

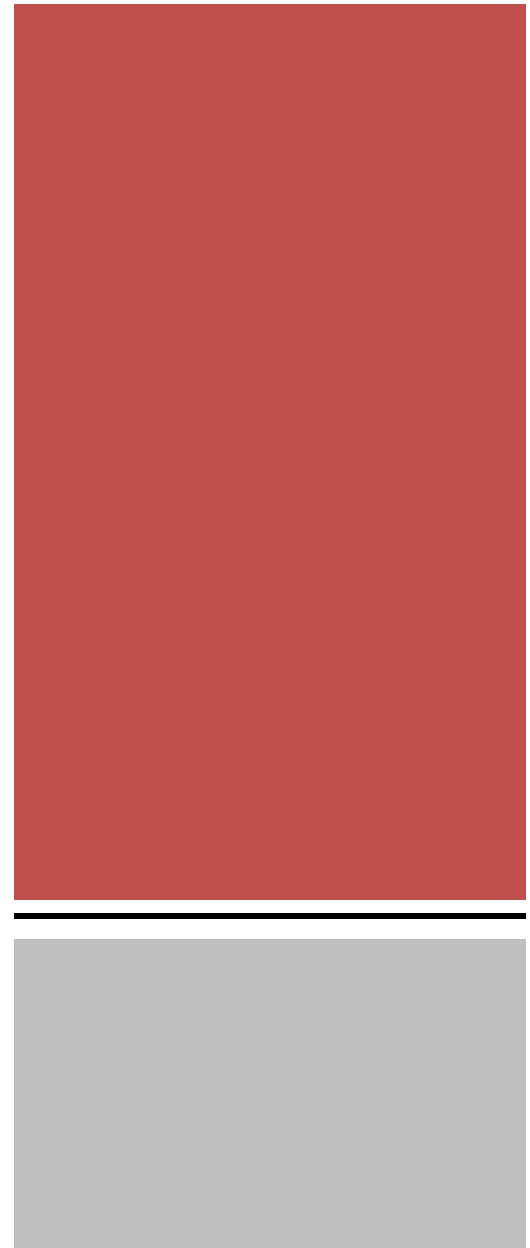


# **Delivering Infrastructure Who said there was NO Money?**

New Partners for Smart Growth  
Baltimore, MD  
January 31, 2015

# Overview

- Outstanding panel introduction
- Review current state of infrastructure and funding challenges
- Looks toward new directions to address the challenges
  - Private sector perspective
  - Public sector perspective
  - Non-profit sector perspective
- Lessons learned
- Q&A



# Jessica Murray

- Head of External Affairs, Infrastructure Development North America, Skanska USA Inc.
- 18 years' experience in the private sector
- Active involvement in PPP development
- Expertise in the areas of
  - Public affairs
  - Community and stakeholder outreach
  - Marketing
  - Corporate communications



[Jessica.murray@skanska.com](mailto:Jessica.murray@skanska.com)



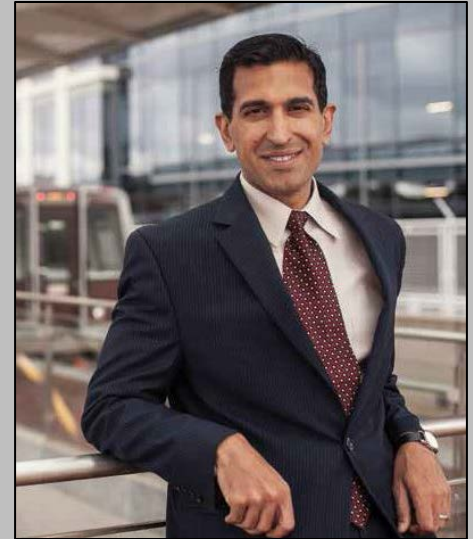
# Paul Morris

- President and CEO, Atlanta Beltline, Inc.
- 30 year career in private, public and non-profit sectors
- North American, European and Asian experience
- Strategic consulting in
  - Transportation
  - Infrastructure investment
  - Urban redevelopment
  - Natural resource management
  - Corporate facilities development

PMorris@atlbeltline.org

# Shyam Kannan

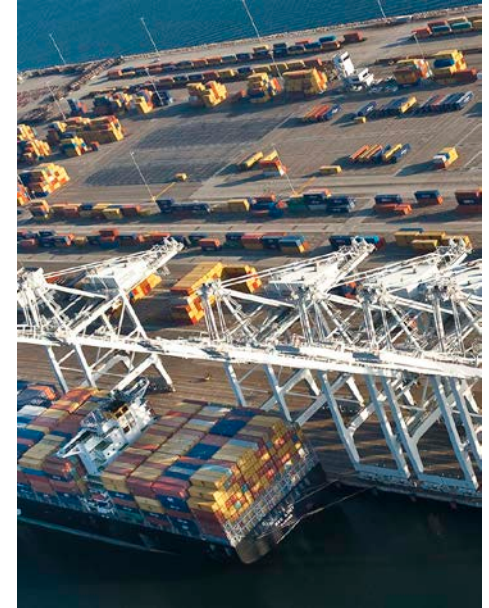
- Managing Director, Planning, WMATA
- 12 years in public and private practice
- National and international experience
- Areas of expertise focus on
  - Strategic systems planning
  - Market and economic development
  - Value capture
  - Innovative infrastructure finance



[skannan@wmata.org](mailto:skannan@wmata.org)

# Importance and Value of Infrastructure

- Infrastructure is fundamental to a long-term livability and economic health
- Infrastructure is public in nature, affecting communities and regions
- Infrastructure is in a competitive environment for public funding in an era where there:
  - Are declining revenues
  - Is often a lack of community vision
  - Is indecision on spending priorities



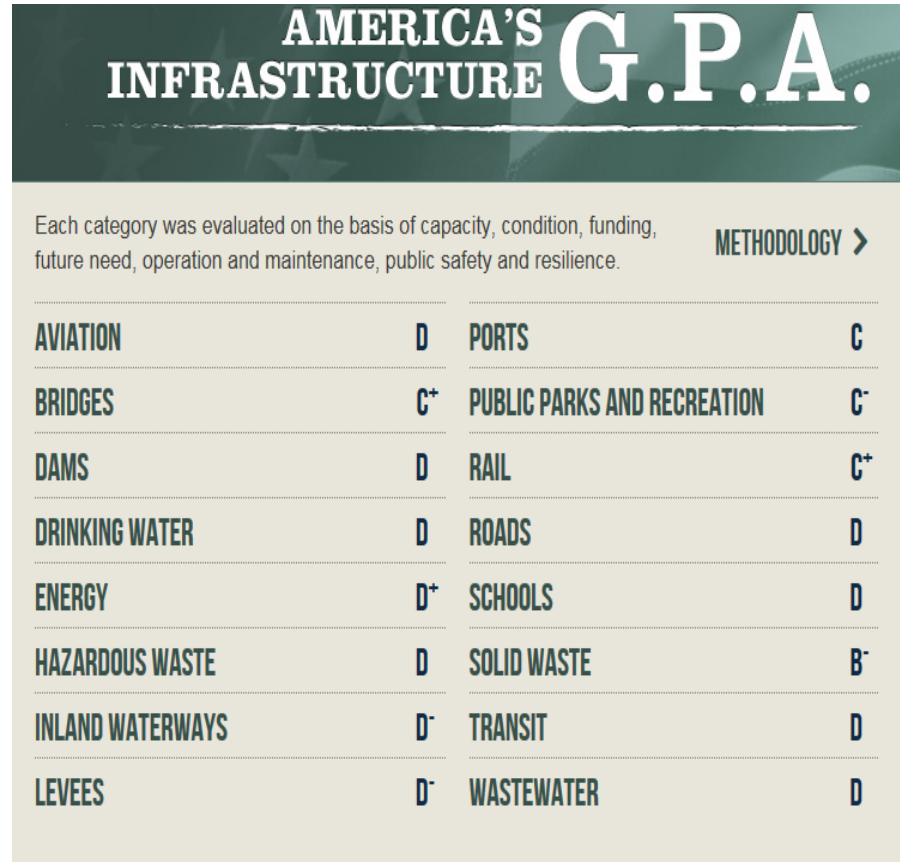
# State of Today's Infrastructure

- North America's infrastructure is in decline
- Every sector is affected
  - Transport
  - Energy
  - Water
  - Waste
  - Public realm
  - Information
- Inability to maintain even a state of good repair



