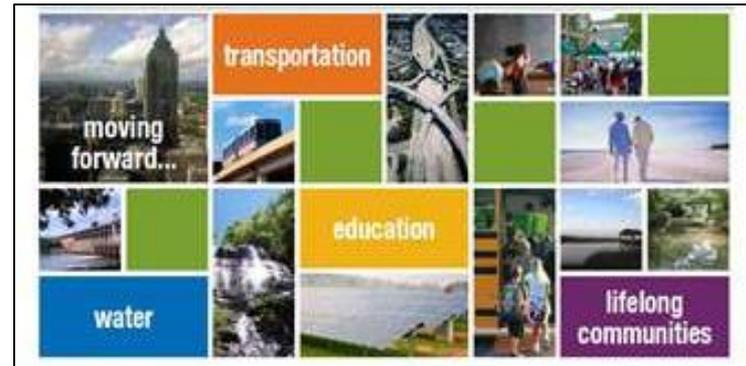
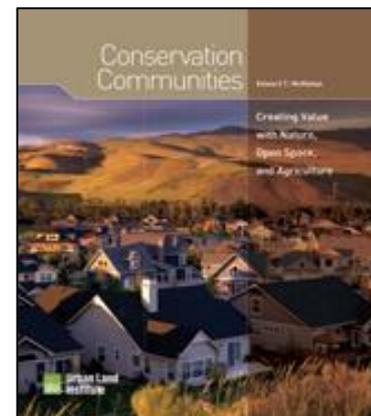
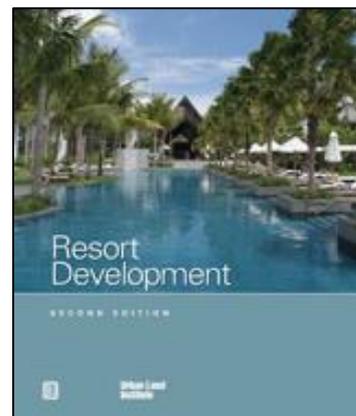


An Advisory Services Panel for Norfolk, VA



About the Urban Land Institute

- The mission of the Urban Land Institute is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide.
- ULI is a membership organization with nearly 33,000 members, worldwide representing the spectrum of real estate development, land use planning and financial disciplines, working in private enterprise and public service.
- What the Urban Land Institute does:
 - Conducts Research
 - Provides a forum for sharing of best practices
 - Writes, edits and publishes books and magazines
 - Organizes and conducts meetings
 - Directs outreach programs
 - Conducts Advisory Services Panels



Thanks to the following sponsors:

Sponsor:

City of Norfolk

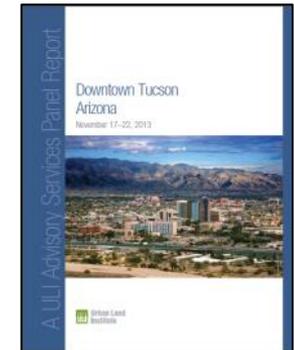
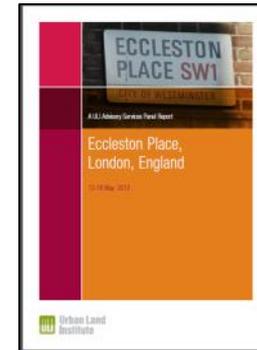
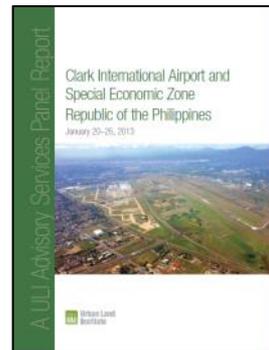
– Steering Committee:

- Christine Morris
- Ron Williams
- George Homewood
- Richard Broad
- Lenny Newcomb
- Peter Chapman
- Ray Gindroz
- Thom White
- Katerina Oskarsson

And the many members of the community who contributed their time, knowledge, and experience!

The Advisory Services Program

- Since 1947
- 15 - 20 panels a year on a variety of land use subjects
- Provides independent, objective candid advice on important land use and real estate issues
- Process
 - Review background materials
 - Receive a sponsor presentation & tour
 - Conduct stakeholder interviews
 - Consider data, frame issues and write recommendations
 - Make presentation
 - Produce a final report



The Panel

- John McIlwain, Senior Advisor, Jonathan Rose Companies
- John Macomber, Harvard Business School, Cambridge, MA
- Jonathan Miller, Miller Samuel Inc., New York, NY
- Paul Moyer, VHB, Vienna, VA
- Dave Stebbins, Buffalo Urban Development Corp., Buffalo, NY
- Charles Schilke, Johns Hopkins Carey Business School, Washington, DC
- Juvarya Veltkamp, Vancouver Economic Commission, Vancouver, BC

Presentation Outline

- I. Intro and Background
- II. Market Potential
- III. Planning & Design
- IV. Economic and Social Resilience
- V. Conclusion

Panel Overarching Assignment

A decade has passed since ULI last looked at the Fort Norfolk neighborhood, then known as Atlantic City. Much has changed since that time – the Tide rail line, the real estate market crash, and an increasing focus on the effect of sea level rise on Hampton Roads.

This panel will look at ways to use development opportunities and challenges in the Fort Norfolk neighborhood to improve flood protection for vulnerable locations in the community, but also to build economic opportunity – to use the site as an avenue to broad community strength and resilience.

Panel Questions

- What is the market potential for the Fort Norfolk neighborhood?
- How will coastal flooding impact land and development value in the area and how can impacts be appropriately mitigated and transferred throughout the community?
- What are appropriate techniques for building resilience to flooding in Fort Norfolk?
- How can social equity be addressed when impacts due to climate change impact affect areas in uneven ways?

The Study Area



Three Important Changes Since Previous Studies

- **The Tide Transit**
- **The 2008 Recession**
- **The Rising Waters**

Market Potential: Context and Opportunity

Market Potential: Context and Opportunity

Considerations

- Time scale
 - Short, Medium, Long
- Hampton Roads Region
- City of Norfolk
- Fort Norfolk

Hampton Roads Region: Slower Economic Growth

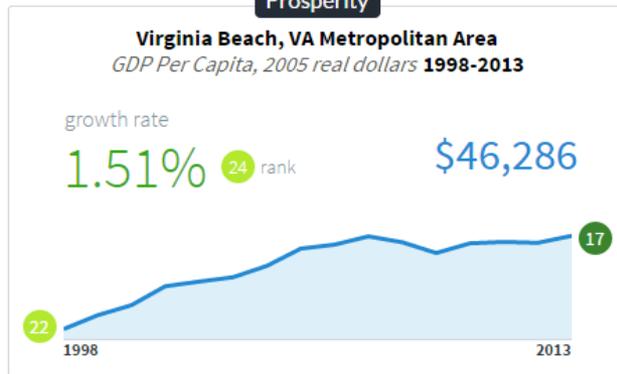
Performance and Drivers

The Performance & Drivers page outlines the key economic outcomes and drivers of this region, based on over 52 data indicators. Click the link below to view the full set of charts.

Ranks are by percentile from 1-100 among all 917 U.S. metropolitan and micropolitan statistical areas:

- 1-20 (first quintile)
- 21-40 (second quint.)
- 41-60 (third quint.)
- 61-80 (fourth quint.)
- 81-100 (fifth quint.)

