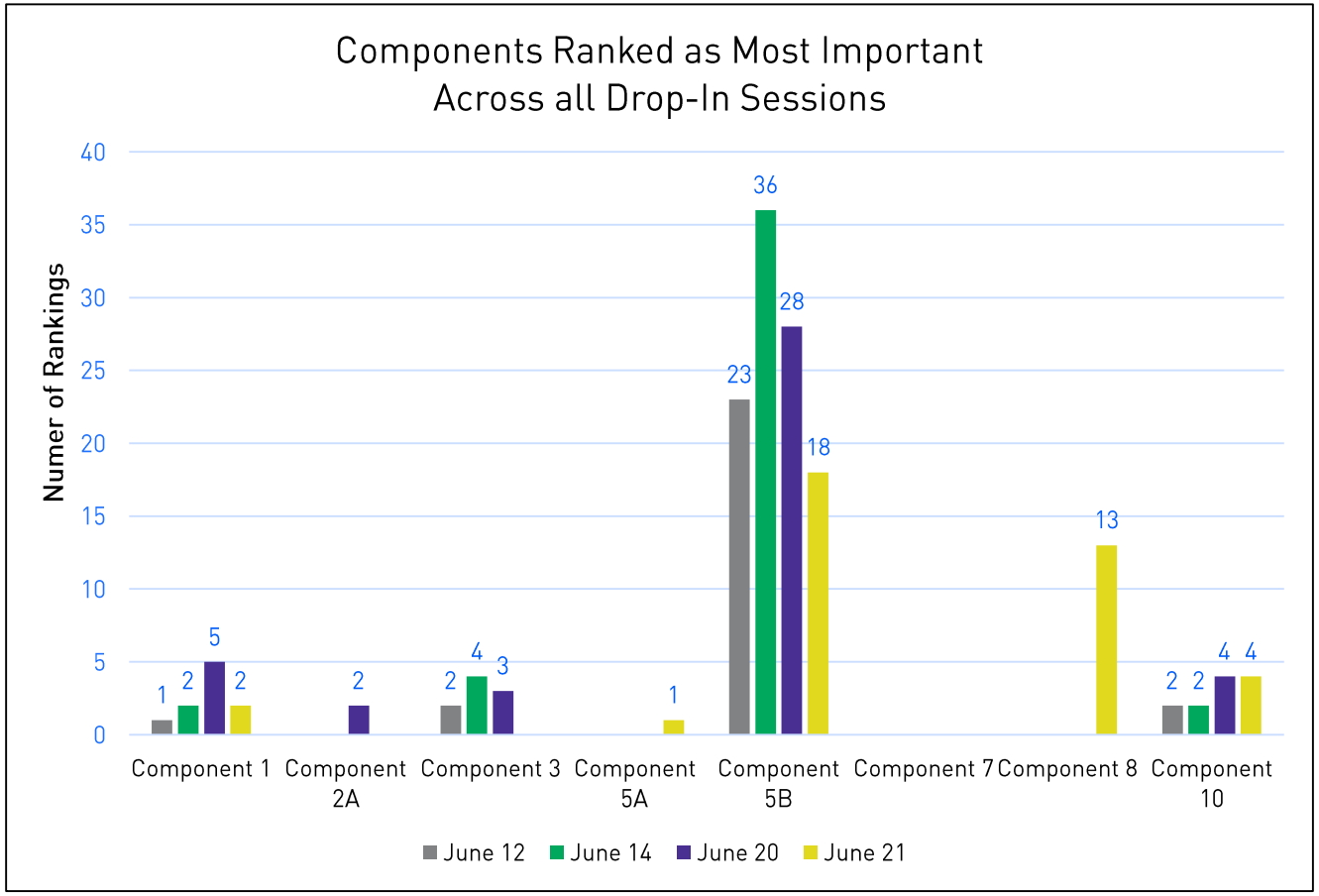
Drop-In Session Results



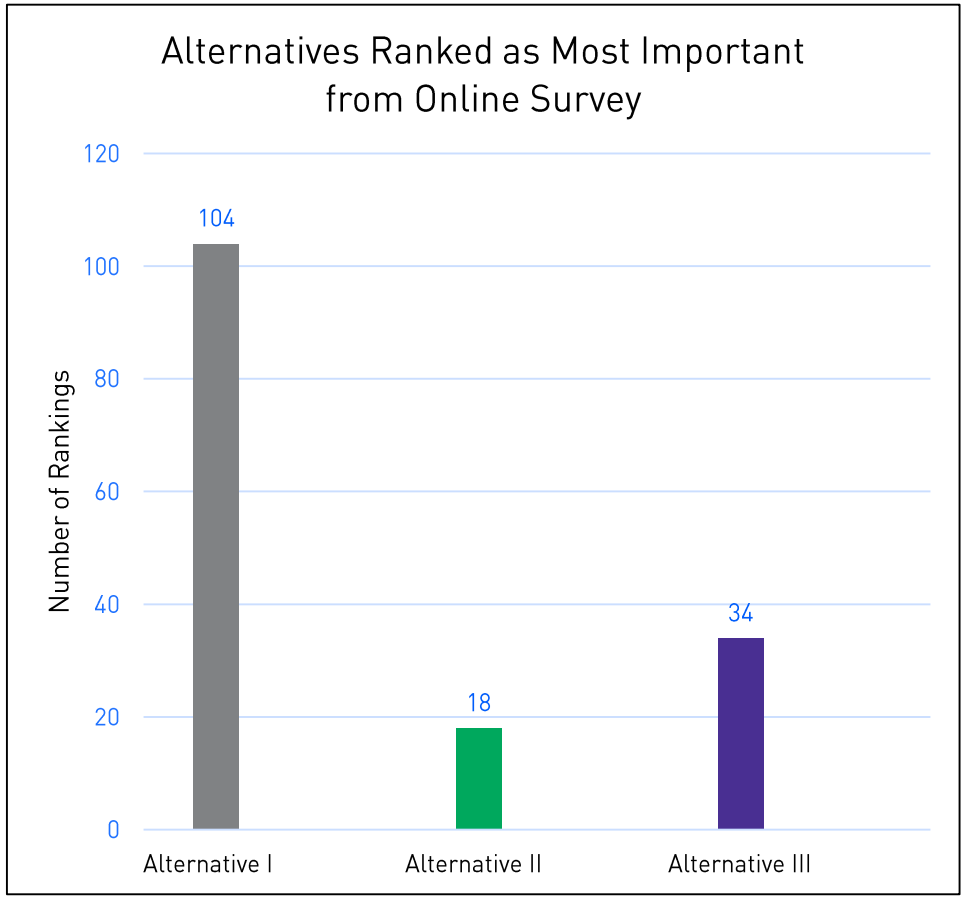


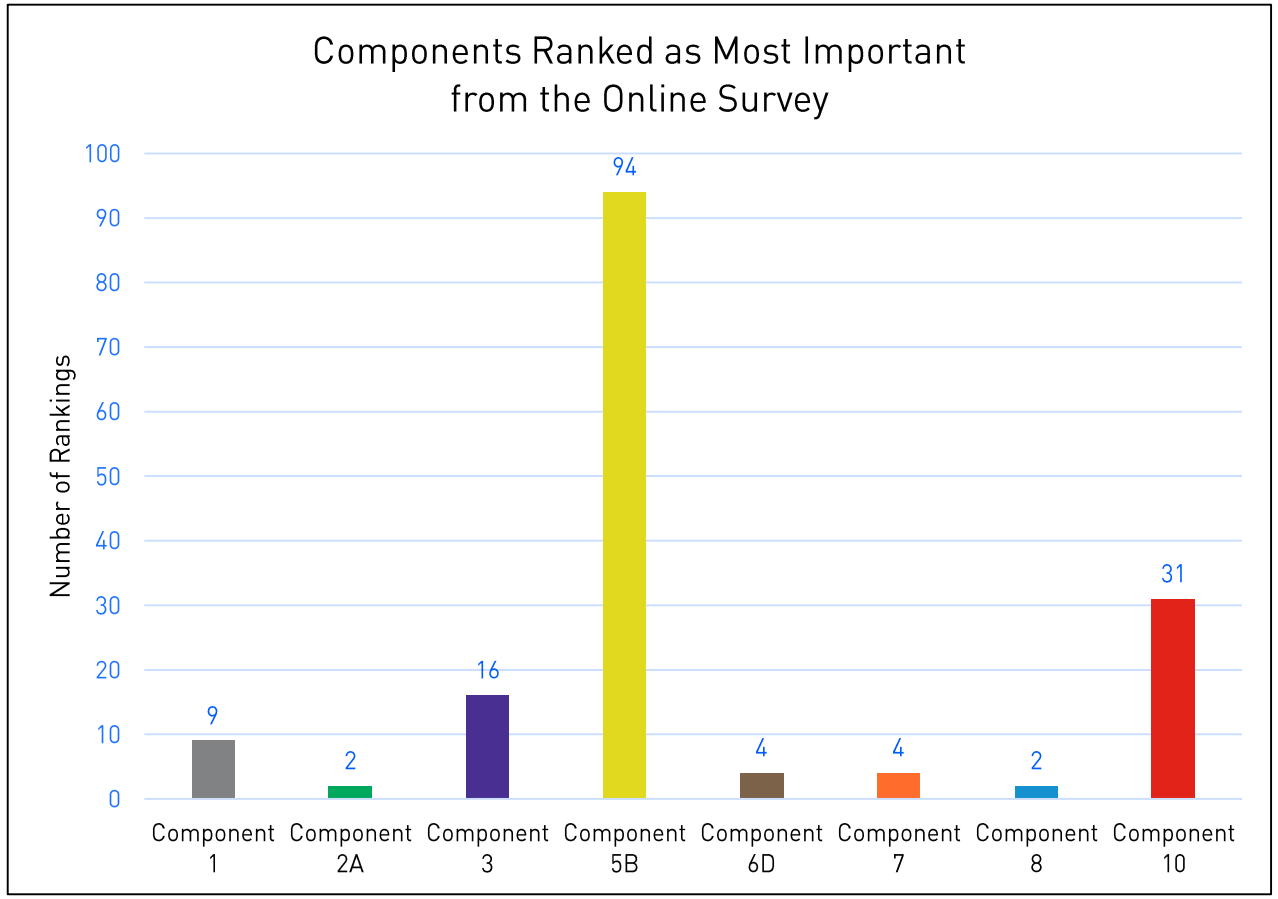
Drop-In Session Results





Online Open House Results





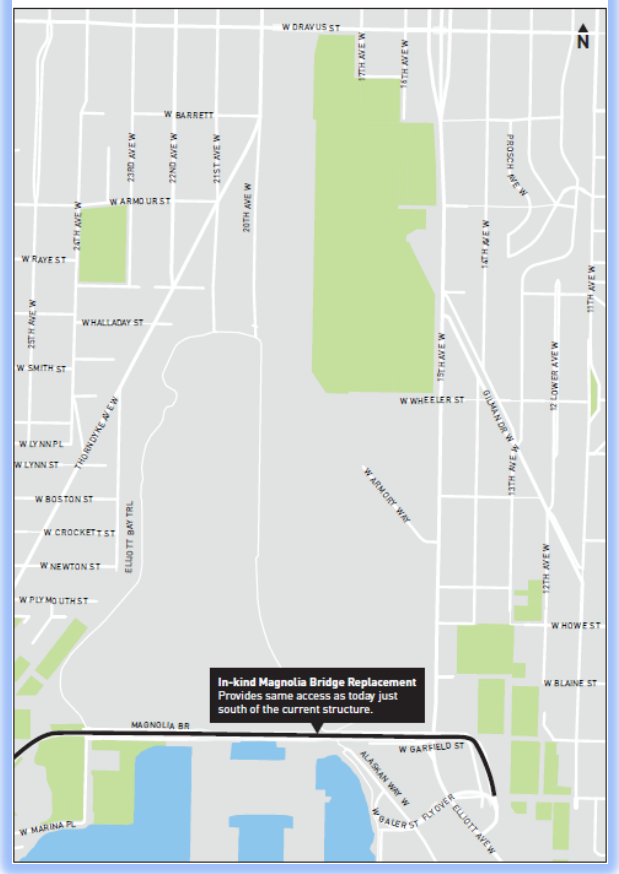
What We Heard

- The majority of commenters want the in-kind replacement of the Magnolia Bridge
- Alternative I and Component 5B ranked highest
- Component 5B W Armory Way Bridge concern: would impact nearby residences on Halladay St
- Many felt W Dravus St could not be improved enough to support the additional trips
- See our website for a full community engagement summary: https://www.seattle.gov/transportation/magnoliabridgeplanning

How We're Responding

Updated analysis of In-Kind Replacement added in response to community comments & engagement

