Index by Name

- Chris Smith - Cost and Financing
- *Doug Allen - Lift Problem & How We Got Here*
- *Fred Nussbaum - Our Alternative – Six Steps*
- *Jefferson Smith - Transit*
- Jim Edelson - Peak Oil
- Jim Howell - Congestion
- Joe Smith - Safety
- Matthew Denton - Bike & Pedestrian
- *Matthew Denton* - Opportunity Cost Analysis
- Ron Buel - Clark County & induced travel

Index by Topic

- Bike & Pedestrian – Also Matthew Denton
- Clark County & induced travel –Ron Buel
- Climate Change –
- Cost and Financing –Chris Smith
- Congestion –Jim Howell
- Historical Context --
- *Lift Problem & How We Got Here –Doug Allen*
- Opportunity Cost Analysis- *Matthew Denton*
- *Our Alternative – Six Steps –Fred Nussbaum*
- Peak Oil- Jim Edelson
- Safety –Joe Smith
- Speaking to Portland's Values –
- *Transit –Jefferson Smith*


Columbia River
CROSSING
Replacement Bridge Draft Concept
Hayden Island and Marine Drive Interchanges

Climate Change

The Planet is at stake

This Bridge is counter to all Oregon & Washington standards

Global Warming goes up with VMT

- Motor vehicles are the largest source of global warming pollution in the region.
- The starting assumption for this Big New Bridge is a 40% increase in regional VMT by 2030. This bridge causes more auto travel, hence more VMT. Sprawl in Clark County, means longer commute trips – 93% from the suburban fringe.

Oregon & Washington call for reductions in carbon

- In Oregon, the State Legislature calls for a 75% reduction in Carbon by 2050. The Governor creates a special task force to help reach these goals. To be on track for this goal, we would need at least a 30% reduction by 2030, not a 40% increase.

Oregon & Washington call for reductions in carbon

- In Washington, the State Goal is a 50% reduction by 2050. The Department of Ecology, by recent legislation, now requires transportation projects to reduce carbon emissions.

Fallacious CRC Argument

- Speeding up vehicles does not reduce Greenhouse gas emissions, as claimed by CRC Staff. This argument not only ignores second level effects of added highway capacity, it also ignores cueing theory – relieving congestion just moves it down the road to another chokepoint.

Cost & Financing

Total Cost Approximately $4.2 billion

Equal to:

- $2,000 per person in the metro area
- $8,000 for each family of four
- 80 OHSU trams

“Draft” Funding Plan

- Highway/Bridge Portion = $3 billion
- Approximate Sources:
- Toll/Bonds: $ 1.0 billion
- Federal Earmarks $ 500 million
- Regional Match $ 1.5 billion

Funding is problematic

Federal

- Highway Trust Fund is broke
- Assumes massive earmarks

Tolls

- Low quality for bonding
- No “investment grade” forecast

Local

- No sources identified
- Financed regionally, would require 15cent/gallon gas tax for $1.5 billion

Is it worth $15.00/commuter/day?

- Tolls cover about 1/3 of highway costs
- Tolls estimated at $2.50/crossing
- Full cost tolls would be $7.50

Therefore, it costs $15.00 per commuter each day for the new bridge

Do users want it at that price?

Deep in Debt

- 80 to 85% of bridge cost would be borrowed.
- Bonding for both tolling and local share
- Huge interest costs—not included in cost estimates.
- Debt service moves CRC to first in line for available revenue.
- Whether we get the increased traffic and toll revenue or not, this Big New Bridge will have a huge impact on our ability to do other things.

Congestion in No-Build Overstated

- Traffic on the bridge has declined since 2006. The Oregonian reports last week that people are driving less in general.
- People will change their commuting habits if congestion gets worse (CRC Staff estimate of doubling of congestion hours by 2030 if the Big New Bridge is not built is ridiculous.)

Congestion in No Build Overstated

- Gasoline prices have driven down demand for suburban housing across country, especially where no transit alternatives.
- Population in Clark County is not going to grow as rapidly as projected according to Washington Regional Economist Scott Bailey – below 600,000 by 2030, compared to CRC projection of 665,000.

Congestion in No Build Overstated

- Demand for commuting will be down because retiring baby boomers will open existing jobs in Clark County for residents, Bailey says.
- GAO says highway builders always project higher traffic growth than is likely to occur.

Eliminating a Bottleneck Just Moves Congestion Elsewhere

- The CRC says traffic in the Bridge Impact Area will speed up with a big new bridge. Does this make the regional highway system less congested, over-all? Can we really build our way out of congestion?

Eliminating a Bottleneck

Queuing Theory Controls:

When one eliminates a bottleneck in a system, queuing theory says the bottleneck simply moves to another location, and you then must deal with that bottleneck.

Eliminating a Bottleneck

- Let's look at a recent local example:

  Millions were spent on widening from two lanes to three lanes on the Sunset Highway coming East into Portland. The traffic does move faster until…

You hit the next Bottleneck

- The lanes going South and North on I-405 off of Highway 26, the Sunset, are now consistently backed up. The bottleneck just moved down the road from where the freeway was widened to the next bottleneck.

Where Will the Next Bottleneck Be After the Big Bridge is Built?

- In Peak Hours, there will likely be a considerable bottleneck **going North** where you leave the Bridge Impact Area and the highway will narrow from six lanes to three.
- In Peak Hours, there will likely be a considerable bottleneck **going South** where you leave the Bridge Impact Area and the highway will narrow from six lanes to three.
- There will **undoubtedly** be a bigger bottleneck further South, at the Rose Garden, where the Banfield (I-84) interchange with I-5 is already very backed up.

Is there enough money to eliminate all the bottlenecks?

- Forget the other bottlenecks if we spend $4.2 billion on this big bridge, and go badly into debt while we do so, into debt *because* we need to bond the tolls and bond the local match to get the money up front to build the bridge. Hundreds of millions of dollars will be spent on interest – the lenders will make sure they get paid.
- More importantly, forget spending on alternatives to the automobile – our local match money and federal transportation money is not unlimited today, and there is a long line of much worthier projects than this Big Bridge.

