SR-520: A daring new vision

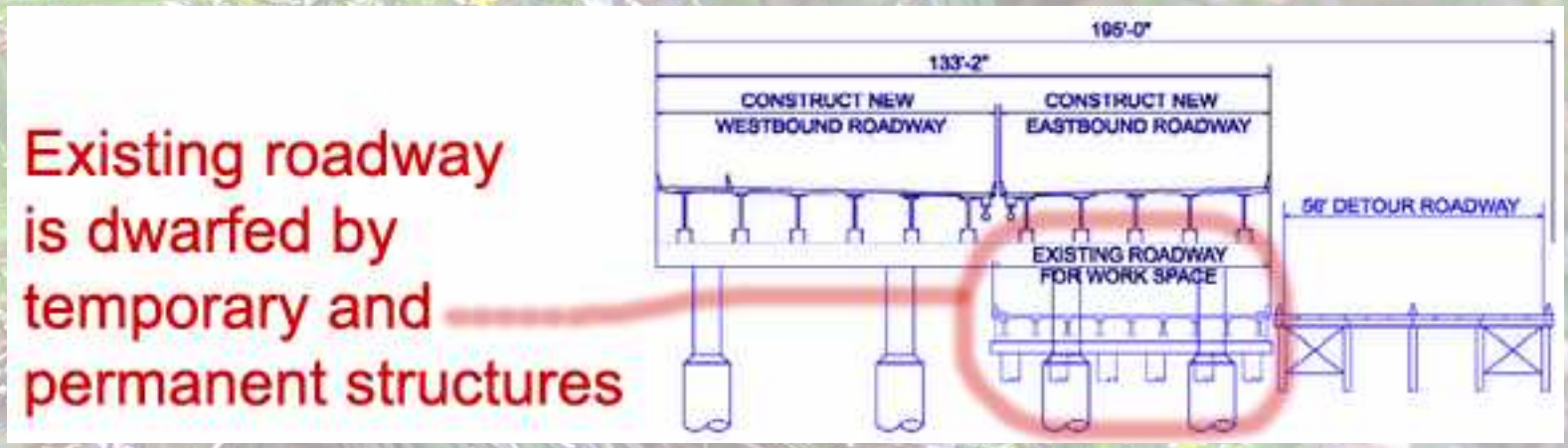
A soaring new gateway to Seattle
and the University of Washington

Why we have been in despair

- Montlake interchange is a monster
  - 300 foot wide swath through Montlake at or near ground level
  - Equivalent of 25 lanes wide
- Embarrassingly bad lid proposal
  - Zero connectivity to neighborhood
  - A tiny island surrounded by a moat of traffic
  - Mostly occupied by 8 lanes of Montlake Blvd. + elevators to transit stop
  - This “baby carrot” only available in 6 lane alternative
- Montlake Bridge bottleneck remains forever
  - Worse congestion, more delays
  - Current alternatives preclude fixing this problem in the future
- No bus connections to the $2.5 billion light rail line at UW
  - Over $5 billion of North/South and East/West transportation investments doesn’t buy you a transfer
- Lake Washington Blvd. ramps closed for 2 to 4 years
  - Total gridlock at the Montlake interchange – a taste of things to come!