Prosperity



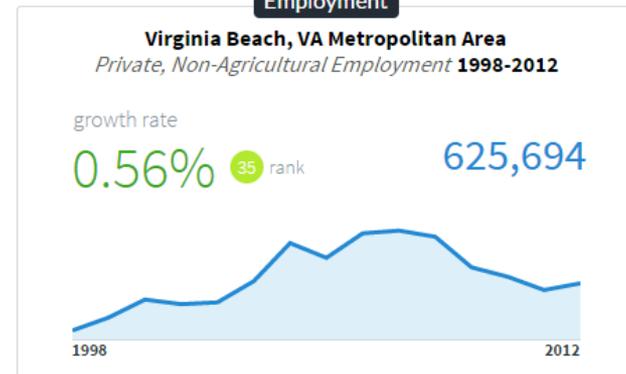
Unemployment



Annual Wage



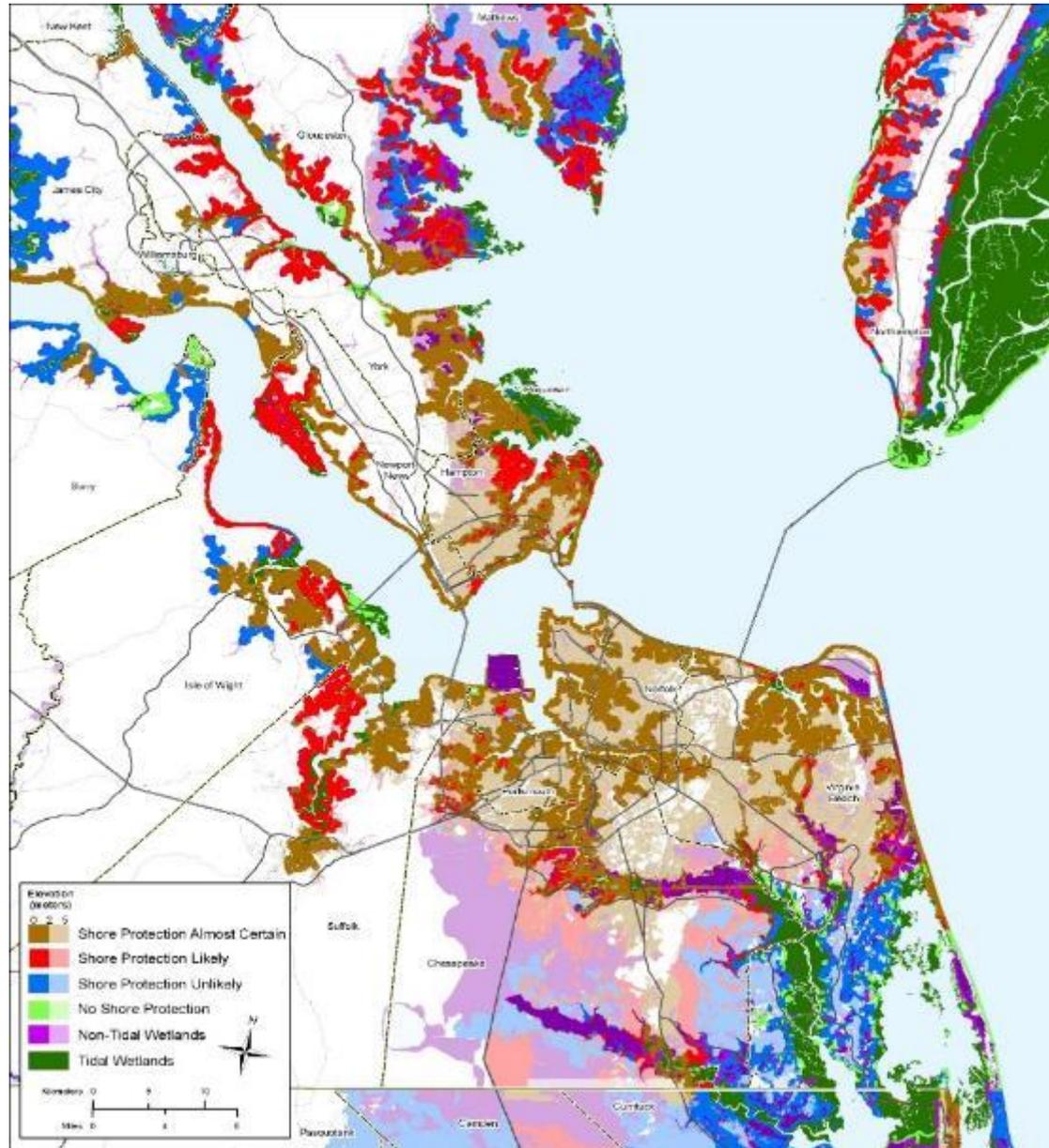
Employment



[EXPLORE THIS REGION'S PERFORMANCE AND DRIVERS](#) →

Source: US Cluster Mapping Project

Hampton Roads Region: Flooding and Sea Level Rise



Hampton Roads Region: Increasing Repetitive Flood Loss



Commonwealth of Virginia Hazard Mitigation Plan

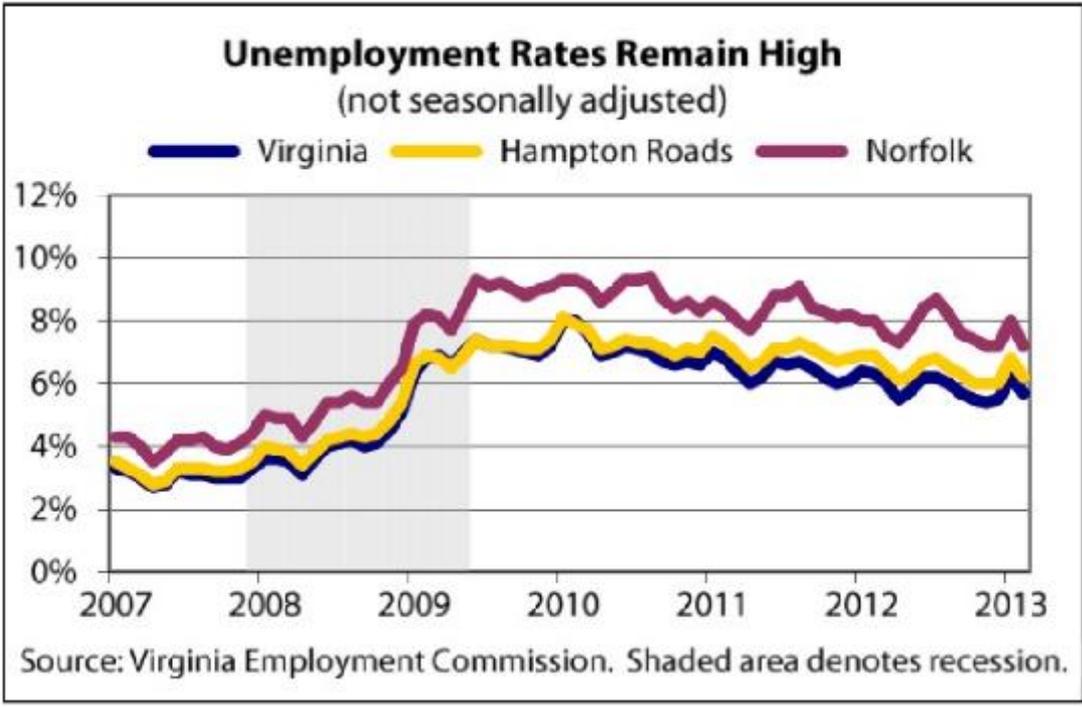
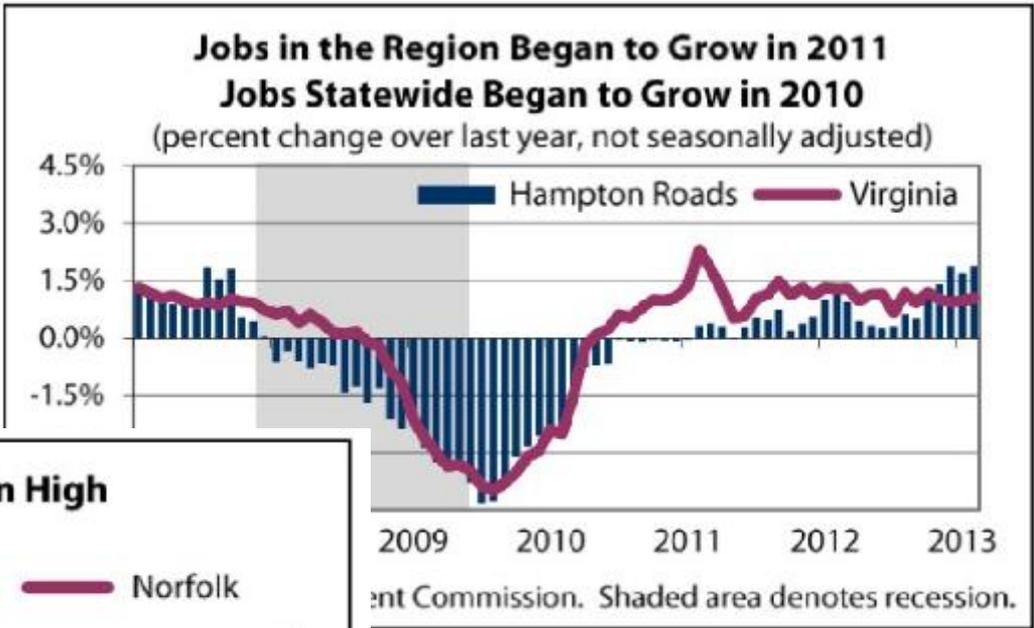
Chapter 3 – HIRA: Section 3.7, Flooding

Table 3.7-3 : NFIP claims of over \$1 million paid on RL

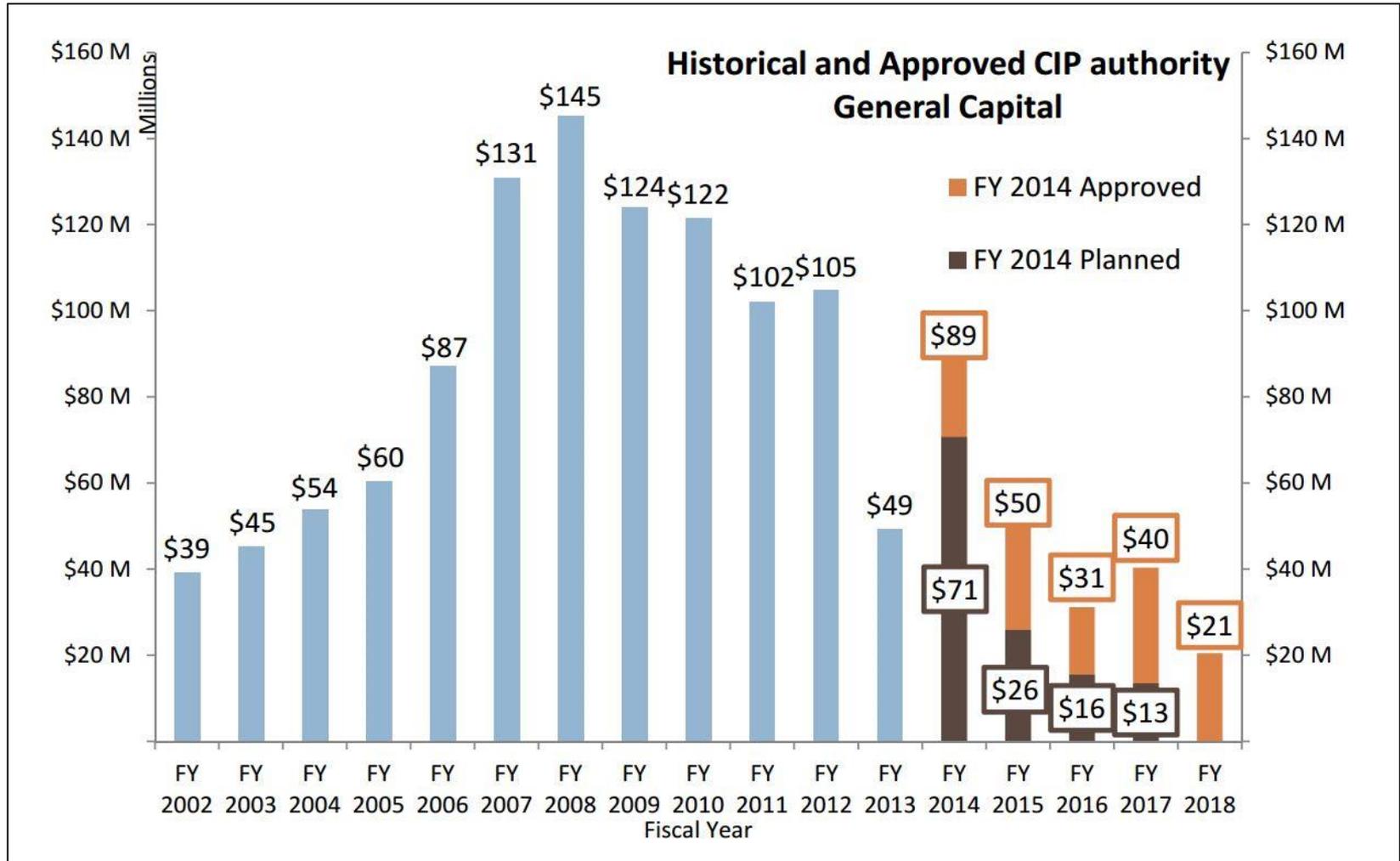
Jurisdiction	Number of Properties as of 2008	Number of Properties as of 2011	Total Paid as of 2008	Total Paid as of 2011
City of Hampton	251	796	\$11,193,716	\$34,526,653
City of Poquoson	172	843	\$9,109,362	\$33,109,340
City of Norfolk	282	738	\$10,443,760	\$31,305,607
City of Virginia Beach	319	443	\$11,051,932	\$22,326,715
City of Salem	93	89	\$14,212,415	\$14,279,639
City of Chesapeake	117	303	\$4,800,587	\$12,468,754