# ASCE's 2013 Report Card

- 15 categories rated
- Overall grade of D+
- \$3.6 trillion = five year investment need for state of good repair
- US ranked 25<sup>th</sup> worldwide behind
  - Switzerland
  - Austria
  - Bahrain
  - South Korea
  - United Kingdom



AMERICA'S INFRASTRUCTURE G.P.A.

Each category was evaluated on the basis of capacity, condition, funding, future need, operation and maintenance, public safety and resilience. [METHODOLOGY >](#)

AVIATION	D	PORTS	C
BRIDGES	C+	PUBLIC PARKS AND RECREATION	C-
DAMS	D	RAIL	C+
DRINKING WATER	D	ROADS	D
ENERGY	D+	SCHOOLS	D
HAZARDOUS WASTE	D	SOLID WASTE	B-
INLAND WATERWAYS	D-	TRANSIT	D
LEVEES	D-	WASTEWATER	D

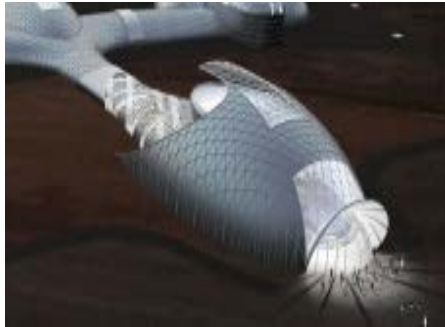


# Just When You Think the Well is Dry...

- Facilities are aging and deficient
- Construction costs are rising
- Revenues are declining
- Competition for funds is increasing
- So, what do you do when you are finding yourself in such circumstances?
  - Look for “unusual” suspects
  - Seek innovation
  - Insist on performance measures
  - Share rewards and manage risks



**SO, HOW CAN WE REACH THE INFRASTRUCTURE OF TOMORROW?**



# Make an Attitude Adjustment...

*"We knew we couldn't do all of this just with sales tax revenue. So we could either sit back and point fingers and say why we couldn't get these projects done, or we could go to the private sector, explain our situation and ask them to help."*

Phillip Washington, General Manager  
Regional Transit District (Denver)





# The PPP Market – An Innovative Approach to Finance

Jessica Murray,  
Skanska USA

*Oculus, World Trade Center, New York, U.S.*



## Skanska AB

- Founded 1887 in Sweden
- Listed on the Stockholm Stock Exchange
- 2013 revenues: USD 21 billion
- Fortune 500 Company
- 57,000 employees
- 10,000 ongoing projects

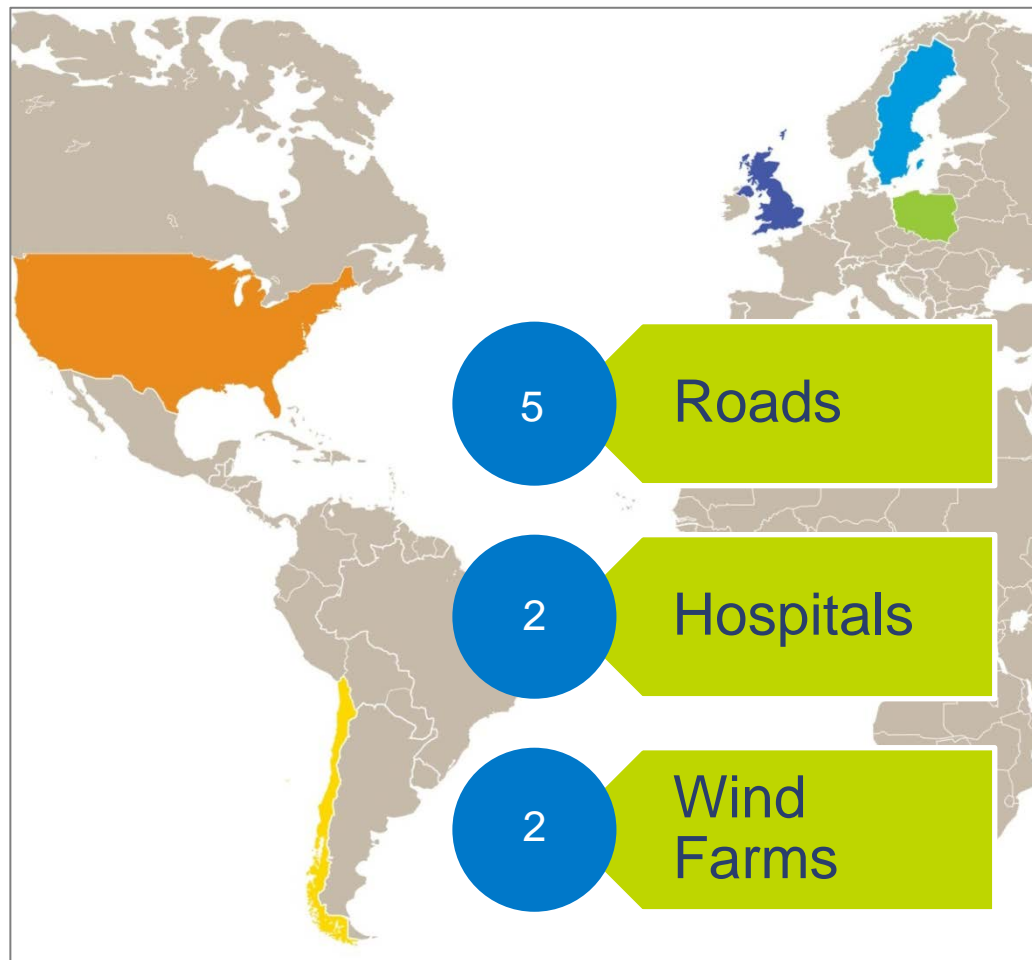


## Skanska USA

- ENR: 4th largest contractor on revenue
  - \$6.7 billion
  - Ranked 2nd in General Building
  - 3rd largest Heavy Building Contractor
  - 9,600 US employees
- Four Business Streams:
  - Civil Construction
  - Commercial Construction
  - Commercial Development
  - Infrastructure Development

# Infrastructure Development

- 110 employees
- 31 projects in 9 countries (historic)
- Current portfolio of 9 P3 projects
- Committed equity \$600M; total construction costs of \$7billion
- U.S. headquarters in Washington, D.C.
- #1 growth market



