

# Local Transportation Project Development & FTA Grants



# Session Objectives

- **Illustrate how transit enhancement supported major redevelopment and economic growth**
- **Provide a case study of close integrated coordination between various agencies**
- **Discuss innovative project funding strategies**
- **Provide an overview of the Design-Build approach**

# Session Agenda

- **LYMMO Overview**  
(Greg Kern)
- **Orlando's Transportation & Redevelopment Vision**  
(Claudia Korobkoff)
- **LYMMO's Downtown Expansion**  
(Laura Minns)
- **Design-Build Project Delivery**  
(James Avitabile)
- **FTA Grants**  
(Laura Minns)
- **Discussion/Questions**

# What's LYMMO?

Gregory Kern, AICP – STV, Inc.





# LYMMO

- Pronounced “li.moʊ”
- Began Operations in 1997
- 3-mile route within Orlando’s CBD
- Operates daily, with 5 to 10 minutes headways
- Free Fare (Parking Revenues & CRA funds)
- Hybrid-electric units
- Current ridership ~ 1 Million



# Existing LYMMO Route



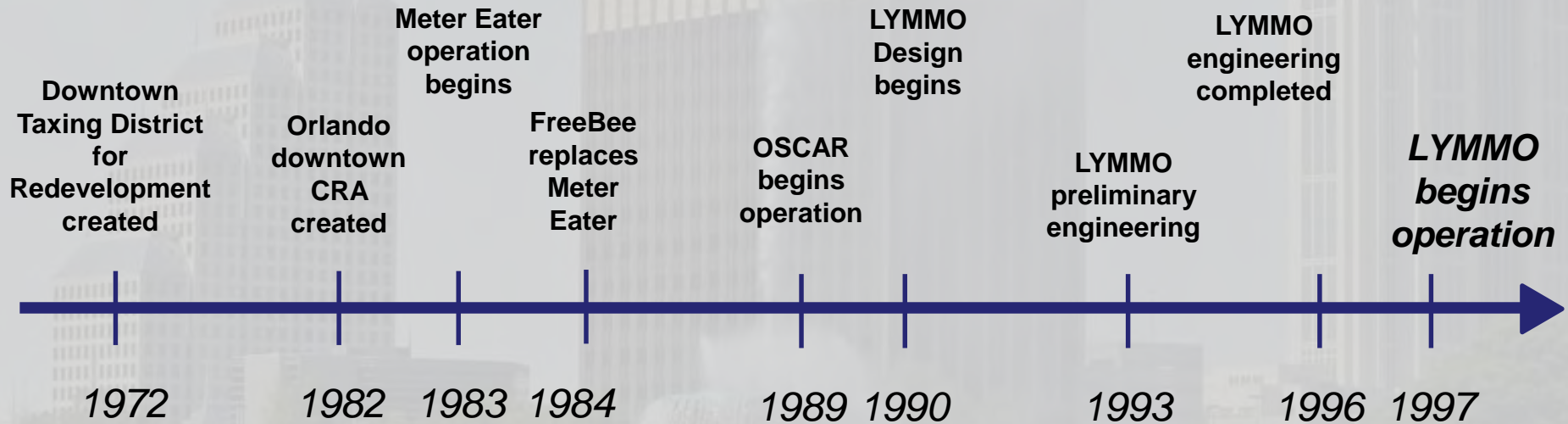


# LYMMO Characteristics

- Branded System
- Exclusive Bus Rapid Transit (BRT) lanes
- ITS technology
- Modified signal priority



# LYMMO Timeline





# Next Steps

- **Spring 2014 - East-West LYMMO begins operation**
- **Summer 2014 - Parramore LYMMO begins operation**
- **Summer 2014 - SunRail begins operation**
- **Future BRT expansions**
  - *North expansion to Florida Hospital area*
  - *South expansion to Orlando Health area*
- **Downtown development projects**
  - *Dr. Phillips Performing Arts Center*
  - *Creative Village*
  - *MLS Soccer Stadium*
  - *Sports & Entertainment District Development*