Does the CRC Task Force account for travel induced by New Bridge?

- The last time we added capacity across the Columbia was the Glenn Jackson Bridge, completed in 1982.
- Projections of travel across the Bridge were made for 2000 and 2005. These projections were nearly 50% below actual travel across the bridge in those years.

Why Does the CRC Task Force use the same land-use projections for No-Build Option & New Bridge?

- Their own figures show that 93% of the commuter trips in 2030 are from what the CRC Task Force staff calls “the suburban fringe of Clark County.”

It Makes No Sense

- It makes no sense to keep the land-use the same for a No-Build and for a Big New Bridge.
- Outside of Vancouver and its Urban Growth Area, in the seven suburban and exurban Clark County cities and their “urban growth areas”, there are 6,600 acres zoned for housing development in Clark County. Isn’t it likely that a Big New Bridge will encourage development? Won’t some of those people commute to jobs in Oregon?

Who Benefits Most from the Big New Bridge?

1) Clark County Commuters.
2) Clark County Landowners.
3) Clark County Housing Developers.
4) Clark County Merchants.
5) Clark County Governments with the sales tax new residents pay.

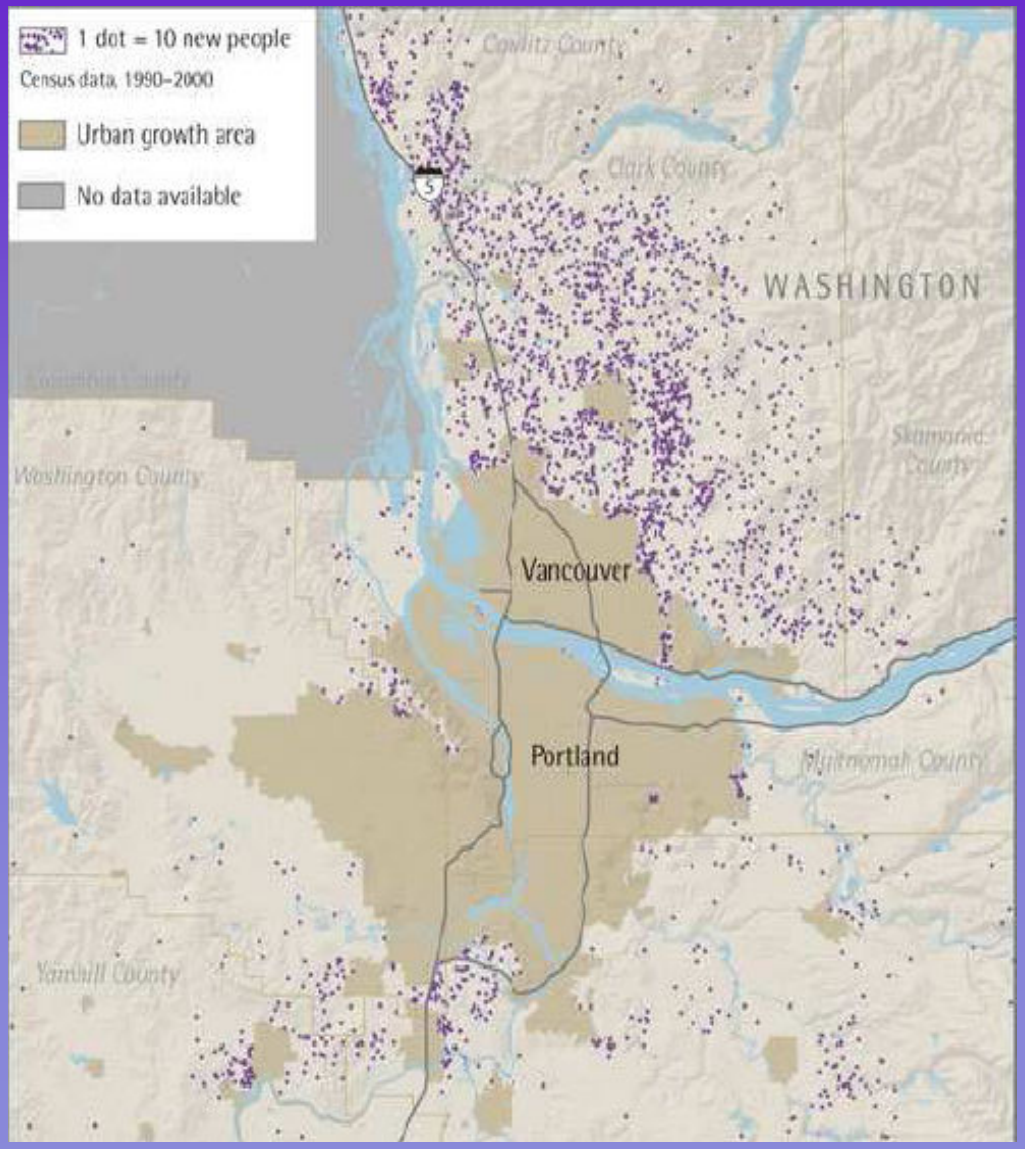
So why is this Bridge such an Oregon Priority?

Clark County Land-use = Sprawl

- Clark County Sprawl: 2007

Demand for more roads is driven by Clark County's sprawling development pattern

Source: Sightline Institute, Census Bureau



Clark County Doesn't Protect Farm and Forest land

- Oregon's land-use laws are considerably more restrictive than those in Washington.
- Portland's tough urban growth boundary means that density (people per acre) in Portland is twice what it is in Seattle, for example.

Jobs Per Capita are also higher South of the Columbia

- Clark County has about half again as many people per job as the rest of the region South of the Columbia.
- It has considerably more residents per job than Oregon's most suburban County, Clackamas County.
- This is the pattern the Big New Bridge feeds.