# Elizabeth River Tunnels

Construction of new tunnel

Maintenance and safety improvements to existing tunnels

Interchange modifications in Norfolk and extension of MLK Freeway in Portsmouth


\$2.1 B total project value

~6 year construction

58 year concession

Equity: Skanska, Macquarie

Construction: Skanska, Kiewit, Lane

Operated by: 



# Interstate 4 Ultimate – Florida

21-mile highway replacement with tolled managed lanes through heart of Orlando

\$2.3 B total project value  
~7 year construction  
40 year concession

Equity: Skanska, John Laing

Construction: Skanska, Granite, Lane



# US Public Private Partnerships - How do they work?

Concession agreement with a public client in which a consortium of private companies develops, constructs, operates, and maintains a project – such as a toll road or bridge or hospital – and is responsible for implementing debt and equity project financing



# What is a P3?

- A procurement method for large capital projects that features:
  - ***Transfer of major project risks from the public to the private sector***
  - Performance-based scope
  - Usually competitive bid process
- Involves a long-term contractual partnership among:
  - Government entities
  - Private investors/Developers/Lenders
  - Construction firms, Operating companies
  - Asset & Operations managers
- Requires a long-term repayment stream
  - User fee (tolls)
  - Annual “availability” payment from the government client
  - Alternative revenue streams depending non asset class
- Asset reverts to public sector at end of concession at zero cost
  - Typical concession length is 25-50 years, as long as 100

# PPP Market Drivers

- National infrastructure crisis, need to upgrade and build new capacity
- Large budget deficits, balance sheet constraints
- Public debt limitations
- Leveraging limited public funds with private investment
- Growing urban population
- Growing support of user-based tolls over new taxes



Purple Line, Maryland, U.S.



New Bridge St. Lawrence, Montreal, Canada



Elizabeth River Tunnels, Virginia, U.S.



I-4 Ultimate, Orlando, FL

## What kind of infrastructure?

Airports  
Hospitals  
Schools  
Government buildings  
Street Lighting  
Wind farms

Highways  
Bridges  
Tunnels  
Railways  
Power plants  
Wastewater plants

# Benefits to government clients

- Risk Transfer!
- Performance-based spec allows for innovation
- Asset lifecycle planned for from inception
- (Potentially) faster project delivery
- High standards of maintenance and operation set by public sector
- Fixed-price, date certain construction
- The asset is handed back in excellent condition at the end of the contract



Autopista Central Highway, Chile

# Benefits to users

- Access to better infrastructure for living, traveling and working
- Infrastructure maintained in top condition throughout its life
- Politicians can't mess with your infrastructure funding (as much)
- Infrastructure is delivered in advance of its economic costs



University Hospital Coventry, UK

# Optimized allocation of risks

The party best suited to assess, manage, and price the risk should also be harboring the risk

Traditional procurement		PPP	
State	Contractor	State	Contractor
Financing			Financing
Permits		Permits	
Program		Program	
Force Majeure		Force Majeure	
Organization			Organization
Design			Design
	Construction		Construction
O&M			O&M
Availability			Availability
Revenue			Revenue



E75 Motorway, Finland



# Two principal compensation models

	<b>Availability model</b>	<b>Market risk model</b>
Compensation/Revenue	Predetermined, contractually agreed	End-user fees and market based
Project company's responsibility/rights	Responsible for providing availability and service to an agreed standard	Right to collect end-user fees e.g. toll-road usage
Normal capital structure	5–10% equity	20–40% equity
Location	Mainly U.S., Europe, Canada	Mainly Latin America, Quebec



Bristol Schools, UK

## Challenges to the P3 Model

- Enabling legislation and political will
- Upfront cost
- Education of clients, clients' advisors, stakeholders
- Clear standards of evaluation
- The inertia of short-term thinking
- Environmental & Sustainability
- Quality/Price

# U.S. Market Assessment

- New states, sectors, opportunities in play
  - ~33 states with legislation
  - Social market is warming up in addition to transportation
- Several attractive projects coming to market
- Growing, intense competition
- Aspects of PPP remain controversial
- Market Leaders
  - Virginia, Florida, Texas, California, Colorado, Indiana



Purple Line, Maryland, U.S.



New Bridge St. Lawrence, Montreal, Canada



Elizabeth River Tunnels, Virginia, U.S.

# U.S. Market Assessment

- Federal Highway Trust extended till May 2015
- Support from administration on Build America Initiatives and PPP
  - Investing in Drinking Water and Wastewater Systems through a new Center at EPA
  - Driving Investment to Rural America via a New USDA Rural Opportunity Investment Initiative
  - Implementation of Qualified Public Infrastructure Bonds (QPIB)
- At the state and local level, political will to protect/drive PPP remains mixed



Purple Line, Maryland, U.S.



New Bridge St. Lawrence, Montreal, Canada



Elizabeth River Tunnels, Virginia, U.S.

# In Summary

- ➔ Clearly a need to strengthen U.S. infrastructure
- ➔ PPP momentum growing nationwide
- ➔ Robust pipeline and growing rapidly
- ➔ New states, sectors evolving daily
- ➔ Political will is the ultimate driver
- ➔ The money is there for the right projects