Current alternatives cause irreparable harm to a fragile ecosystem

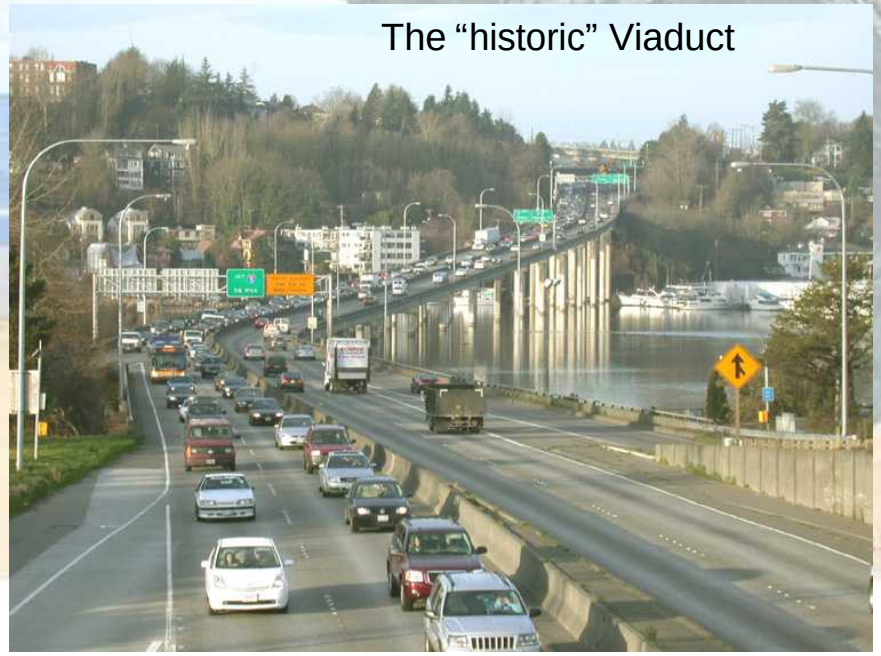
- Many acres of wetlands and parks paved over
- Tons of air pollution in neighborhood from idling cars sitting in congestion
- Temporary bridges require massive footprint; figures for eventual acreage covered understate the devastation



Portage Bay Viaduct proposal is monster-sized eyesore

- Current proposal is nine lanes
  - Running into the same I-5 and the same Montlake Bridge!
  - Proposals to narrow viaduct would remove transit stop, sending more buses to struggle across Montlake Bridge and add to congestion there

The “historic” Viaduct



Artist’s conception (in a bad dream)

Would we choose that plan if there were an affordable way to achieve all this?

- A spectacular landmark structure for our region
- Solution for the Montlake Bridge bottleneck
- Direct bus/rail connection with major transit hub where it belongs - at UW
- Continuous greenbelt from Montlake Playfield to Foster Island
- Restoration of continuity of Olmsted plan through Montlake
- Forests of trees instead of forests of columns
- Improved air quality
- Direct bicycle access to Burke-Gilman trail
- *Stupendous* views of and from the bridge
- Less noise in the most impacted areas, with fewer noise walls required
- Improved access from North Capitol Hill, Roanoke Park, Eastlake
- *Decreased* arterial congestion
- A *net increase* in wetlands and critical habitat
- A project that can earn popular support, get funded and actually get built

Introducing the Portage Bay Suspension Bridge and the UW Gateway Bridge

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Why a suspension bridge over Portage Bay?

View from vicinity of East Edgar Street
in Portage Bay neighborhood

- A graceful, landmark structure instead of a 9 lane concrete ramp
- Creates huge new greenbelt underneath
- No need for forest of huge supporting columns
- No temporary bridges the width of the current bridge required for construction
- Much narrower (6 lanes instead of 9)
- Almost level; no need for traffic to ascend 4% grade
- Enables optional on-ramp from 10th Ave. E (Roanoke lid area)

Great suspension bridges of the world

Golden Gate Bridge – San Francisco, 1937
Built in 4 years using 70 year old technology.

Center span (between towers):
4,200 ft (0.8 miles)

Total length of Bridge including approaches:
8,981 ft (1.7 miles)

Humber Bridge – England, 1981

Center span: 4624 ft (0.87 miles)
Total length: 7283 ft (1.38 miles)

Great suspension bridges of the world

Severn Bridge – England, 1966
Main span: 3280 ft (0.62 miles)
Knife-edge profile

Tsing Ma Bridge
Hong Kong, 1997

Total length:
7217 ft (1.36 miles)

Main span:
3280 ft (0.62 miles)

