# MAGNOLIA BRIDGE PLANNING STUDY

PRESENTED TO THE MAGNOLIA COMMUNITY COUNCIL
MARCH 20, 2018

SCJ ALLIANCE

SDOT
Seattle Department of Transportation

# PROJECT PURPOSE & GOALS

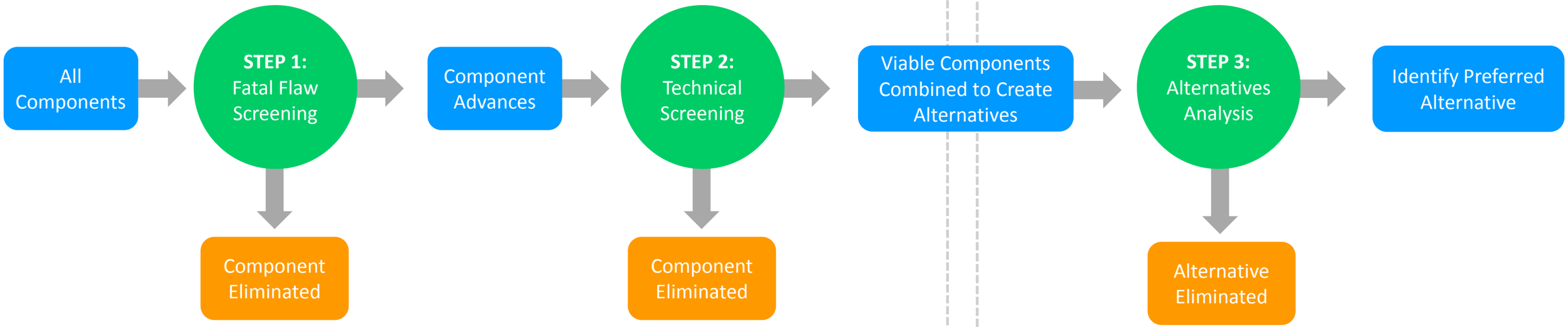
## Mission:

*Develop an alternative that provides safe and efficient access to the Magnolia area that has stakeholder support and is financially feasible.*

## Project Goals:

- *Provide a safe route(s) to Magnolia.*
- *Provide reliable and redundant access to and from Magnolia.*
- *Any new route must be grade separated from the BNSF Mainline railroad tracks.*
- *Provide a route that will support Magnolia Village.*
- *Maintain or improve traffic flow on, and connections to, the 15th Avenue W corridor.*
- *Maintain access to the Smith Cove waterfront and improve connection between Magnolia and the Smith Cove waterfront.*
- *Maintain or improve access to Terminal 91.*
- *Improve the level of bicycle and pedestrian connections within and beyond the project area.*
- *Consider future ST3 light rail project when evaluating alternatives.*
- *Design an alternative that is financially feasible.*
- *Minimize or mitigate environmental impacts.*
- *Minimize disruption during construction.*

# EVALUATION PROCESS




**Fatal Flaw Criteria:**

- *Maintain access to the Smith Cove waterfront and improve connection between Magnolia and the Smith Cove waterfront*
- *Must be grade separated from the BNSF Mainline railroad tracks*
- *Maintain or improve access to Terminal 91 (T91)*
- *Must be financially feasible*

Component to replace the existing Magnolia Bridge was considered and found to be fatally flawed

**Technical Screening includes:**

- *Traffic operational need*
- *Geometric feasibility*

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**Alternative Analysis include:**

- *Traffic operations metrics (travel time, intersection delay, etc.)*
- *Cost Estimates*
- *Right-of-Way Impacts*
- *Construction Disruption and Duration*