Washington Metropolitan Area Transit Authority

# Alternative Financing Options for Mature Transit Systems

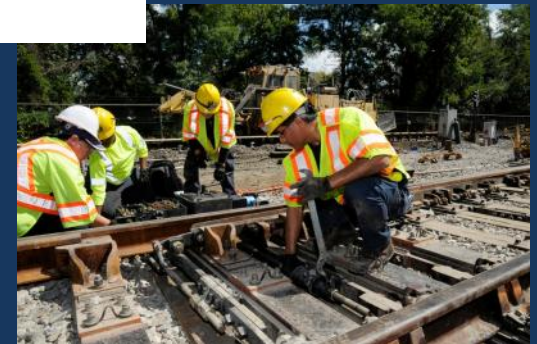
New Partners for Smart Growth

January 31, 2015



# Rebuilding the Foundation

Metro Forward: \$5 billion, six-year investment program



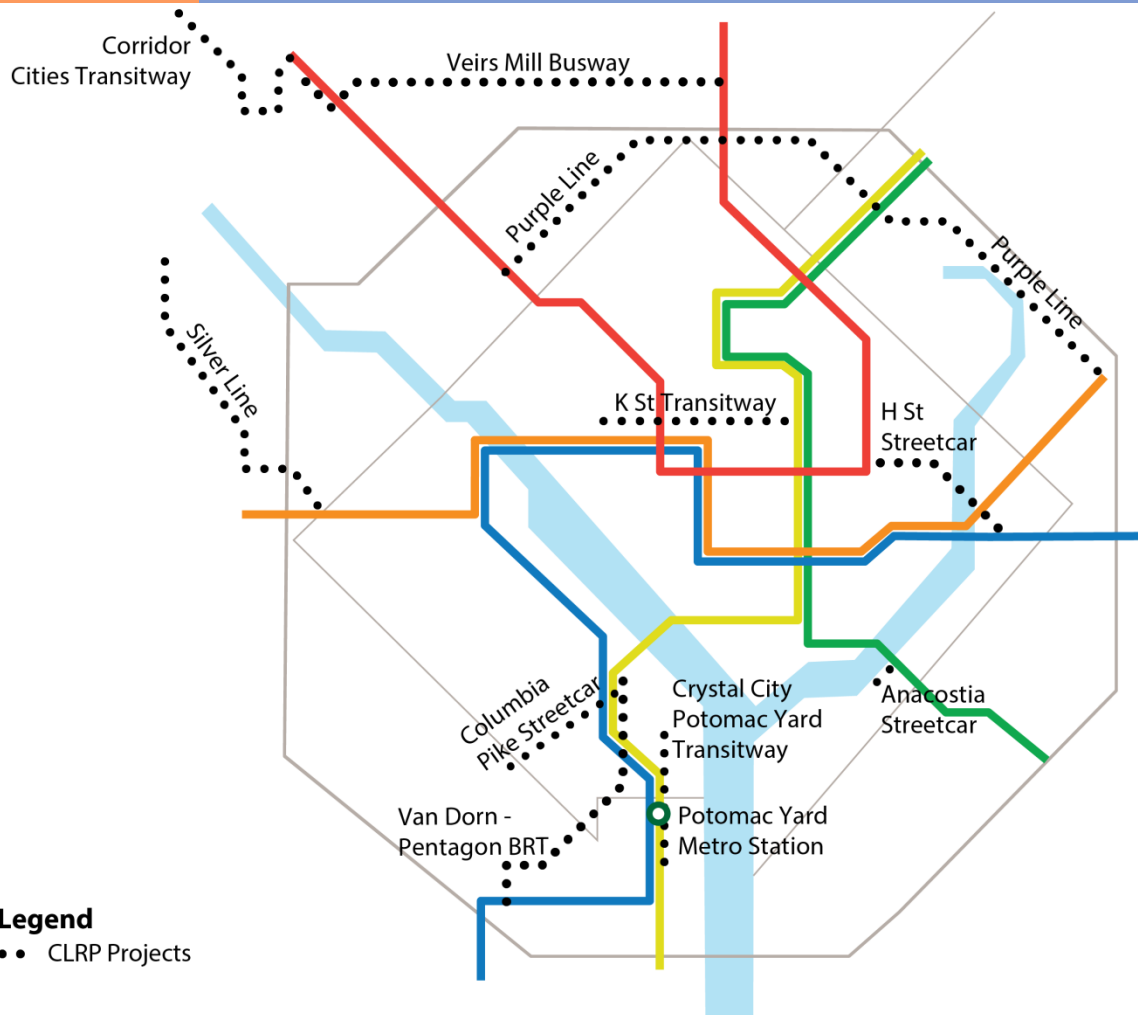
# What If We Do Nothing?

- More delays, service disruptions and crowded conditions
- More congested highways as regional growth will outpace Metro investment
- Reduced overall quality of life
- Harms region's competitive advantage –talent, jobs, and investment dollars





# What If We Do Nothing?



Metro is integral to the success of the region's current transit investments.

If these projects get built and Metro cannot keep up with growth, do they deliver as promised?

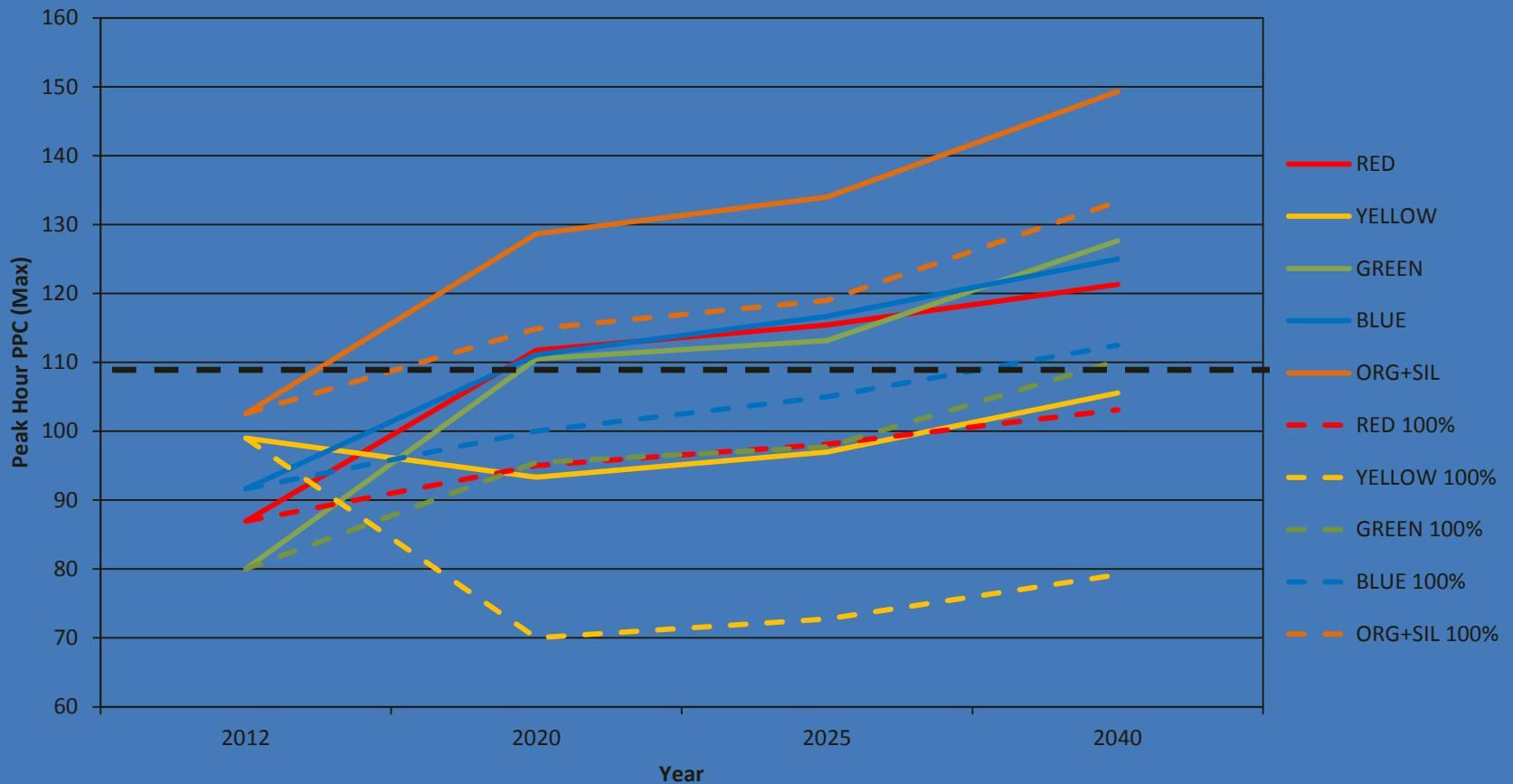
# Forecast Metrorail Crowding

AM Peak, 2014 - 2030



# With Eight-Car Trains

## Estimates for Crowding across All Lines with and without 100 Percent 8-car Trains





# Momentum Delivers Metro 2025



## Longest possible trains to provide more seats

*More cars + power improvements and maintenance facilities to operate all 8-car trains during rush hours*



## Improved flow through major stations

*More escalators, stairs and mezzanine space added at transfer Stations to accommodate more riders more comfortably*



## More reliable, faster bus service

*Bus-only lanes along major corridors, additional limited-stop and express service, and more buses will upgrade bus service*



# Momentum Delivers Metro 2025



## More timely, reliable customer information

*Metro will provide a network for region-wide transit information and fare collection, giving customers information when and how they want it*



## Improve reliability of rail system

*New connections will allow trains to more easily be routed around delays and get back on-time more quickly*



## Increase rush hour service on the Blue Line

*New track connections or a new station at Rosslyn will allow for more frequent Blue Line service during rush hours*



# Question

How easy is it to apply alternative financing and funding mechanisms to existing systems?