Portage Bay Suspension Bridge: not even close to pushing the limits

Portage Bay Suspension Bridge

Center span: 0.6 miles
Total length: 1.5 miles

Pearl Bridge – Kobe, Japan
(earthquake country) - 1998

Center span: 1.2 miles
Total length: 2.5 miles

Santiago Calatrava

Celebrated architect, artist, engineer, bridge designer

Alternative approach: Cable Stayed Bridge

Millau Viaduct – Southern France - Opened Dec. 2004

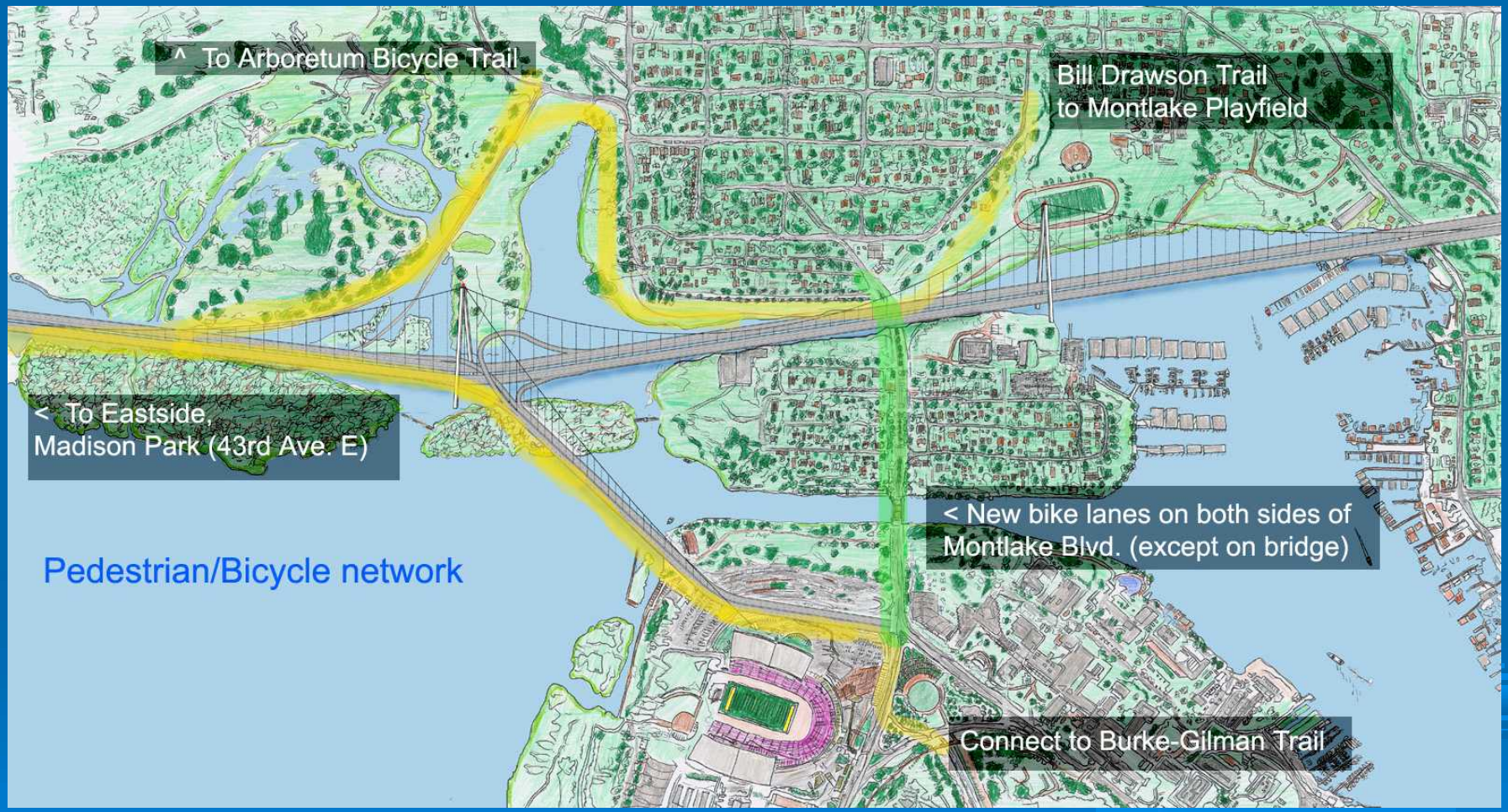
Designed by world-renowned architect Norman Foster