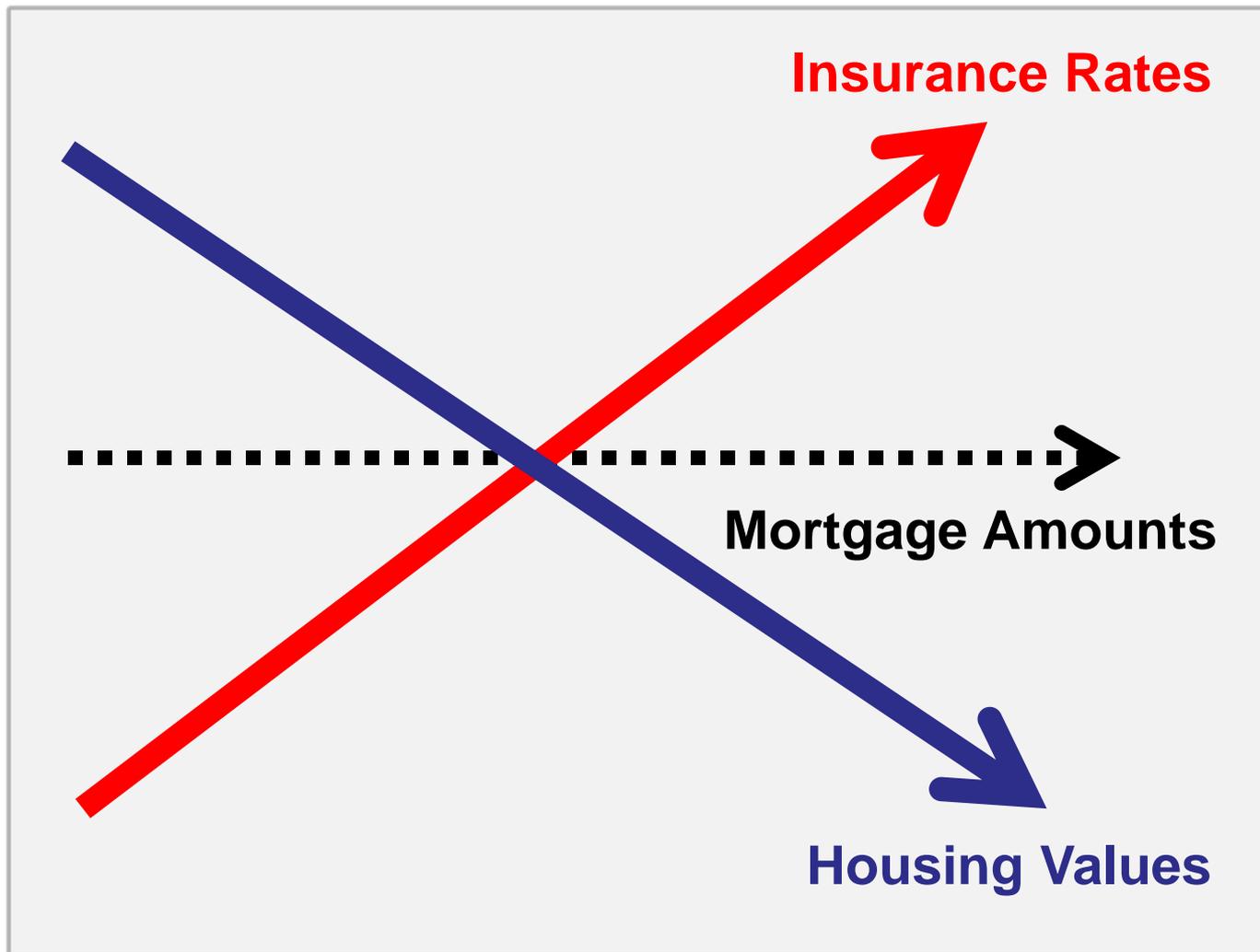
City of Norfolk: Economy and Jobs



City of Norfolk: Lower Tax Revenues, Lower CIP budget



City of Norfolk: Individual impact, Regional effects



Fort Norfolk: Water Challenges

Developers and landowners will need to address severe impairment from increasing flood risk



FEMA proposed flood map

Fort Norfolk: Value in the Future

The Fort Norfolk area needs to rely on collaborative and bold development to create value in the future.

Value today is *constrained* by:

- Lack of demand in the region
- Significant and uncertain flood risk

Value in the future could be *enhanced* by creating:

- Employment demand: new jobs
- Housing demand: new people
- Housing: taking pressure off the most flood-exposed areas
- Housing demand mixed-use, mixed-income urban coastal lifestyle
- Employers interested in a mixed-use urban coastal environment
- Designs that are flood resistant in the long run

Market Overview

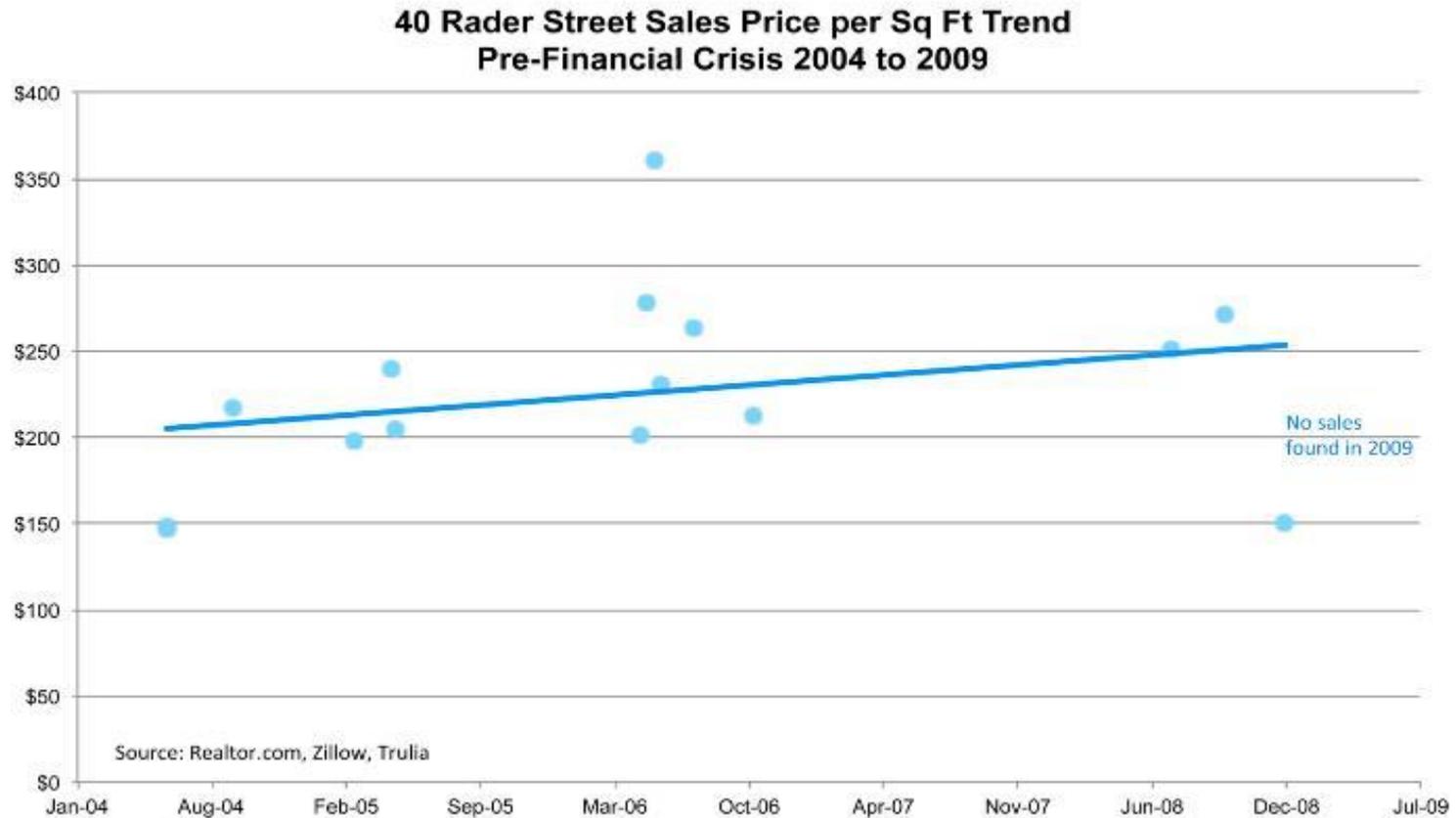
Fort Norfolk Residential Real Estate In Context

- Existing condominium – 40 Rader St. (Pier Condo)
- New and existing residential development - 139 Riverview Ave. (Riverview Lofts)
- New and existing retirement community – 1 Colley Ave. (Harbor's Edge)