Metro 2025 Initiatives





# Convened Thought Leaders Expertise

- Banking/Finance on public-private partnerships
- Academia on value capture and real estate economics
- Peer agencies on enhanced leverage
- Operators on previous experience/lessons learned





# Summary of Panel Discussions

- Funding and financing not synonymous
- No “new money” via mechanisms
- Applying tools to existing integrated system poses challenges
- TIFIA becoming less and less attractive
- All mechanisms require recurring predictable revenue streams
- Metro’s cost inflation presents jurisdictional challenges





# Alternative Mechanisms Explored

- Public-Private Partnerships (P3)
- Real Estate Value Capture
- Infrastructure Bank
- Station Adoption
- Regional Sales Tax
- Enhanced Debt Instruments



## **CREATIVE CAPITAL + METRO**

### **ALTERNATIVE FINANCING FOR METRO 2025**

WMATA's *Momentum* necessitates strategic investments in seven capital projects to support the region's growth over the next decade and beyond. Connecting the capital program to ways of paying for the investments may require innovative thinking and new financial tools.



# National Precedents

Agency or Jurisdiction	Mechanism
NJ Transit's Hudson-Bergen Light Rail Line	Public-Private Partnership
Charlotte, NC Commuter Rail 'Red Line'	Value Capture
Fairfax County's Dulles Rail Transportation Improvement District	Station Area Tax District
California's Infrastructure and Economic Development Bank	Infrastructure Bank
Los Angeles County's Measure R	Regional Sales Tax



# Mechanisms' Pros & Cons

## Public Private Partnerships (P3)

- + Initial private capital equity to supplement public funds
- + Risk transfer to the private partner
- + Incentive for state of good repair by partner



- Requirement of a steady fund flow to repay partner

Metro 2025 Application: Red Line, Metrobus Priority Corridor Network



# Mechanisms' Pros & Cons

## Value Capture or Property Tax within Station Areas

- + Strong relationship to certain Metro 2025 projects
- + Allows partners to invest in “local” projects



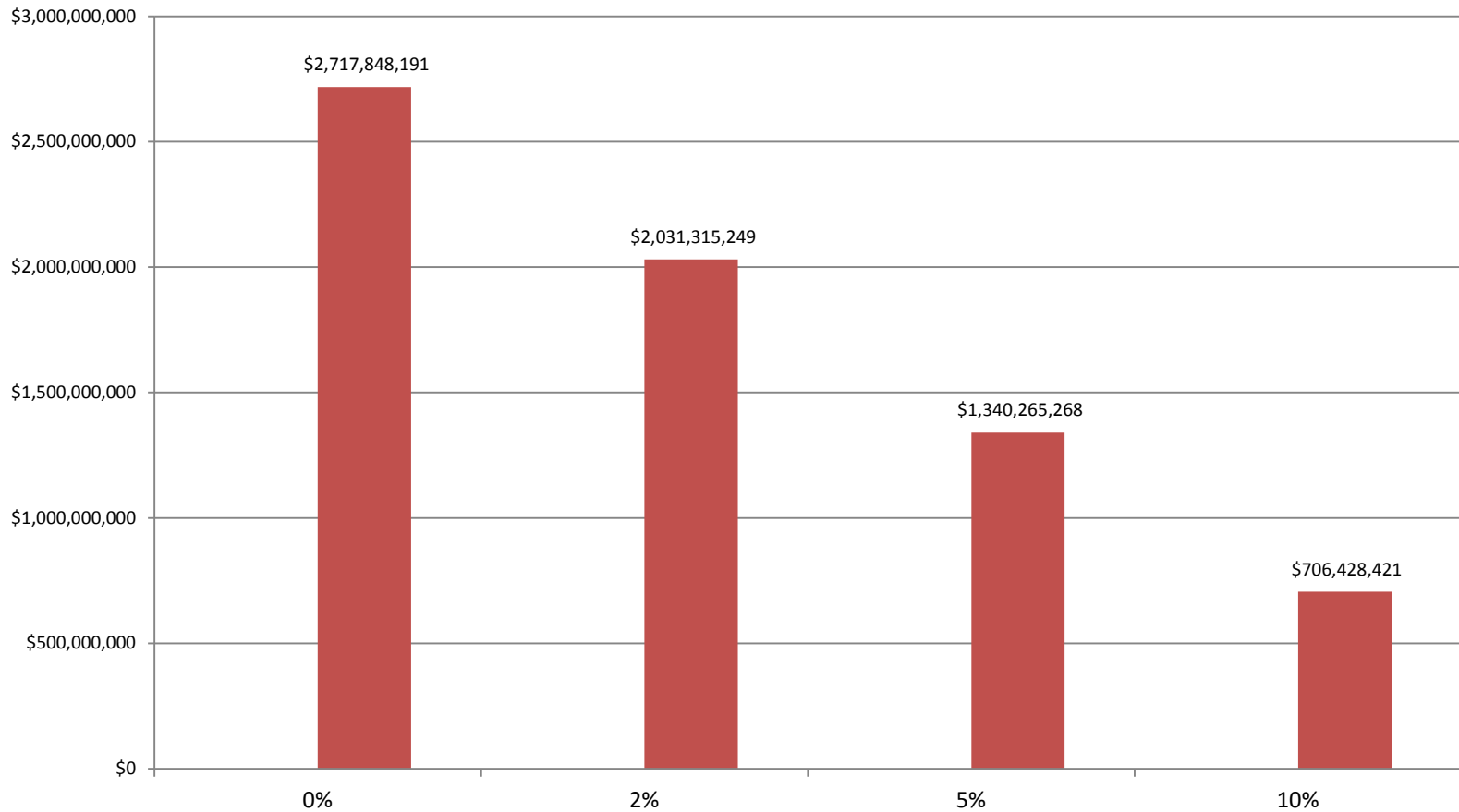
- Difficulty of capital financing based on TIF revenue
- Overlap of jurisdictions' established value capture
- Less powerful in areas where land is already developed

Metro 2025 Application: Core Stations, Passageways



# System-Wide Value Capture

**Impact of a \$0.03/\$100 AV Property Tax (Hypothetical)  
Properties within 1/2 Mile of Metrorail**



## Infrastructure Bank

- + Large-sum of upfront capital
- + Hybrid bank – Private sector contributions



- Requirement of a revenue base of taxes and/or fees
- Possibility of insufficient revenues
- Hybrid bank – Highly complex investment agreements