Total length: 8202 ft (1.55 miles)
Traffic flows 885 feet above Tarn gorge

Roadway is 90 ft wide – carries six lanes

Built in 39 months for a total cost of only $517M
Now a major tourist attraction in the region

Major new ped/bike opportunities



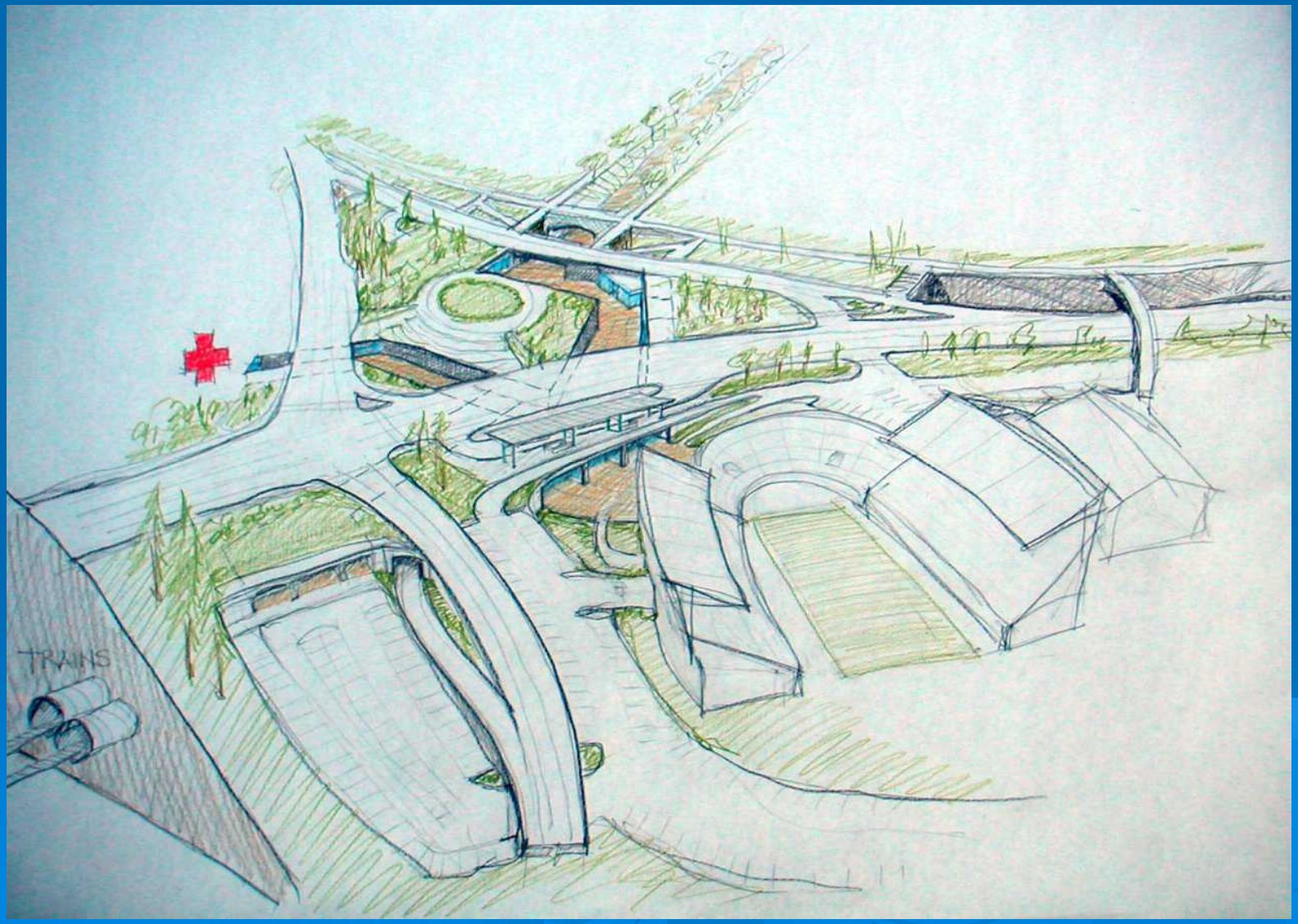
- Includes direct connection to Burke-Gilman trail with scenic viewpoints on bridge
- “Olmsted Boulevard treatment” on Montlake with bicycle lanes where cars used to queue up
- Compatible with proposals for a direct connection to Madison Park at 43rd Ave. E