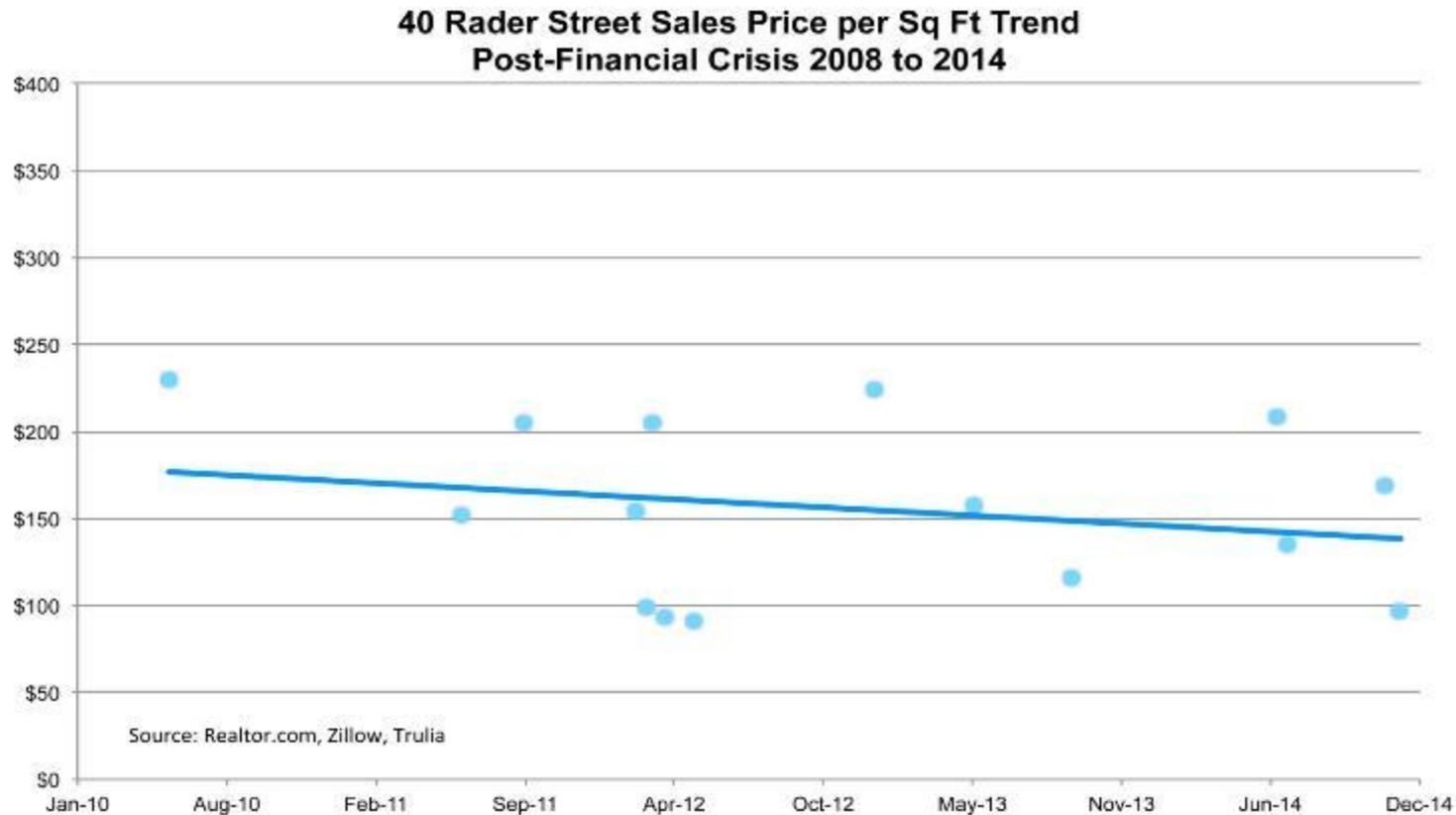
Market Overview

Fort Norfolk Prices Rising Before Financial Crisis



Market Overview

Fort Norfolk Prices Continue to Fall After Financial Crisis



Market Overview

Fort Norfolk Prices Down 31.7%

Pre-Financial Crisis

Closing Date	Price	SqFt	PPSF	% Change
2004	\$278,000	1,280	\$217	
2006	\$295,000	1,280	\$230	6.1%

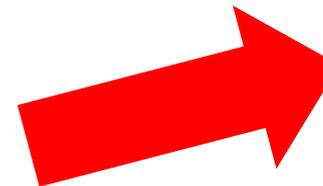
Post-Financial Crisis

Closing Date	Price	SqFt	PPSF	% Change
2010	\$205,000	891	\$230	
2013	\$103,000	891	\$116	-49.8%
2012	\$161,000	1,734	\$93	
2012	\$158,000	1,734	\$91	-1.9%

Straddling Pre/Post Financial Crisis

Closing Date	Price	SqFt	PPSF	% Change
2006	\$280,000	1,314	\$213	
2011	\$200,000	1,314	\$152	-28.6%
2005	\$269,500	1,314	\$205	
2011	\$200,000	1,314	\$152	-25.8%
2006	\$414,000	1,490	\$278	
2014	\$310,000	1,490	\$208	-25.1%
2008	\$380,000	1,397	\$272	
2012	\$320,500	1,430	\$224	-17.6%
2005	\$364,500	1,519	\$240	
2014	\$144,000	1,497	\$96	-59.9%
2006	\$595,000	1,648	\$361	
2012	\$315,000	1,540	\$205	-43.3%
2006	\$325,000	1,610	\$202	
2013	\$279,000	1,768	\$158	-21.8%

