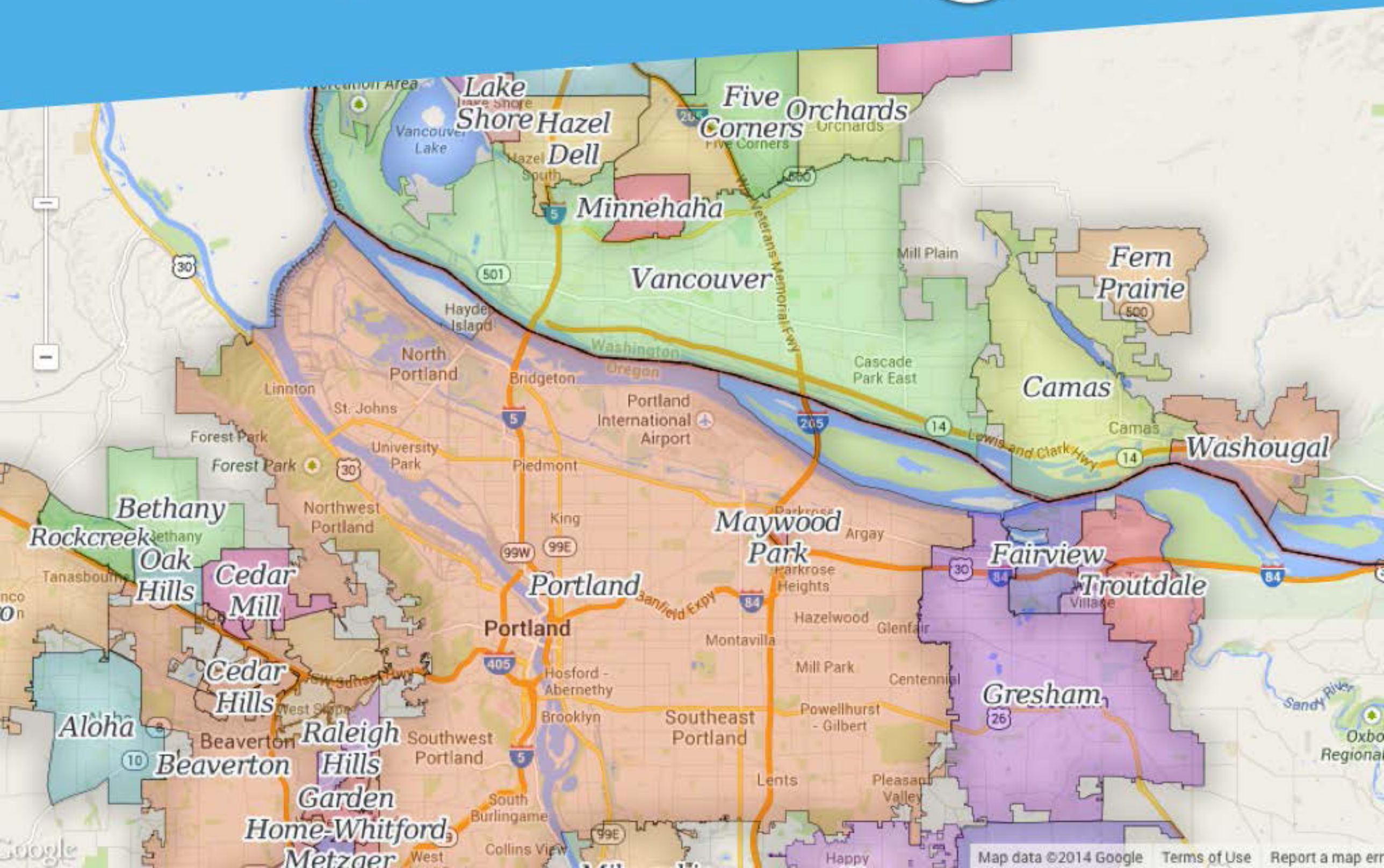
A Bridge Proposal
TO CLARK COUNTY, WASHINGTON
For the
East County Bridge
Between Clark County, Washington & Multnomah County, Oregon
Crossing the Columbia River
July 25, 2014

CREATING BRIDGES AS ART®

Connecting Communities

Multnomah County



The Beauty of Vancouver, Washington

Marshall House Officers Row

Downtown Farmers Market

Ft. Vancouver

Columbia River Waterfront

Waterfront Renaissance Trail

Esther Short Park

Clark County Historical Museum

Elks Building Downtown Vancouver

The Beauty of Vancouver, Washington

Columbia River

Mount St. Helens

Salmon Creek Greenway

Marine Park Beach

Wintler Community Park

Burnt Bridge Creek Trail

The Beauty of Portland, Oregon

Arlene Schnitzer Concert Hall

Portland Oregon Landmark Sign

Rose Garden Arena

Union Station

Governor's Hotel

Jeld Wen Field

Portland Skyline

The Beauty of Portland, Oregon

Forest Park

Mount Hood and Mirror Lake

Wildwood Trail

Architect Robert Harvey Oshatz

Willamette River

International Rose Test Garden

Tom McCall Waterfront Park

Transportation Corridor Visioning Study

April 2008

Southwest Regional Transportation Council

Transportation Corridor Visioning Study

Southwest Washington
Regional Transportation Council

Steering Committee Meetings
Oct. 6, 2006 - Jan. 11, 2008

Agency	Steering Committee	Technical Staff Support
Port of Ridgefield North County	Commissioner Roy Randel (Port of Ridgefield)	Justin Clary (City of Ridgefield)
Battle Ground/Yacolt	Mayor John Idsinga (City of Battle Ground)	Rob Charles (City of Battle Ground)
Clark County	Commissioner Steve Stuart (Board of County Commissioners)	Pete Capell, David Cusack
C-TRAN	Mayor Jim Irish (La Center, representing C-TRAN board)	Jeff Hamm, Ed Pickering
WSDOT	Don Wagner	Jack Burkman, Bart Gernhart
City of Vancouver	Councilperson Tim Leavitt	Matt Ransom
Port of Vancouver	Commissioner Arch Miller	Katy Brooks
East County	Councilperson Helen Gerde (City of Camas)	Jim Carothers (City of Camas) Trevor Evers (City of Washougal)

Transportation Corridor Visioning Study

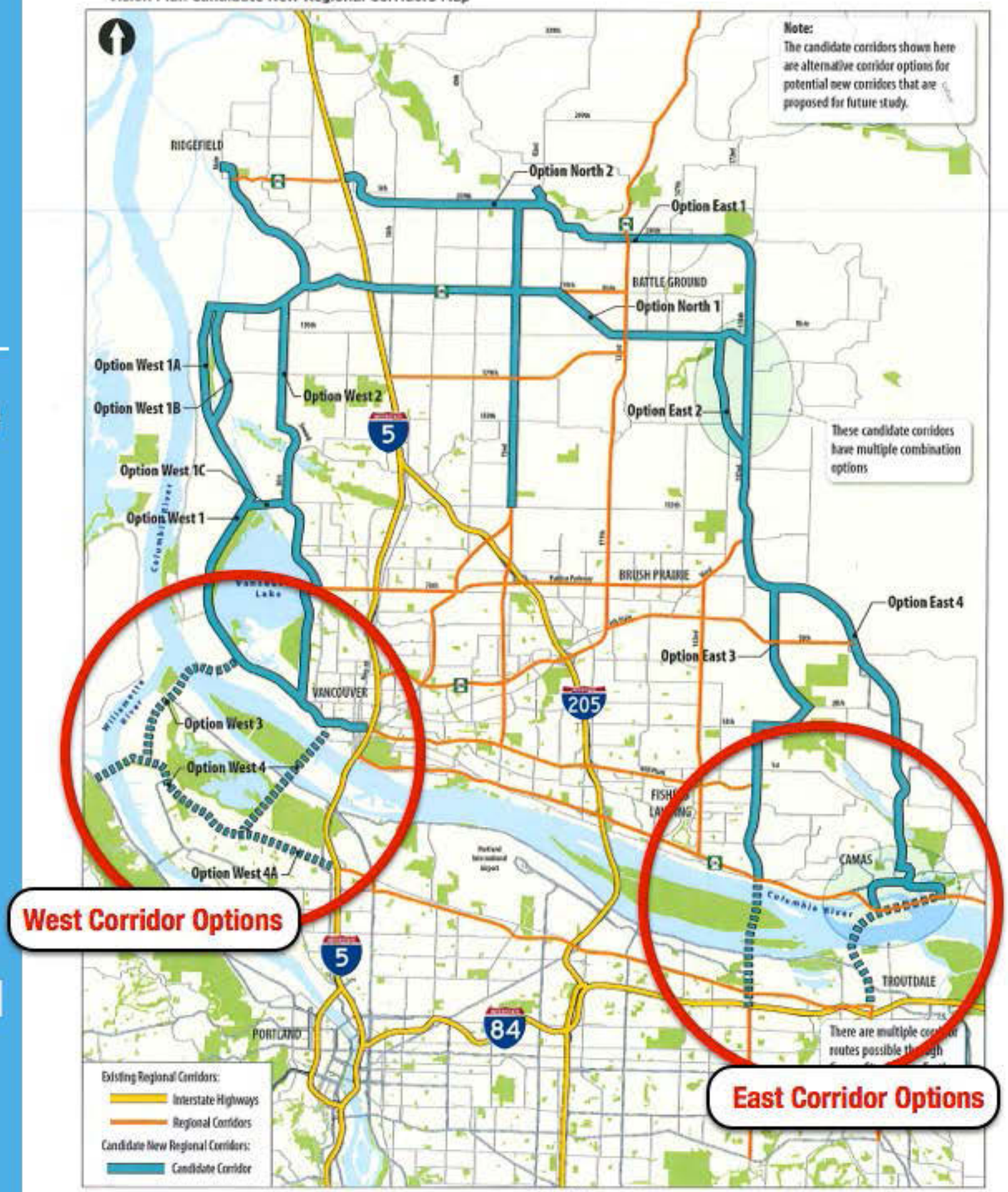
April 2008

Exhibit 8. Vision Plan Candidate New Regional Corridors Map

A third bridge crossing: East Corridors showed twice the amount of traffic over West Corridors

Southwest Washington Regional Transportation Council

Vision Plan Candidate New Regional Corridors Map



http://www.rtc.wa.gov

November 2013 Clark County Citizens Voted 58% in favor of East County toll-free Bridge

PROPOSED
EAST COUNTY TOLL-FREE BRIDGE RESOLUTION 2013-07-21

A resolution to create a policy of the Board of Commissioners to support a proposed East County Toll-Free Columbia River Bridge as defined in this resolution.

Because the Clark County Board of Commissioners, as representatives of the Citizens of Clark County, serve as members of various governing boards that consider transportation projects; and

Because any major transportation project serving Clark County would affect the public health, safety and welfare of the Citizens; and

Because such projects should start by asking the people if they would support the proposed direction and that the wishes of the electorate in this instance are best represented by a County-wide vote, which is referred to as an advisory vote; and

Because a third toll-free bridge across the Columbia River may be in the best interests of the citizens of Clark County; and

Because this matter was considered at a duly advertised public hearing, where the Board of County Commissioners concluded that adoption of this policy would be in the best interests of the public health, safety and welfare of the Citizens, now therefore:

BE IT ORDERED AND RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF CLARK COUNTY, STATE OF WASHINGTON AS FOLLOWS:

The Board should adopt a policy to propose and support an East County Toll-Free Columbia River Bridge WHICH WOULD:

1. Provide a third free-flowing highway between Oregon and Washington that enhances interstate commerce, relieve traffic congestion across the Glenn Jackson I-205 Bridge and in turn, relieve traffic congestion across the I-5 Columbia River Bridge; and

2. Better connect Clark County at SR-14 at NE 192nd Ave to I-84 at exit 13 via Airport Way and 181st Avenue in Gresham, Oregon; and

3. Ensure that the total cost for the whole project is less than $900 million including all studies and planning, and that the bridge remains toll-free in order for the Board of Commissioners to support the project; and

4. Be about 4 miles east of the I-205 Glenn Jackson Bridge; and

5. Have two to three through lanes in each direction plus shoulders for cars, trucks and buses plus paths for bicycles and pedestrians; and

A Turnkey Design Build Bridge Proposal
For the East County Bridge
from

FIGG

(Bridge Designers)

PCL

(Bridge Builders)

Exclusively Specializing in Bridges for 36 Years in the United States of America and International

FLORIDA

FIGG Bridges in 42 states and 6 countries

Family of Bridge Companies:

FIGG Bridge Engineers
FIGG Bridge Inspection
FIGG Bridge Developers
FIGG Bridge Managers

FIGG BRIDGE BUILDERS
Building Bridge Landmarks™

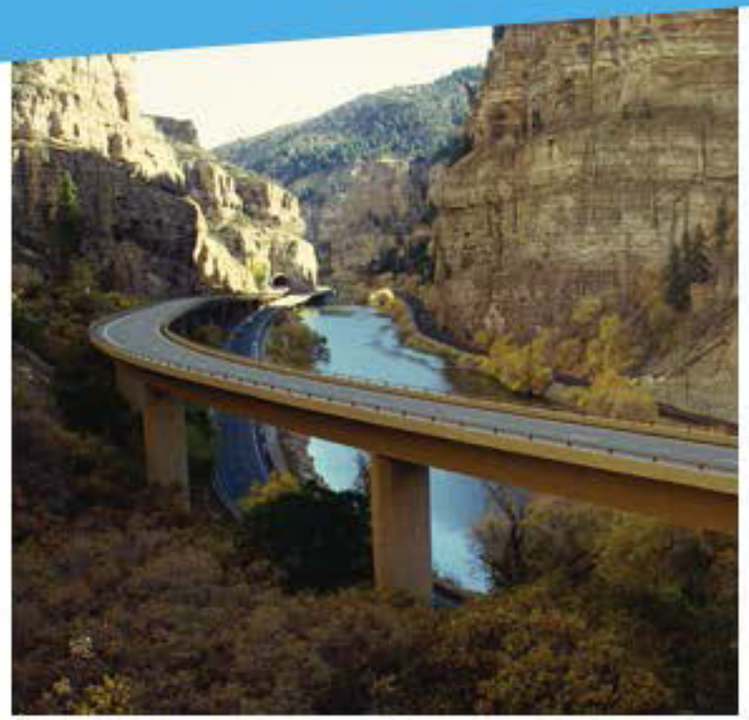
WASHINGTON

COLORADO

VIRGINIA

BOSTON

355 Bridge Design Awards for Our Customers
All Bridges Built Because They Were Best Value



3 Presidential Awards

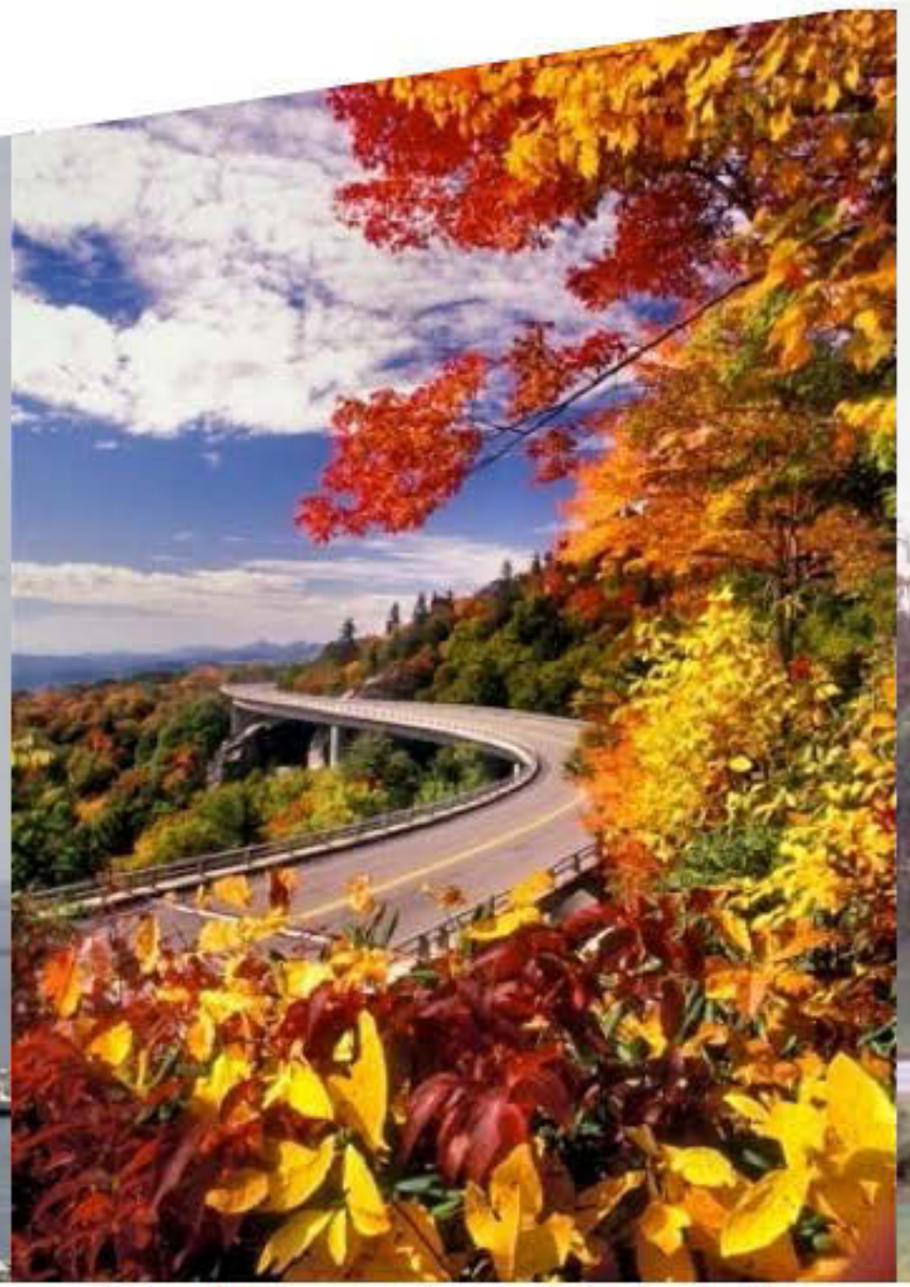
through the National Endowment for the Arts