Potential new inland canal

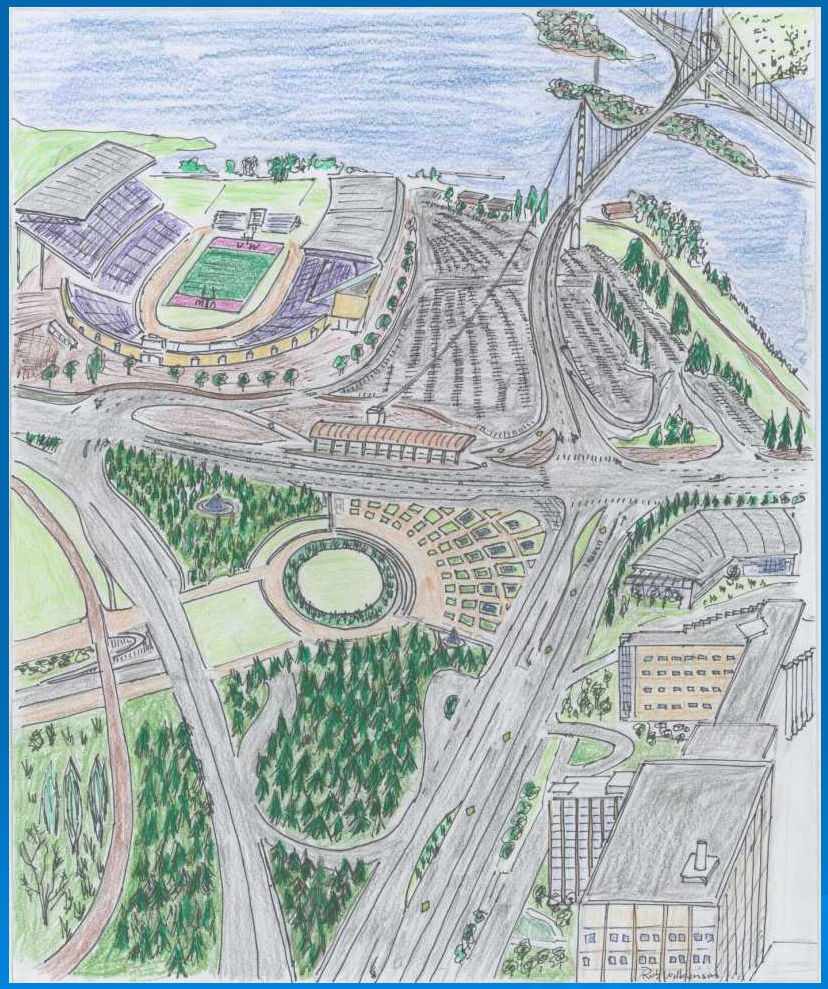
- A paradise for fish, wildlife and kayakers where 520 runs today
- Could be landscaped in the Olmsted Brothers tradition like the UW Campus, Arboretum, Montlake Blvd., Lake Washington Blvd.
- Restoration of historic log canal route turns Shelby-Hamlin into “Olmsted Island”
- Compare with 300 foot wide interchange (width of 7 typical house lots for the length of Montlake)