Metro 2025 Application: None



# Mechanisms' Pros & Cons

## Station Adoption

+ Enhancements and improvements via local organization



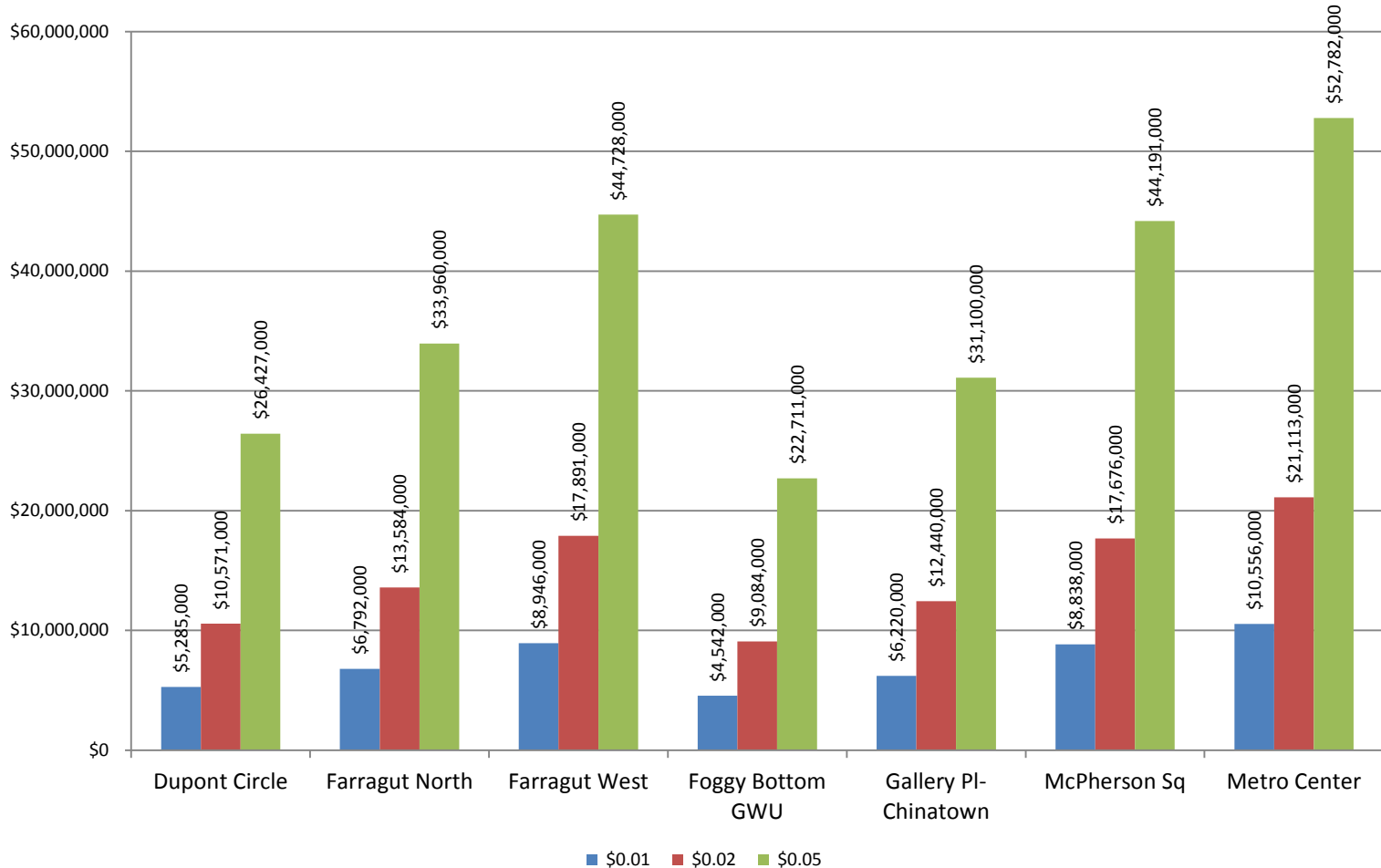
- Constraints of Metro safety and security protocols
- Possible restrictions of Metro labor agreements
- Diversion of current advertising revenue to the partner

Metro 2025 Application: Core Stations



# Station Area Value Capture

Present Value of Property Tax Surcharge, Various Rates  
(1/4 Mile from Station, 20 Yrs, Assuming 5% Cost of Capital)







# Mechanisms' Pros & Cons

## Regional Sales Tax

- + Ability to piggyback on existing mechanisms
- + Generation of significant revenues
- + Relative stability year-to-year, though subject to cycles



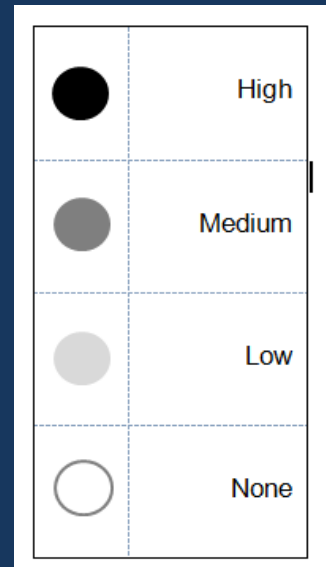
- Difficulty to revisit major transportation funding

Metro 2025 Application: All seven initiatives



# Potential Mechanisms for Metro 2025

Metro 2025 Initiative	Public-Private Partnerships	Value Capture or Station-Area Tax Districts	Infrastructure Bank	Station Adoption Programs	Supplemental Regional Sales Tax
100% Eight Car Trains	●	●	●	○	●
Core Station Improvements	●	●	●	●	●
Metrobus Priority Corridor Network	●	●	●	●	●
New Blue Line Connections	●	●	●	●	●
Next Generation Communications	○	○	●	○	●
Bus Fleet Expansion	●	○	●	○	●
Pocket Tracks	●	○	●	○	●





# // The Atlanta BeltLine & Public Private Partnerships

*New Partners for Smart Growth  
Conference*

# // Where is the Atlanta BeltLine?



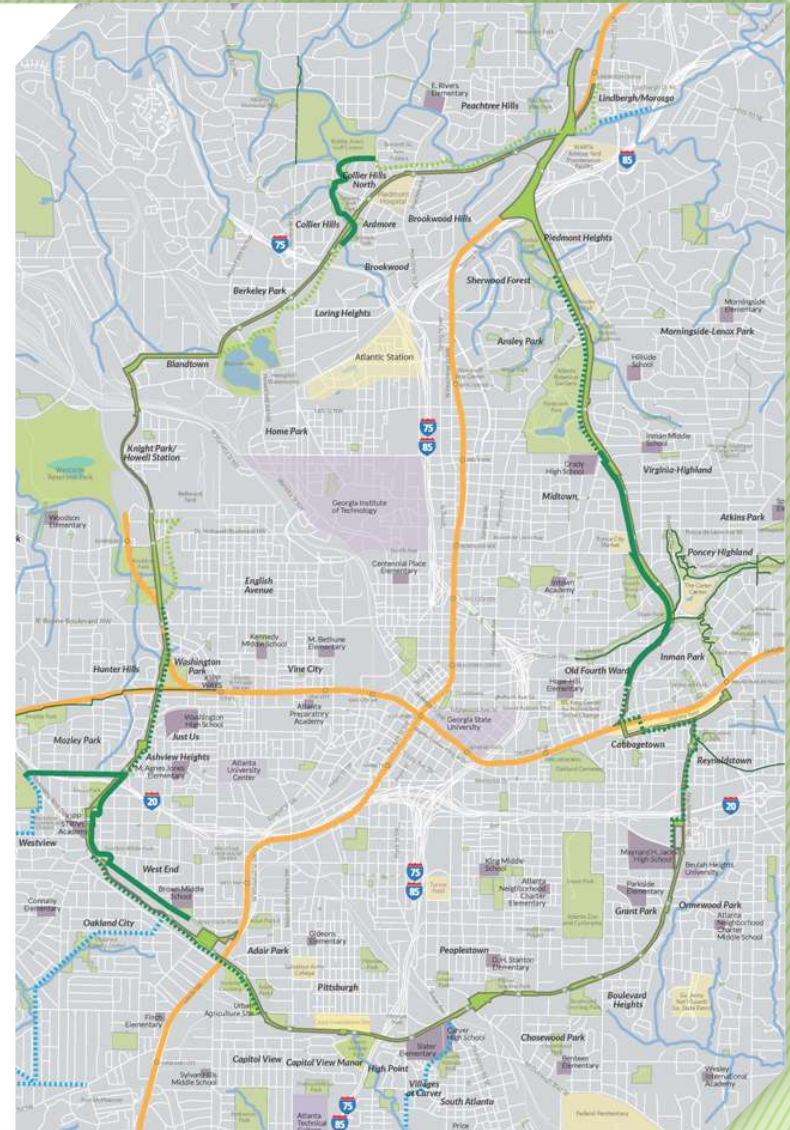
- In the heart of the Atlanta region
- Brings together many of Atlanta's cultural destinations
- Connects four historic abandoned freight rail rights of way encircling the center of town