Opportunity Cost Analysis

- What gets set aside if we spend $700 million of Oregon's local match on the Big New Bridge?
- Who has calculated the interest we **must** pay on this local match as we pay back 30-year bonds?
- What could we be spending this money on?

Opportunity Cost Analysis

- The Light Rail, bicycle and pedestrian bridge across the Columbia, which we all support, is driving the submission of a locally-preferred alternative by August 15. The Big Federal Earmark for the New Freeway Bridge and skyway ramps isn't due until 2009 at the earliest.
- August 15 is also the deadline for Tri-Met's submission to the same FTA of a request for a roughly equivalent amount for the new light rail bridge across the Willamette and the Green Line to Milwaukie.
- Which is Portland's Priority? The FTA may ask.

Opportunity Cost Analysis

- Our short list of **what else** goes on the back burner as we spend $700 million of Oregon's local match money:
  - The Sellwood Bridge.
  - Road Infrastructure serving new jobs areas in Clackamas County, where Metro has planned for growth.
  - Filling all those potholes and paving streets in East Portland neighborhoods.
  - Improvements to the Freeway Loop in Downtown Portland. The City Council voted 4-0 to consider, as part of the upcoming Central City Plan, putting the Eastbank underground and restoring riparian habitat.

How Does this Project Deal with Peak Oil?

- Oil Prices have settled near $125 per barrel. Digging into CRC DEIS work shows projections for oil prices in 2030 of $100 a barrel, with only standard inflation until then. CRC work based on 2004 when gasoline was under $1.50 a gallon.
- The Port of Portland, who just presented today has adjusted their oil prices by at least 20 to 27%.
- Why is the CRC Task Force ignoring oil and carbon realities when the Port and the Oregon Public Utilities Commission are using carbon values up to $100 per ton.

Isn't the Analogy to WPPS?

- Back in the late 1970s and early 1980s, energy projections were nothing but up. Plans were made to build these huge, expensive nuclear plants costing billions. A lot of money was wasted starting them.
- What happened? The energy demand projections were never reached, not even close. **Conservation** kicked in.
- What behavior changes have we already seen in the region just based on the oil price increases of the past year.

Isn't it Time to Show Some Restraint Instead?

- When the Portland City Council calls for a 50% reduction in fossil fuel use by 2030, should we be supporting significant highway capacity anywhere in the region?
- Whether oil has already peaked, or will peak in the next decade, should we further concentrate our dependence on a resource in its twilight years?
- Should we be counting on the auto companies to give us fewer gas guzzlers?
- This project presents a choice between two strategies:
  - Building infrastructure based on a declining resource
  - Diversifying modal options and energy feedstock options to meet future transportation needs.

Historical Context

- Back in the late 1960s, the State started buying dozens of properties in the Mt. Hood Freeway Corridor. In 1976, facing lawsuits and inner city neighborhood opposition, the City Council voted to ask the Feds to stop the freeway and convert the money to light rail and other transit purposes.
- Who led the fight for the conversion in Congress? Glenn Jackson, the powerful head of the Oregon Department of Transportation.

Historical Context

- In the 1980s and early 1990s, ODOT planned for a Westside Bypass between Hillsboro and Wilsonville.
- Neighborhood Activists and farmers created Sensible Transportation Options for People (STOP). Working with 1000 Friends of Oregon, STOP developed LUCTRAC, the land-use and transportation connection.
- Nation-leading concepts like “Transit-Oriented Development” came out of the work. ODOT came to recognize that the huge cost of the project was not justified by the benefits.
- Governor Kitzhaber put the nail in the coffin, killing the project.

Historical Context

- Oregon's unique land-use laws were created by Governor Tom McCall and the State Legislature in 1973. Farmland and Forestland was protected. Cities and Counties were required to have land-use plans. Urban Growth Boundaries were set. Portland grew twice as dense as Seattle. Challenges to the laws were beat back by Ballot Measure 49 last year.

Historical Context

- Portland City Planning leads the way to a dense, thriving city, green and sustainable.
- Portland attracts new residents for its livability. Is in top five cities in nation in attracting 25-34 year-olds with college.
- Portland has a well-educated populous living in inner core neighborhoods. Housing prices stay high in the City as suburban housing prices decline.

Historical Context

- Tri-Met and the City co-operate to build transit – bus mall, light rail, streetcars.
- A growing number of cyclists fill the streets. More people walk to work. People live closer to where they work.
- VMT per capita decreases in recent years in the city.

Historical Context

- And now, facing global warming and peak oil, we decide to make a significant commitment to building a $4.2 billion bridge to relieve congestion? 18 lanes as it passes through Hayden Island? 35 new acres of concrete?
- What's wrong with this picture?

Speaking to Portland's Values

- The document, **Portland 2030, a vision for the future**, came out of extensive conversations about our values with thousands of citizens.
- It talks about Portland's distinctiveness, our small-town feel, our varied neighborhoods, our civic involvement, the strong sense of connection in our communities.

Values in the Built Environment

- “Our city is compact, green, dynamic and accessible to all Portlanders.”
- “Decisions about how and what to build are thoughtfully made…”
- “People in all parts of Portland get around easily on foot, bikes and public transportation.”

Two pages to Global Warming One to Peak Oil

- Cites peak oil task force, that oil is a limited resource – that we will be "compelled to retool our economies and societies around new realities."
- Vision says, "Portland is positioned to lead the way in minimizing carbon emissions."

Difficult to square with values

- Spending $4.2 billion to add highway capacity across the Columbia, to demolish the existing bridges, to add six lanes (and more) of highway capacity for a five-mile stretch, is **not** in keeping with the values laid out by the Mayor's Task Force.

Hayden Island Plan

- We have read with care the Hayden Island Plan document.
- There are Serious Omissions.
- There are Questionable Assertions.
- We do not believe adding eight-to-twelve lanes of highway capacity, and putting that capacity on ramps high in the air, will produce what local residents are expecting. Where are the statements about likely height and number of ramps?