Average -31.7%

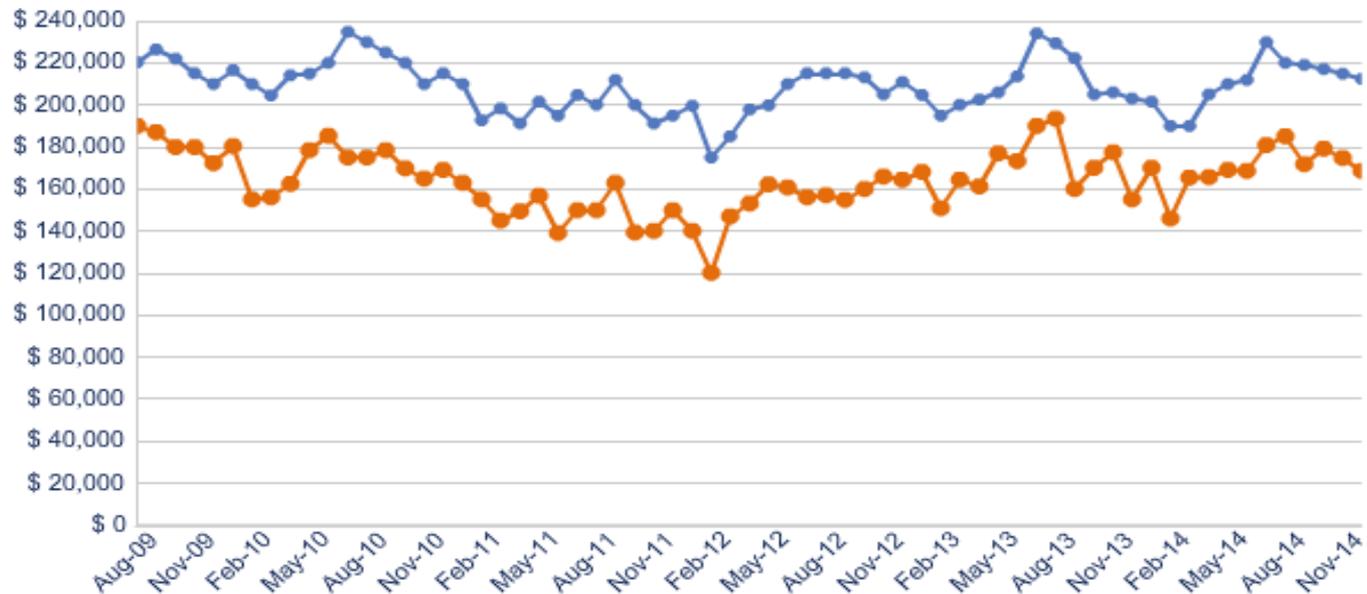


Market Overview

Norfolk and Hampton Roads 5- Year Trend: In Sync, Flat

Median Sale Price

● Hampton Roads/Southeast Virginia ● Norfolk City - VA

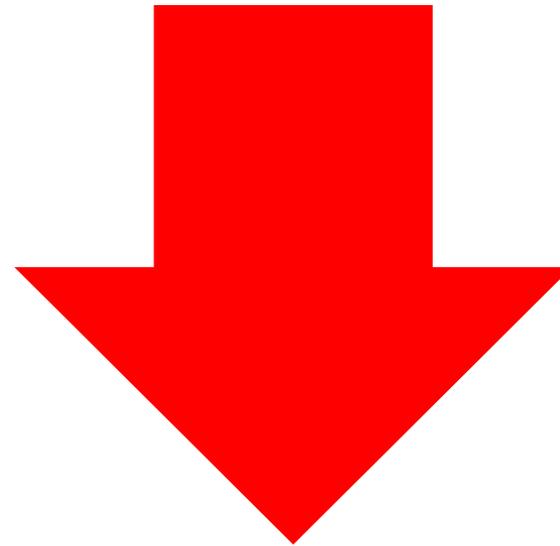


Source: Long & Foster

Market Overview

Lagging Behind U.S. and Regional Housing Trends

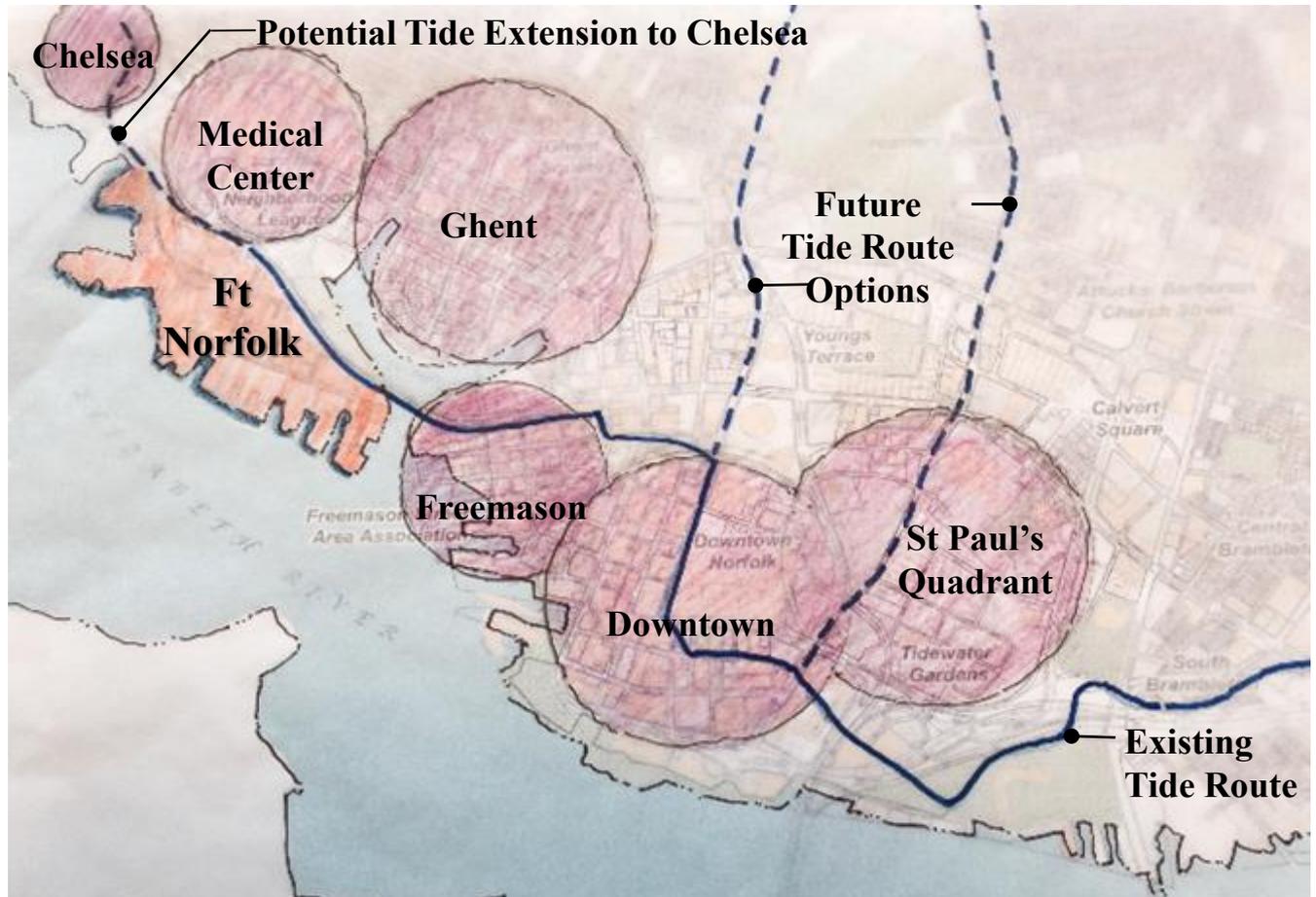
- S&P/Case-Shiller Home Price Index Change from Market Peak
 - U.S. -15.9%
 - Charlotte, NC -5.1%
 - Washington, DC -16.5%
 - Fort Norfolk, VA -31.9%



Planning and Design

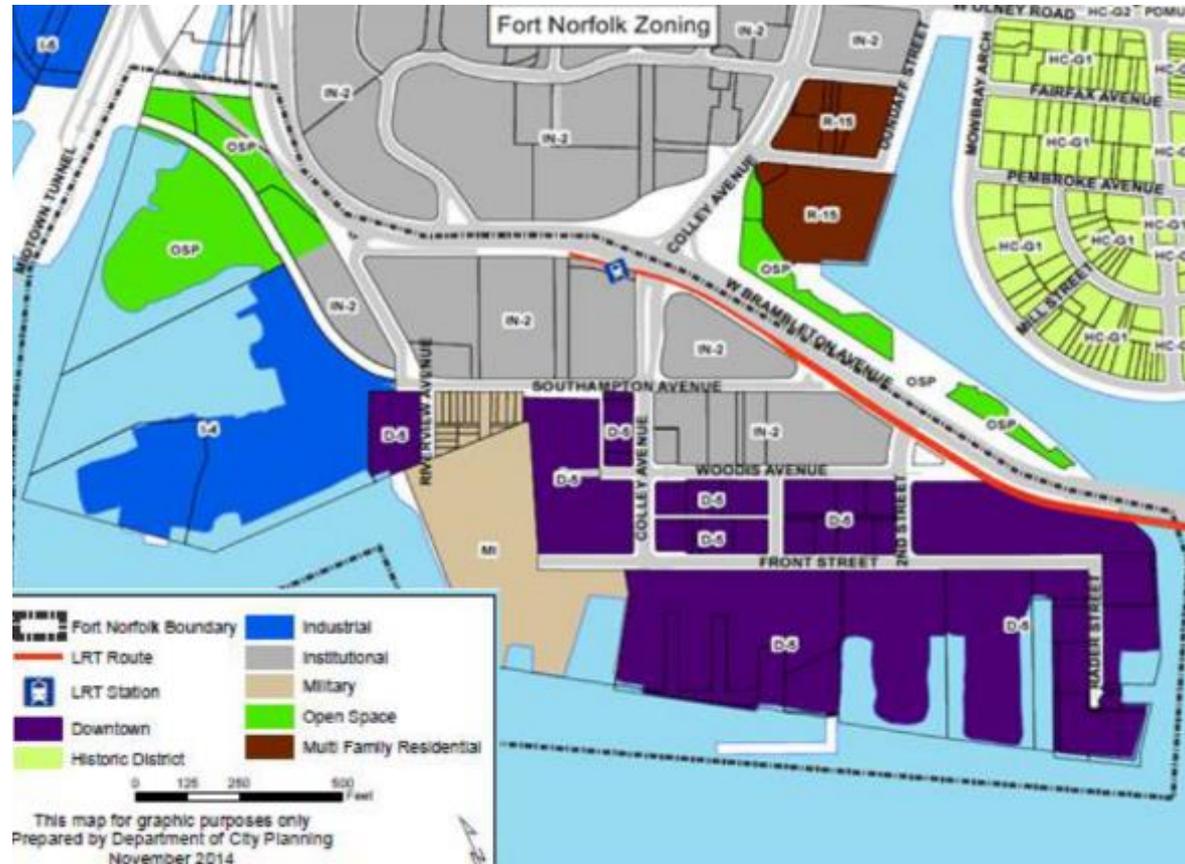
Planning & Design: Site Context

- Near a number of stable and emerging neighborhoods
- Easy access to downtown via Tide
- Waterfront along 3 sides
- Excellent views to surrounding areas