# PROJECT COMPONENTS


**Component 1: West Uplands Perimeter Road**

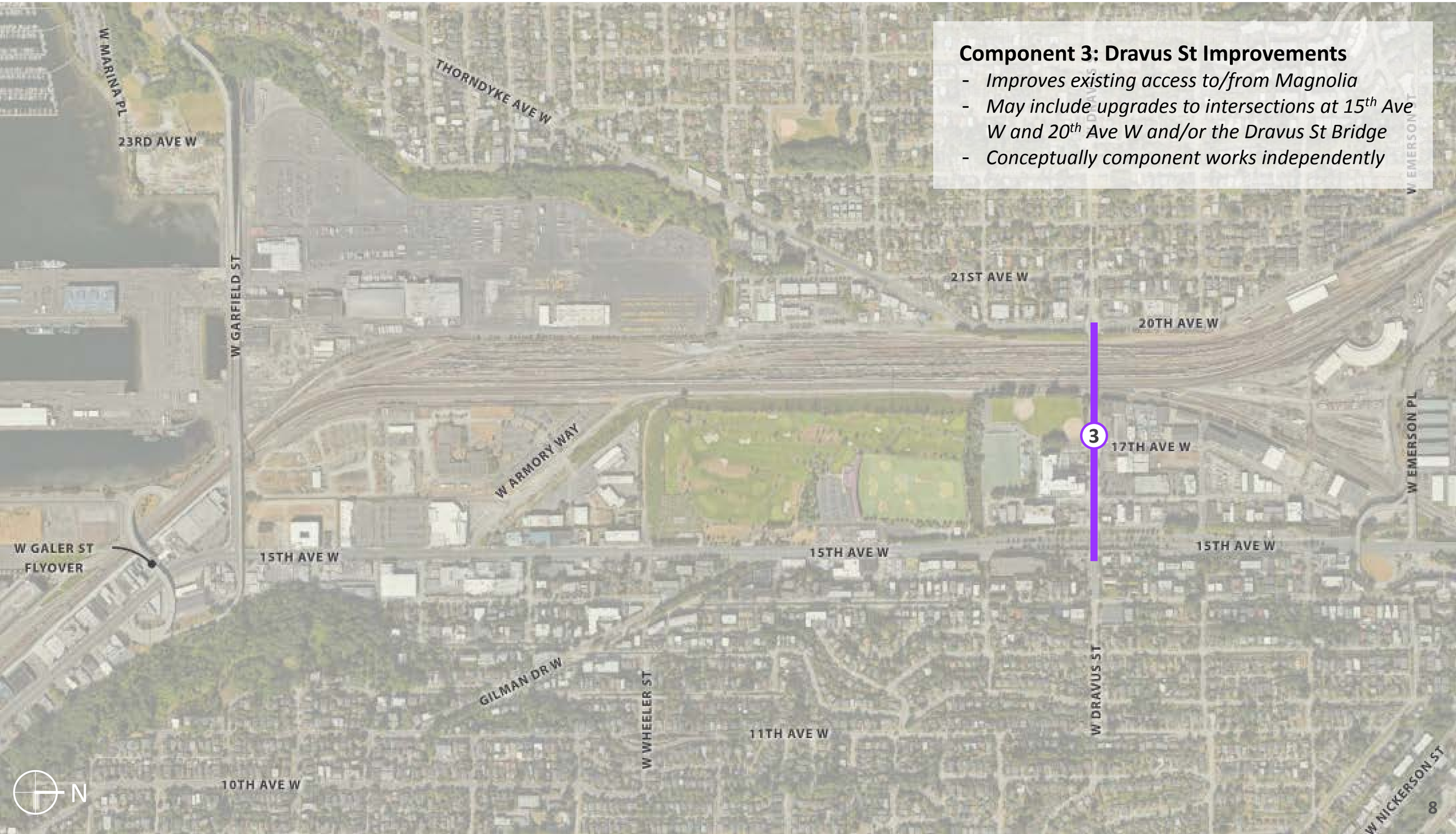
- *New roadway parallel to existing Elliott Bay Trail*
- *Required to provide access to/from Elliott Bay Marina and Smith Cove*
- *Required to provide access between Magnolia and Elliott Bay Marina and Smith Cove*
- *Only works in conjunction with other components*

# PROJECT COMPONENTS


**Component 2: Magnolia Connector**

- *Improvements to existing roadway*
- *Required to provide access between Magnolia and Elliott Bay Marina and Smith Cove*
- *Option to provide access on 20th Ave W or 21st Ave W*
- *Only works in conjunction with other components*

# PROJECT COMPONENTS




**Component 3: Dravus St Improvements**

- *Improves existing access to/from Magnolia*
- *May include upgrades to intersections at 15th Ave W and 20th Ave W and/or the Dravus St Bridge*
- *Conceptually component works independently*