Hayden Island Plan Omissions

- **Noise** – comparison is to parking lot at OMSI with Marquam ramps overhead. Try having a conversation.
- **Dead spaces** underneath the ramps and freeway itself. Things don't grow when they don't get sunlight or rain. Comparison is to Fremont Bridge ramps in Northwest Portland -- dead spaces that are not welcoming for people are created. Nearby activity must be auto-oriented.
- **Visual pollution**: Skyway ramps dominate visual landscape for neighbors. Not exactly pretty.

Hayden Island Plan Questionable Assertions

- "New Transit Oriented Neighborhood."

Sorry, we don't believe a new transit-oriented neighborhood will be created next to the 14 lanes of auto traffic and next to the Big Box Shopping Center with its huge parking lots.

A transit stop does not a "transit oriented neighborhood" make.

Hayden Island Plan Questionable Assertions

- The New Park on the Columbia for “recreational opportunities” is not “similar to Cathedral Park under St. John’s Bridge.”
- The noise and air pollution from many lanes of traffic at that point is not the same as the four lanes on the St. John’s Bridge create. More traffic and more big ramps and the absence of sunlight also makes this a significantly less inviting site. Will people throw things off the bridge as they do on ramps in the I-5 and I-405 loop? Name a highly-used park area under freeway ramps on the I-5, I-405 loop.

Hayden Island Plan Questionable Assertions

- The CRC Task Force Staff asserted before the Planning Commission that, by putting the freeway up in the air over Hayden Island, it will “knit the East Side and the West Side of the community together.”
- The capacity to drive more easily between East and West does not knit a community together.

Where is Cost-Benefit Analysis for $1 billion of New Skyway Ramps?

- This plan calls for huge new skyway ramps, almost bridges in themselves, going up to the new bridge from the East and West on both sides of the River. Ostensibly, these bridges serve truckers, freight and the ports.
- So, what are the public benefits of this huge cost? How many new jobs can we expect in the region, for example? How will the lower costs to landowners and truckers be passed along?
- Shouldn't there be at least an effort to justify this very large expense beyond general statements about freight and the economy?

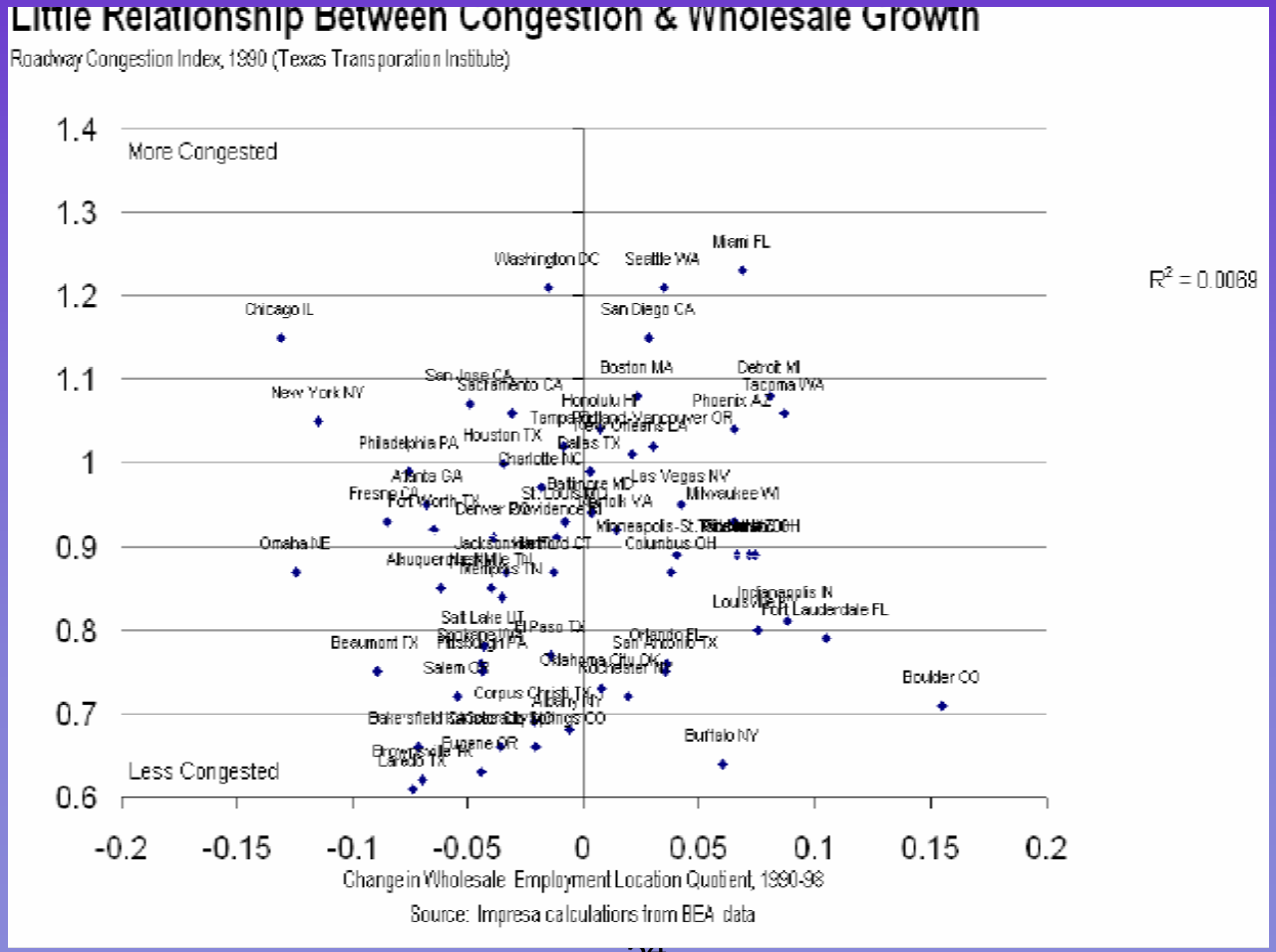
Myths about Freight

- Freight is no longer an important driver for urban economies
- I-205 exists for through freight
- Freight forecasts are out-dated
- RR Bridge is real issue: unique, seismically vulnerable