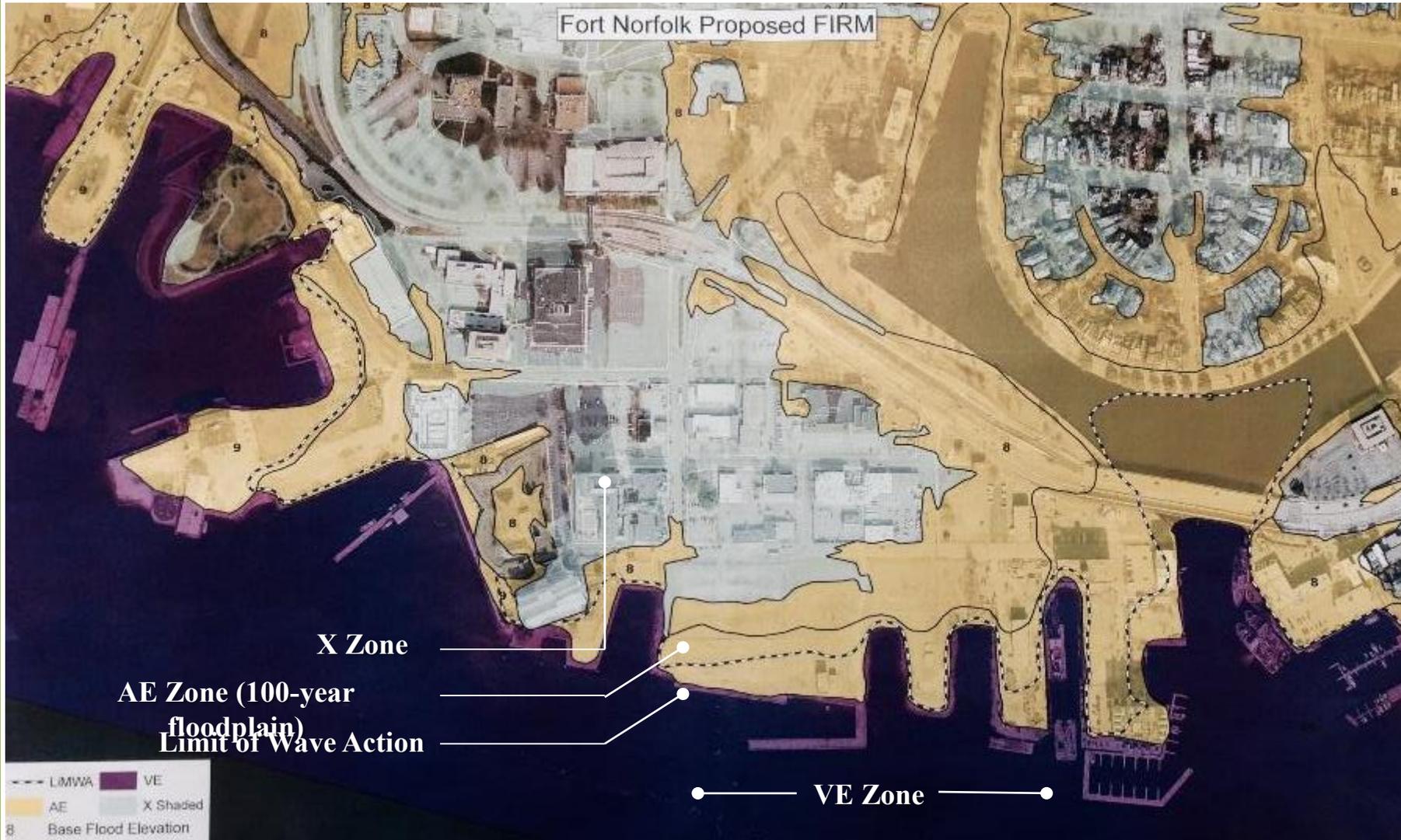


Current Zoning

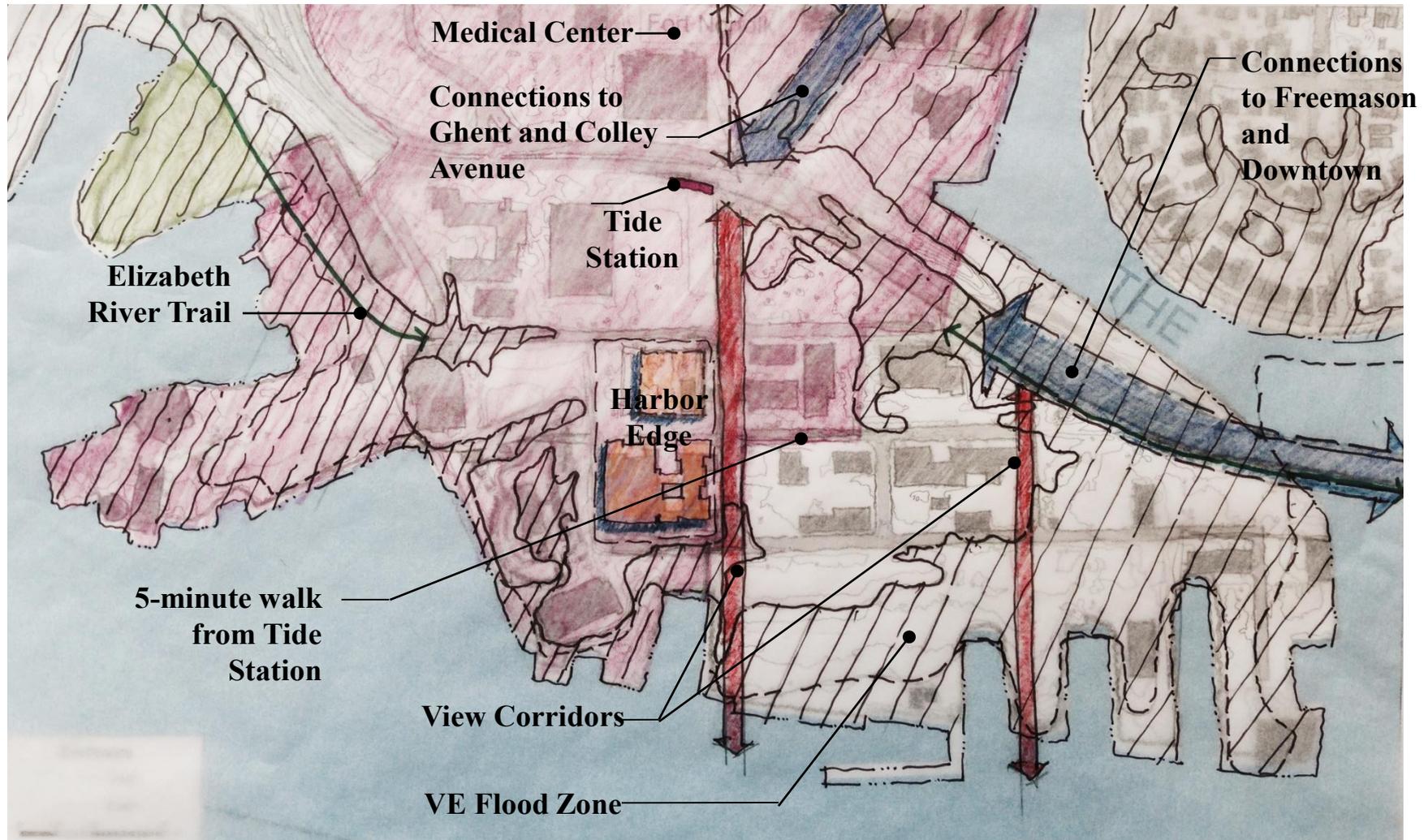
- Densest development nearer the waterfront
- Institutional near transit station
- No open space provided along the waterfront



Proposed FIRM Map



Physical Opportunities and Constraints



Planning & Design

Key Takeaways

- Market Requires Long-Term Time Horizon
- Phased Development Needed
- Make Fort Norfolk a Resilience Demonstration Project



Planning & Design

Setting the Stage

- Focus initial redevelopment at Tide station
- Activate the site
- Conduct feasibility study to validate development thesis



Planning & Design

- Transit-Oriented, Mixed-Use Development
 - Medical Center
 - Tide Light Rail
 - Resilience Itself



Planning & Design

Healthcare/Senior Living Uses

- Medical Center is key economic asset
- Long-term space need in Fort Norfolk
- Employee housing need in Fort Norfolk
- Success of Harbor's Edge shows appeal to seniors



Planning & Design

Fort Norfolk as Historic Asset

- Historical Asset of National Significance
- Embrace the asset
- Enhanced use leasing
- Engage state and national partners



Planning & Design

Leadership Challenges

- Fort Norfolk - transitioning from industrial to mixed use
- Thus lacks established community institutions
- Fragmented Land ownership
- Without community institutions, no consensus
- Community institutions create resilience



Planning & Design

Building Leadership

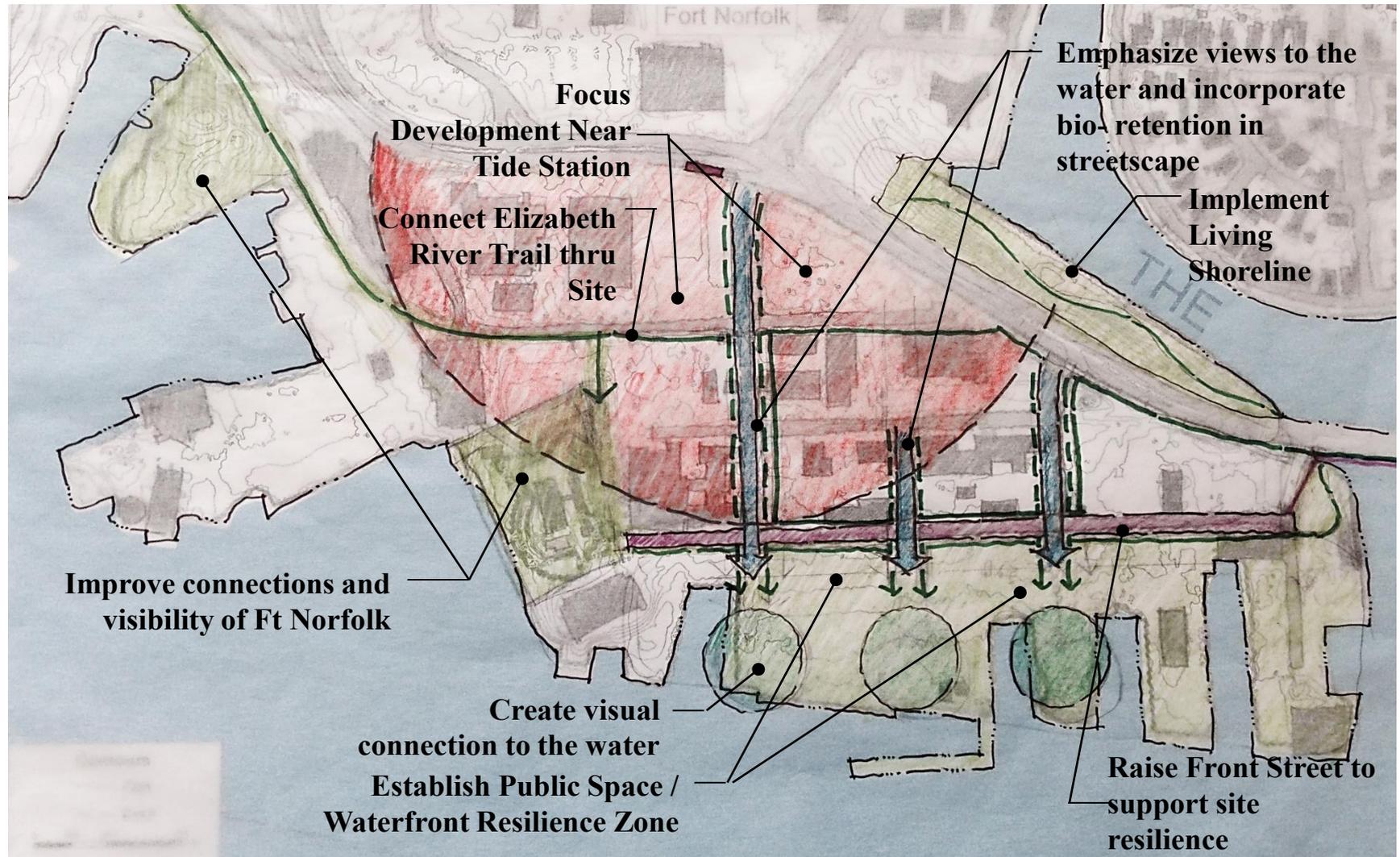
- Community Development Authority (CDA)
- Business Improvement District (BID)
- Civic League