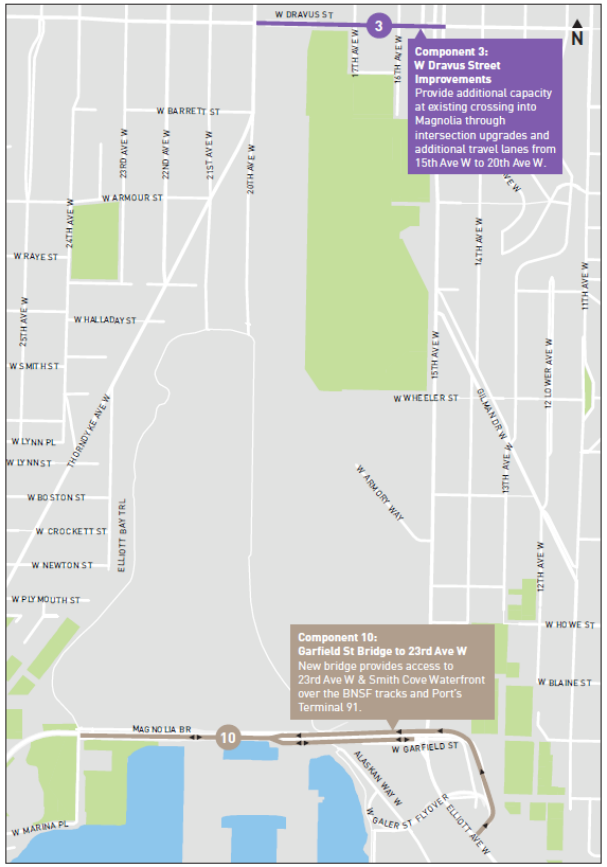
2006 Recommended In-kind Replacement



Alternative I - Armory Bridge, etc.

Alternative II - Dravus, etc.

Alternative III - Dravus & Garfield Bridge



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Updated Planning Study Scope & Schedule

- Authorized Scope and Schedule addendum to update the cost and traffic analysis for the in-kind replacement option
- Extending planning study to the end of 2018
  - Present in-kind replacement and recommended alternative
  - Provide direct comparison of costs
  - Provide direct comparison of traffic impacts

ALTERNATIVE ANALYSIS STATUS

- SUMMER 2018 – Complete Alternatives Analysis
- FALL 2018 – In-Kind Replacement Analysis

Total Cost - In-kind Replacement & Alternatives

#	Summary Cost Item Description	Unit	Unit Price	Alternative 1 Quantity	Alternative 2 Quantity	Alternative 3 Quantity	In-kind Replacement Quantity	Alternative 1 Estimated Cost	Alternative 2 Estimated Cost	Alternative 3 Estimated Cost	In-kind Replacement Estimated Cost
1	Component 1 Construction Cost	LS	$ 10,116,000	1	1			$ 10,116,000	$ 10,116,000	$ -	$ -
2A	Component 2A Construction Cost	LS	$ 1,334,000	1	1			$ 1,334,000	$ 1,334,000	$ -	$ -
3	Component 3 Construction Cost	LS	$ 38,682,000		1	1		$ -	$ 38,682,000	$ 38,682,000	$ -
5B	Component 5B Construction Cost	LS	$ 41,187,000	1				$ 41,187,000	$ -	$ -	$ -
6D	Component 6D Construction Cost	LS	$ 2,909,000	1				$ 2,909,000	$ -	$ -	$ -
7	Component 7 Construction Cost	LS	$ 27,647,500	1	1			$ 27,647,500	$ 27,647,500	$ -	$ -
8	Component 8 Construction Cost	LS	$ 1,604,000	1	1			$ 1,604,000	$ 1,604,000	$ -	$ -
10	Component 10 Construction Cost	LS	$ 41,496,500			1		$ -	$ -	$ 41,496,500	$ -
Demo	Magnolia Bridge Demolition	LS	$ 6,673,500	1	1	1	1	$ 6,673,500	$ 6,673,500	$ 6,673,500	$ 6,673,500
Repl	HNTB Replacement Cost 2018$	LS	$ 191,122,500				1	$ -	$ -	$ -	$ 191,122,500
							Construction Cost Total	**$ 91,471,000**	**$ 86,057,000**	**$ 86,852,000**	**$ 197,796,000**
							Soft Cost % *	40%	40%	40%	30%
							Soft Cost	$ 36,588,400	$ 34,422,800	$ 34,740,800	$ 59,338,800
							Property Acquisition Costs	$ 63,704,700	$ 61,264,500	$ 44,406,800	$ 34,020,700
							TOTAL BASE COST	$ 191,764,100	$ 181,744,300	$ 165,999,600	$ 291,155,500
							Project Contingency (30%)*	$ 58,000,000	$ 55,000,000	$ 50,000,000	$ 87,000,000
							2018 TOTAL COST**	$ 250,000,000	$ 237,000,000	$ 216,000,000	$ 378,000,000
							2018 ESTIMATED COST RANGE	**$200-$350M**	**$190-$310M**	**$170-$280M**	**$340-$420M**

**Soft Cost and Contingency % based on SDOT standards for a project's design level*

***Total Cost adjusted to Estimated Cost Range based on American Association of Cost Engineering (AACE) Standards for projects in different stages of definition and design*

American Association of Cost Engineering (AACE) Cost Estimate Classification

	Primary Characteristic	*Secondary Characteristic*		
ESTIMATE CLASS	**MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES** Expressed as % of complete definition	**END USAGE** Typical purpose of estimate	**METHODOLOGY** Typical estimating method	**EXPECTED ACCURACY RANGE** Typical variation in low and high ranges [a]
Class 5	0% to 2%	Functional area, or concept screening	SF or m^2 factoring, parametric models, judgment, or analogy	L: -20% to -30% H: +30% to +50%
Class 4	1% to 15%	or Schematic design or concept study	Parametric models, assembly driven models	L: -10% to -20% H: +20% to +30%
Class 3	10% to 40%	Design development, budget authorization, feasibility	Semi-detailed unit costs with assembly level line items	L: -5% to -15% H: +10% to +20%
Class 2	30% to 75%	Control or bid/tender, semi-detailed	Detailed unit cost with forced detailed take-off	L: -5% to -10% H: +5% to +15%
Class 1	65% to 100%	Check estimate or pre bid/tender, change order	Detailed unit cost with detailed take-off	L: -3% to -5% H: +3% to +10%

Note: [a] The state of construction complexity and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual cost from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.