Freight Avoids Peak Travel

- 85 to 90% of Truck Travel Occurs in Non-Peak Hours, or in the Non-Peak Direction
- Daytime Truck Travel is Lowest at Evening Rush Hour
- Trucks schedule and route around congestion—travel time is more important than arrival time

No statistical relationship between congestion and wholesale growth



Most Freight in Region is Time-insensitive Materials

Commodity Share of Freight:

- Gravel & Stone 32.8%
- Wood Products 17.4%
- Non-Metallic Minerals 11.5%
- Coal & Oil Products 5.6%
- Total, these bulks, 67.3%

More Freight is Moving to Rail

- Intermodal Container Units are Up

2004: 8.07 Million

2006: 9.40 Million

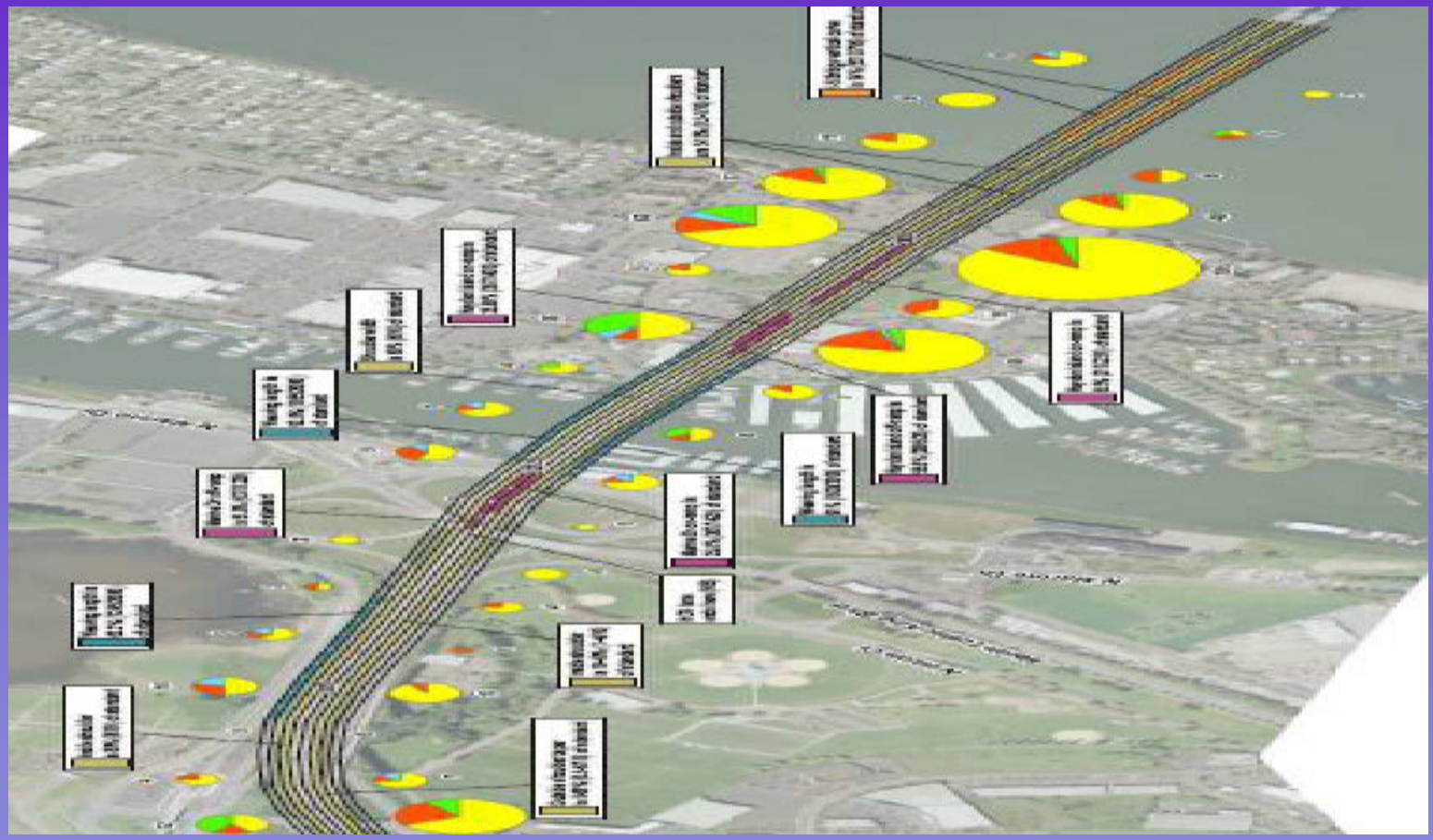
- A 16% increase in two-years
- At a time when freight overall was

declining relative to economic activity

Safety is a Red Herring

- The interstate bridge is relatively safe
- Most accidents are related to congestion
- Most are minor
- Fewer accidents than other roads
- Three fatalities in five years

Hayden Island Ramps are Biggest Safety Problem; Few Accidents on Bridge Itself



Crashes are worse on Fremont

- Fremont (I-405: West End Fremont Bridge to Russell Street) – 1.88 Crashes Per Million Vehicle Miles
- Marquam (I-5: Marquam Jct. Stadium Freeway to I-84)– 1.08 Crashes per million vehicle miles
- Interstate (I-5 N. Lombard to Washington State Line)– 1.06 Crashes per million vehicle miles
- Source: Ness, 2006 ODOT State Highway Crash Rate Tables, (2007)

Not the most dangerous part of the Oregon Highway System

- Road Type Accidents/Million Miles

Urban Cities (Total) 1.20

Interstate Freeways 0.52

Other Fwys/Expressways 0.76

Non-Freeways (Combined) 2.24

Other Principal Arterials 2.23

Minor Arterials 2.38

Urban Collectors 1.84

I-5 Bridge 1.06

Source: Ness, 2006 ODOT State Highway Crash Rate Tables, (2007)

Purpose & Need: Not the Best Answer for Bikes & Pedestrians

- The High Freeway Bridge is not the best answer for bikes & pedestrians because:
- It makes access difficult from adjacent land, requiring elevators.
- It doesn't connect well with the Riverfront trails.
- The bridge is longer than it needs to be because of the height.
- Has traffic problems with more vehicle traffic on surface streets coming to and from the bridge.