Planning & Design

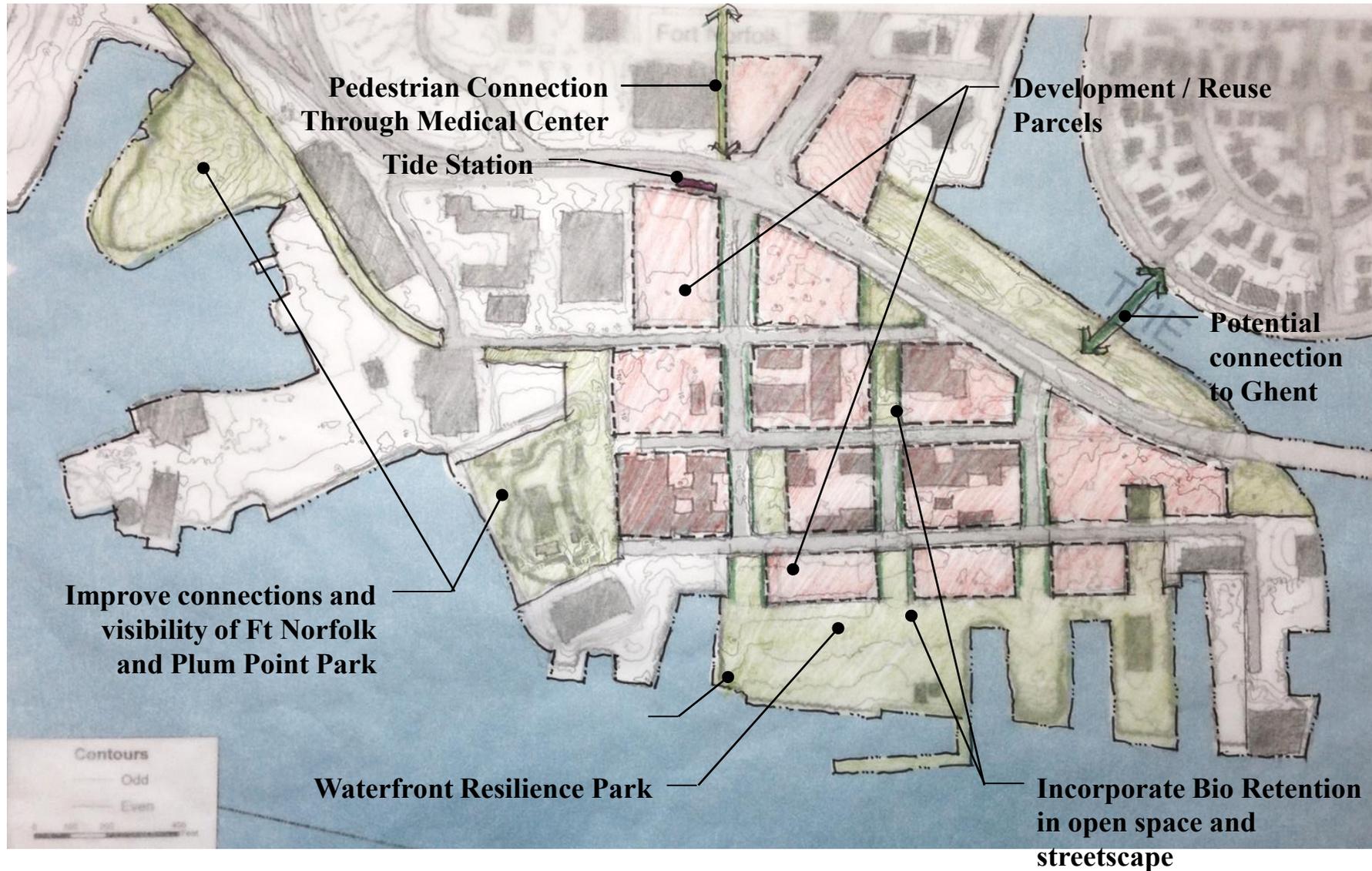
Land Use Techniques

- Transactional
- Control
- Zoning
- Environmental

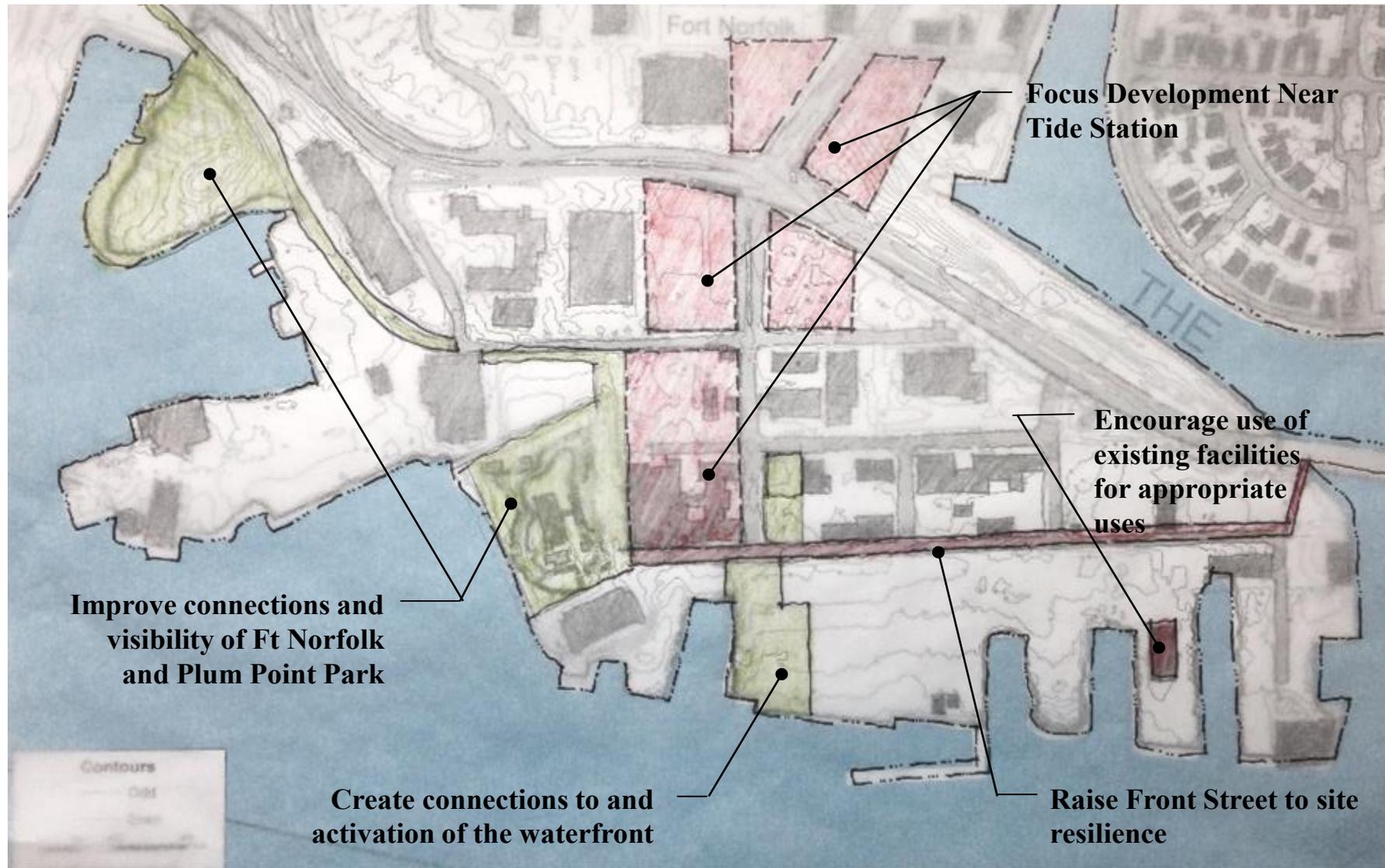
Physical Site Development Concept



Development Framework



Near Term Actions



Physical Resilience Techniques

- Bio-retention – collecting and treating stormwater runoff
- Permeable Pavement – allows stormwater to pass through and be collected and treated below the surface



Bio - Retention



Pervious Pavement



Bio - Retention

Physical Resilience Techniques

- Cisterns – receptacle for holding water from the roof or other impervious surface
- Underground Water Reservoir – system for collecting, treating and releasing stormwater



Cistern



Underground Storage Reservoir

Physical Resilience Techniques

- Living Shoreline - shoreline that incorporates as many natural elements as possible to create more effective buffers in absorbing wave energy and protecting against shoreline erosion



Living Shoreline



Living Shoreline

Physical Resilience Techniques

- Green Roofs – roof that is partially or completely covered by vegetation to help absorb rainwater and provide insulation



Green Roof



Green Roof

Physical Resilience Techniques

- Resilient Waterfront Park – park that incorporates features such as a living shoreline, floodable zones, bio-retention, and habitat areas



Yards Park, Washington DC



Beale Street, Landing Memphis

Social & Economic Resilience

- **Social Resilience:**
 - Community connections
 - Social capital

- **Economic resilience**
 - Diversity
 - Adapt to economic disruptions

Social Capital

- Building community networks
- Thriving resilient communities
- Harbor's Edge storm procedures



“Network theory has discovered that ... a few nodes stand out as extraordinarily better connected than average nodes. These nodes are called hubs. A healthy network has multiple hubs, all well connected to each other.”

Ft. Norfolk Resilience District

- Housing choice
- Job choices
- Multi-modal transportation options
- Waterfront access
- Emergency preparedness training



Coastal Urban Resilience Institute

- Become global leader on coastal resilience
- Norfolk as a resilience laboratory
- Demonstration technologies and incubator support
- Partnership with local universities, NGO, and government
- Create opportunity from adversity

Social Resilience

Housing Options

- Market & workforce
- Multi-generational
- Storm safe new construction
- Proximate to critical institutions at EVMC



Social Resilience

Employment

- Diversity
 - Skilled
 - Low-barrier to entry
- Skill development
- Entrepreneurial support



Social Resilience

Transportation

MULTI-MODAL

- Transit
- Major road access
- Bicycle trails



Social Resilience

Access & Recreation

- Passive and active recreation options
- Accessible
- Affordable
- Water-oriented
- Benefits everyone



Social Resilience

Emergency Preparedness Training

Partners

- City Office of Emergency Preparedness
 - Red Cross
 - U.S. Army Corps of Engineers
 - NOAA
-
- Key organizations on site
 - Prepares residents
 - Builds social capital



Innovation Check In



What is your competitive advantage?

“Don’t Believe Your Own Press Release”



Do you have entrepreneurial culture?

How do you identify commercializing opportunity?



Do you have availability of capital and early stage financing?

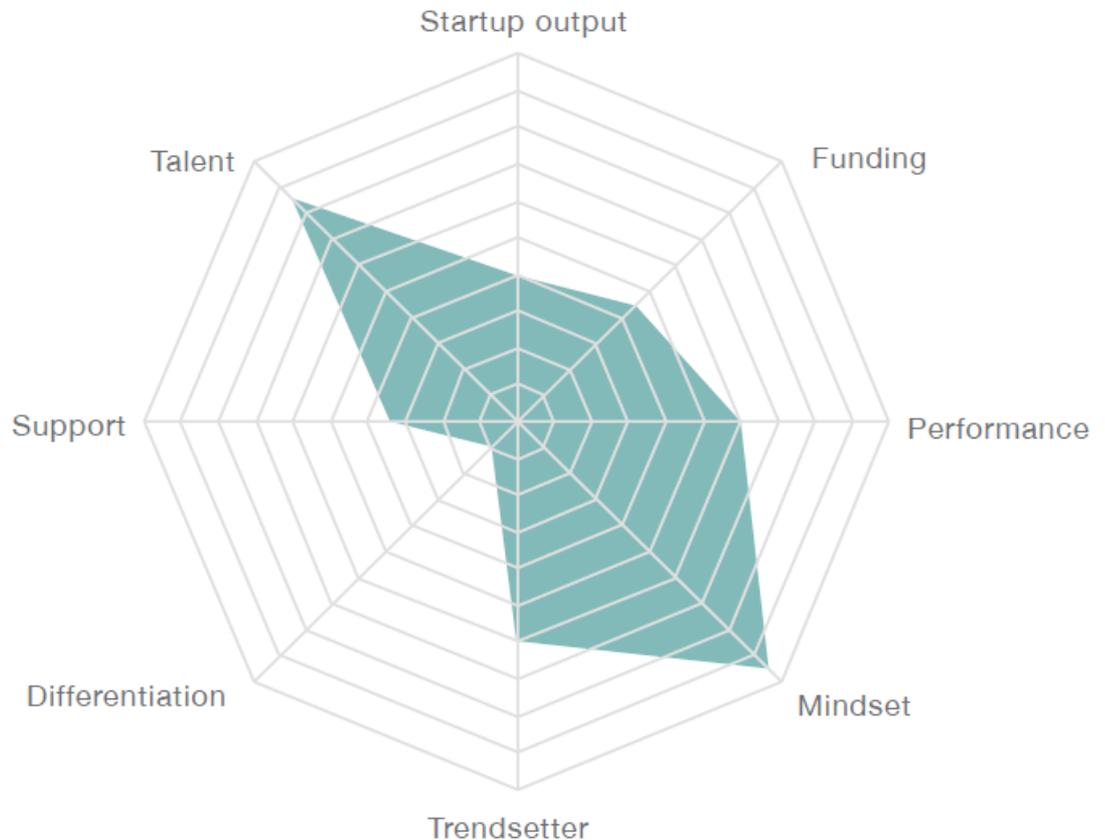
Where does it come from?