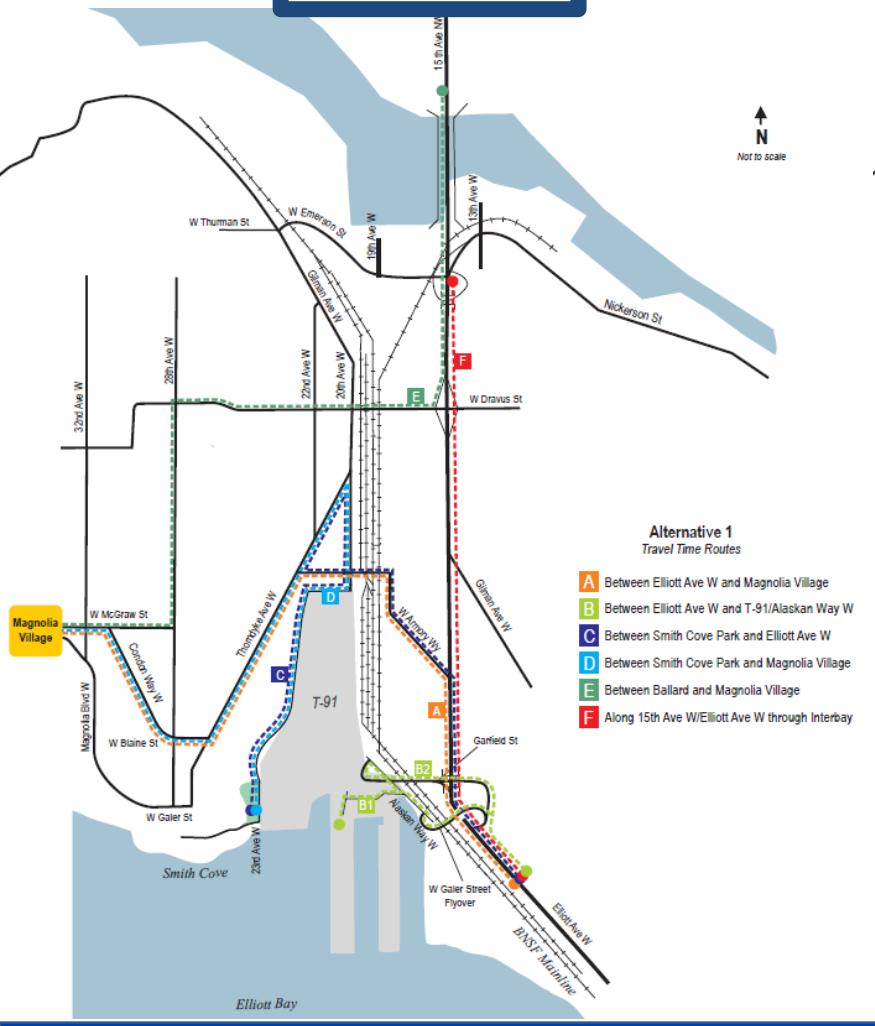
Table 1 – Cost Estimate Classification Matrix for Building and General Construction Industries

Per AACE International Recommended Practice No. 56R-08

Travel Time Routes Evaluated

In-Kind Replacement, 2035
Travel Times by Fall 2018

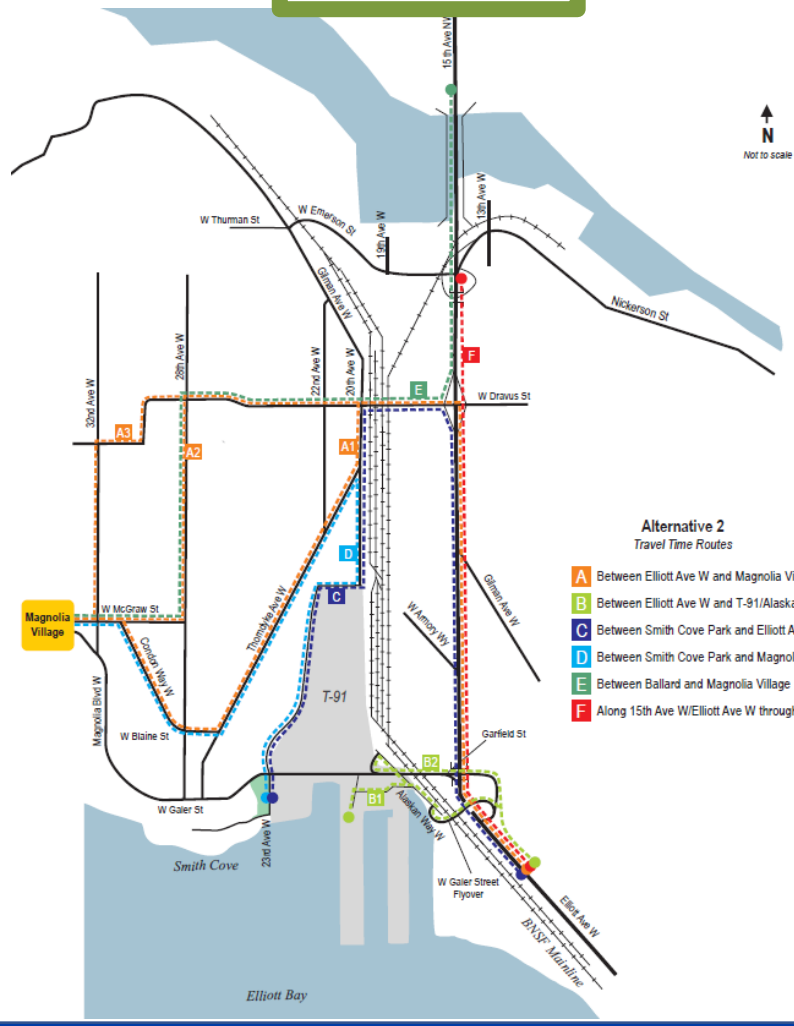
Alternative 1



Alternative 1
Travel Time Routes

- A Between Elliott Ave W and Magnolia Village
- B Between Elliott Ave W and T-91/Alaskan Way W
- C Between Smith Cove Park and Elliott Ave W
- D Between Smith Cove Park and Magnolia Village
- E Between Ballard and Magnolia Village
- F Along 15th Ave W/Elliott Ave W through Interbay