Purpose & Need: Not the Best Answer for Bikes & Pedestrians

- By contrast, a low-profile bridge for transit, bikes and pedestrians would be shorter, connect better with the shorefront, and present a less rigorous climb.
- If the Railroad Bridge problem is solved appropriately, no necessity for lifts to interrupt service.
- More cycling, less driving with our alternative.

SmarterBridge's 6-Step Alternative

- Will cost less and be better for people and the environment.
- Can be phased over time.
- Satisfies the objectives of the CRC project.
- Is the kind of solution asked for in the Metro Council's 2/22/07 Resolution that was not honored by the CRC.

SmarterBridge's 6-Step Alternative

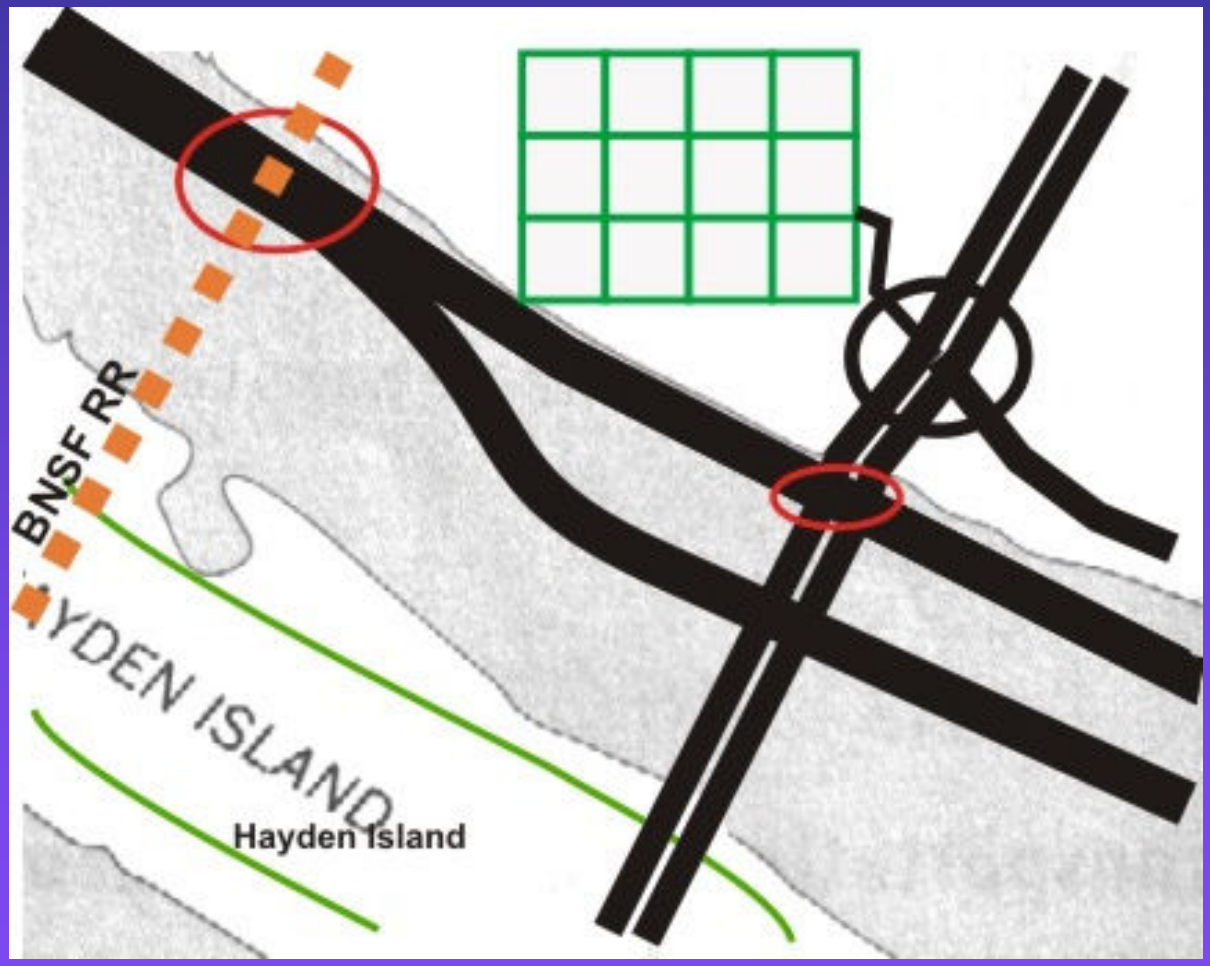
1. Toll the existing bridges and the ***I-205*** bridge to reduce traffic, improve freight mobility and fund improvements.

