

How a Tunnel was Chosen for Alaskan Way Viaduct Replacement

ITA Open Session

Budapest

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Harvey W Parker

President, Harvey Parker & Associates

John Reilly

President, John Reilly International



You Too Can Influence Decisions

The decision to tunnel was guided by a relatively few leaders and organizations

Conservative Seattle

- Seattle tradition has been to oppose
 - Taxes
 - Projects
 - Especially costly projects
- Many projects have been stopped
 - Heavy Rail transit system rejected by voters
 - After final design completed in 1970's
 - Mt. Baker Ridge Tunnel
 - Several decades of social & environmental opposition
 - Sound Transit Funding Bills
 - Several light rail funding bills rejected



Viaduct Damaged During Earthquake

- Damaged in February 2001 Nisqually Earthquake
 - Analysis: Unacceptable chance of viaduct failing in next earthquake
 - Environmental Studies Begin
 - Public Outreach begins
 - Leadership Committee – Reilly & Parker tunnel options
- 2007-State Chooses 2 Very Controversial Options
 - Replace with new modern Viaduct
 - Replace with 2-Level cut & cover tunnel
 - Waterside wall of tunnel would replace Seawall



Public Process

- 2007: Non-Binding City-wide Vote
 - New viaduct: Yes or **NO**
 - Cut & Cover Tunnel: Yes or **NO**
- 2008: City, County, and State Co-Leadership
 - Back to Drawing Board
 - City-Wide Traffic Approach
 - Most traffic bypasses downtown
 - 85,000 of 110,000 trips per day are through traffic
 - Downtown Off-Ramps Not Required
 - Only need 4 lanes, not 6 lanes
 - Lower cost



Numerous Anti-Tunnel Groups & Forces



- Significant media and public sentiment against a tunnel solution
- Fear of Initial Capital Cost + Overruns
 - Boston Central Artery Big Dig Precedent
- Anticipated Disruption of Cut & Cover Tunnel

Meanwhile



- Cascadia Foundation Strongly and Actively Supported a Tunnel Solution
 - Transportation Think Tank Kept Tunnels Visible
 - Over a decade of general tunnel support
 - Conducted a few workshops on a tunnel solution
 - Engaged ARUP to prepare a White Paper
 - Facilitated Letter to Governor by Tunnel Experts

Other Tunnel Support Actions

- An increasing number of leaders recognized that none of the surface solutions were satisfactory
- Economic studies demonstrated long term value
- Economic studies showing high social & economic cost of construction disruption
 - 7 years
 - Cost about equal to project cost

Stakeholder Advisory Committee (SAC)

- About 30 Members Representing
 - Neighborhoods
 - Business and Labor Associations
 - Special Interest Groups
- Met Monthly for a Year
 - Briefed on and Discussed all issues
 - General lack of consensus of what to do
 - By end of year 8 alternatives left for consideration
 - One tunnel alternative but not favored



Remarkable December 2008

Complete Turnaround
from
Anti-Tunnel to Pro-tunnel

Stakeholder Meeting December 11

- State, City, & County announced decision to move ahead (because of funding restraints) as follows:
 1. Replace Viaduct with a new Viaduct, or
 2. Remove Viaduct and improve city streets & transit
- Asked Stakeholders for feedback
- Chamber of Commerce Retaliated and Proposed Tunnel Hybrid
 - Deep bore tunnel with improved street & transit
 - 90 % of Stakeholders asked for the tunnel to be included as a third option

Pro-tunnel Actions December 2008

- Cascadia White Paper
- Several Tunnel Experts wrote letter to the Governor
 - Validated feasibility and safety of deep bored tunnels worldwide and urged serious consideration
 - Seriously questioned WSDOT's tunnel costs of \$3.5 B
- Business Leaders Lobbied for a Deep Bore Tunnel
 - Recognized that State only can spend \$2.8 B and worked within that restraint

Exchange of Tunnel Ideas

- Workshop to discuss apparent differences of opinion regarding feasibility and cost
 - Both expressed similar conclusions about feasibility and even the value of life cycle cost issues
 - WSDOT was actually close to Experts on tunnel construction estimates
- WSDOT looks at costs through the eyes of an Owner
 - Not just construction costs
 - Design consultant and Agency cost
 - 3rd Party and Mitigation Costs
 - Startup Costs
 - Appropriate Contingency because of very early stage of design



December 2008: Busy Month for WSDOT

- Selected a Single Bore 4-lane stacked configuration
 - Revisited previous tunneling concepts
 - Confirmed feasibility of 16.5 m diameter tunnel
- Re-evaluated tunnel costs including contingencies
 - Single Bore tunnel much cheaper than twin bore
 - Revised contingency, especially of non-tunnel items



Other Actions During December

- Found other sources of funding
 - City responsible for \$900 M
 - Seawall
 - Waterfront Improvements
 - Port offered \$300 M
 - Evaluated potential for Tolls
- Found other groups supporting a deep tunnel
 - Many in State and Local political leadership
- Briefed the Governor & Political Leadership on the virtues and benefits of a tunnel solution

Governor Agrees to Single Bore Tunnel

- January 13, 2009
 - Governor announced Alaskan Way Viaduct will be replaced by a single bore, 4-lane deep tunnel
 - Reversed recommendation announced one month earlier
- State will pay no more than \$2.8 B
- Will be single bore with 4 stacked lanes
- Cars will go through tunnel in 2015

Post Announcement Activities

- Signed agreement between State-City-County
- Passage of Tunnel Bill by Legislature
- Numerous public meetings and related materials informing the public
 - Precedents of very large tunnels worldwide a deep bore tunnel is different from Cut & Cover
 - Why the tunnel will not be another Big Dig
 - Why the tunnel will be safe
- Continued Stakeholder Activity to maintain support

Conclusions

- Controversial decision took about 7 years
 - Before December 2008, capital cost of tunnel was considered to be too high
 - After December, the revised cost estimates were more reasonable
- Complete reversal about chances a tunnel would even be considered in about ONE WEEK
- Final Decision by Governor in ONE MONTH
- Tunnel was selected
 - because of its own merits
 - because the other solutions were considered to be unacceptable

You too can make a difference