-Only 5 ever for Bridges-

FIGG

CREATING BRIDGES AS ART®

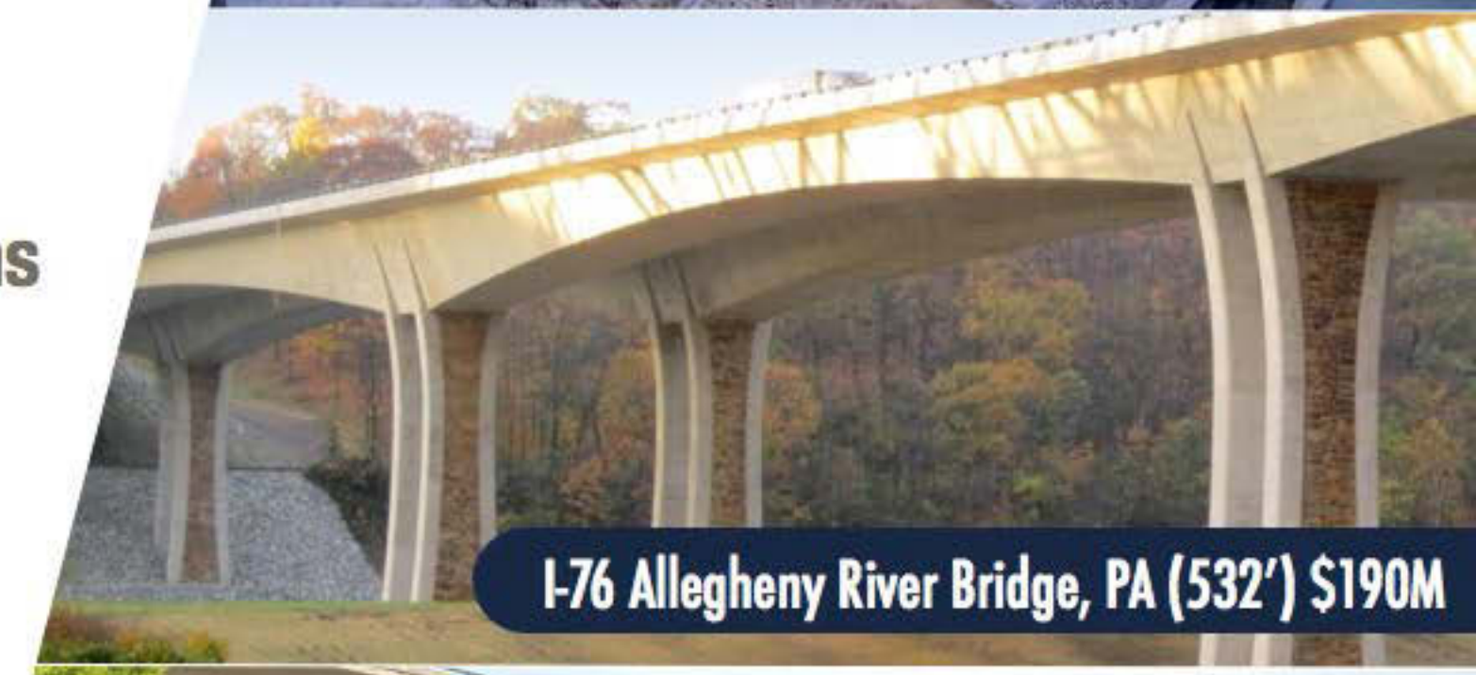
Sunshine Skyway Bridge, FL



Blue Ridge Parkway Viaduct, NC
National Park Service

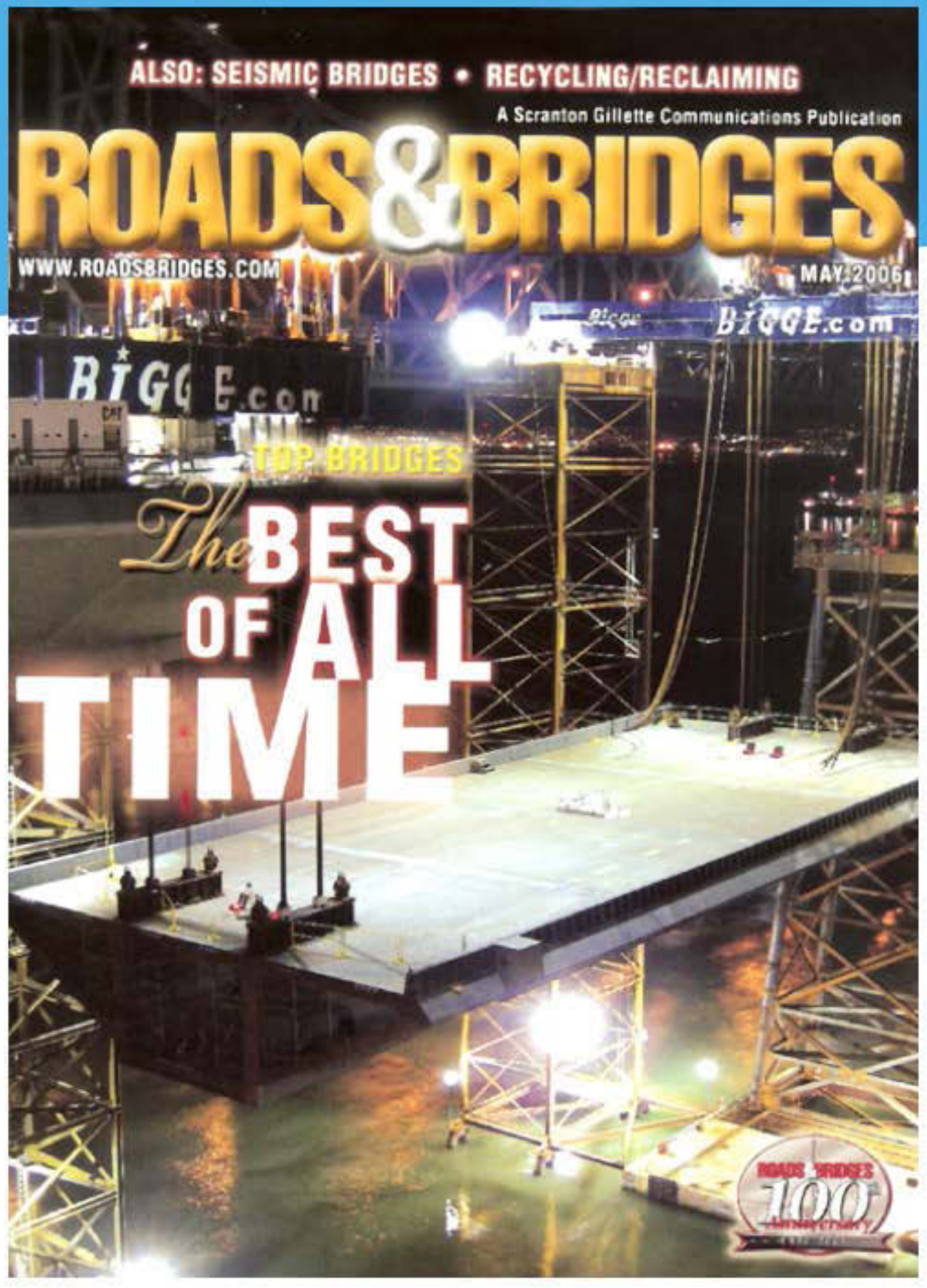
Natchez Trace Parkway Arches, TN
National Park Service

FIGG Has Delivered the Most Long Span Concrete Bridges in America



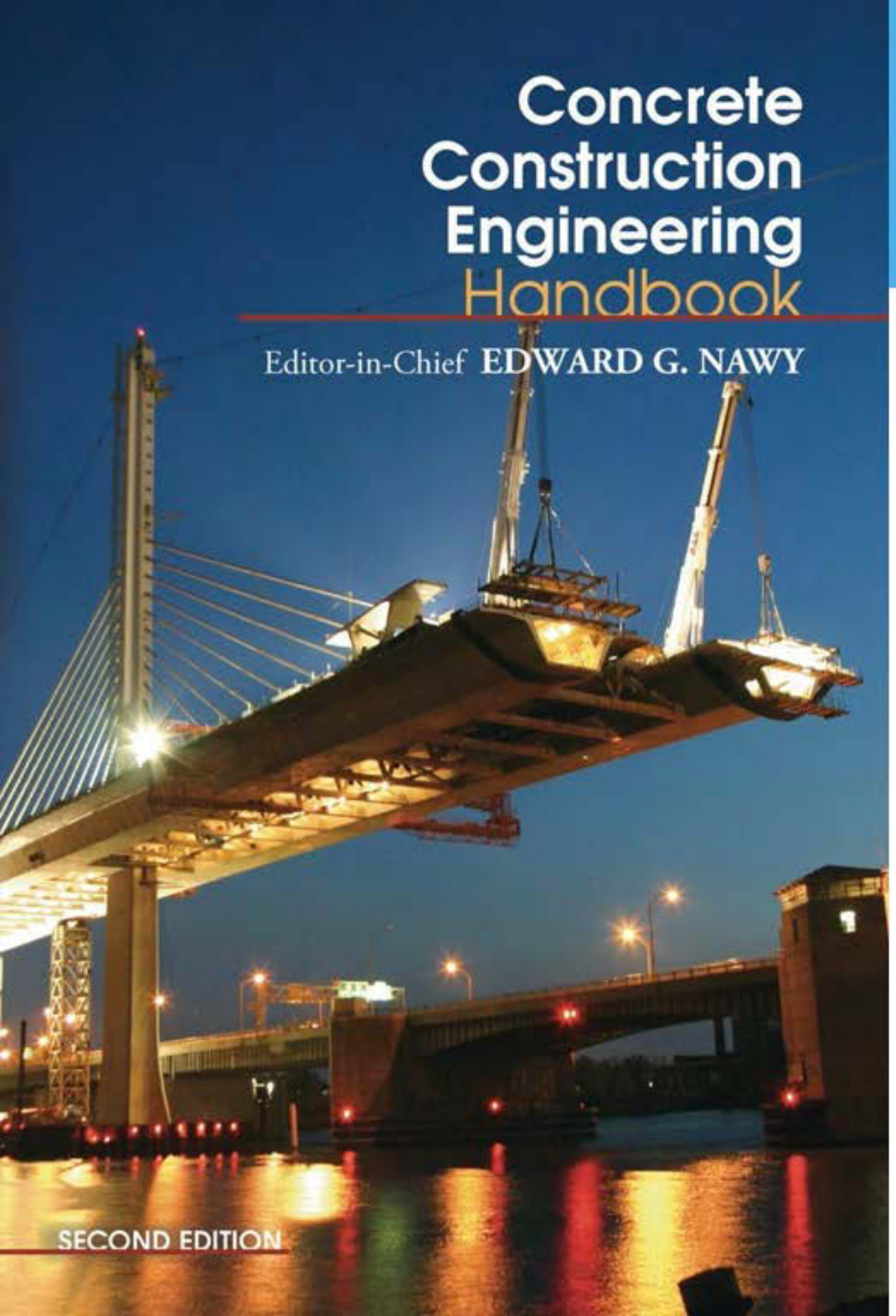
54 built long-span concrete bridges from 300' to 1200' spans as Engineer of Record

An unsurpassed record of success in closing long spans



FIGG

6 of the Top 25 Bridges of all time

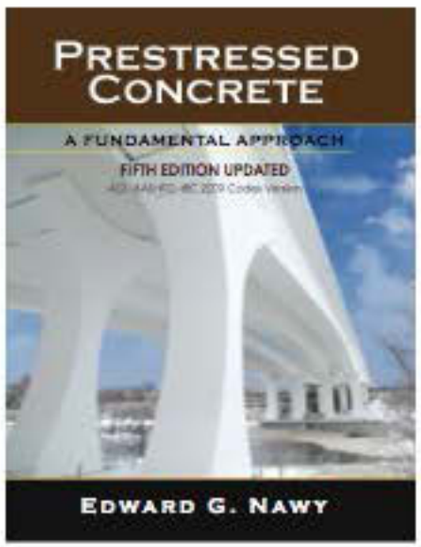


Concrete Construction Handbook

Edward G. Nawy, Editor-in-Chief

I-280 Veteran's Glass City Skyway on cover Design by FIGG

Chapter 29 - Aesthetics in the construction and design of long-span prestressed concrete bridges. Authored by Linda Figg



New I-35W Bridge, Minnesota on cover design by FIGG

FIGG Bridges showcased on 7 television shows in the last 14 years

THE HISTORY CHANNEL
WHERE THE PAST COMES ALIVE

MODERN MARVELS

NATIONAL GEOGRAPHIC

NOVA

PBS

History of Concrete 2000 - Modern Marvels
(All major bridges designed by FIGG)

Overseas Highway 2003 - Modern Marvels
(Seven Mile Bridge, FL Keys)

Sunshine Skyway Bridge 2004 - Modern Marvels
(Skyway Bridge,Tampa FL)

History of Arches 2004 - Modern Marvels
(Natchez Trace Parkway Arches, TN)

Mountain Roads 2007 - Modern Marvels
(Blue Ridge Parkway, NC)

Super Bridge 2003 - 2 hour PBS/NOVA Special
Clark Bridge, IL

Twin City Bridge:
After the Collapse 2009 - National Geographic
(New I-35W Bridge, Minnesota)

RAIL BRIDGES

ARCHES

CABLE STAYED BRIDGES

ENVIRONMENTAL BRIDGES

URBAN BRIDGES

LONG BRIDGES
OVER WATER

LONG SPAN BRIDGES

Blue Ridge Parkway Viaduct
Grandfather Mountain, NC
for FHWA/National Park Service

Environmentally Sensitive Bridge in Harmony with Nature

Blue Ridge Parkway Viaduct
Grandfather Mountain, NC
for FHWA/National Park Service

Built using local labor and local materials

Blue Ridge Parkway Viaduct
Grandfather Mountain, NC
for FHWA/National Park Service

Built from above protecting the beautiful environment

Blue Ridge Parkway Viaduct
Grandfather Mountain, NC
for FHWA/National Park Service

Black Iron Oxide Matches Boulders

I-76 Allegheny River Bridge
Pittsburgh, Pennsylvania

532’ Main span
Twin wall piers

I-76 Allegheny River Bridge
Pittsburgh, Pennsylvania

Built over water, rail and highway

US 191 Colorado River Bridge
Moab, Utah at Arches National Park

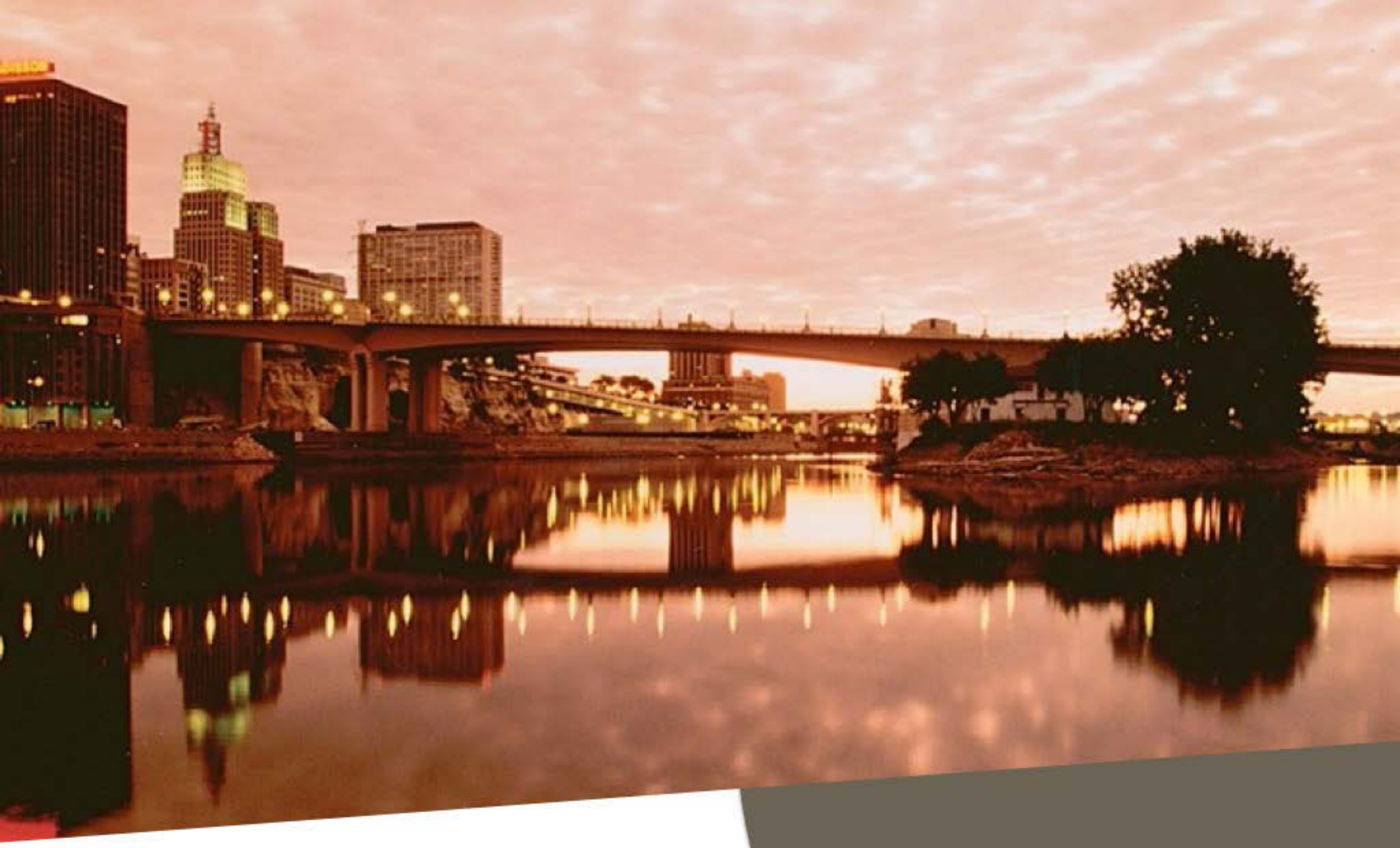
438’ spans

US 191 Colorado River Bridge
Moab, Utah at Arches National Park

Sustainable Context Sensitive Solutions

Wabasha Freedom Bridge
St. Paul, Minnesota

397’ Main span over Mississippi River



Wabasha Freedom Bridge
St. Paul, Minnesota

7 Design Awards for our Customer

Monongahela River Bridge Section 51H, Brownsville, Pennsylvania

Span lengths of 490', 518' and similar

I-90 Third Lake Washington Bridge Approaches
Seattle, Washington

4,810’ Total (4 Bridges)
1985

August 1, 2007
40 year old bridge in Minneapolis collapsed and killed 13 people

The bridge had been rated as structurally deficient and raised concerns throughout the US for the condition of bridges

New I-35W Bridge

Emergency Replacement Bridge for Mn/DOT by FIGG

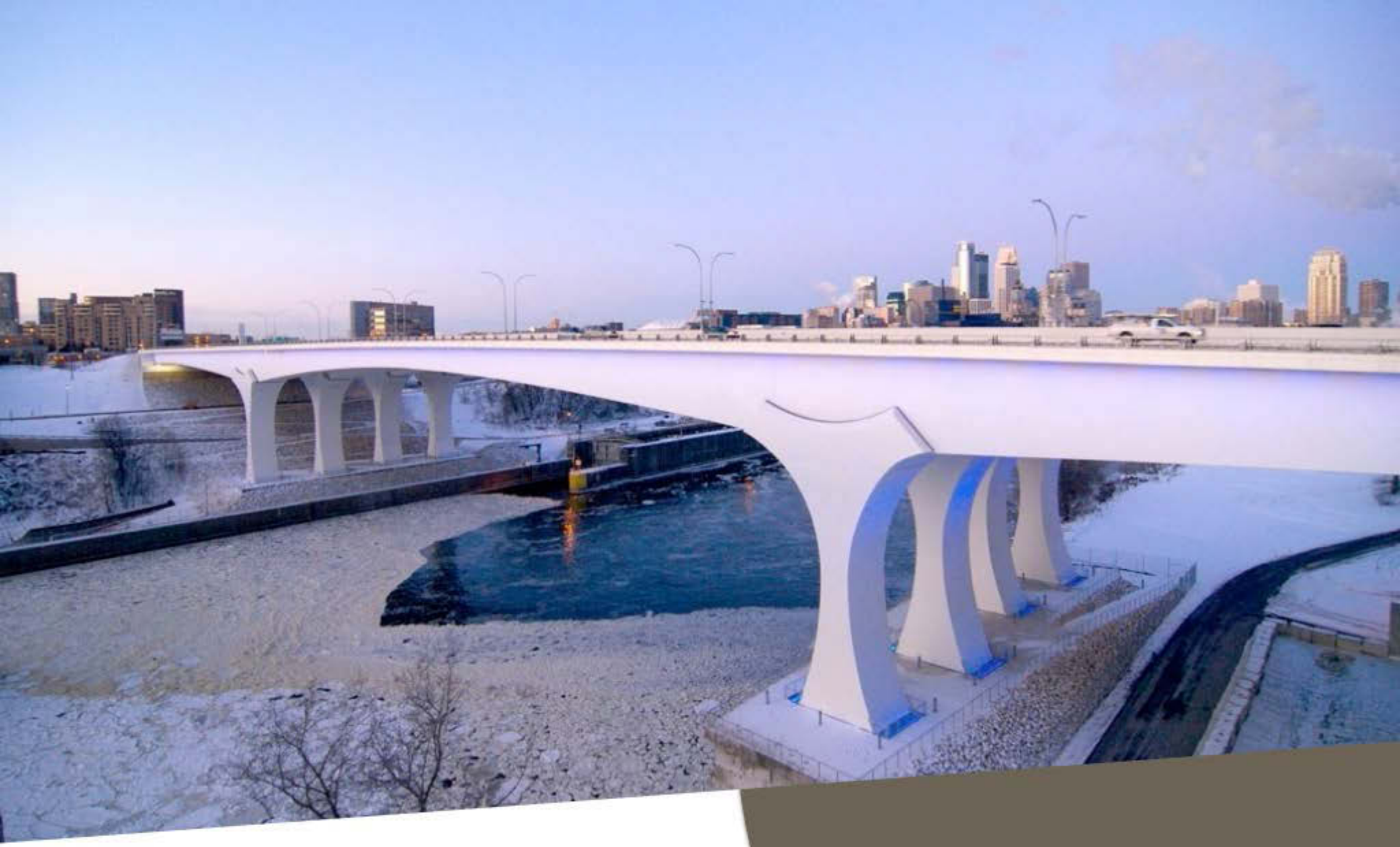
Designed and Built
in 11 Months
10 Lane Interstate
$234 Million