# PROJECT COMPONENTS


**Component 4: Wheeler Street Bridge**

- *Provides new access to/from Magnolia*
- *Options for 15th Ave W access include intersection treatment (4A) or Gilman Dr W loop (4B)*
- *Conceptually component works independently*

# PROJECT COMPONENTS

**Component 5: Armory Way Bridge**

- *Provides new access to/from Magnolia*
- *Options for 15th Ave W access include intersection treatment (5A) or braided fly-over ramp (5B)*
- *Conceptually component works independently*

# PROJECT COMPONENTS


**Component 6: New Bridge Port Connector**

- *Provides access between new bridge and Port property, Elliott Bay Marina, and Smith Cove*
- *Needs to accommodate freight traffic*
- *Options include EL-ramp to 20th Ave W (6A), loop-ramp to 21st Ave W (6B), Thorndyke Ave W/21st Ave W (6C), or Thorndyke Ave W/ 20th Ave W (6D)*
- *Only works in conjunction with other components*

# PROJECT COMPONENTS


**Component 7: Magnolia Bridge Segment**

- *Improvements to existing Magnolia Bridge segment*
- *Provides direct access to/from Port properties*
- *Provides partial access to/from Magnolia in combination with other components*
- *Relieves pressure on Galer Street Flyover*
- *Particularly important to freight traffic*
- *Conceptually component works independently however, if intended for public use, only works in conjunction with other components*

# PROJECT COMPONENTS


**Component 8: Alaskan Way Connector**

- *Extend portion of Alaskan Way*
- *Provides access between Port property/Magnolia Bridge segment and Galer St Flyover*
- *Provides partial access to/from Magnolia in combination with other components and/or the Galer Street Flyover*
- *Relieves pressure on the Galer St Flyover*
- *Only works in conjunction with other components*

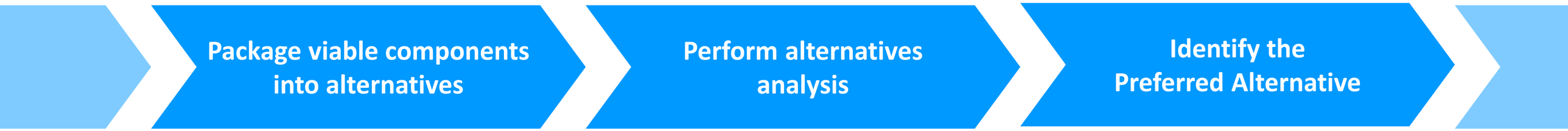
# PROJECT COMPONENTS


**Component 9: East Uplands Perimeter Road**

*Improve and open existing private Port road*

- *Provides partial access between Port property and Magnolia and 15th Ave W*
- *Provides partial access to/from Magnolia*
- *Particularly important for freight traffic*
- *Particularly important for transit access to the Port and T91 cruise terminal*
- *Only works in conjunction with other components*

# NEXT STEPS




## ALTERNATIVE ANALYSIS METRICS:

### Mobility and Connectivity

- *Vehicular Access to and from:*
  - *Magnolia*
  - *Marina/Waterfront*
  - *Terminal 91*
- *Traffic Flow on 15th Avenue*
- *Bicycle and Pedestrian Connections*
- *Transit Access*

### Environmental Impact

- *Adjacent Land Use (Acquisition, Noise, and Visual)*
- *Sensitive Areas (Cultural, Historic, and Natural Resources)*
- *Natural Hazards (Steep Slopes and Seismic Susceptibility)*

### Implementation Characteristics

- *Project Cost*
- *Construction Duration and Impact*
- *Stakeholder Support*

### Other Considerations:

- *Neighborhood Advisory Committee (NAC) Agreement*
- *Sound Transit's Link alignment*
- *Freight access and Port security protocol*

# NEXT STEPS

**Package viable components into alternatives**

**Perform alternatives analysis**

**Identify the Preferred Alternative**

**Online Survey**
to describe Magnolia Bridge history (including past alternatives evaluation process), present alternatives, and collect community input

**Public Outreach Event(s)**
to describe the evaluation process, share findings, summarize community feedback, and present the preferred alternative

# THANK YOU

QUESTIONS?

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