Alternative 2



Alternative 2
Travel Time Routes

- A Between Elliott Ave W and Magnolia Village
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- C Between Smith Cove Park and Elliott Ave W
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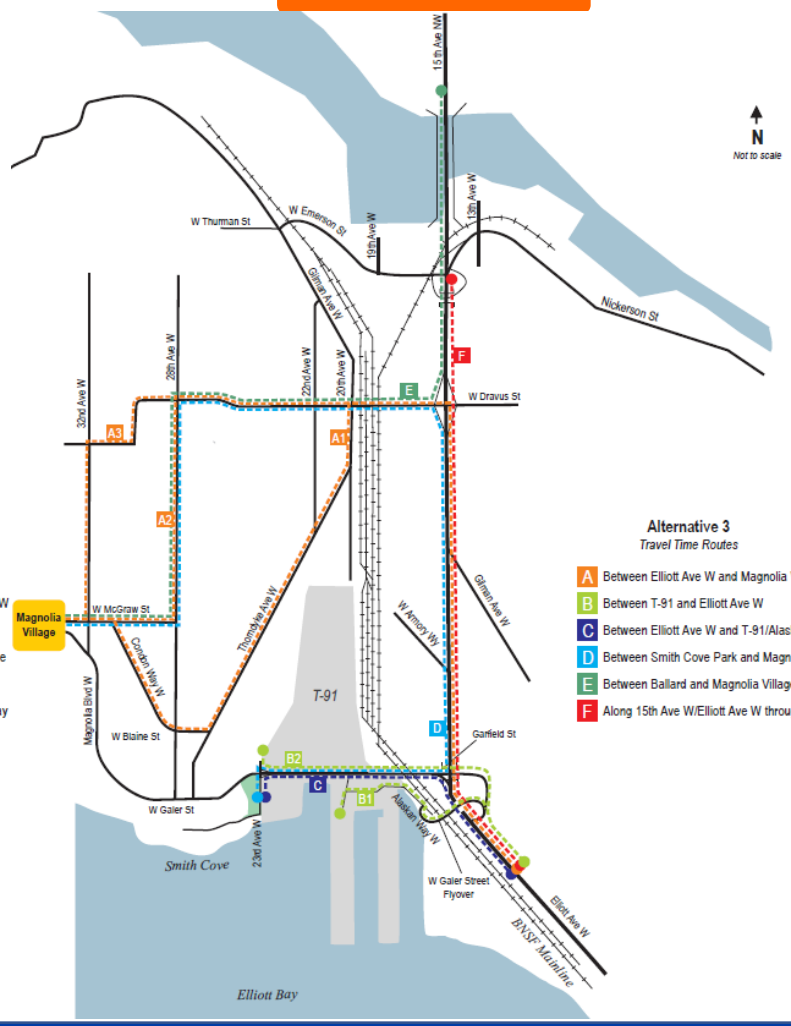
Alternative 3



Alternative 3
Travel Time Routes

- A Between Elliott Ave W and Magnolia Village
- B Between T-91 and Elliott Ave W
- C Between Elliott Ave W and T-91/Alaskan Way W
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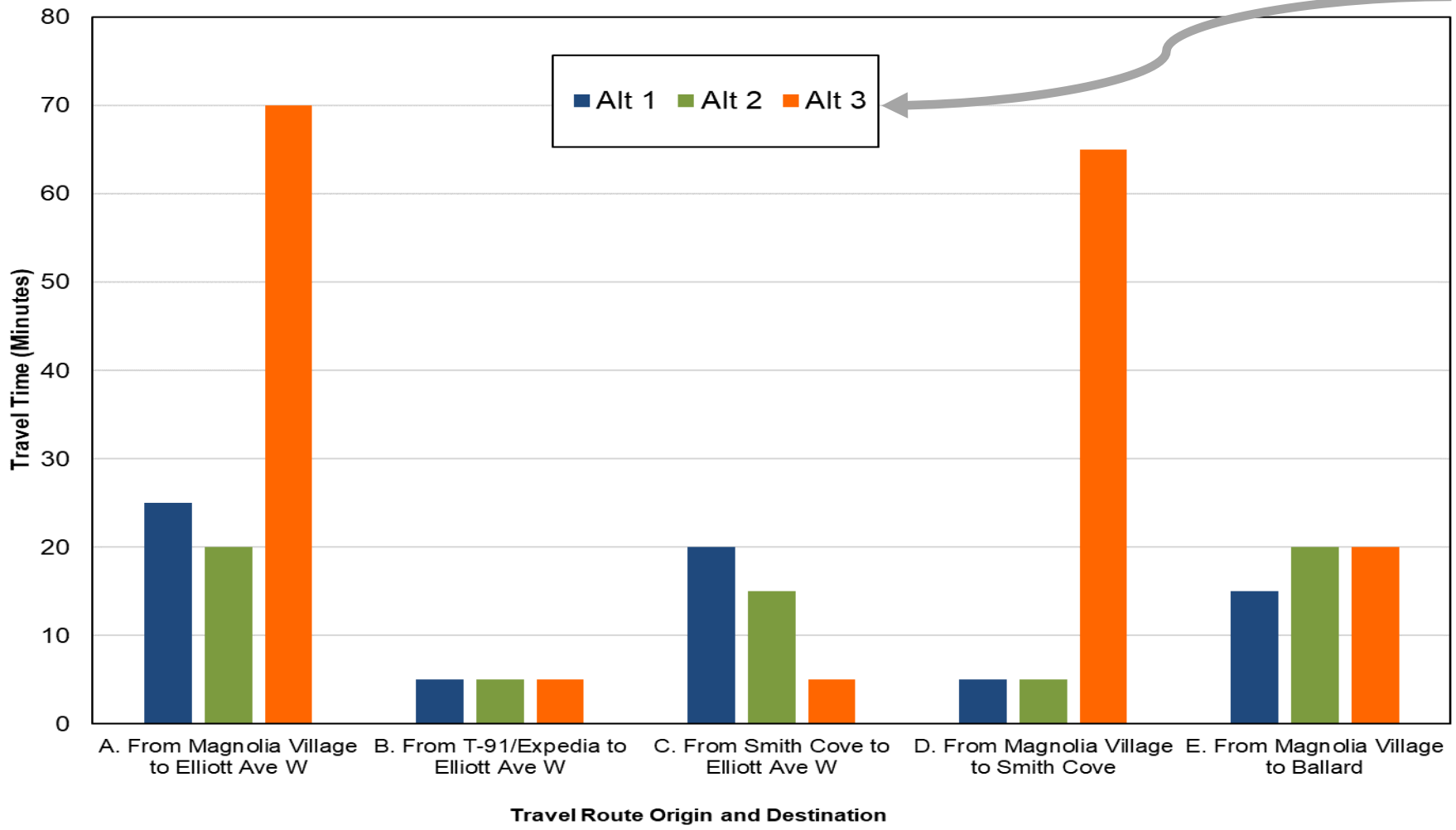
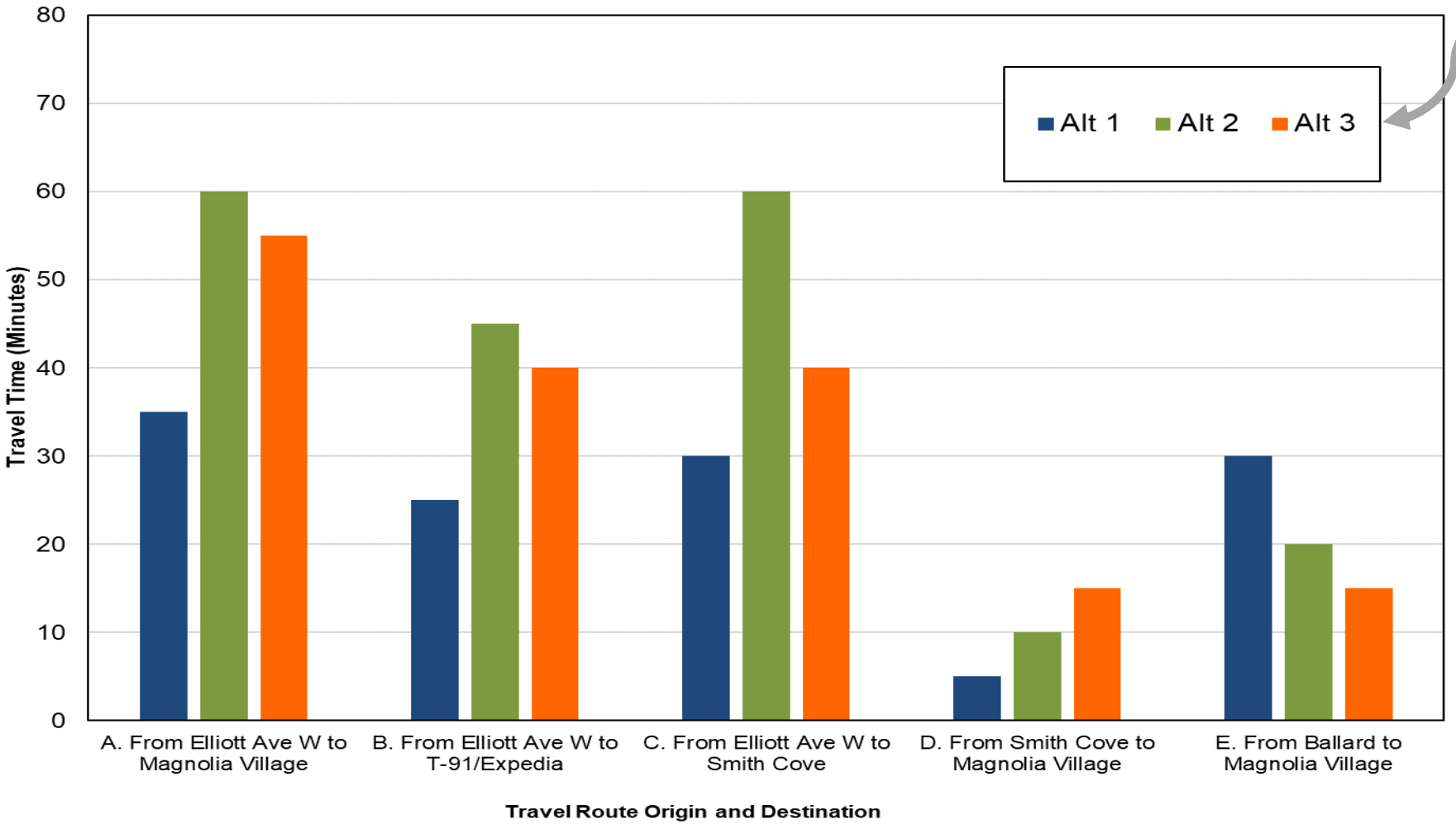
2035 Travel Times – Leaving Magnolia/Interbay AM Peak Hour