New I-35W Bridge
Minneapolis, Minnesota

Segmental box girder
casting yard next to bridge site
Used local labor and local materials

New I-35W Bridge
Minneapolis, Minnesota

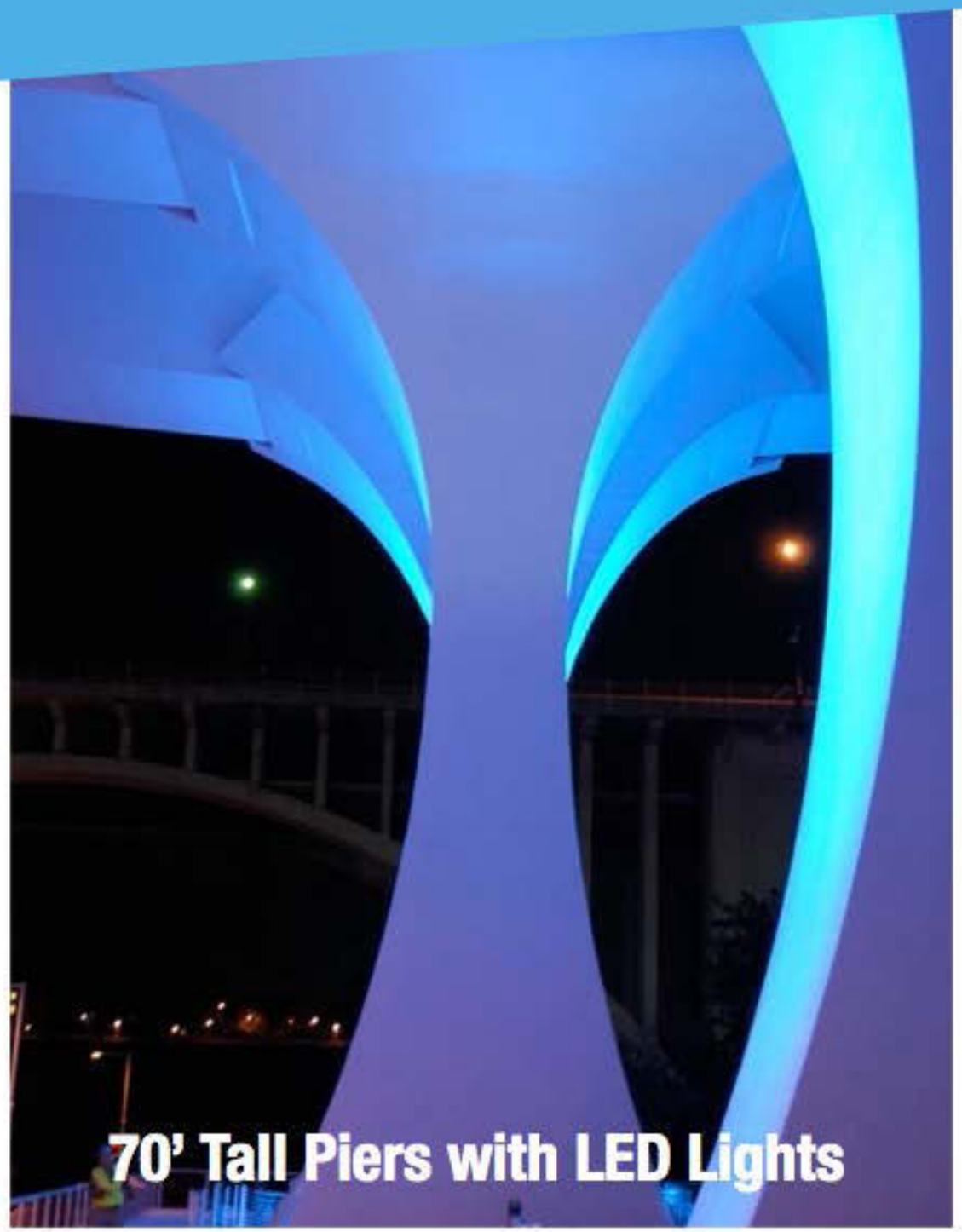
120 segments installed for
10-lane Interstate across
Mississippi River in just 47 days

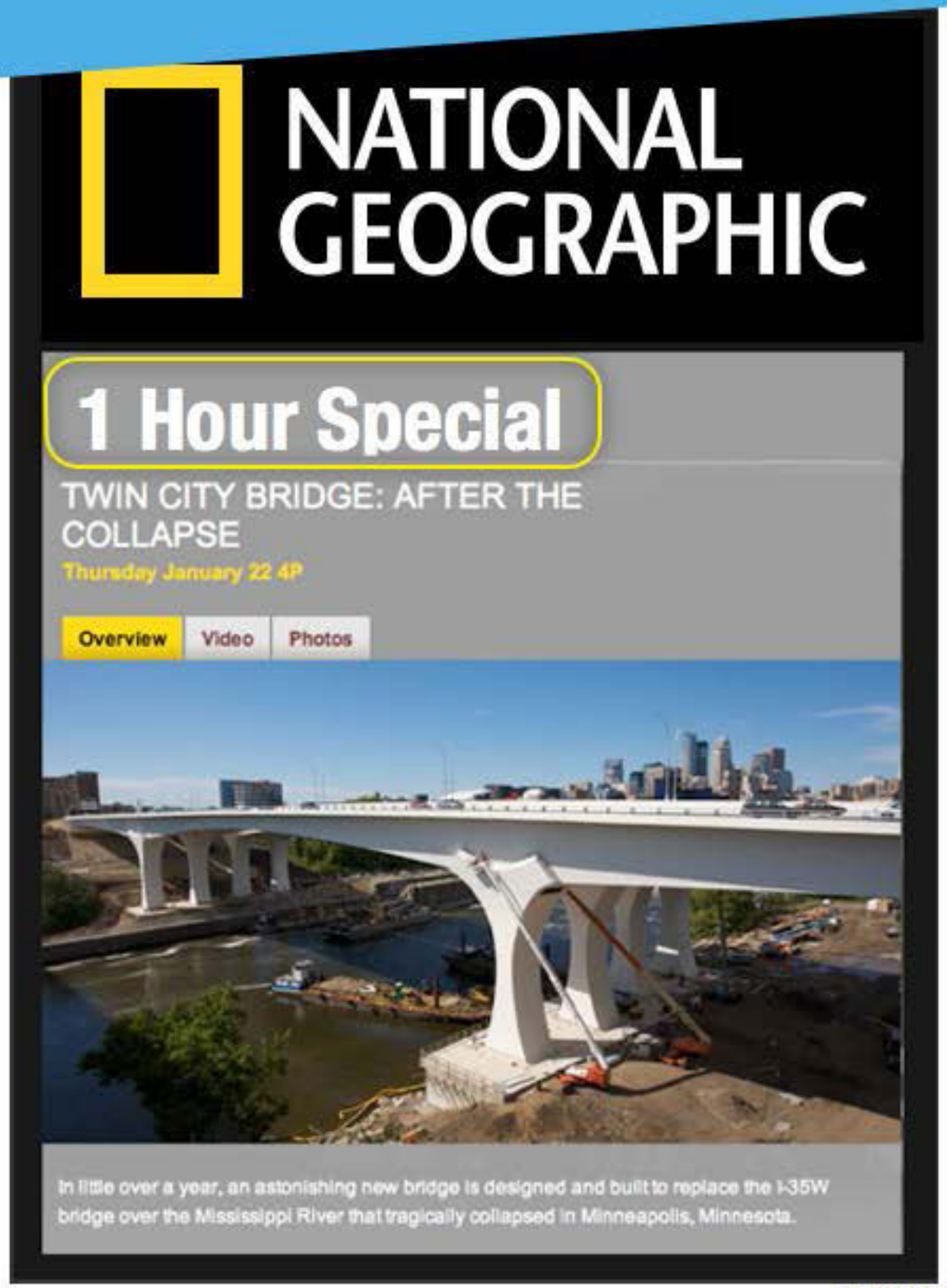


New I-35W Bridge
Minneapolis, Minnesota

504’ Main Span

New I-35W Bridge - Minneapolis, Minnesota





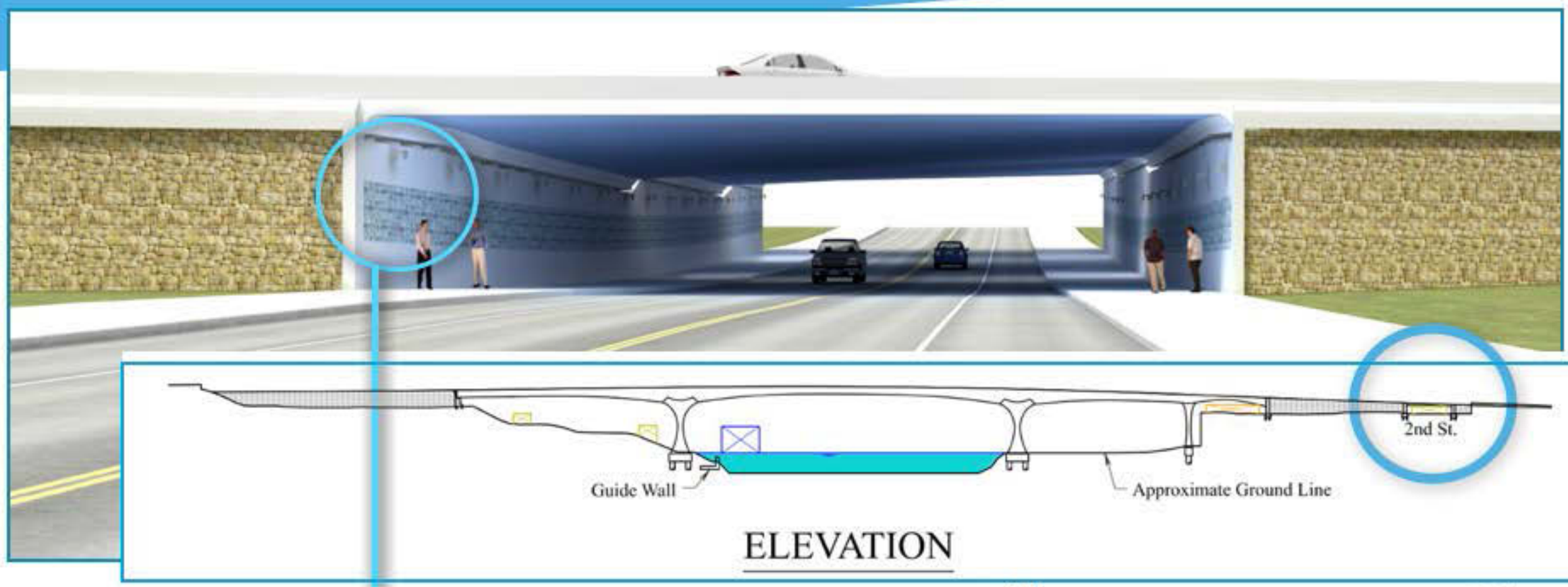
Eco-friendly Concrete

New I-35W Bridge 30' Precast Gateway Sculptures. Inspired by the ancient symbol for water, the gateway design consists of three rippling forms that recall the river and the flow of life.

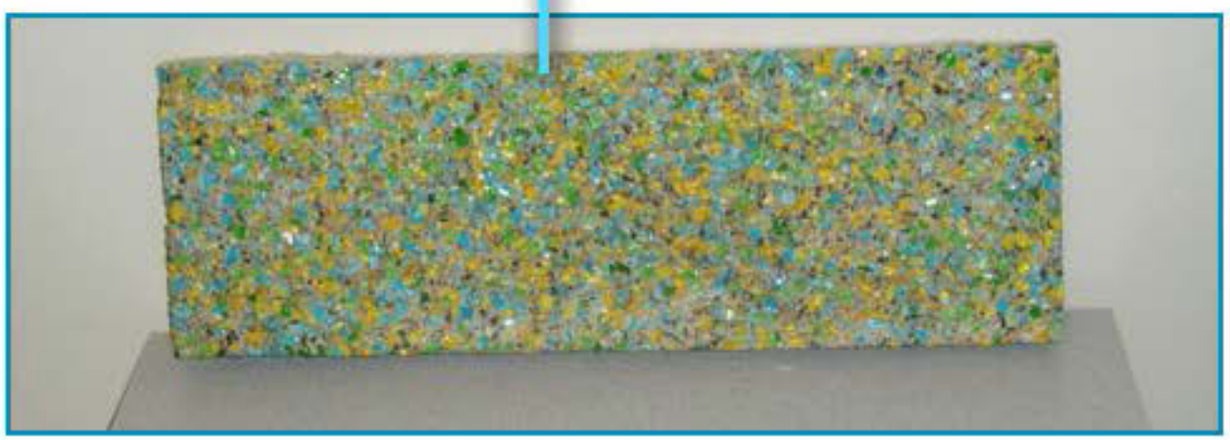
Nanotechnology self-cleaning and pollution-eating cement When UV light hits surface of concrete it creates photocatalytic reaction that cleans pollution out of the air

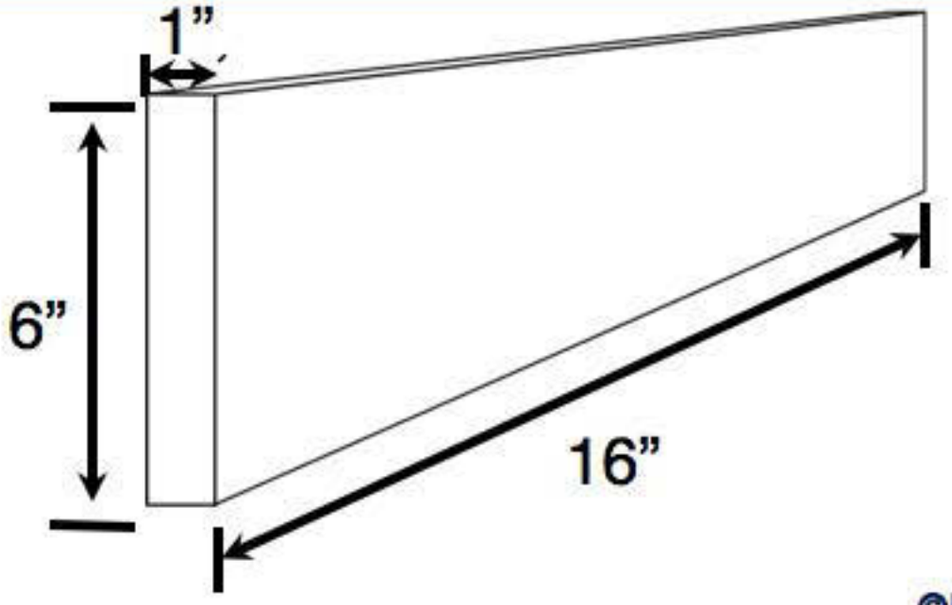
2nd Street Abutment Walls

Recycled Glass - Blue, Yellow & Green



ELEVATION



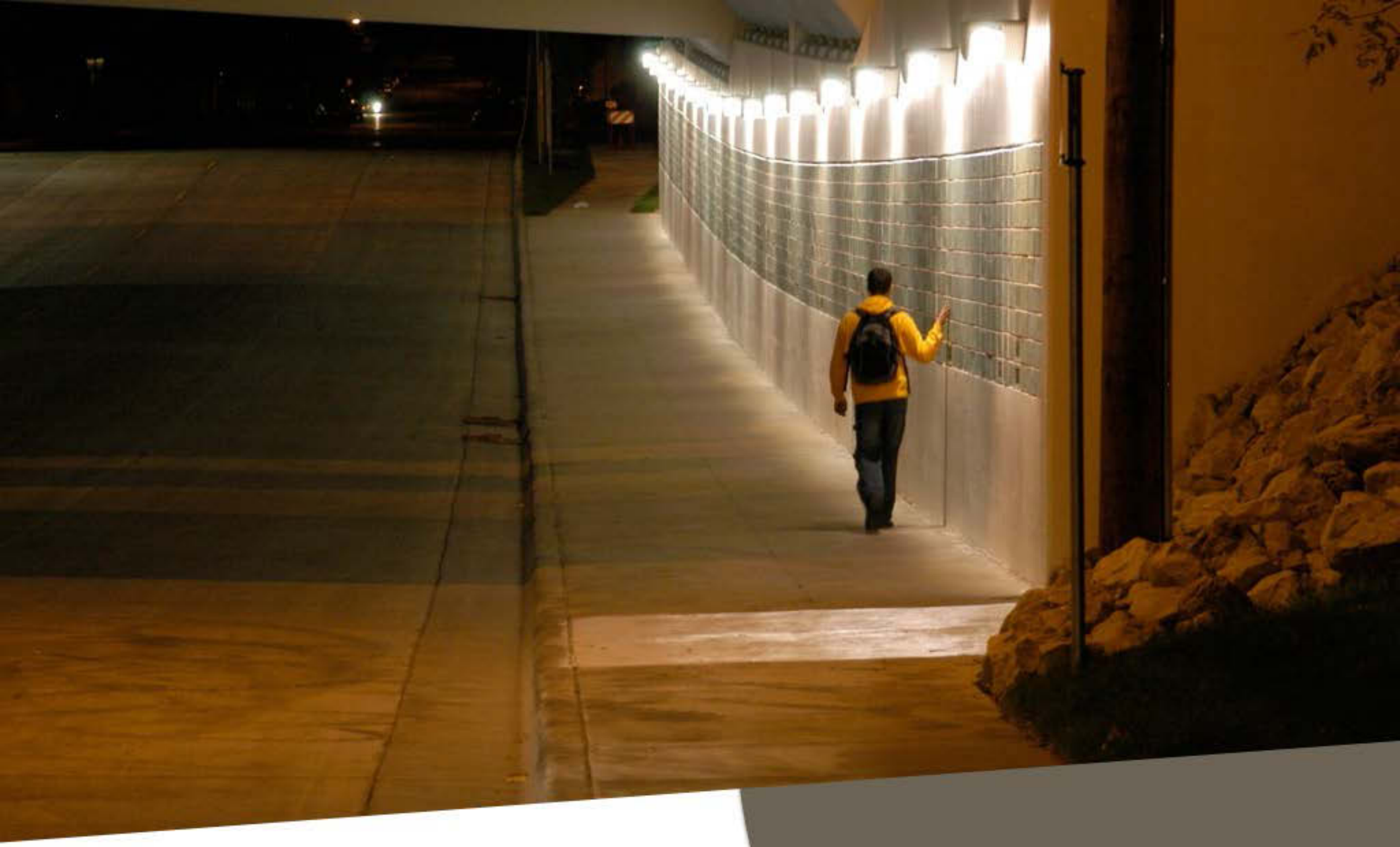


Casting the Future

Students filled molds with concrete and recycled glass aggregate.