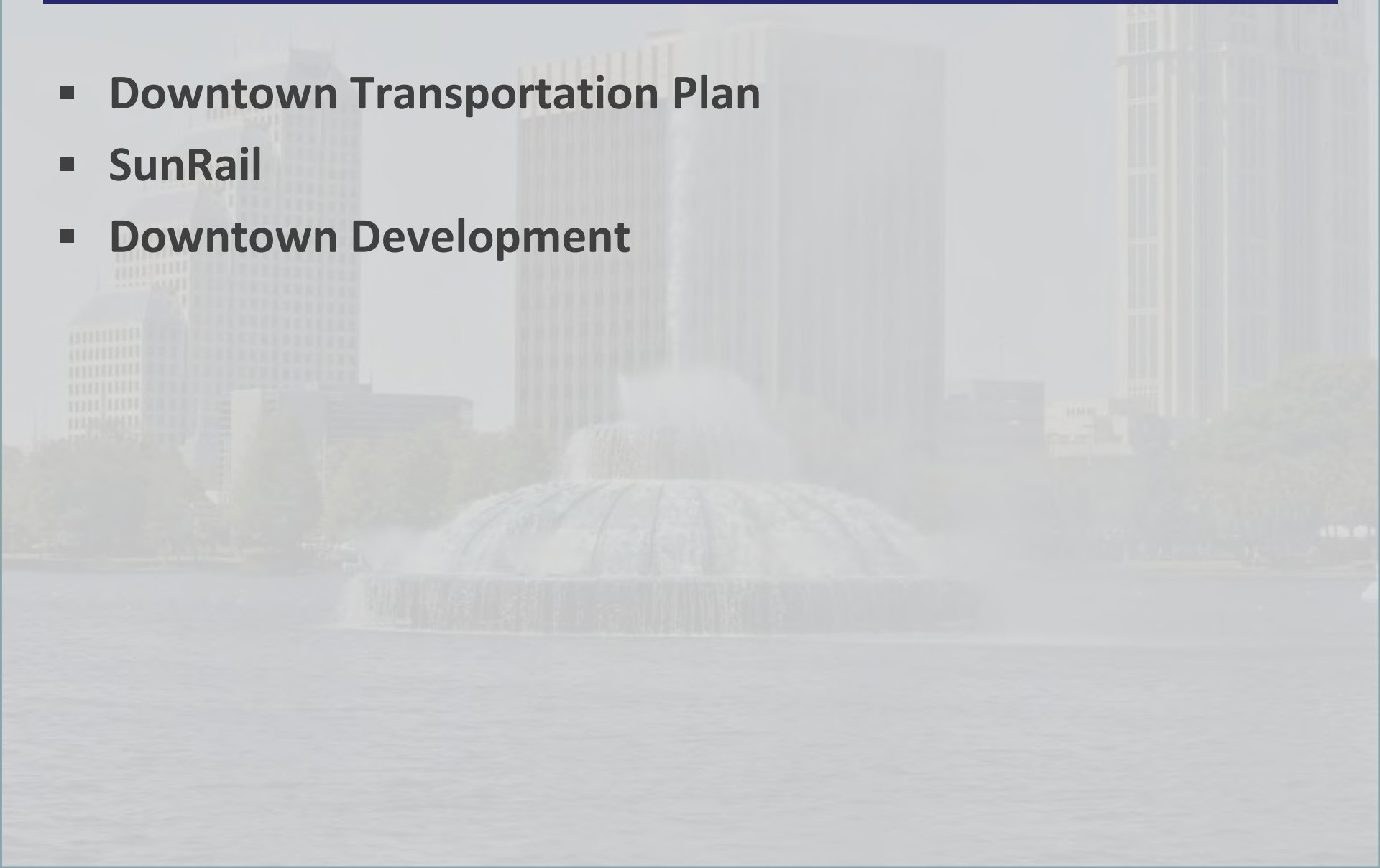
# **Orlando's Transportation Vision - Supporting Redevelopment**