University of Washington station

Peter Stoner, AIA



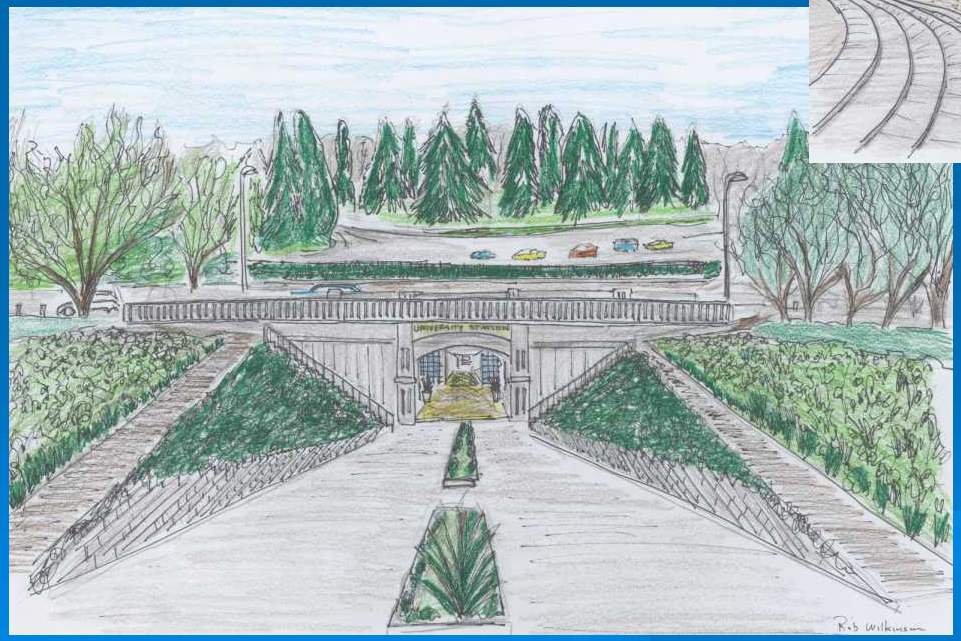
Transportation hub at Pacific St.



- Interchange where new bridge meets Montlake Blvd. - Grade-separated left-hand turn whisks traffic from southbound Montlake Blvd. (from U Village) onto UW Gateway Bridge, reduces traffic in front of Sound Transit station
- New bridge provides all I-5 access
- Sound Transit UW light rail station where currently planned
- Major bus transfer point; Eastside buses could turn around or continue to U District
- 21,000 rail boardings and 47,000 bus passengers on 520 *without* the bus connection – imagine how many with a good transfer!
- Rainier Vista view corridor protected

Accessing the light rail station

- Multiple entrances to serve 30,000 to 40,000 transit patrons per day
- Underground transit mall surrounding Triangle Parking Garage provides pedestrian access and essential services



- Skylights preserve landscape plan, provide daylight to transit mall
- Montlake neighborhood bus access to the Eastside relocated to here (no “Montlake Flyer” stops on the suspension bridge)

Key Attributes of new SR-520 solution

- Construct signature structure over Portage Bay that remains at a very high profile over all of Montlake
- Relocate the entire Montlake interchange to Husky Stadium over 4-lane signature second crossing (with direct bike connection to Burke-Gilman)
- Reconstruct Arboretum ramps (with bicycle path)
- Grade separate Montlake/Pacific interchange and construct major transit hub
- (optional) Add entrance from Delmar or 10th Ave. in Roanoke lid area to serve North Capitol Hill, Roanoke Park, Eastlake
- Match current 6-lane floating bridge plan, which could be built as phase 1

Key Benefits of new SR-520 solution

- A soaring new gateway to Seattle and the UW – the romantic allure of a suspension bridge, Santiago Calatrava
- No need to construct Montlake Flyer stops, Montlake lid
- Portage Bay structure down from 9 lanes to 6 – no transit lanes, no auxiliary lane necessary because WB entrance ramp is moved east
- Contiguous greenbelt from Montlake Playfield to wetlands; major net increase in critical habitat, major decrease in shading of impacted critical habitat, no forest of huge columns underneath
- Two new waterfront park areas where SR-520 enters and leaves Montlake today
- Approx. 50% decrease in SR-520-related traffic on Montlake Bridge, including weaving buses; much better LOS at key intersections
- Restore Olmsted boulevard and landscape aesthetic underneath SR-520 ROW at end of project; true neighborhood reconnection without a lid
- All the benefits of bus/rail connectivity
- Direct bicycle connection to Burke-Gilman trail
- Improved noise and air quality in most highly impacted areas
- Elevation and decreased need for high noise walls opens up truly stupendous views

How to get involved

- Email: webmaster@montlake.net
- Join the Montlake Forum on the web (http://www.Montlake.net)
- More info on http://www.betterbridge.org