Casting the Future

Students proudly display their works of art made of concrete and recycled glass.



2nd Street Mosaic Tiles

LED Highway Lighting for Interstate - A first.
Worked with US Dept. of Energy

New I-35W Bridge
Minneapolis, Minnesota

Opened Sept. 18, 2008 at 5 a.m.,
3 months ahead of schedule

New I-35W Bridge
Minneapolis, Minnesota

Winner of 25 design Awards

Natchez Trace Parkway Arches, TN
for FHWA/National Park Service

582' Spans
Designed by FIGG
Built by PCL

FIGG

PCL

Smart Road Bridge
Virginia

472’ Main span
Designed by FIGG
Built by PCL

Selmon Expressway, Tampa, Florida
5 miles of bridge over water and land

Designed by FIGG
Built by PCL

FIGG

PCL

I-91 Brattleboro Bridge
Brattleboro, Vermont

515’ Span
Designed by FIGG
Built by PCL

An Overview of PCL's

Transportation Infrastructure Group

CONSTRUCTION LEADERS

PCL Family of Companies Geographic Reach

30 Major offices located in:

US - 17 major offices
Canada - 12 major offices
Australia – 1 major office

"Strategically placed offices to service all of North America"

Financial Profile

Unsurpassed financial strength and stability in the construction industry

2010 Revenue	$4.9 billion USD
2011 Revenue	$5.6 billion USD
2012 Revenue	$6.8 billion USD
2013 Revenue	$7.5 billion USD

No bonding restrictions to the full extent of each company's three-year business plan

"We value our association with this fine organization, and have no reservation about giving any company in the PCL family our highest recommendation."

Fidelity and Deposit Company of Maryland
PCL's Leading Co-Surety

About PCL

Industry Ranking

Employer Awards

Community Giving

- PCL has a proven 107-year reputation as a construction leader: a strong, reliable, and successful contracting entity that prides itself on delivering a quality product and exceptional services to our clients.
- PCL is the 5th largest contractor in the United States, and was ranked a Top Green Contractor by *Engineering News-Record* magazine.
- PCL is currently ranked #73 on the FORTUNE 100 Best Companies to Work For® list for eight consecutive years.
- In 2012, the PCL family of companies and its employees contributed over $7.1 million to United Way organizations across North America, along with many other charities.

LIVE UNITED
United Way

American Red Cross

Habitat for Humanity®

Core Values

- Honesty
- Integrity
- Respect
- Dynamic Culture
- Passion

Guiding Principles

- Ownership
- Teamwork
- Mutual Obligation
- Safety
- Effective Communication
- Diversity
- Mobility
- Social Responsibility

Safety Performance

- Corporate goal of *ZERO INCIDENTS*
- Excellent safety record
- Benefits passed on to clients

	Manhours	TRIR	LTFR	EMR
2009	20,377,707	1.18	0.04	0.55
2010	20,882,155	0.79	0.05	0.58
2011	19,922,959	0.71	0.03	0.62
2012	23,863,084	0.59	0.01	0.56
2013	21,465,333	0.42	0.01	0.54

Transportation Infrastructure Group (TIG) Organization

PCL Civil Constructors, Inc.

Luis Ventoza
President
TIG - USHO

Brian Stieritz
Vice-President,
Major Projects
TIG - USHO

Patrick Malone
Corporate Business
Development Manager
TIG - USHO

Ankur Talwar
District Manager
TIG - Seattle

Gayle Grady, PE
District Manager
TIG - Tampa

Jim Schneiderman, PE
Area Manager
TIG - Raleigh

Janiece Christian
Manager, Business
Development
TIG - Seattle

Brett Kermode
Manager, Estimating &
Business Development
TIG - Tampa

Joel Covitz
Manager, Business
Development
TIG - Raleigh

"Corporate Leadership with Proven Track Records in Transportation Project Delivery"

A Civil History of Excellence

"We have over 3,800 employee stockholders invested in project success."

PCL

1906
PCL Founded by Ernie Poole

1994
Natchez Trace Arch
Franklin, TN

1986
Alex Fraser Bridge
Vancouver, BC

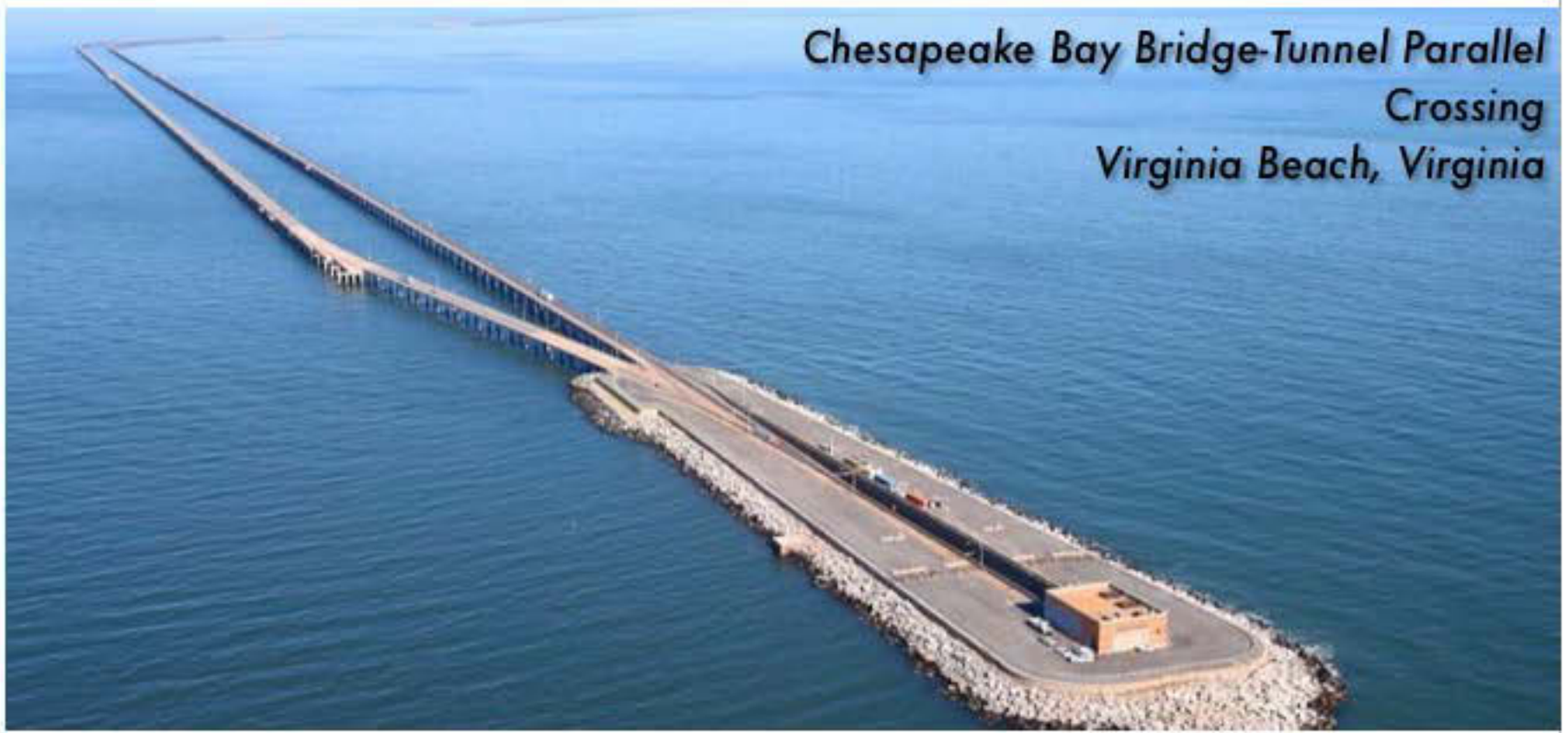
1997
Blue Water Bridge
Port Huron, MI

1988
Glade Creek Bridge
Beckley, WV

2015
Pearl Harbor Memorial Bridge
New Haven, CT

Bridges and Roadways

Open Water Marine Crossings



Chesapeake Bay Bridge-Tunnel Parallel Crossing
Virginia Beach, Virginia

Complex Interchanges
Urban Environment

I-4 / SR-408 Interchange
Orlando, Florida

Bridges and Roadways

Structures over Protected Waterways

Johnson Street Bridge
Victoria, BC

Structures Constructed in Tight Confines

Gilmerton Bascule Bridge Replacement
Chesapeake, VA

Bridges and Roadways

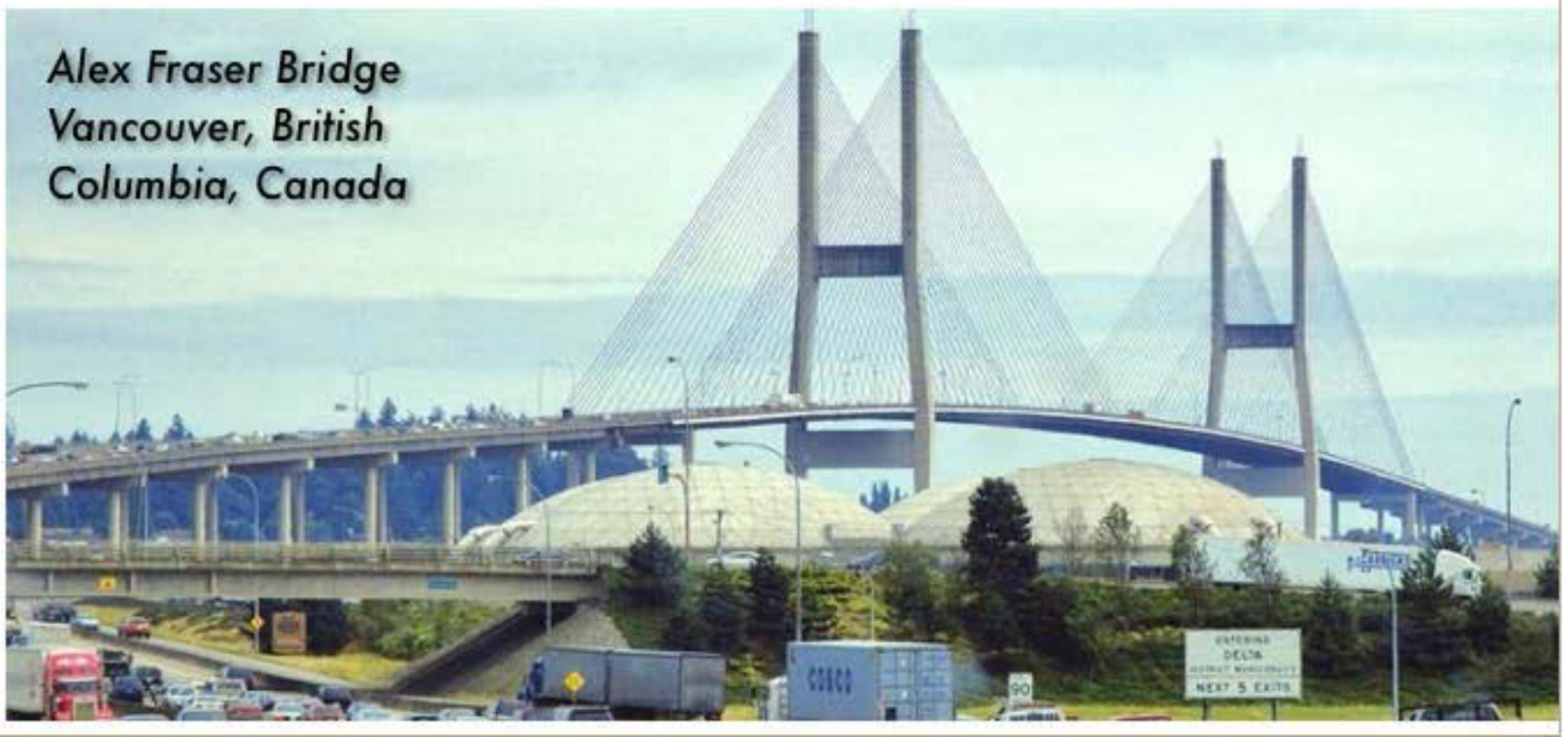
Steel Truss

Arch Bridges

Harp Design

Cable Stayed Structures

Bluewater Bridge
Port Huron, Michigan and
Point Edward, Ontario, Canada

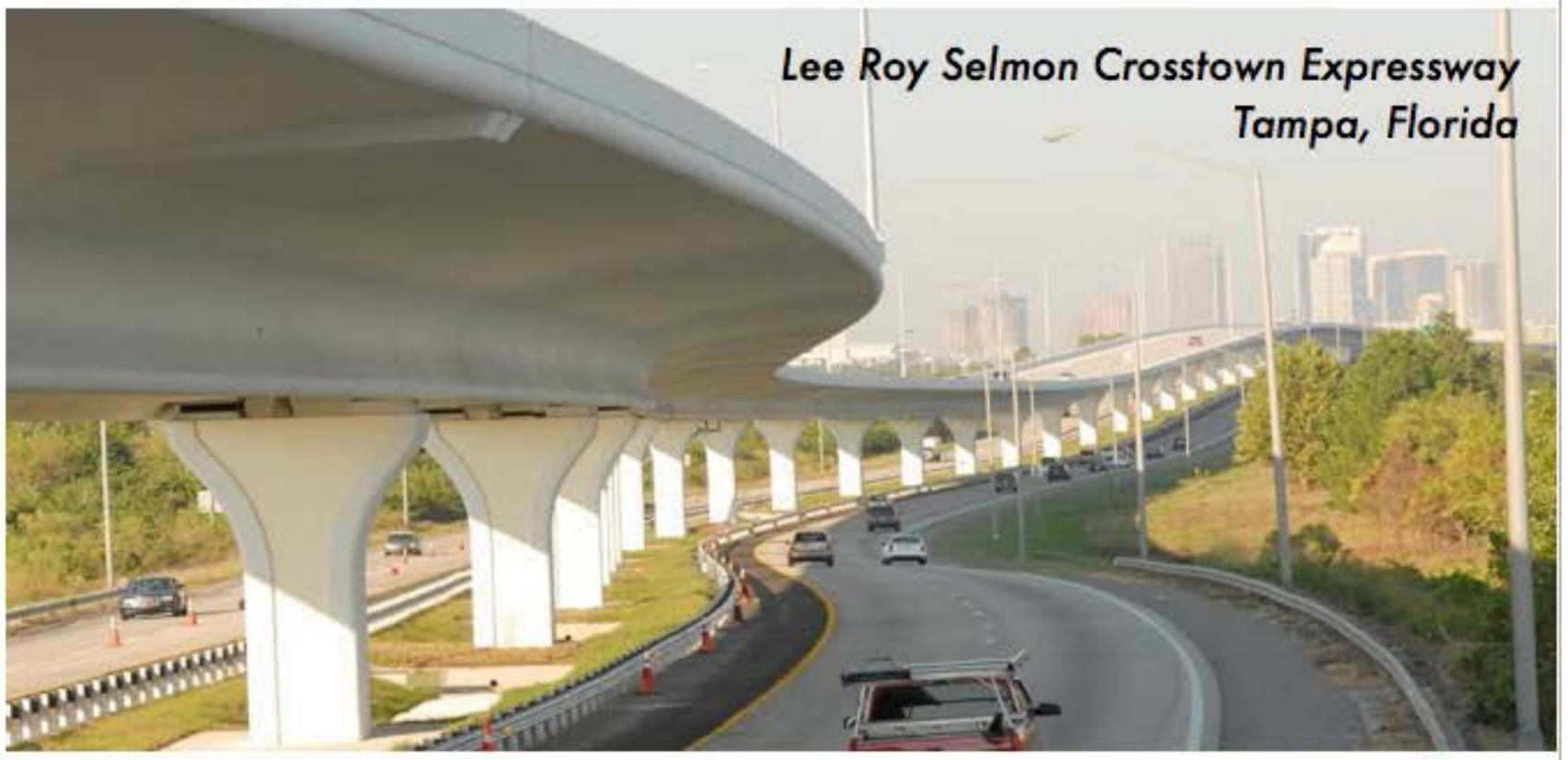


Alex Fraser Bridge
Vancouver, British
Columbia, Canada

Bridges and Roadways

Precast Segmental

Span by Span Construction



Lee Roy Selmon Crosstown Expressway
Tampa, Florida

Precast Segmental

Balanced Cantilever Construction

Ringling Causeway (Design-Build)
Sarasota, Florida

Bridges and Roadways

Precast Segmental

Span by Span and Balanced Cantilever

Central Link Light Rail C755
Tukwila, WA

Bridges and Roadways

Precast Segmental

Under Slung Truss Erected

Ernest Lyons Bridge (Design-Build)
Stuart, Florida

Precast Segmental Concrete Arch Structure

Natchez Trace
Franklin, Tennessee

Bridges and Roadways

Concrete Segmental

Concrete Segmental

Smart Road Bridge
Blacksburg, Virginia

Memorial Causeway Bridge Replacement
Clearwater, Florida

Alternative Project Delivery

Design-Build-Finance & P3's

I-4 Connector / Selmon Crosstown
Tampa, Florida

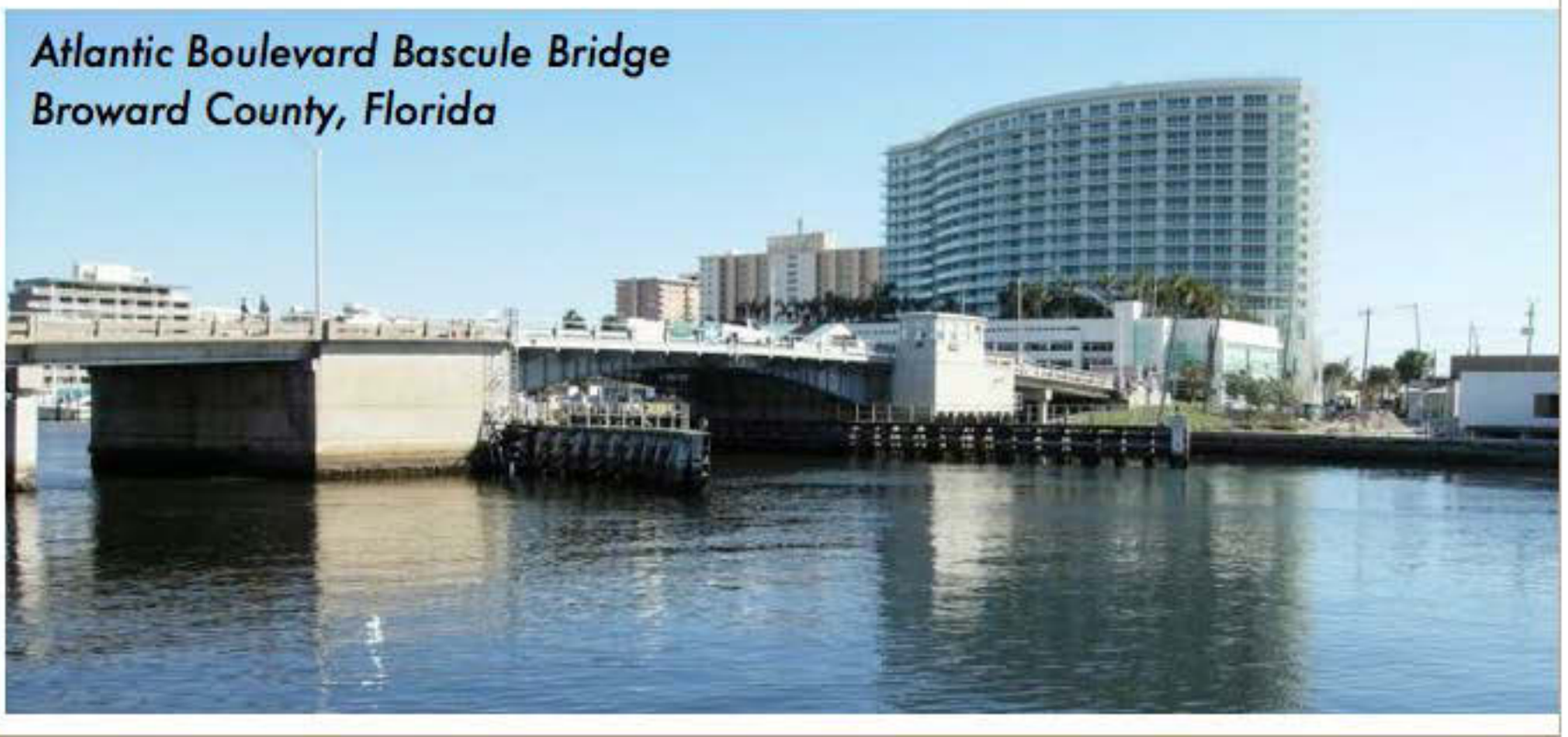
Alternative Project Delivery

Design-Build

Alternative Project Delivery

Construction Management at Risk

Parker Boulevard Bascule Bridge
Broward County, Florida



Atlantic Boulevard Bascule Bridge
Broward County, Florida

Watch us build at PCL.com

PCL

PCL
CONSTRUCTION LEADERS

Contact Us | News & Media | PCL Companies | Search Careers | Canada/International [change]

NEWS & EVENTS

PROJECTS that Inspire | **SERVICES** that Deliver | **MEET** the PCL Family | **CULTURE** & Community | **PARTNERS** in Building | **CAREERS**

The PCL family of companies are construction leaders in buildings, civil infrastructure, and heavy industrial markets.