In-Kind Replacement 2035 Travel Times by Fall 2018

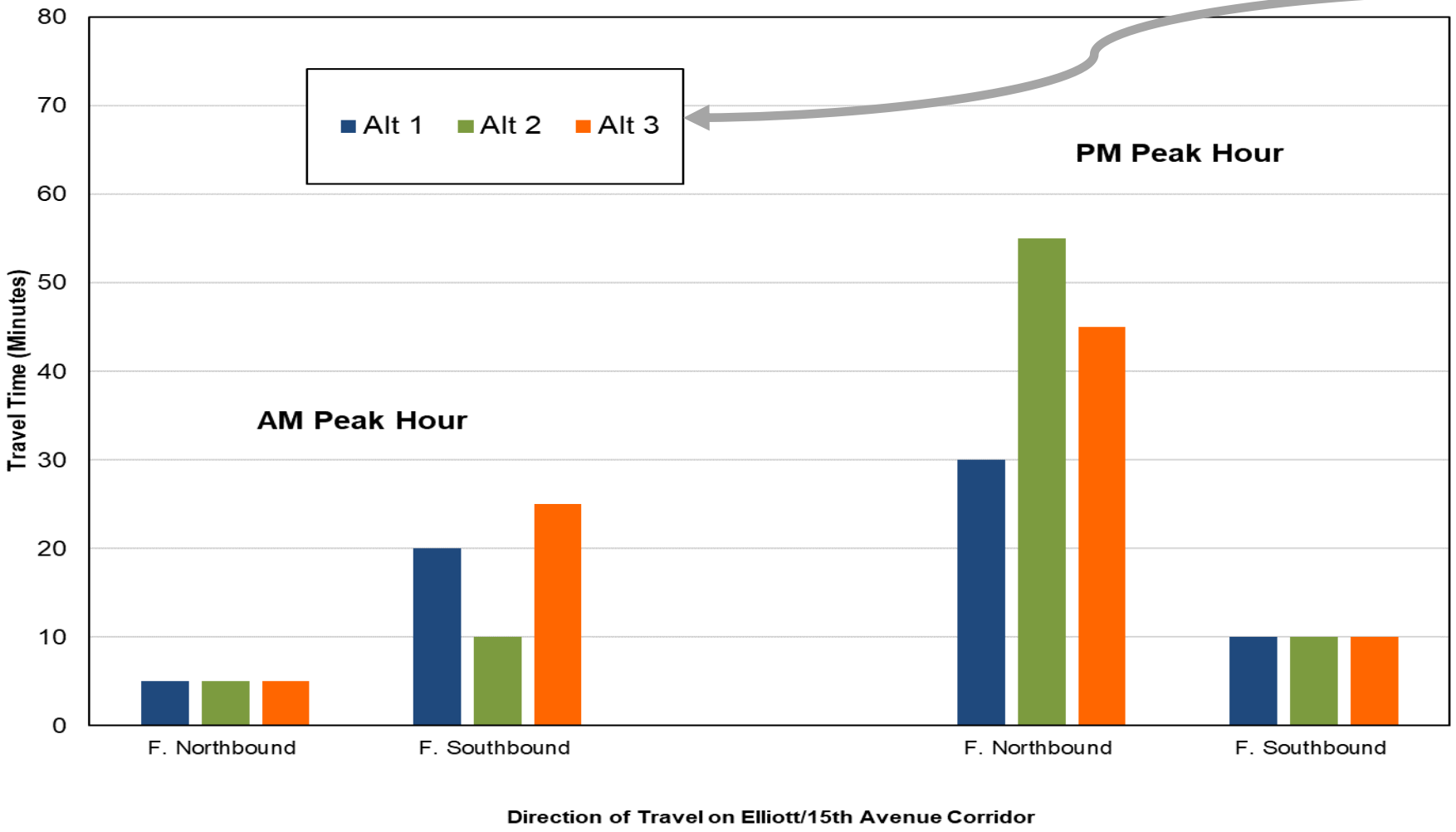
2035 Travel Times – Leaving Magnolia/Interbay PM Peak Hour