# // What is the Atlanta BeltLine?



- Connects 45 neighborhoods
- 22% of City of Atlanta population lives in the planning area
- 19% of the City's land mass is inside the planning area
- 40% increase in Atlanta's parkland
- 6,500 acre TAD



# // The Atlanta BeltLine: Key Elements



**1,300 ACRES**  
of New  
Greenspace  
(w/700 ADDITIONAL  
ACRES REBUILT)



**22 MILES**  
of Transit &  
Transportation  
Infrastructure



**33 MILES**  
of Trails



**46 MILES**  
Streetscapes &  
Complete Streets



**5,600 UNITS**  
of Affordable  
Workforce  
Housing  
(AS PART OF 30,000  
TOTAL UNITS)



**30,000 JOBS &  
\$10-20B**  
Economic  
Development



Corridor-wide  
Historic  
Preservation,  
Public Art and  
Arboretum



**> 1,100 ACRES**  
of Environmental  
Clean-up

# // The Plan for Engagement



*Project Owner/Sponsor*



*Public Redevelopment Authority*



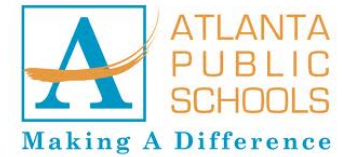
*Single-purpose  
Implementation Agent  
(Public Funding)*



Atlanta  
BeltLine  
Partnership

*Community Awareness  
(Private Funding)*

# // Funding Partners





# // Economic Impacts – Development Activity to Date



## Private investment is following public investment:

- **Over 90 projects** complete or underway within Planning Area\* valued at over **\$2.4 billion**
  - **13,369** new residential units completed
  - **1,960,000 SF** of new commercial space completed
- **Roughly 6:1 ROI to date**

### Development Activity

- FINISHED 
- IN PROGRESS 
- UNDER CONSTRUCTION 

**\*Projects larger than 10 dwelling units and/or 10,000 square feet**

# // ROI - Eastside Trail



- **\$13 million** post purchase project cost (design + construction) with \$5 million contribution from private donors
- **\$775 million** in new private development within half a mile of this segment of the Atlanta BeltLine



# // Eastside Trail – Before



Photo credit: Ryan Gravel

# // Eastside Trail – After

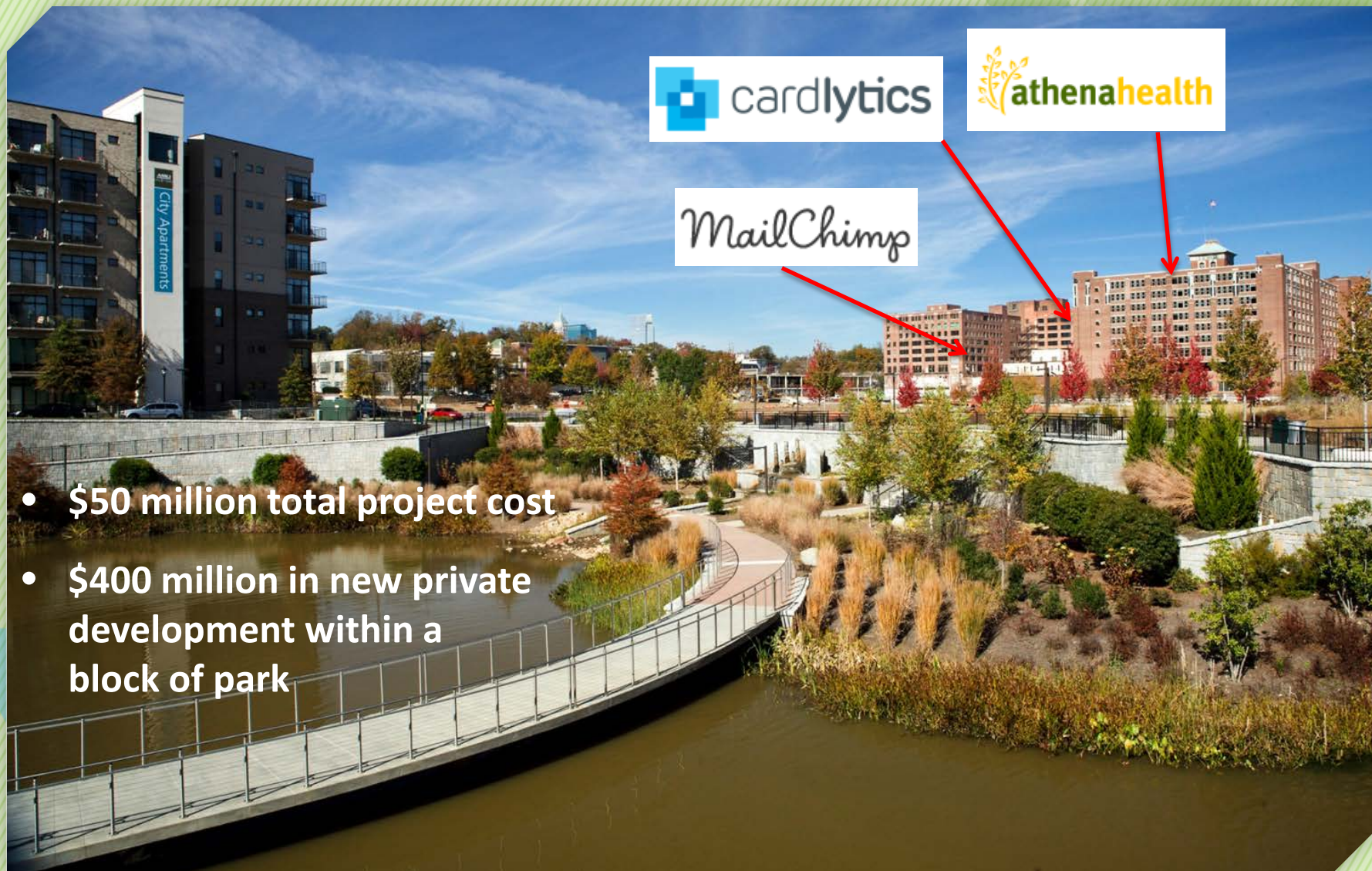


Photo credit: Ryan Gravel

# // Historic Fourth Ward Park: Before



# // Historic Fourth Ward Park – After



- \$50 million total project cost
- \$400 million in new private development within a block of park

## Goal:

- Create a mix of housing for a variety and mix of incomes and household types
- 30,000 total additional housing units
- 5,600 affordable workforce housing units

## 1<sup>st</sup> Generation (2009-2014)

- \$8.8M Trust Fund capitalized
  - Down Payment Assistance
  - Incentives for Developers
  - Property Acquisition
- ABI and Invest Atlanta created over 900 affordable units to date.