We aspire to be your builders of choice.

Companies don't develop solutions. People do.

No matter the size of your project, you can trust the PCL family.

Meet our Team »

Experience our Project Gallery

We love to build. What can we build for you?

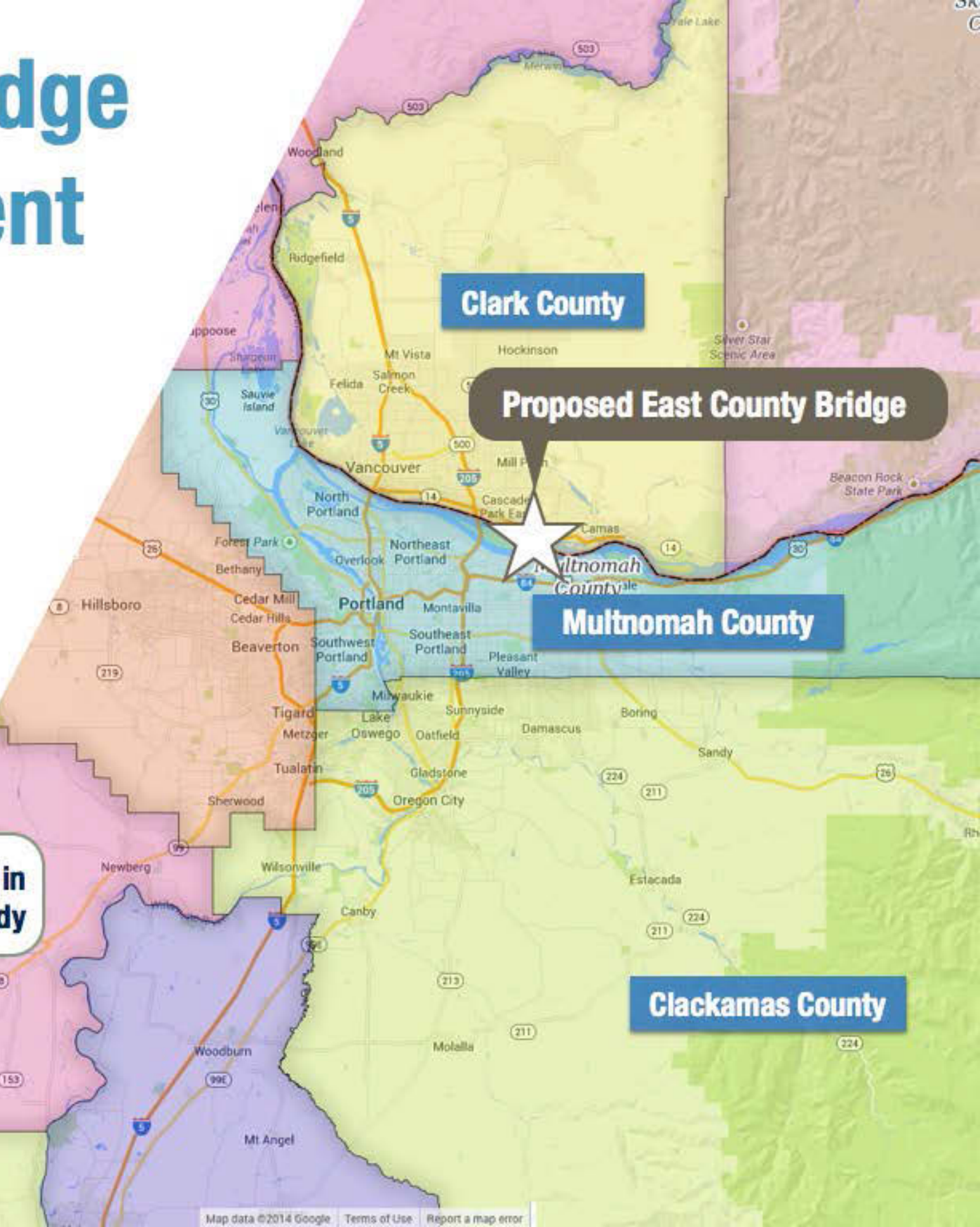
View our Project Gallery »

News & Events

7/12/2012 Prospective Employees are Invited to Build Their Legacy with PCL

Read More...

East County Bridge Project Alignment

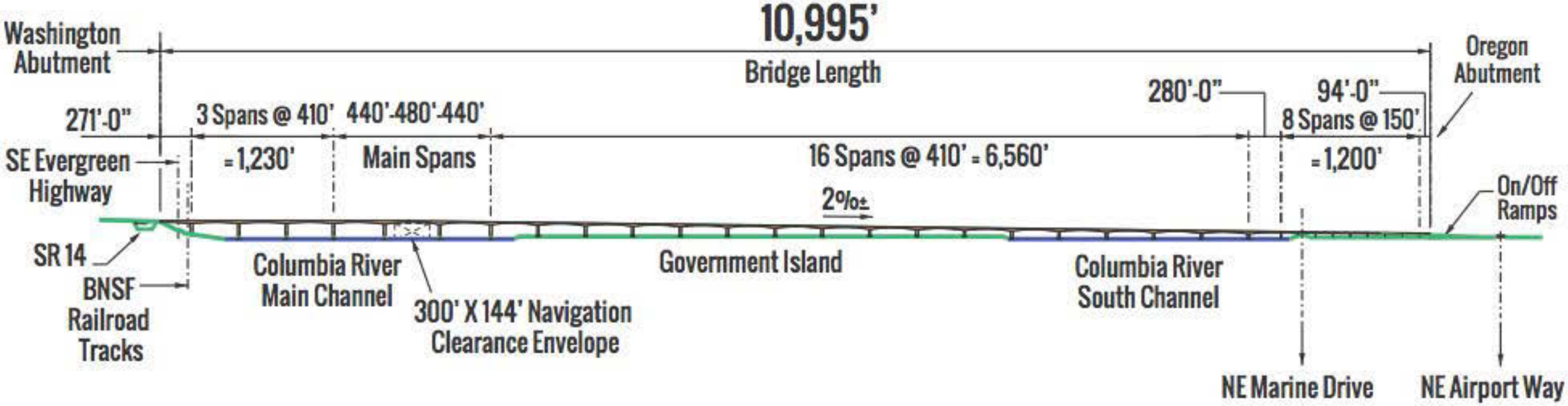


East County Bridge Location

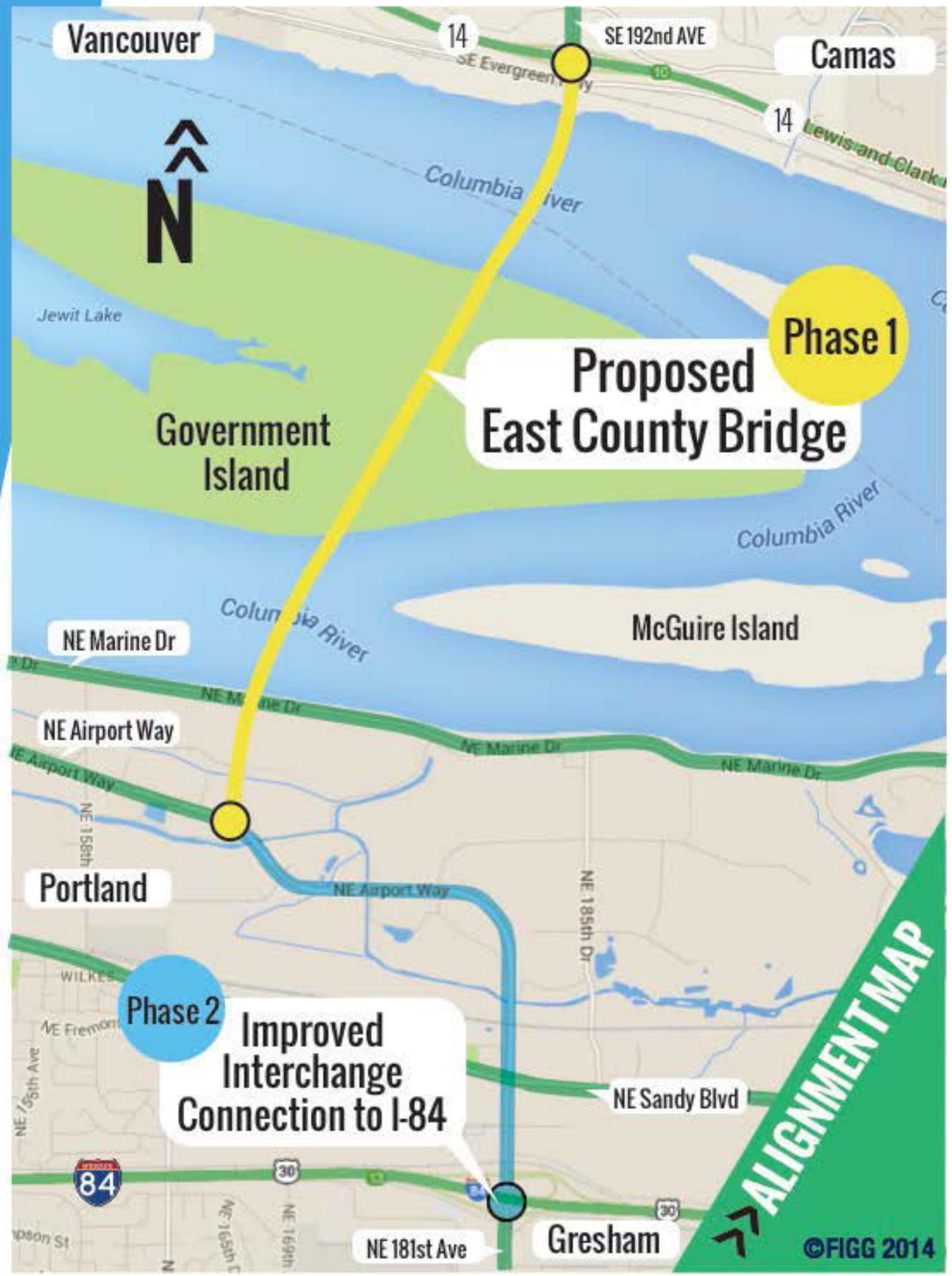
Phase 1
192nd/SR 14, Clark County to NE Airport Way, Multnomah County

Phase 2
NE Airport Way to I-84 Enhancements

Overall Bridge Elevation



Overall Bridge Layout



Starting at 192nd/SR-14 Washington side bluff allows easy crossing of navigation channel with gentle bridge grade.

2% grades are good for trucks and multi-use pathways for pedestrians and bicycles

Bridge meets all airport clearances

East End Bridge Rendering

480’ span over navigational channel provides 300’ horizontal and 144’ vertical clearance for vessels. The same as I-205

East End Bridge Rendering

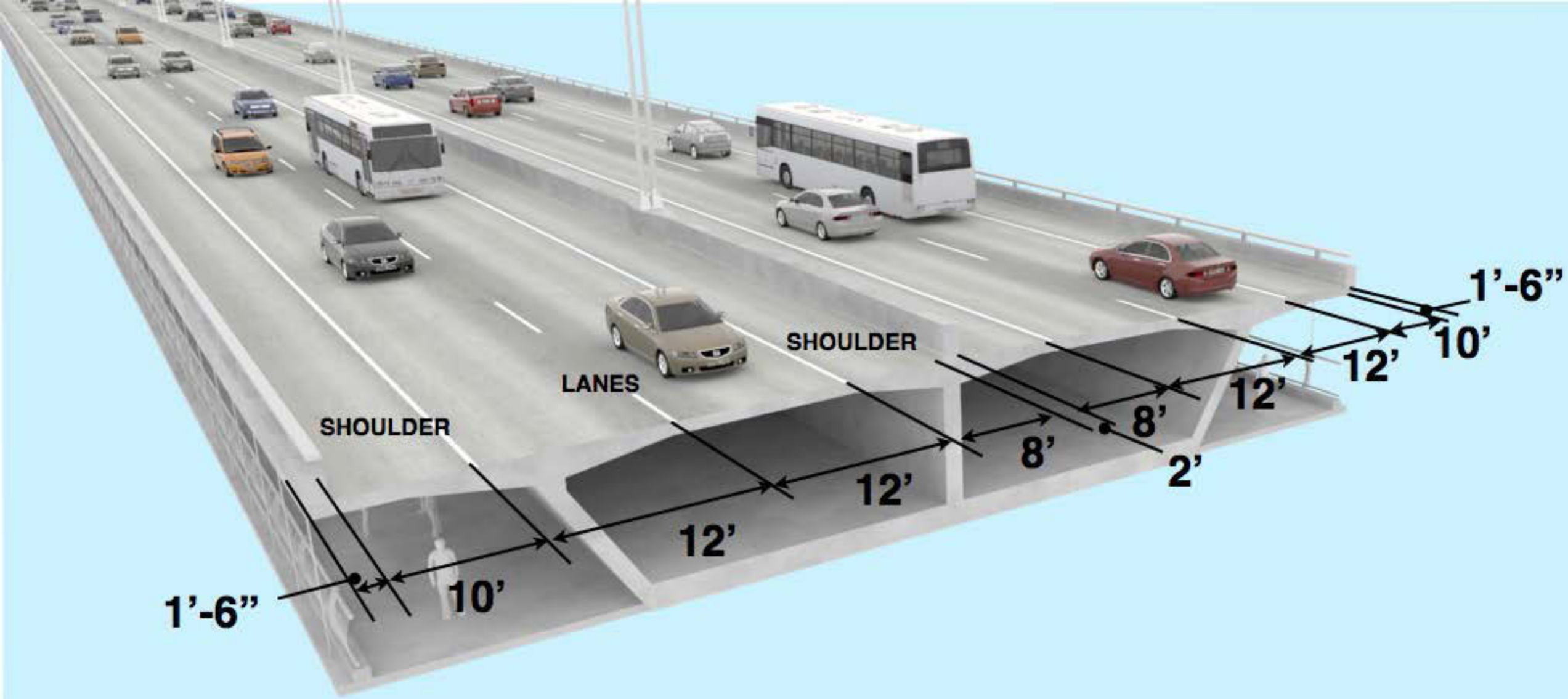
Spans of 410’ create openness and maximize navigation and preserves the environment

East End Bridge Rendering

Bridge is elevated over Government Island to preserve the environment with the least footprint

East End Bridge Rendering

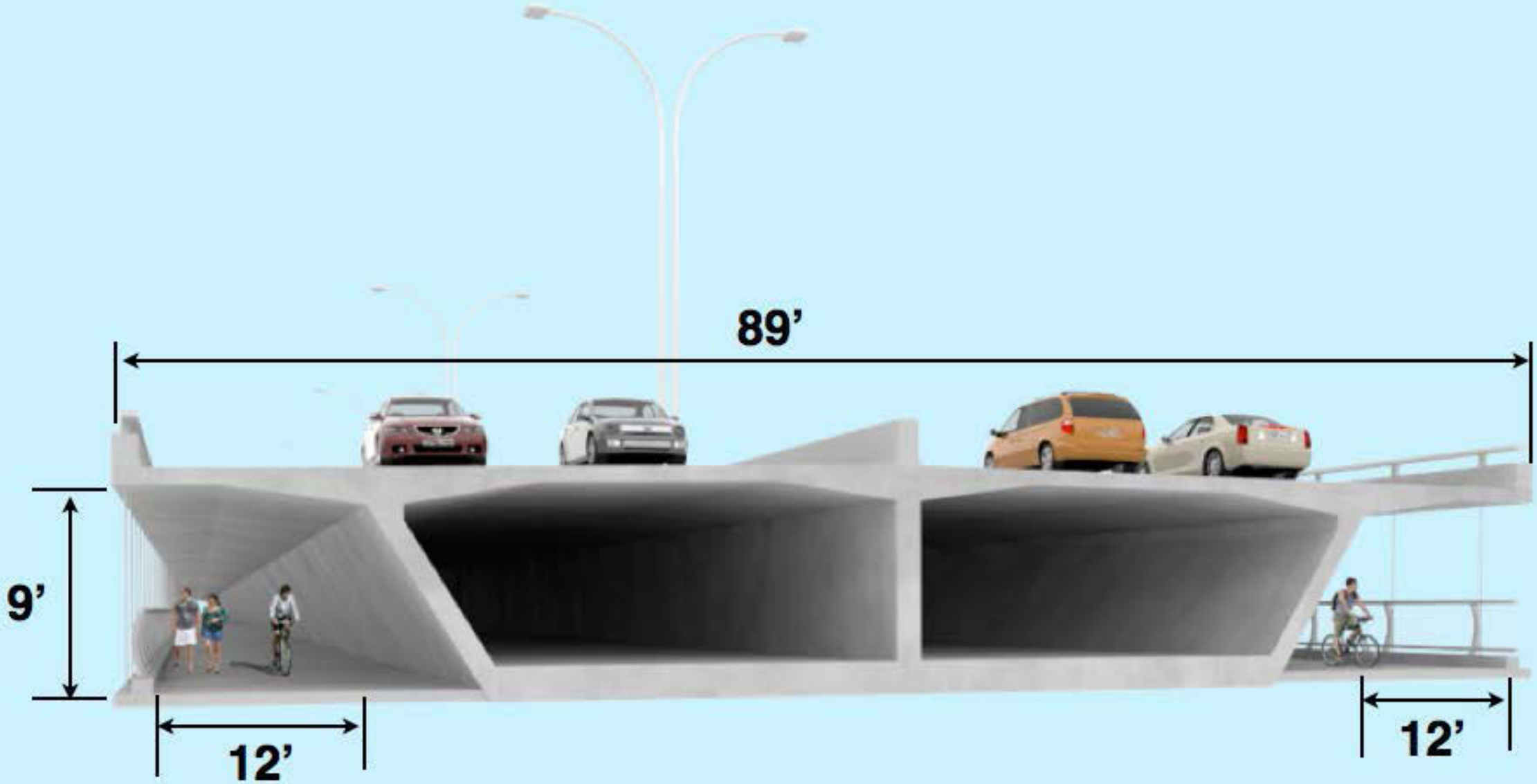
Alignment is away from homes.
Convenient connection to commercial areas