In-Kind Replacement 2035 Travel Times by Fall 2018

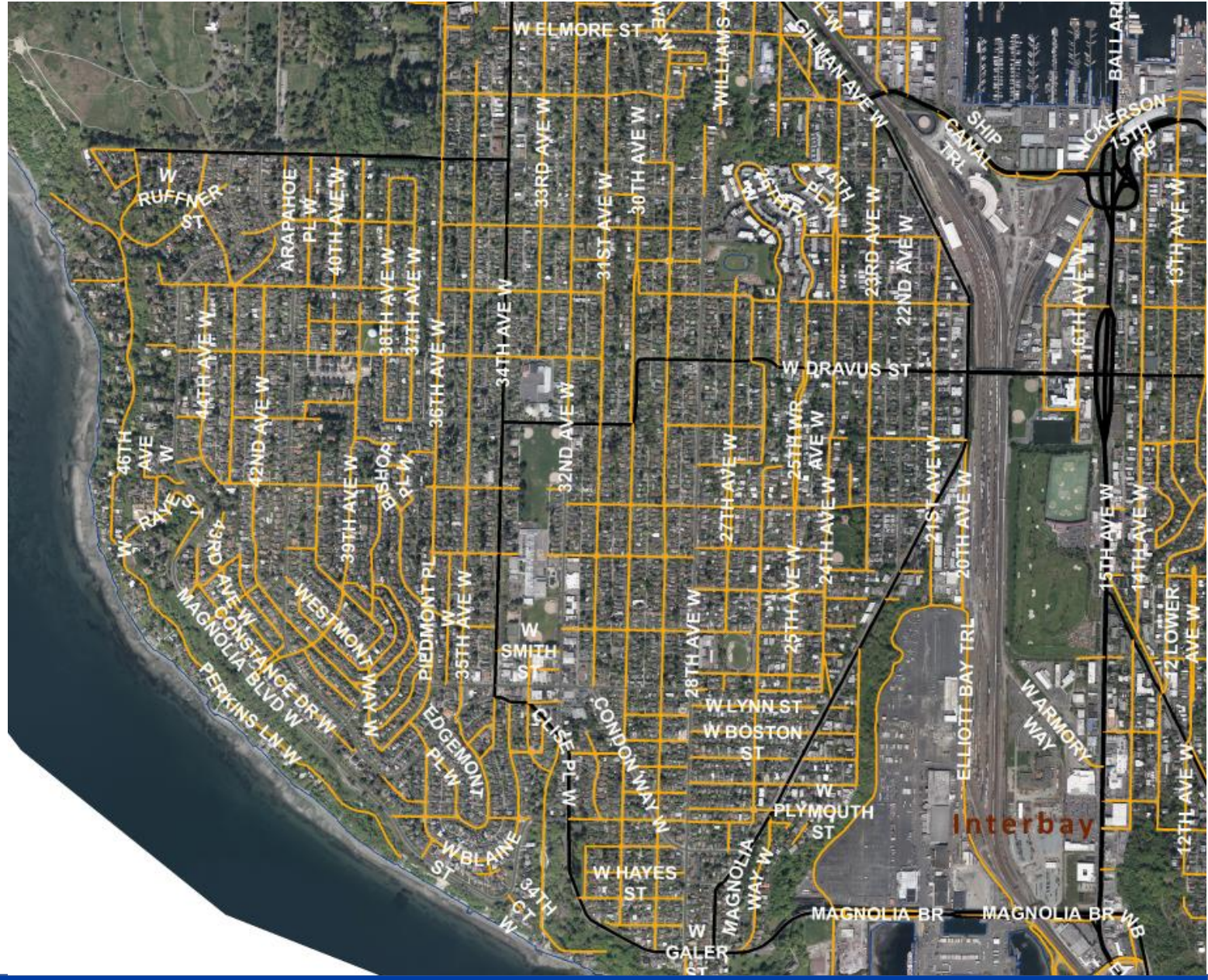
2035 Travel Times – Along 15th/Elliott Ave Corridor

In-Kind Replacement 2035 Travel Times by Fall 2018



Preliminary Recommendations

- Access improvements beyond new components
  - Thorndyke Ave W
  - W Blaine St
  - Condon Way W
- Economic Impact
  - Intercept Survey
  - Considerations for future environmental impact study
- Emergency Response