INNOVATION & ECONOMIC RESILIENCE

START UP GENOME

- Resilience comes from diversity, the ability to regenerate and being grounded in the local context

Vancouver



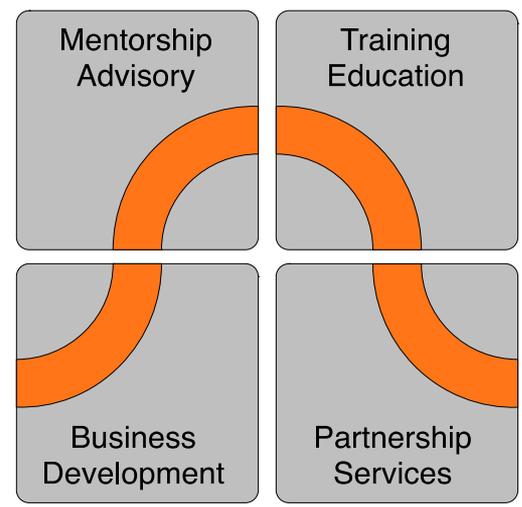
Create a Global Presence

- Build on Anchors
- Program for business and capital attraction
- Use network approach (social physics)

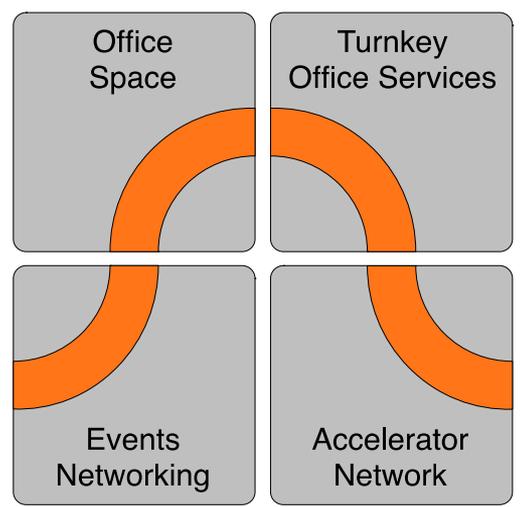
Vancouver's Hydrogen Fuel Cell industry

- 77% of world's R+D in Vancouver
- Stimulated by \$20M National Research Council grant 2002
- 2,000 FTEs + \$211M sales in 2011
- Mercedes Benz \$50M 3,300sf manufacturing plant ships fuel cells to Germany

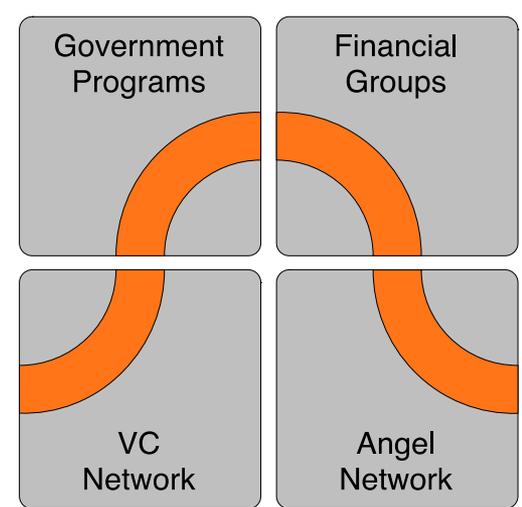
Programs & Services



Facility (the Centre)



Funding Network



Program for Local Growth

- Train and retain human capital
- Generate and export ideas
- Demonstration + leadership



COMMUNITY ACCESS AND ACTIVATING THE SITE

“Industrial land is where the most interesting things happen – where ideas, innovation and experimentation happens. It is also where culture is produced and attracted to.”

Bruce Katz



Tell the Story

- Arts, culture + design appeal to young people, show mature industries how to innovate and provide ingredients to create innovative spaces



THE PEOPLE, PLACES, AND THINGS TO SEE AND DO IN THE DOGPATCH AND SURROUNDING NEIGHBORHOODS OF SAN FRANCISCO MAP



SCULPTURE IN BUILDING ON FRANKLIN STREET

TRAMPOLINE LEANING AGAINST FENCE AT FIELD ON HUDSON AND CLARKSON STREETS. I THINK IT IS TO THROW BALLS AGAINST.

TWO STEPS ON WARREN STREET

COVERED MOTORCYCLE ON JAY STREET

NEON SIGN ON WEST BROADWAY IN FRAME SHOP

SOCCER BALL OUT ON A FIRE ESCAPE ON STABLE STREET

THE BACK OF A YELLOW THERMOMETER IN WINDOW ON STABLE STREET

MODEL PV-120U/VTE2 1966 IN ELECTRONICS SHOP ON MURRAY STREET

NEWS TRUCK ON PARK PLACE. IT DROVE AWAY.

CROSSING GUARD - A SCHOOL JUST GOT OUT ON GREENWICH STREET.

COOKIE IN WINDOW ON HUDSON STREET

SHOES IN WOOLWORTH BUILDING

RAMP PROPPED UP IN DOORWAY ON HUDSON STREET

TWO 11s ON HARRISON STREET

HANDRAIL ON NORTH MOORE STREET

SLIPPERS ON VARICK STREET

THERE WAS A PHOTO SHOOT ON STABLE STREET TODAY

STUFFED FROG IN TOY STORE ON GREENWICH STREET

PLANT IN POT THAT IS CRACKED ON WASHINGTON STREET

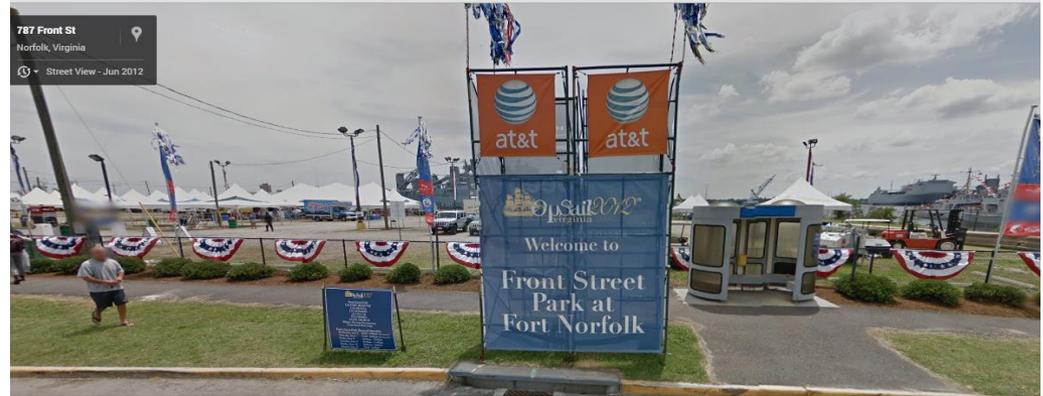
Set Aside the Space

- Flex-, Maker-, Prototyping spaces
- Community space
- Connections to Chelsea, Ghent businesses



Activate with Events

- Congregate
- Recreate
- Create
- Live with the water



Key Themes

- Transit-Oriented Development
 - Grow from the Tide station
 - A place for All Residents
- Activate the Site
 - Programming and Policies for activity, innovation, commerce: energy
- Water's Edge
 - Open space; public amenity; temporary, low-Intensity uses
 - Soft infrastructure for shore protection

Monday Morning Agenda

Key Actions

- Conduct a thorough Feasibility Study
- Create a Ft. Norfolk Community Development Association
- Create a local Economic Development plan
- Create a Coastal Urban Resilience Institute
- Develop workforce housing / mixed use near Tide Station

Thank you to our stakeholder interviewees...

John Matson | Vince Mastracco | Charles McPhillips | Mary Miller | Bob Kerr | Barry Bishop | Dr. Terry Whibley | Rev. Jean Bozeman | Peggy Haile McPhillips | Tara Saunders | Dennis Richardson | Mark Babashanian | Col. Paul Olsen | Dave Harnage | Dr. Richard Homan | Michelle Hamor | George Homewood | Kristen Lentz | Richard Broad | John White | Darryl Critendon | Bobby Tajan | Lenny Newcomb | Jeremy Sharp | Denise Thompson | Bill Van Buren | Dan Neumann | Andrea McClellan | Pam Boatwright | Mel Price | Ray Gindroz | Thom White | Roy Hoagland | Paige Pollard | Mark Perreault | Skip Stiles | Tony Watkinson | Emily Steinhilber | Karen Rudd | Tom McNeilan | Randy Royal | Paul Fraim | Barclay Winn | Mason Andrews | Mike Locher | Joseph Leafe | Burrell Saunders | Michael Vernon | Buddy Gadams | John Porter | Jack Kavanaugh | Peter Chapman | Kevin Murphy | Andrew Fine | John Peterson | Ron Williams | Ben McFarlane | David Basco | Marcus Jones | Paul Riddick | Terry Finch | Julie Wilcox | Jim Wofford | Neil Volder III | Allen Baker | Kirk Hofelich | Erin Zabel | Peter Raffetto | Andy McCullough | Pieter Reidy | Perry Frazer | Ken Benassi | Ray Amoruso | Heather Wood | Eric Neil | Lisa Chandler | Mark Poutasse

And everyone else!

Questions?