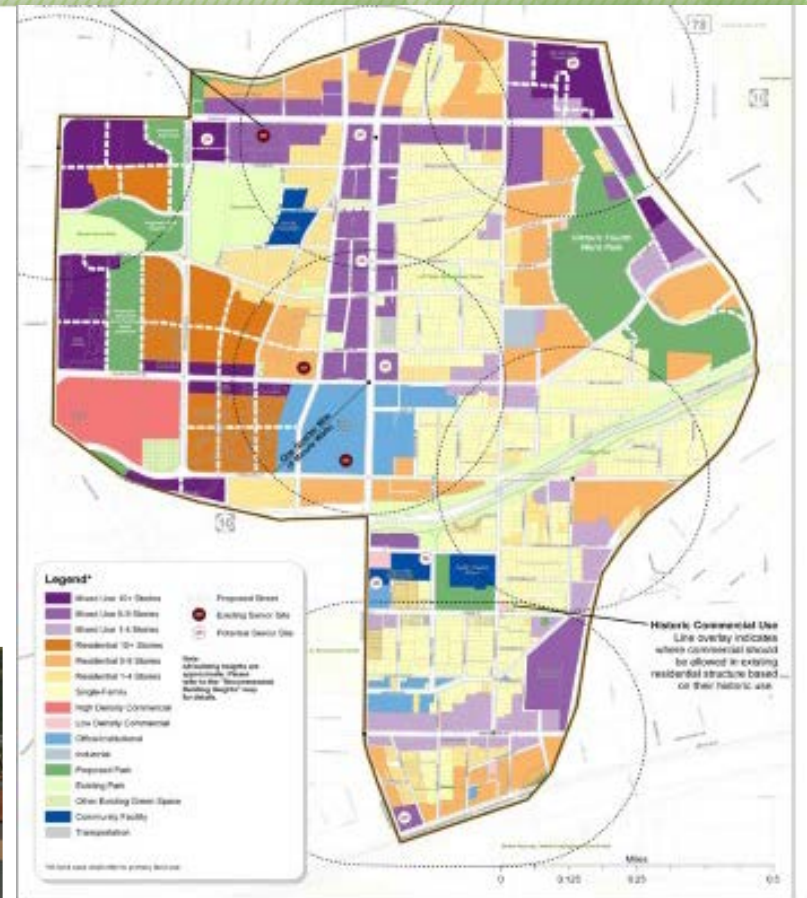


## A. Land Use and Entitlement

- Master Plans
- Proactive Rezoning
- Sponsored rezoning

## B. Incentives / Gap Financing

- Ponce City Market
- Boynton Village Apartments



## Proposed Land Use Framework

Old Fourth Ward Master Plan 2006

The City of Atlanta  
Department of Planning & Community Development  
Tulane/Oglethorpe Station & Administration



September 2, 2009

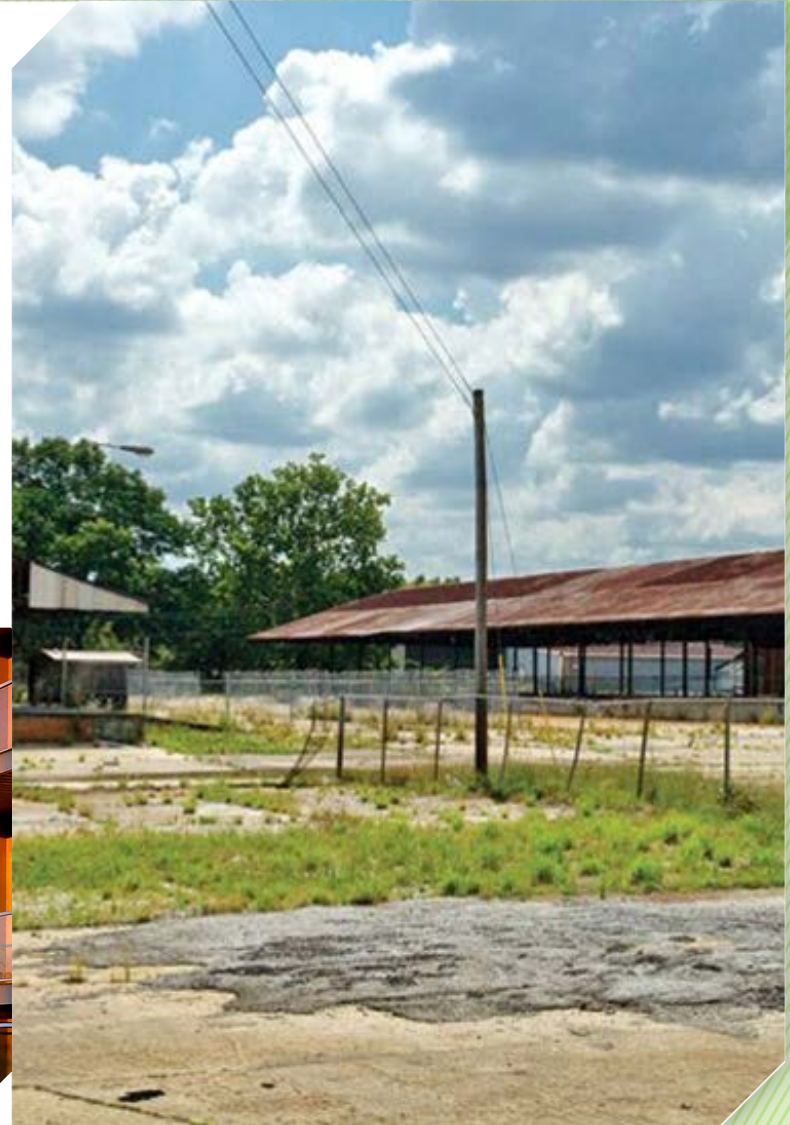


## C. Land Acquisition, Predevelopment, and/or JV

- State Farmer's Market
- Masquerade

## D. Vertical Development

- Lofts at Reynoldstown Crossing



- **Community Improvement District (CID)**
  - Façade Improvements
  - Street Scaping
  - Public Safety
  - Infrastructure Improvements
  - Excellent Public Private Partners
- **Special Service District (SSD)**
  - Includes residential properties
  - Maintenance and improvements to community property
  - Provides community services
  - Defrays the administrative costs connected to these activities

# // Legislation: Georgia's Redevelopment Powers Act



- Updates state law to allow surface transportation projects in urban redevelopment areas
- Broadly defines surface transportation projects to include related facilities, systems, parks, trails, streets, greenspace
- Provides framework for executing public contracts with private enterprises to complete these projects
- Lays out requirements for procurement, bond issuance, public engagement

// Thank You

*Beltline.org*  
*@AtlantaBeltLine*





# Delivering Infrastructure Who said there was NO Money?

## Q&A

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