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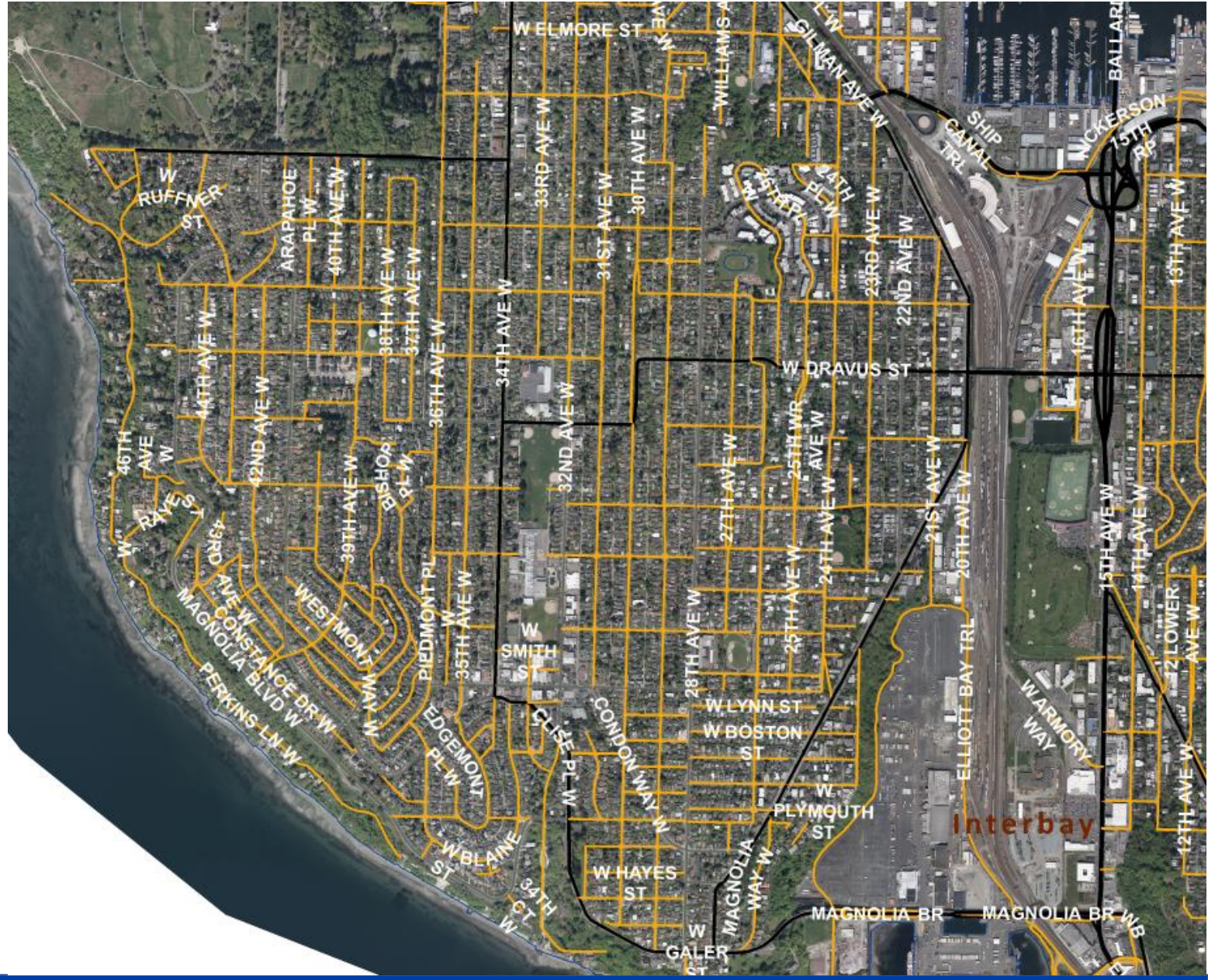
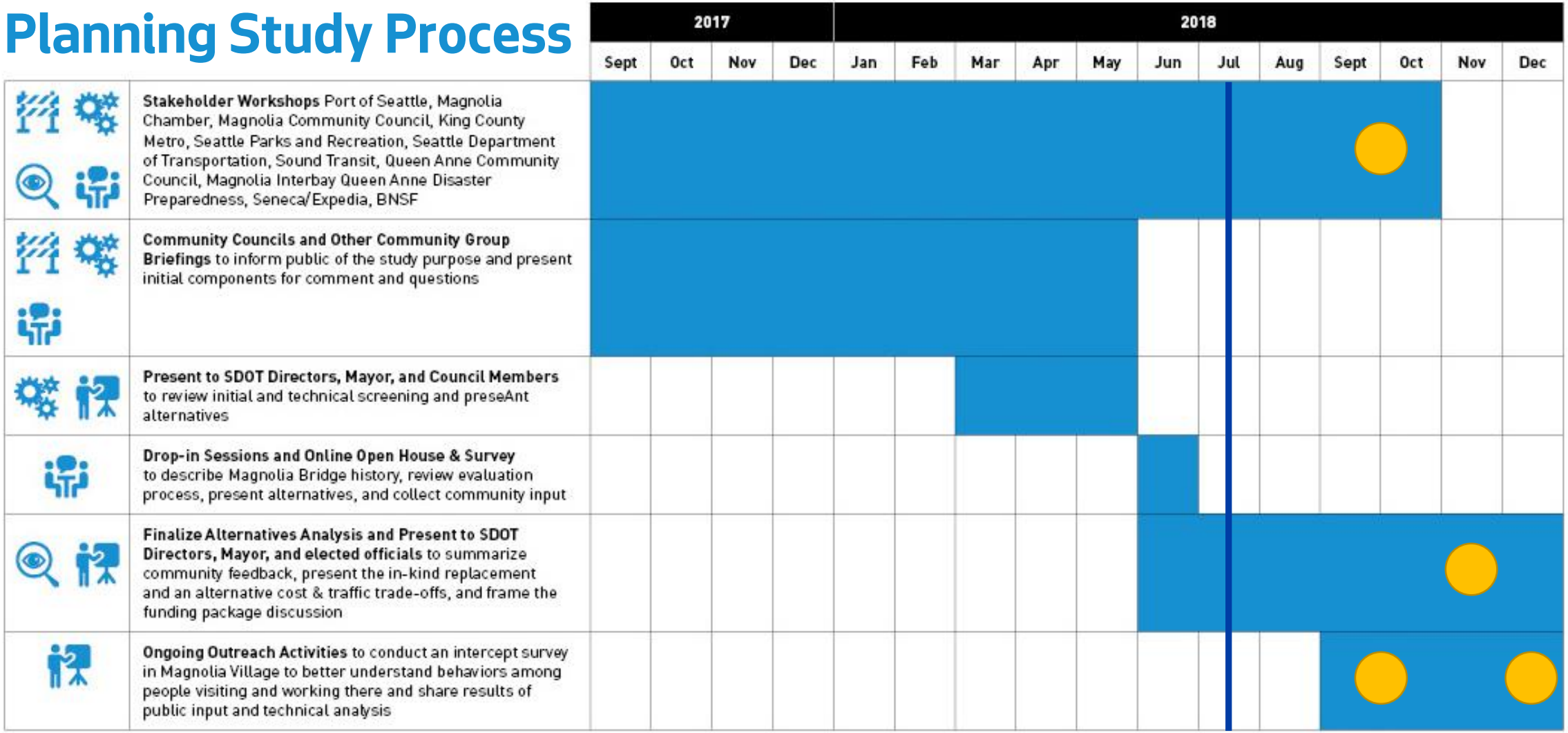
Remaining Concerns or Questions…



Planning Study Process



Emergency Closure Plan

Technical screening of components to identify viable alternatives

Perform alternatives analysis

Present analysis and information

Listening to community & agencies

City of Seattle

Questions

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