Bridge Configuration

Each direction - NB and SB provides:
2 - 12’ lanes with
10’ outside & 8’ inside shoulders

Provides for cars, trucks, buses, pedestrians and bicycles

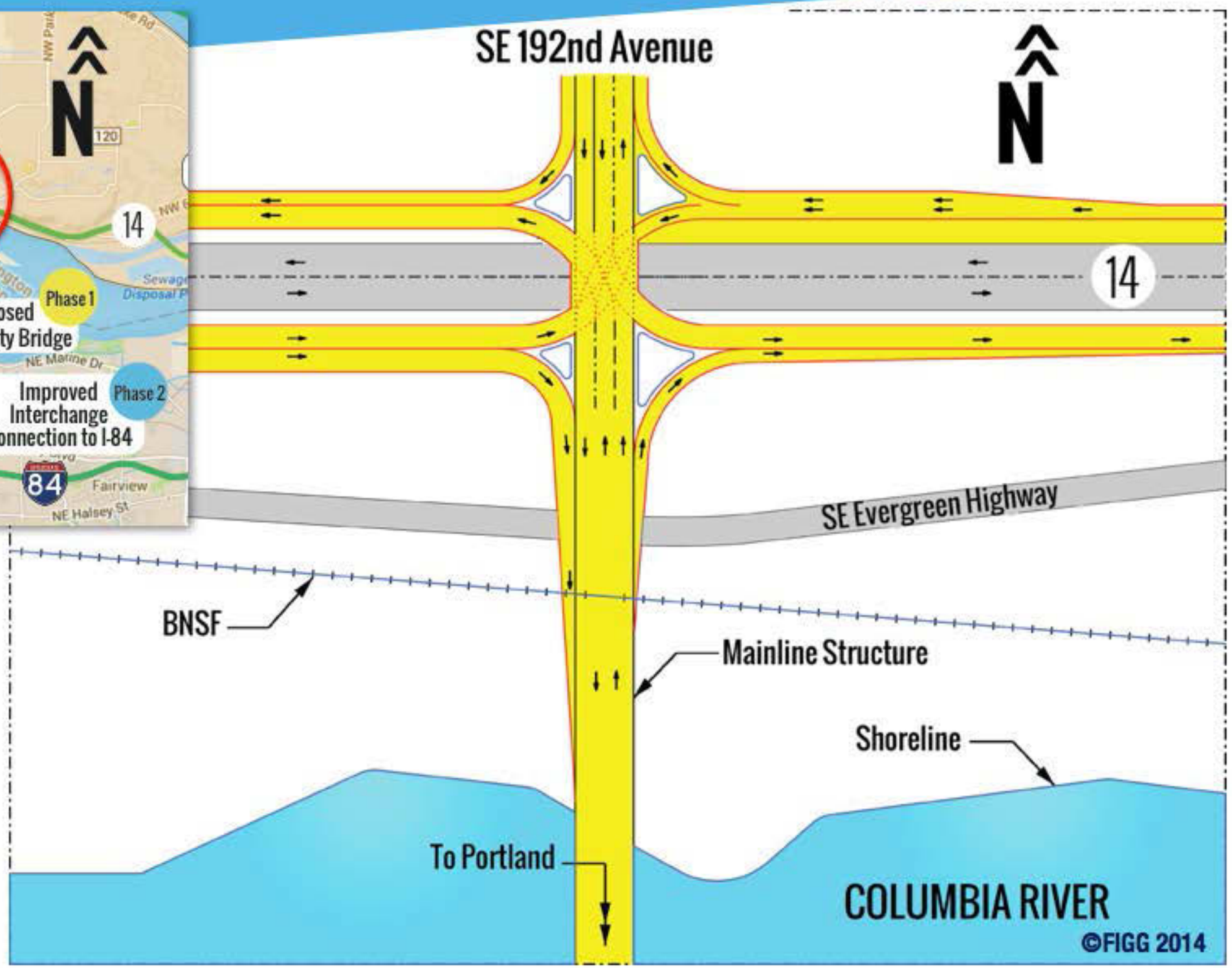


Bridge Configuration

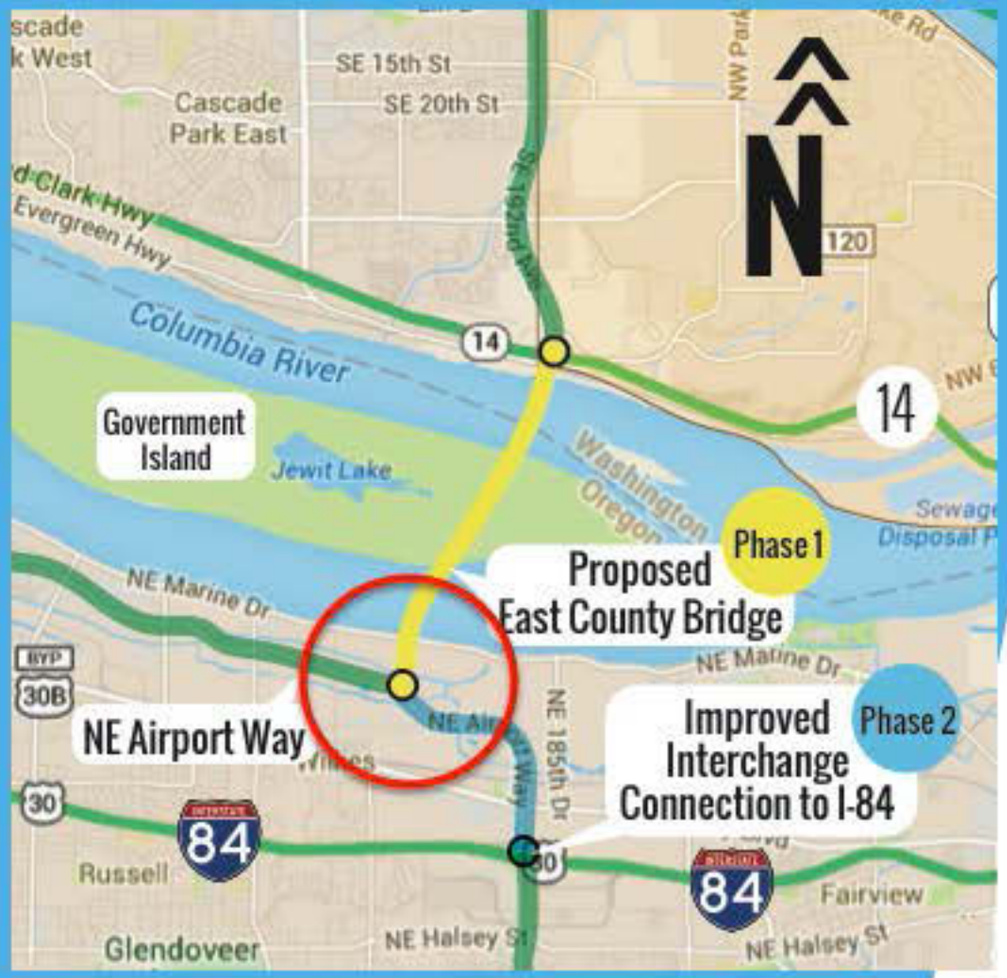
Two 12’ multi-use protected pathways for pedestrians and bicycles

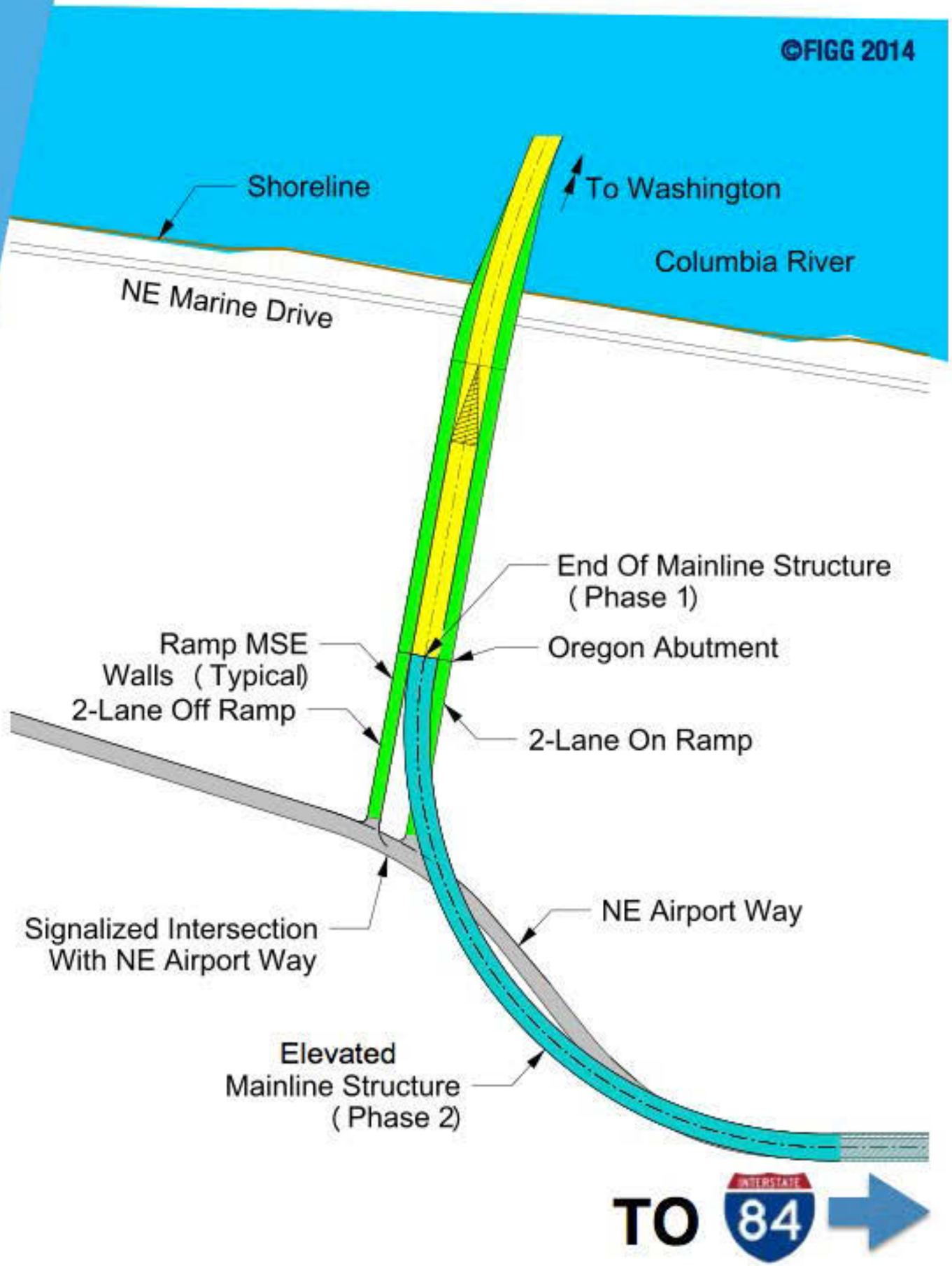
Scenic views of the Columbia River

Single Point Urban Interchange (SPUI)



South End Interchange Configuration





Creating Sustainable Bridges as Art for Your Communities

East County Bridge

the People

1st Five Bridges Glenwood Canyon | Glenwood Springs, Colorado

the Places

Natchez Trace Parkway Arches | Tennessee

the Events

Veteran's Glass City Skyway | Toledo, Ohio

the Nature

Blue Ridge Parkway Viaduct | Grandfather Mountain, North Carolina

Create
the History
of a landscape.

Natchez Trace Parkway Arches | Tennessee

the Story

The New I-35W Bridge | Minneapolis, Minnesota

Every bridge shares that story.
It begins with

a Vision

I - 275 Sunshine Skyway Bridge | Tampa Bay, Florida

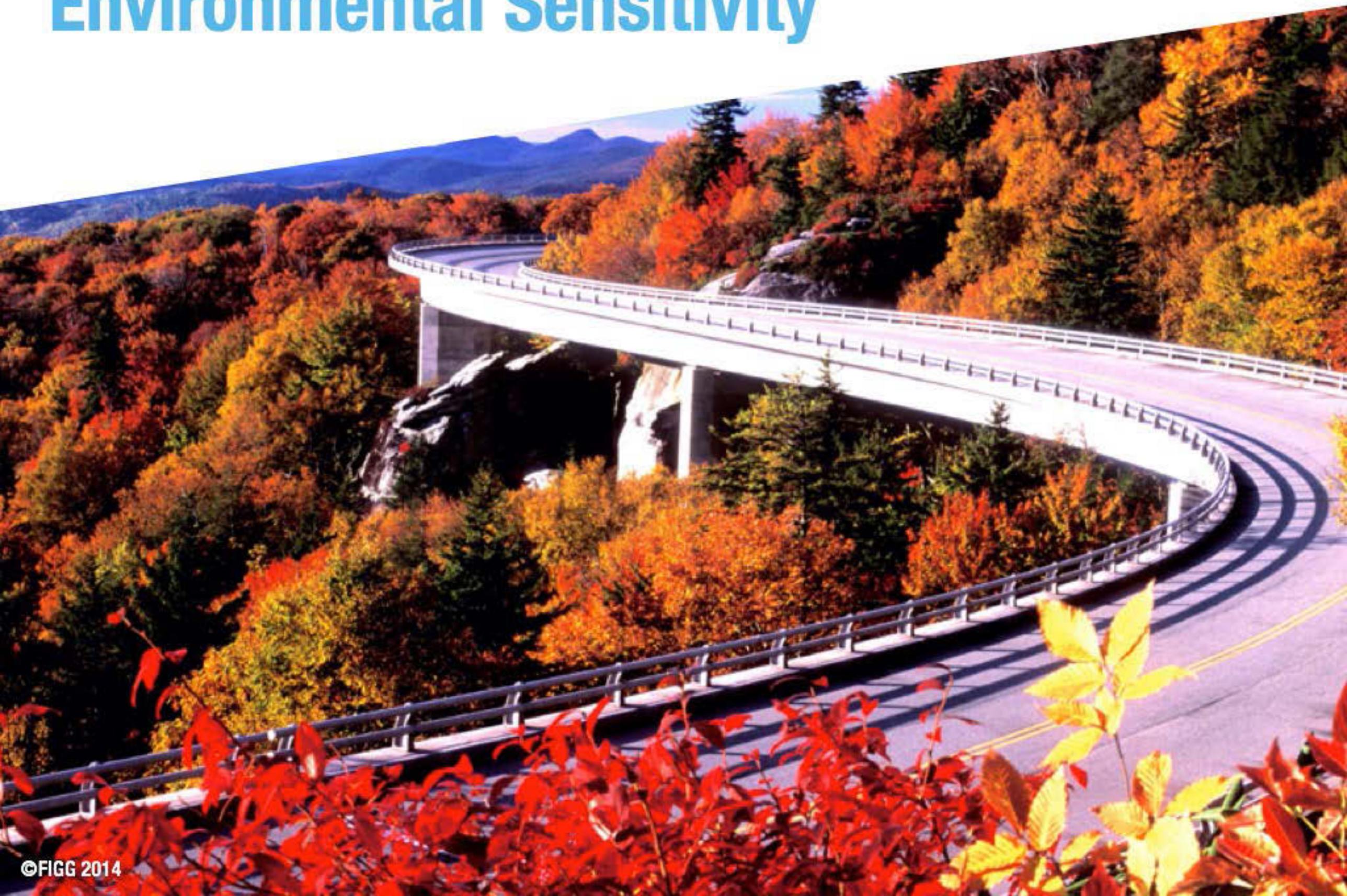
Community Vision

Signature Design

Functional Sculpture

Constructibility

Environmental Sensitivity



Harmony with Environment

Context Sensitive Design

Technical Innovation

Spirit of People

Timeless

Sustainability Is The Capacity To Endure

Context Sensitive Solutions (CSS)

Concrete Segmental Bridges are a Sustainable Solution
Precast factory-like quality and quick to assemble

ENVIRONMENTAL

Protect air, water and land

Protect ecosystem

Reduce green house gases/carbon footprint

Low energy use

East County Bridge

Environmental Analysis & Document will follow National Environmental Protection Act (NEPA)

Sustainable Design

High quality materials built to last

Sand

Water

Cement

Gravel

Environmentally Friendly Concrete

Created better concrete durability through lower permeability

Fly ash (waste product from coal) replaces some cement for lower permeability

Saved 3.5 tons of CO2 per truckload

Local Materials + Local Labor = Energy Efficiency

CSS AWARD FHWA

Low Energy
Low Maintenance
LED Lighting

First used on New I-35W Bridge ➤

Highway lighting with beautiful white light

Multi use path lighting for pedestrians and bicyclists

Multiple color options for aesthetic lighting

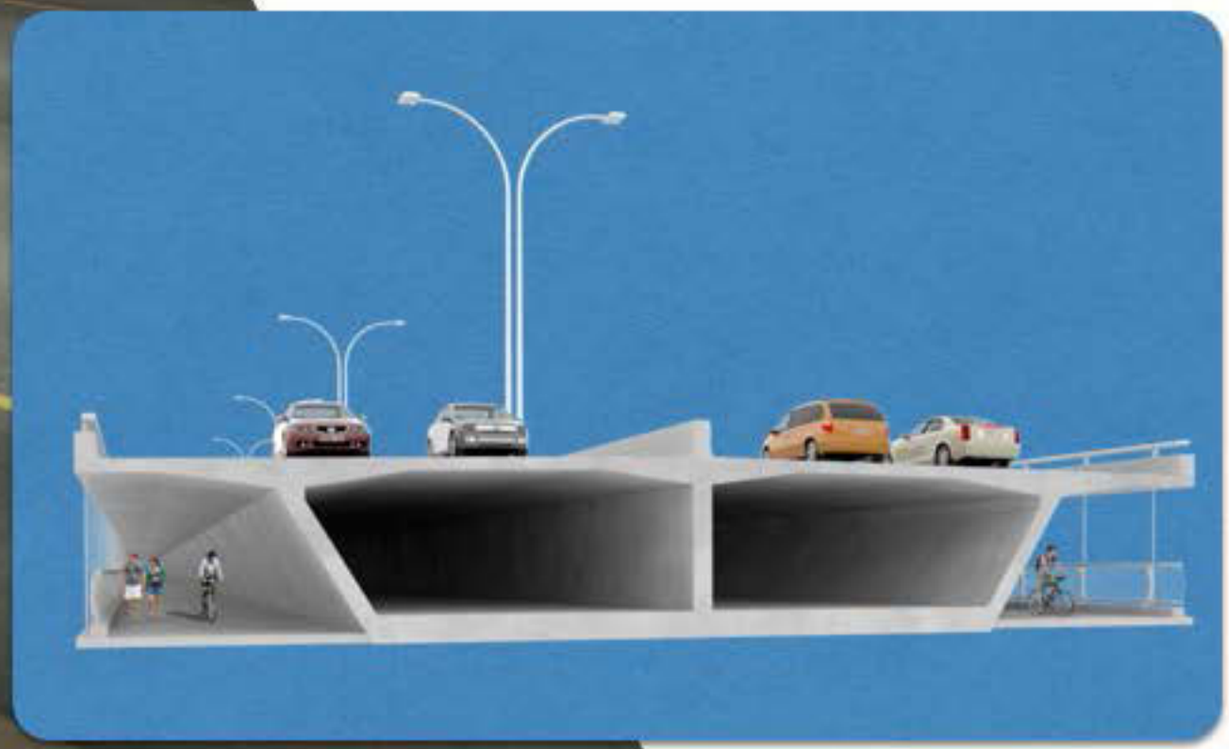
15-20 year life
(vs. 4 year life for yellow high pressure sodium bulbs)