SmarterBridge's 6-Step Alternative

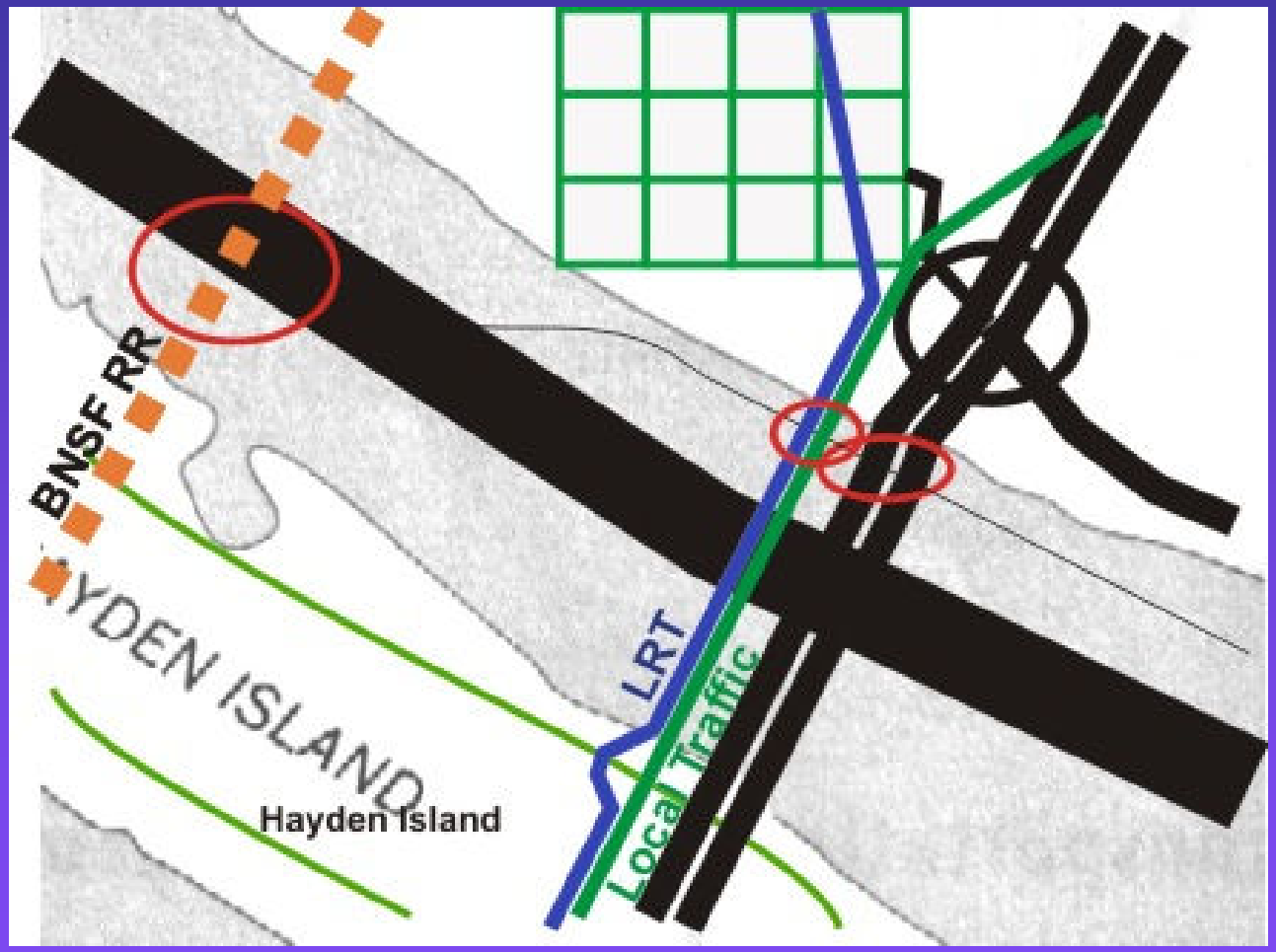
2. Move and improve the railroad bridge opening, to reduce bridge lifts to trivial levels on ***I-5*** and the supplemental bridge in Step 6.

   This rail bridge improvement would be eligible for Coast Guard "Truman-Hobbs" funding.

Current Lifts & Navigation



SmarterBridge Proposed Lifts & Navigation



SmarterBridge's 6-Step Alternative

3. Expand public transit by:
   - Extending MAX to Hayden Island.
     Build a low-level, multimodal bridge across Portland Harbor that also caters to local traffic, bikes, and pedestrians.
   - Improving transit service within Clark County and between it and MAX.
   - Enhancing service connections to major destinations on both sides of the river.

SmarterBridge's 6-Step Alternative

4. Improve I-5 interchange configuration by:
   - Eliminating some interchanges.
   - Redesigning those remaining.
   - Provide new frontage/local road connections to ensure adequate local access to the remaining interchanges.
   - Build new, multi-modal bridges across Portland Harbor and the river to carry local traffic, light rail, bicycles, and pedestrians.

SmarterBridge's 6-Step Alternative

5. Seismically upgrade the existing bridges.

SmarterBridge's 6-Step Alternative

6. Extend MAX only to downtown Vancouver on a low-level, multimodal bridge that also caters to local traffic, bikes, and pedestrians.
   Let Clark County decide the kind of transit system it wants to connect to MAX.