Claudia Korobkoff – City of Orlando



# Orlando Transportation Evolution

- **Downtown Transportation Plan**
- **SunRail**
- **Downtown Development**





# Downtown Transportation Plan

- Adopted in December 2006
- Comprehensive review of transportation issues focusing on Orlando's core
- Areas of Analysis:
  - *Bicycle*
  - *Pedestrian*
  - *Roadways*
  - *Parking*
  - *Freight Movement*
  - *Transit*

# Downtown Transportation Plan

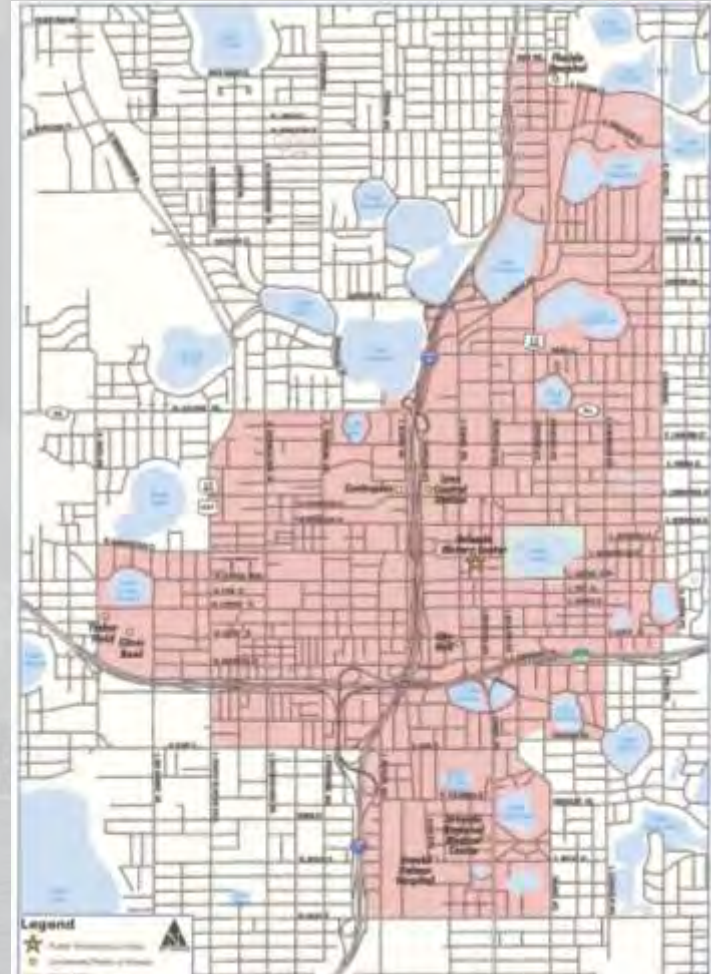
## ■ Core Transit Objectives:

- *Create a positive pedestrian culture*
- *Make transit practical & attractive*
- *Link destinations – visitors & residents*
- *Provide Master Transportation Plan for Downtown*
- *Make Orlando a great place to live, work & play*

# Project Study Area

## Study Area Limits:

- North: Florida Hospital
- South: Orlando Health
- West: Orange Blossom Trl
- East: Mills Ave





# Projected Study Area Growth

	<b>2005</b>	<b>2025</b>	<b>Growth</b>
Population	23,200	59,700	157%
Single Family Homes	1,911	1,931	1%
Condo / Apartment	9,568	27,981	192%
Hotel Rooms	2,004	3,182	59%
Employment	75,500	102,600	36%