Innovative LED Barrier Lights Is An Option

First used on FIGG bridge in Colorado

FHWA approved

Option to eliminate light poles



SOCIAL

Context Sensitive Solutions
Involve Community
Better Quality of Life
Safer
Better Land Use

Applying FIGG Archetypal Design Principles to Achieve Holistic Design

Establish a Theme

Blend Shapes

Create Shadows

Select Appropriate Textures

Choose Pleasing Colors

Open New Vistas

Use Native Materials

Create Feature Lighting

Incorporate Landscaping

Wabasha Freedom Bridge, MN

Community Theme:
Timeless Ecology

FIGG Bridge Design Charettes™ Community Involvement to Select World Class Bridge Aesthetics

Design Charettes will be held with community to select bridge features

FIGG Bridge Design Charettes will be held with community to select bridge aesthetic features

Items such as:

Bridge Theme

Pier shapes

Bridge Treatments

Railings

Lighting

Landscaping

Creating Functional Bridge Sculpture Means Examining Pier Shapes that are Context Sensitive to a Communities Sense of Place

US280 Birmingham, AL

Wekiva River for NPS

Dresbach Bridge, MN

4th Street Pueblo, CO

SR 204 Savannah, GA

I-91 Brattleboro, VT

Example Theme of Nature inspired by Washington and Oregon Trees

Example Theme of Nature inspired by Washington and Oregon Trees

Ponderosa Pine

Sitka Spruce

Quaking Aspen

East County Bridge Aesthetic Lighting To Be Chosen By The Community

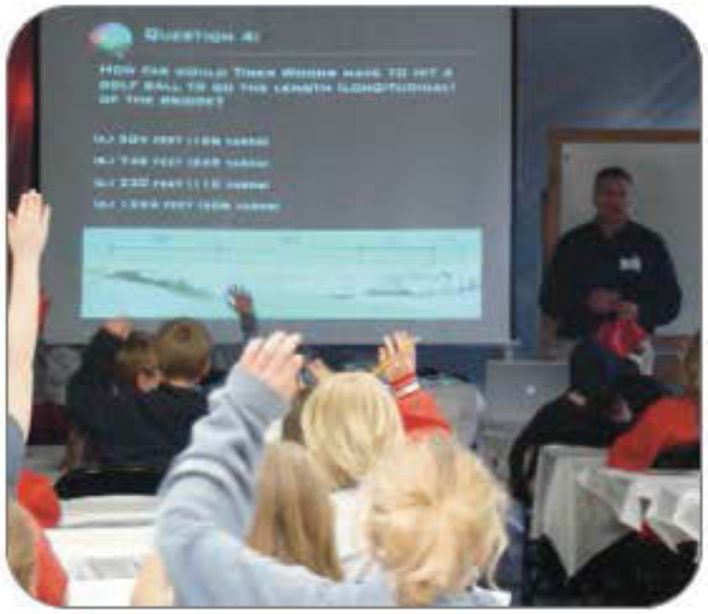
LED Lighting Provides Opportunity for Thematic Color Features

Involving the Community Builds Excitement, Trust and Ownership

Website and Live Construction Cam

Newsletters

Education for Kids



Sidewalk Community Talks

Sign the Bridge

Bridge Box for Teachers

Educational Outreach

Teachers Bridge Box Basics Kit for the classroom customized for East County Bridge FIGG developed with National Building Museum in Washington D.C.

Example: I-35W Bridge, Minnesota

Approach to Community Involvement

Design Charettes
To select bridge aesthetics with community

Open Houses
To share designs with community

Educational Outreach
To involve local schools and universities in building the bridge

ECONOMICAL

Cost and Time Savings
Local Economic Benefits
Resource Efficiency
Life Cycle Cost Benefits

Long variable depth spans and compact sections with twin wall piers create efficiency and economy

Low Maintenance / Long Term Durability Concrete Bridge Features

Owners Manual for Care of East County Bridge
Ease of Inspection & Maintenance

Inspection Workshop and Joint First Inspection with the Bridge Owner

We Know "Low Maintenance"
FIGG Bridge Managers is Maintenance Operator

East County Bridge Project Schedule
Open in 5 years from Notice to Proceed

	2 Years		3 Years		
	Environmental, permitting, right-of-way, pre-construction engineering		Design and Construction		
	YEAR1	**YEAR 2**	**YEAR 3**	**YEAR 4**	**YEAR 5**
ENVIRONMENTAL ANALYSIS AND DOCUMENT *	24 mo.				
FINAL PERMITTING		12 mo.			
BRIDGE/ROADWAY ENGINEERING (FOR ROW and PERMITTING)	9 mo.				
RIGHT OF WAY ACQUISITION		12 mo.			
PRE-CONSTRUCTION BRIDGE AND ROADWAY ENGINEERING		12 mo.			
DESIGN/BUILD			36 mo.		

* Involves full cooperation with all local, state and federal agencies

East County Bridge Project Costs
Turnkey Design/Build Proposal

COSTS

Design/Build Project	**$830 Million**
Further defined in first year of project development:	
Right-of-way, mitigation, geotechnical conditions	**$30 Million**
Less than	**$860 Million**

Multi-year financing can be provided by this team so that public funds can achieve this bridge over time

Proposal to Clark County for the East County Bridge

Design and build 4-Lane East County Bridge with shoulders and 2 - 12’ multi-use pathways: cars, trucks, buses, pedestrians, & bicyclists

Connects 192nd/SR-14 in Washington and NE Airport Way in Oregon with plans for future direct connection and interchange enhancements with I-84

Meet navigational channel clearances like I-205 - 300’ horizontal, 144’ vertical over shipping channel - alignment perpendicular to channel for added safety

Bridge over Government Island to preserve environment

Proposal to Clark County for the East County Bridge

Built using local labor, local materials and providing local economic stimulus

Alignment is away from homes. Convenient connection to commercial areas

Sustainable, eco-friendly, high strength, redundant and safe bridge

Low maintenance concrete bridge with LED roadway and aesthetic lighting

Community involvement in selecting bridge aesthetic features for a functional bridge sculpture that captures a sense of place

Proposal to Clark County for the East County Bridge

Environmental analysis and document following NEPA - 2 Years

Design and build bridge in 3 years following permits and right-of-way

Complete new bridge in 5 years from Notice to Proceed

Total project costs under $860 Million

Proposal to Clark County for the East County Bridge

Achieve Washington and Oregon DOT standards

Meet Local, State and Federal Requirements

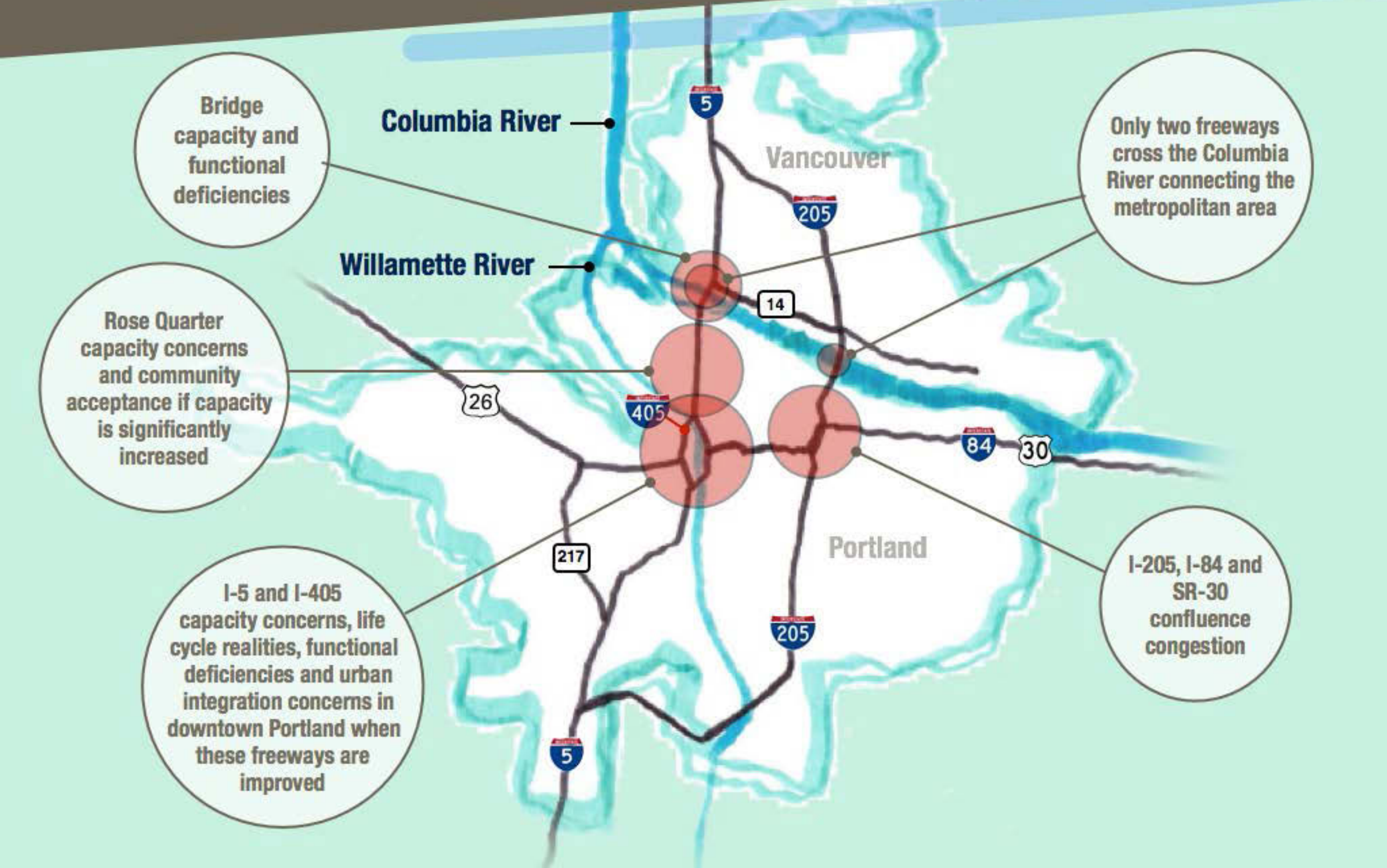
Owners manual for care of your new bridge

Over 100 year life

Kevin Peterson

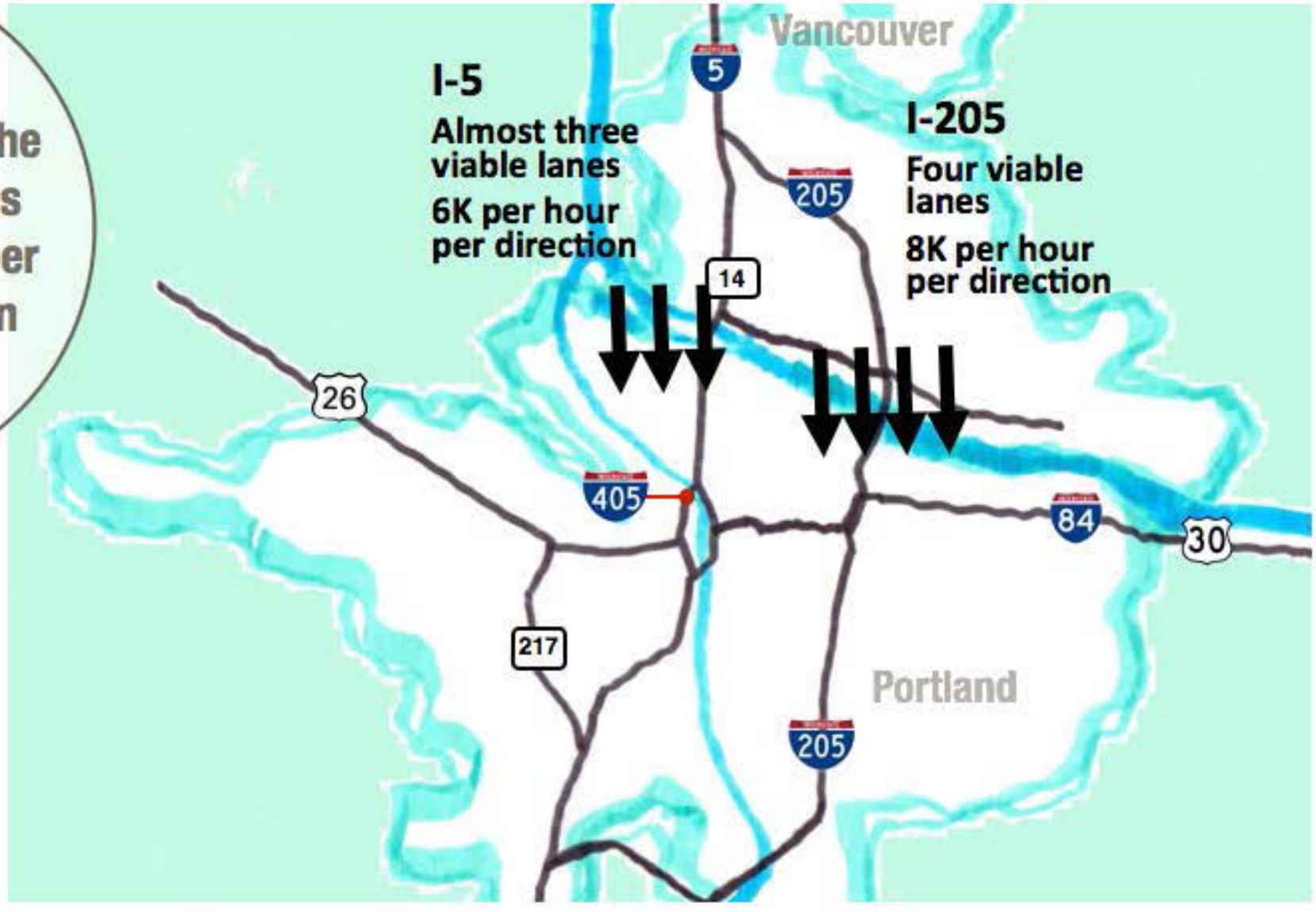
Transportation Architect and Urban Planner