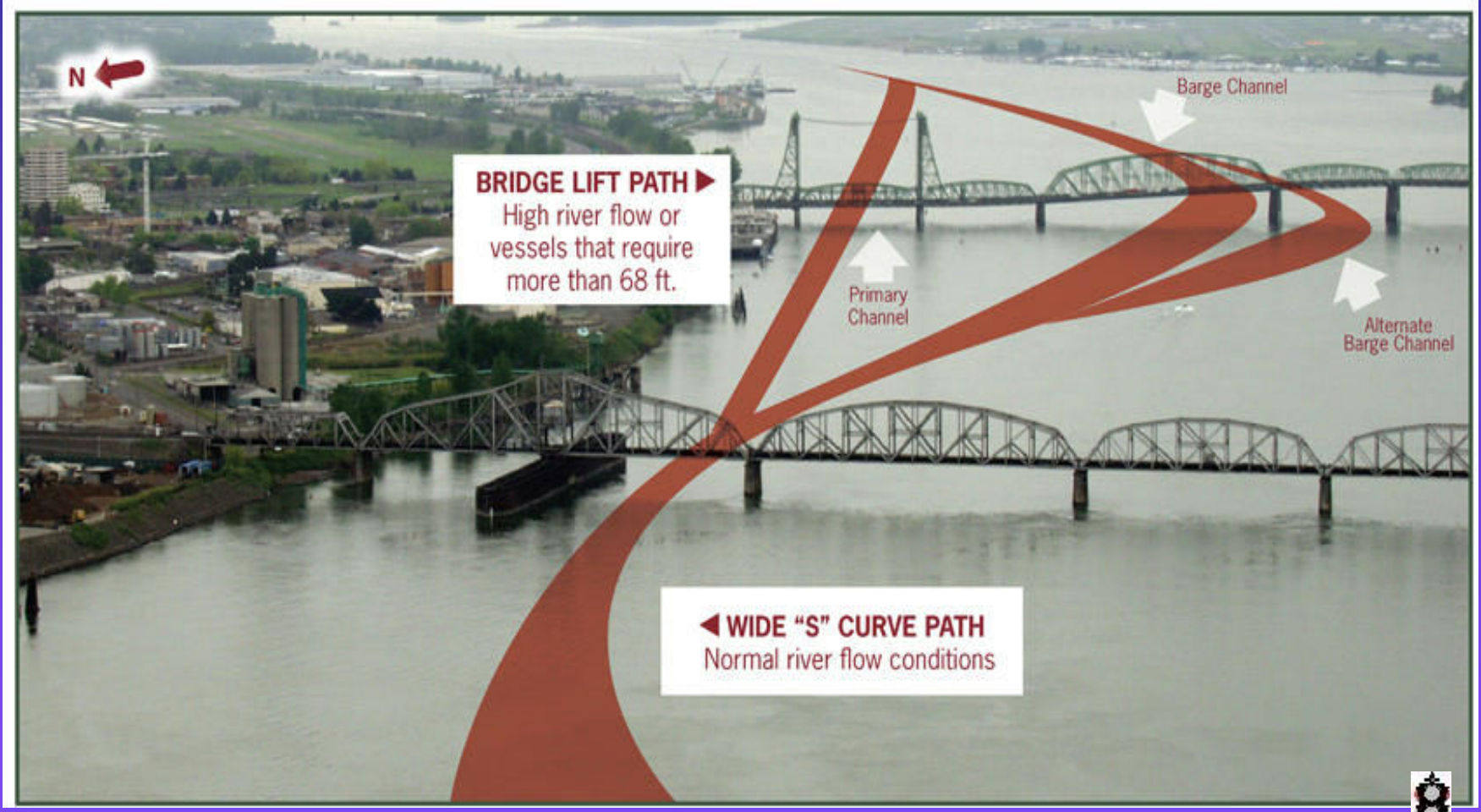
Why is Our Suite of Solutions Not Yet on the Table?

- CRC Process has suffered from a belief that the solution had to have a big freeway bridge.
- Alternative solution components were evaluated in isolation and rejected because they could not solve all the problems by themselves.

The 6-Step Alternative - Recap

1. Toll the existing bridges (including I-205)
2. Move and improve the railroad bridge opening
3. Extend MAX to Hayden Island and improve overall public transit service
4. Improve I-5 interchange configuration
5. Seismically upgrade the existing bridges
6. Extend MAX only to downtown Vancouver on a low-level, multimodal bridge that also caters to local traffic, bikes, and pedestrians.

The Lift Problem



The Solution

- Remove the Railroad Bridge swing span
- Move River channel South to match existing barge channel under higher I-5 bridge spans
- Construct lift span to serve the channel, replacing an existing fixed span.

On record support from:

- Coast Guard
- Burlington Northern Santa Fe Railroad
- Columbia River Towboat Association
- Regional Governments

Consistent Public Support for these choices

- Consider Transit and tolls as first step.
- Serve local traffic with a local bridge.
- BUT…

CRC, in fall of 2006, moved toward one build option for the DEIS

REPLACEMENT BRIDGE WITH TRANSIT

Regional Leaders ask for Better Options

- October 2006 letter from Metro to CRC
- February 2007 Metro hearing with resolution.
- CRC Task Force Forms 4th Alternative Sub-committee.
- Sub-committee meets four times in March 2007

What Happened?

- Staff persisted in putting long-distance traffic on a supplemental bridge option.
- State DOTs refused to support alternative without additional highway capacity.
- All options proposed by sub-committee were dismissed by staff as inadequate.
- Staff invented new supplemental bridge splitting local and long-distance travel in half with the old bridge.
- Staff carried the day with sub-committee and whole CRC Task Force.

What about Alternative 5 - Supplemental bridge with light rail?

- Shows seismic reinforcement is cost-effective
- Shows improved transit and tolls nearly double peak period transit share
- But…Fails to address lifts
- Puts pedestrian and bikes on the old bridge
- Puts through traffic on oversized new bridge.
- Not cheaper

WE CAN DO BETTER

CRC's Transit Component does NOT Meet the Project's Purpose & Need Objectives to:

- Improve connectivity and
- Serve more transportation markets

CRC's Inadequate Transit Component Means the Project does NOT Fulfill State and Regional Mandates to:

- Reduce VMT
- Reduce Greenhouse Gases

CRC Focused Almost Exclusively on Downtown Portland Transit Trips

For work trips alone, this misses a number of key destinations, including:

- Columbia Blvd corridor
- Rivergate
- Swan Island
- PDX Airport Area
- Troutdale Industrial Area

Transit Component

Considering the vast expenditures and impacts in play:

- Transit investment needs to be much bolder than the CRC proposes, if it is to significantly reduce auto travel in the corridor.

Transit Component

Merely extending light rail into Vancouver with park & ride lots is not sufficient.

- Park & rides require people to drive to them, causing local congestion and pollution and,
- Once a car is required for a trip, many are likely to find reasons to drive the whole way.

CRC Needs More Robust Transit

- A vastly improved local transit network on both sides of the river must be provided.
- Such an improved network is affordable, if money isn't squandered on avoidable freeway expansion.

Light Rail and Local Transit Do NOT Need a Big, High Freeway Bridge.

- A new, low, multimodal bridge actually would work better for transit, by providing improved local access to areas adjacent to the river.
- Such a bridge would work better for local traffic, bicycles, and pedestrians too.