Overarching Issues



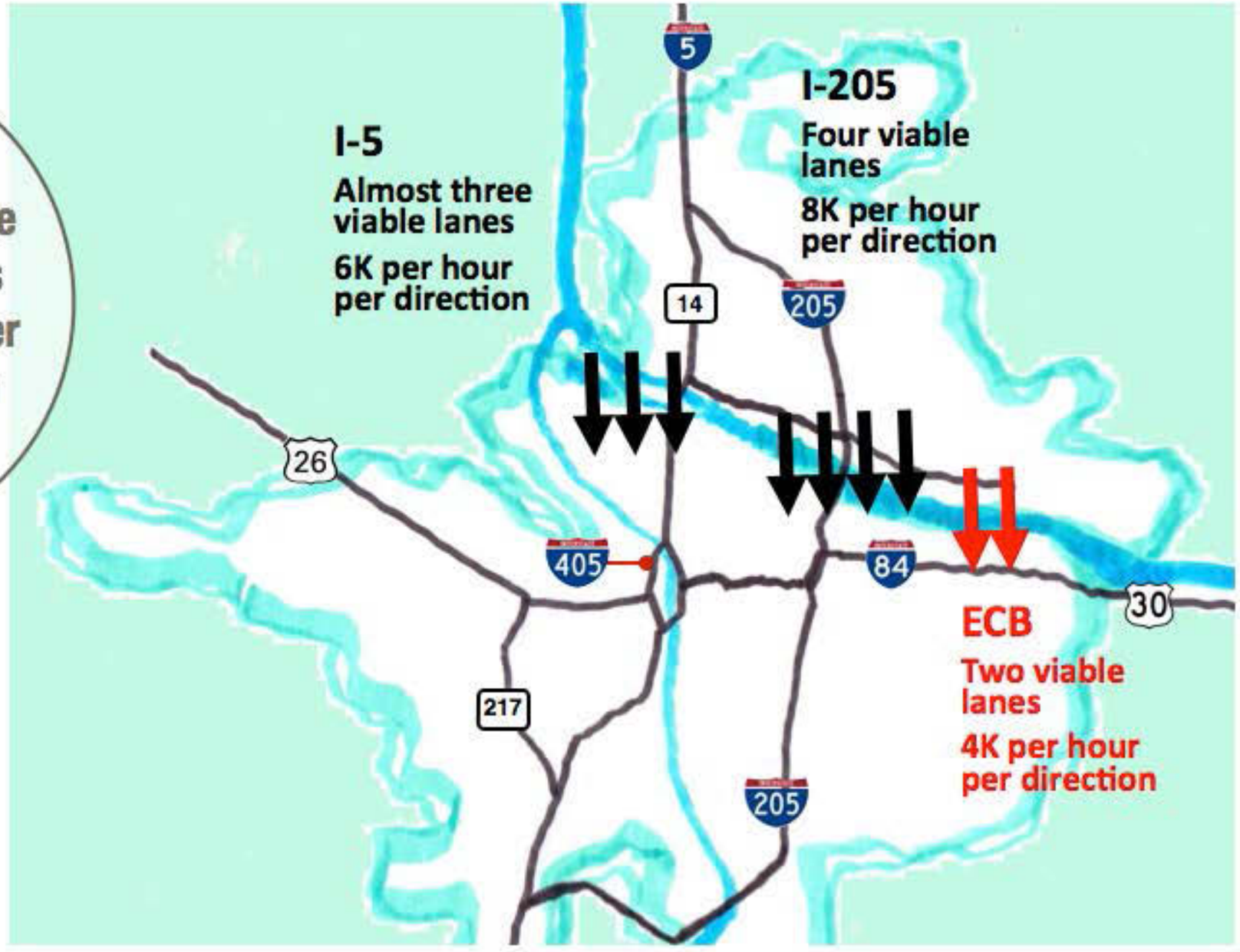
Existing Condition

Capacity across the Columbia River is 14,000 vehicles per hour per direction



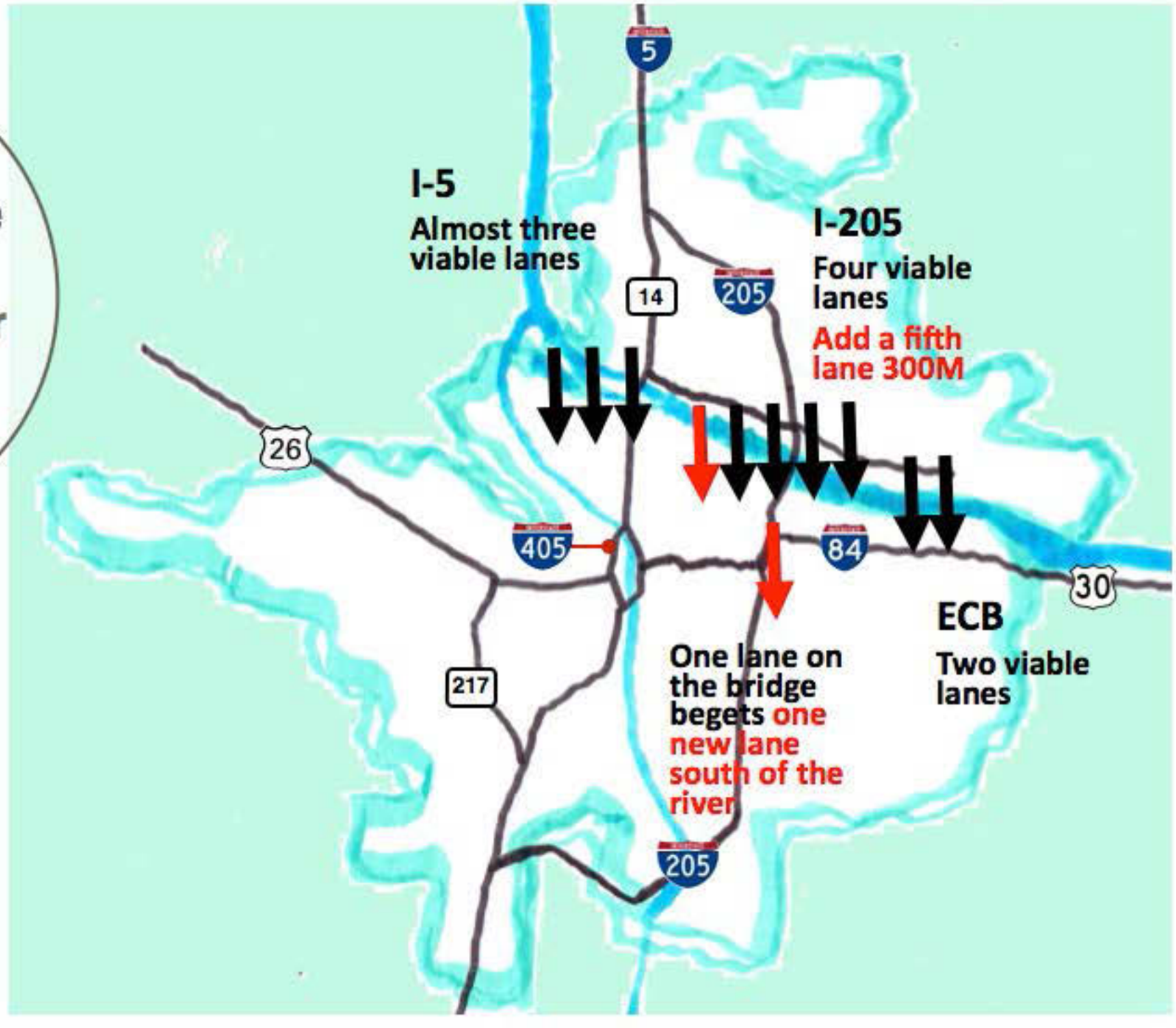
With the East County Bridge

Capacity across the Columbia River is 18,000 vehicles per hour per direction



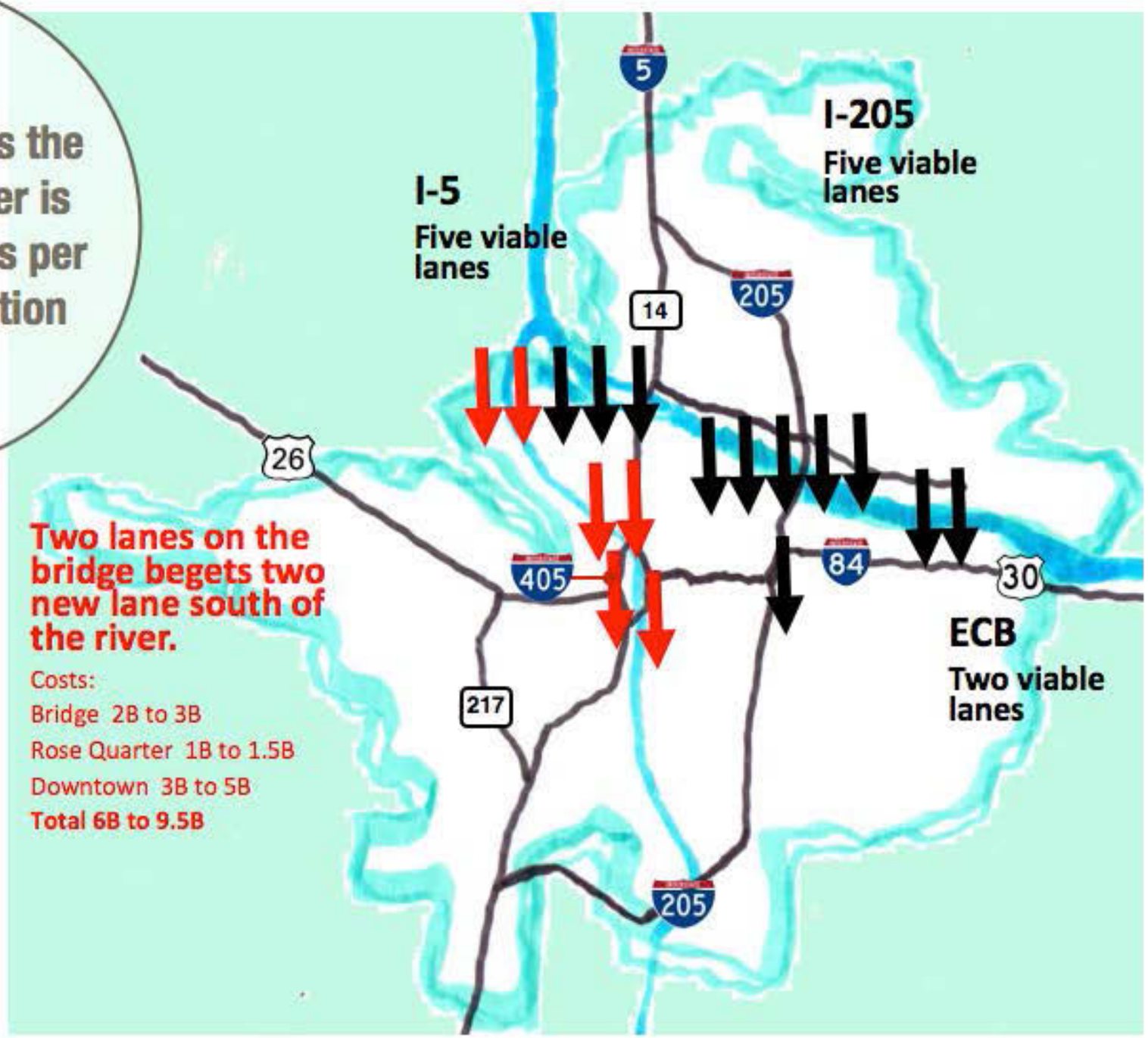
One New Lane on I-205

Capacity across the Columbia River is 20,000 vehicles per hour per direction



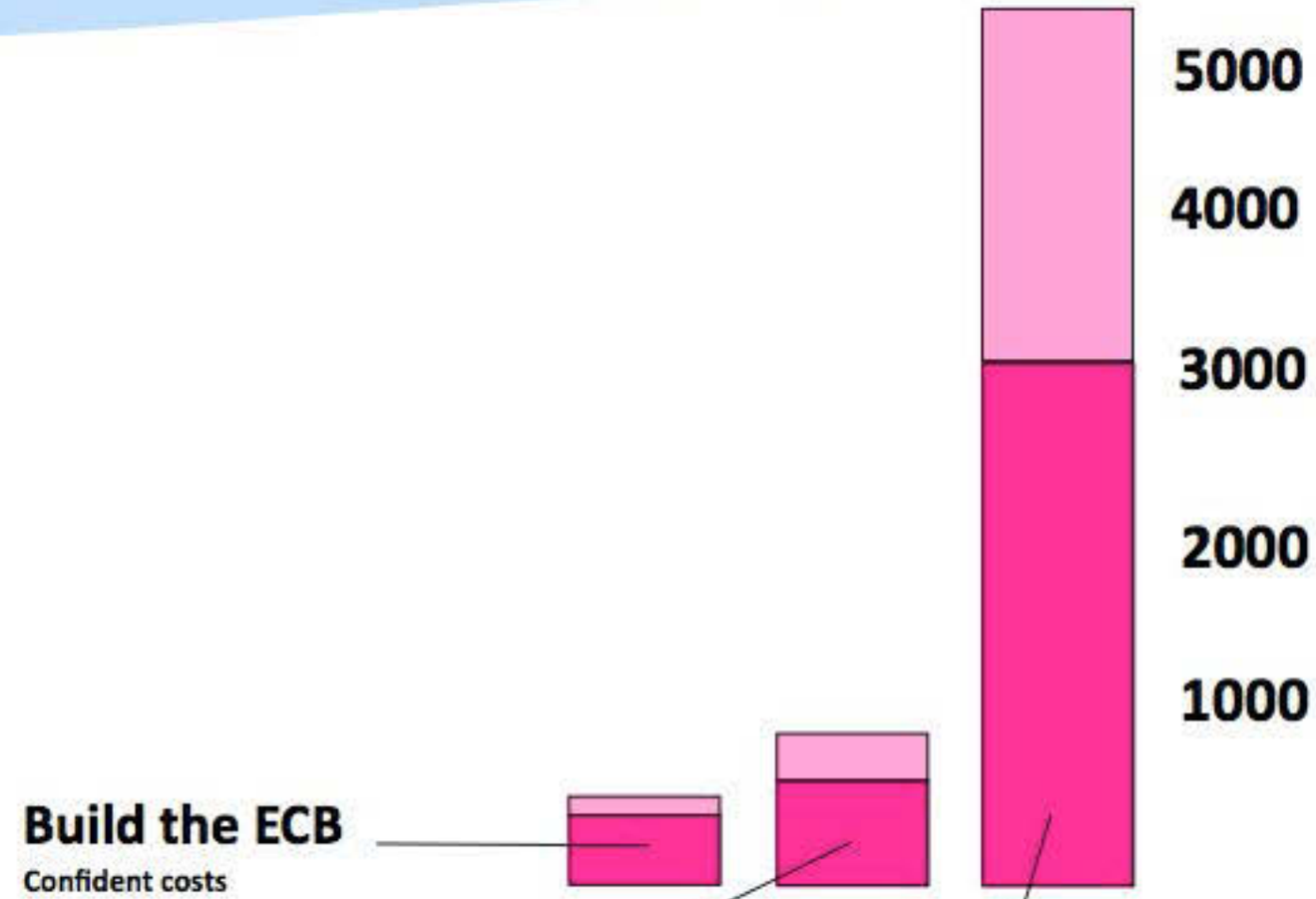
Two New Lanes on I-5

Capacity across the Columbia River is 24,000 vehicles per hour per direction



Cost per Lane to Increased Capacity Across the Columbia River

Capital Investment Measured in Millions of Dollars per New Vehicle Lane



Build the ECB

Confident costs

Add a lane to I-205.

Includes fixing the I-84/I-205 inter-change

Costs less confident

Fix I-5 and add two lanes

Includes fixing Rose Quarter and downtown Portland freeways

Costs less confident

Urban Connector Value

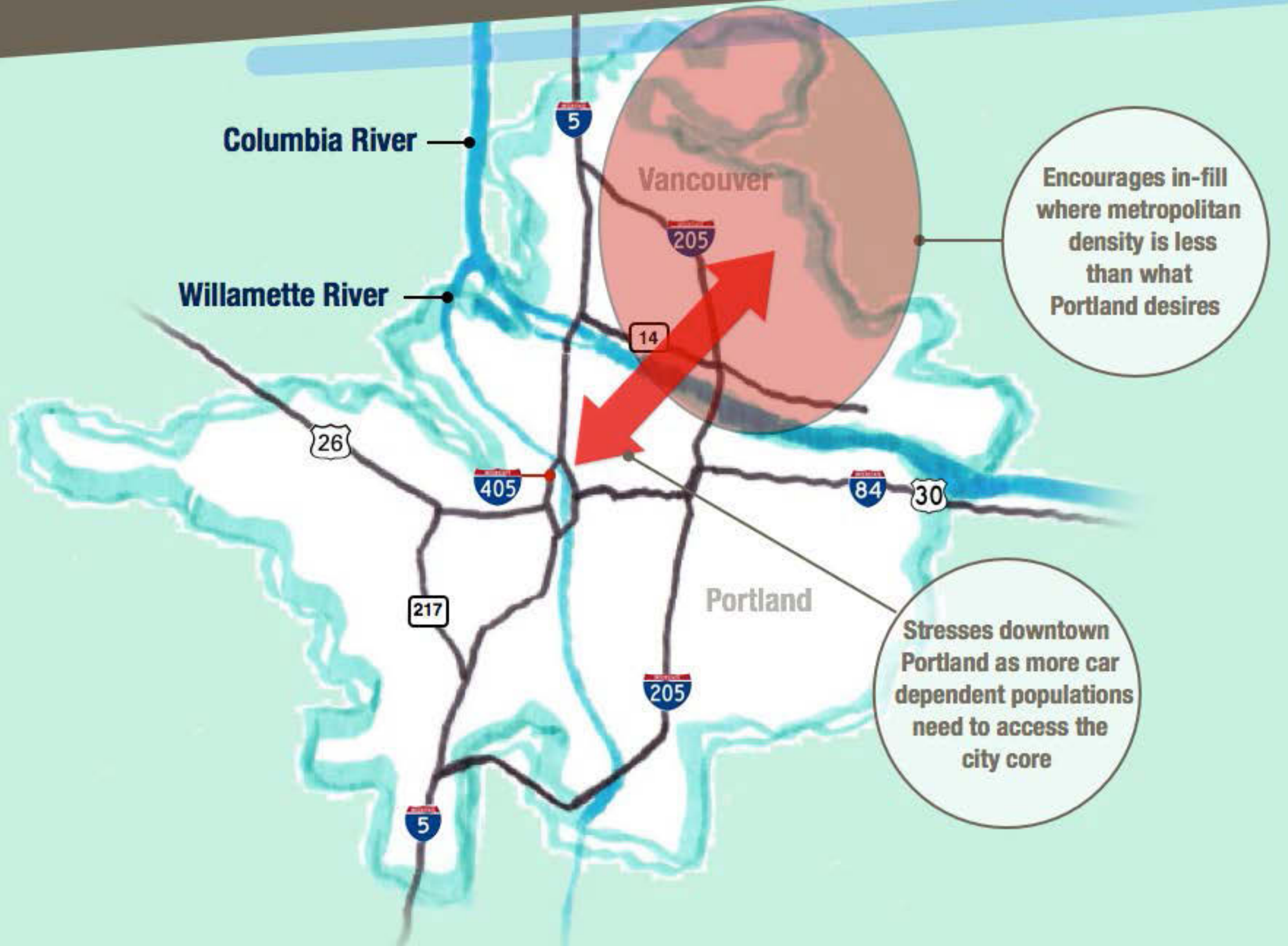
Bypass Value

What about a Bridge to the West

What about a Regional Bypass to the West

What About the I-5 Corridor ?

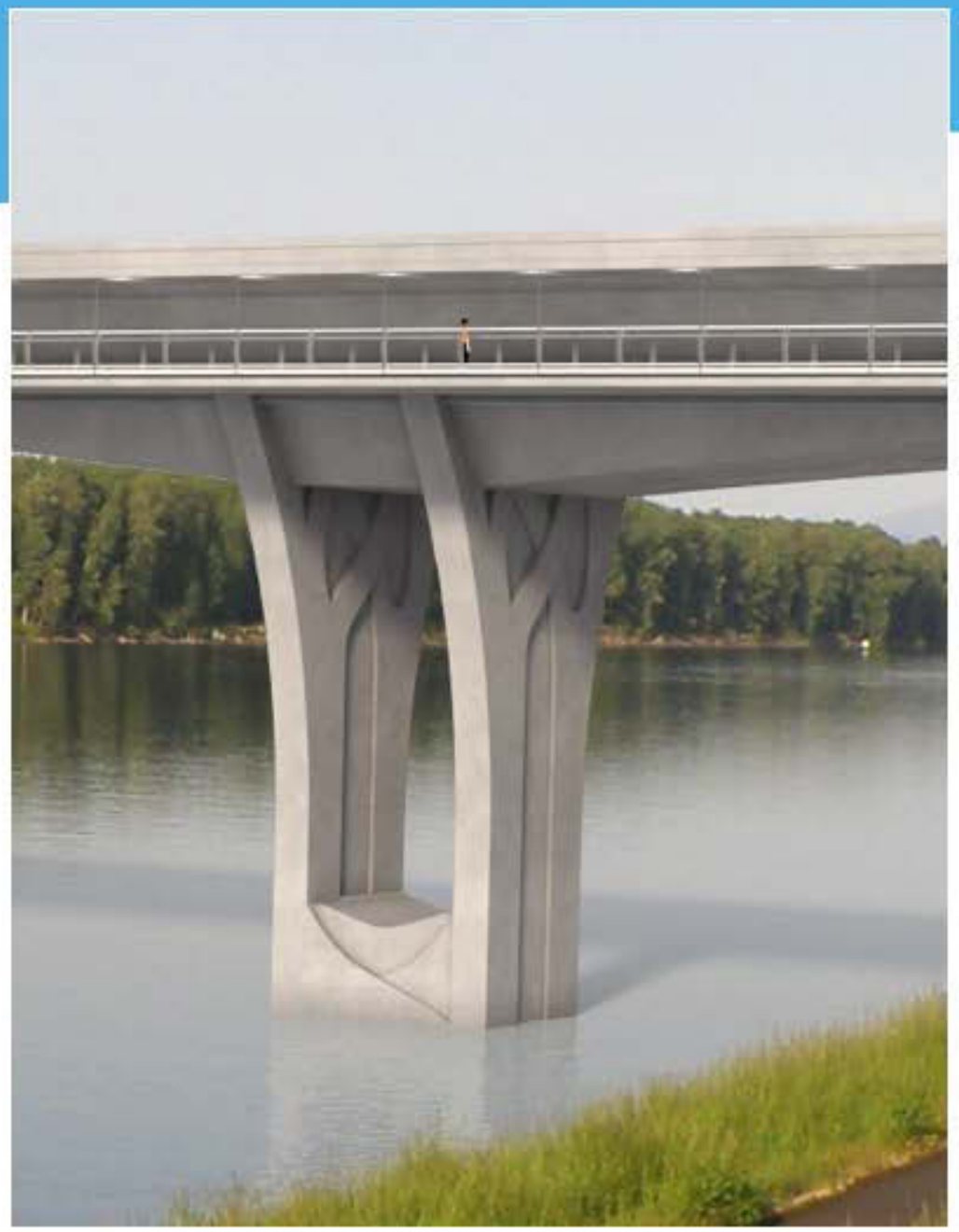
What Are The Concerns?



Mitigating Concerns - Good Neighbors North and South

East County Bridge Benefits

- **Link urban areas reducing each average urban trip distance for cross river traffic by eight miles!**
- **Bypass congested I-205 reducing pressure on I-205 and I-84 by up to 20%**
- **Link NE Vancouver with the Banfield LRT link via express bus service — this helps shape north of the river to optimize transit and adds users to the underfunded Tri-Met system**
- **Provides Portland with more opportunity to minimize car and truck impacts downtown — especially when downtown sections of I-5 and I-405 are fixed**
- **Is a project we can finish this decade for less than $860 million — providing jobs and pride that the future is bright**
- **Achieves 28% more cross river capacity without the need to impose tolls**



Creating a Sustainable East County Bridge

PCL FIGG

CREATING BRIDGES AS ART®