City of Orlando, Transportation Department

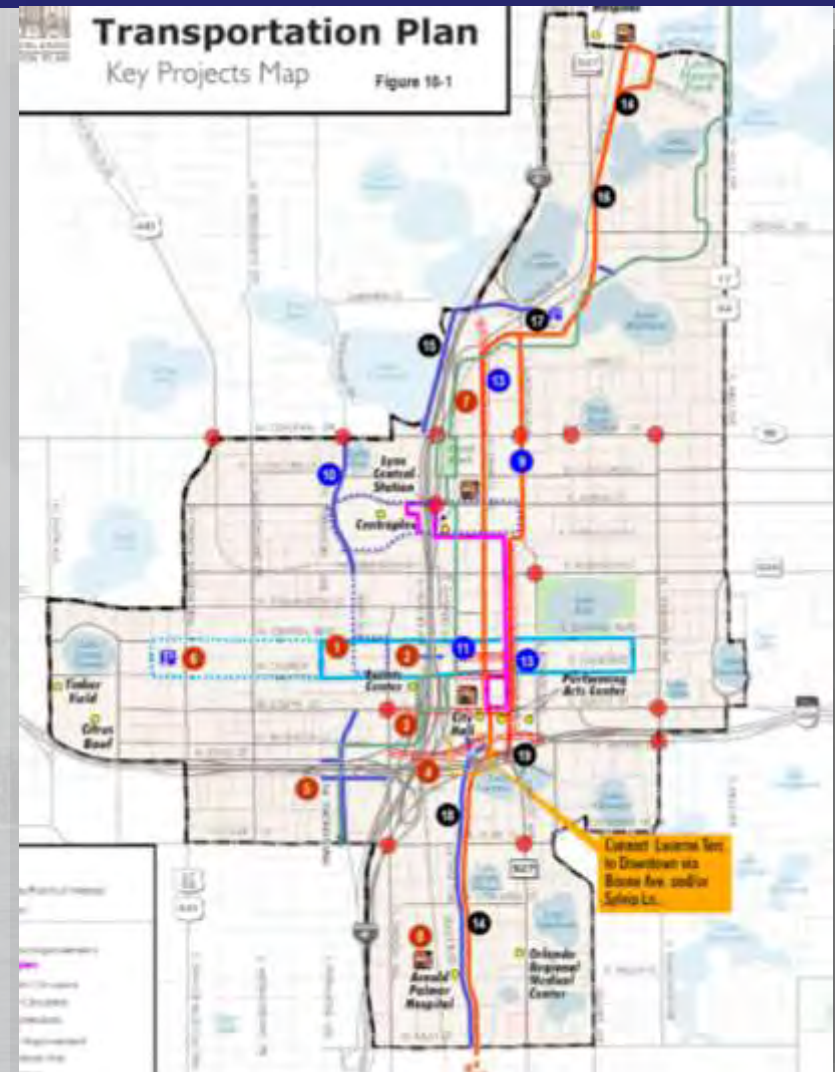
## Reliable, Convenient, Attractive

- 
- Top Destination Choices For Future Transit**
- Green circle: New transit line
  - Yellow circle: New transit line extension
  - Orange circle: New transit line extension
  - Red circle: New transit line extension

# Downtown Transportation Plan - Blueprint

## Key Projects Map

- **Phase 1**
  - *Citrus Bowl – Thornton Park Loop*
  - *Orlando Urban Trail*
  - *Commuter Rail*
- **Phase 2**
  - *Downtown – Uptown Loop*
  - *Terry Ave – Extension*
  - *ITS Wayfinding and Smart Parking*
- **Phase 3**
  - *Florida Hospital – OH Loop*
  - *Alden Road Corridor*





# BRT Refinement and Funding

- **2006 – DT Transportation Plan Completed**
  - *Blueprint is Complete*
  - *Time to Implement Recommendations*
- **2007 – Transit Circulator Expansion Report**
  - *Goal: BRT to Manage Congestion & Support Redevelopment*
  - *Yield: Concepts and Costs*
- **2007-08 – Federal Grant Applications**
  - *Alternatives Analysis*
    - \$240K – Alternatives Analysis
  - *Earmarks*
    - \$686K – Alternatives Analysis
    - \$7.92M – Design, Engineering & Construction

# BRT Alternatives Analysis (AA)

- 2011 – LYMMO AA Completion Date
  - *Identified Routes*
    - East/West BRT
    - Parramore BRT
    - North/South BRT (unfunded)
  - *Estimated Ridership*
    - East/West BRT: 4,500 daily riders
    - Parramore BRT: 4,150 daily riders

# BRT Alternatives Analysis (AA)

- *Estimated Costs (Capital & Operating)*

- East/West BRT:

- Capital costs: \$9.92 Million

- Operation & Maintenance: \$700k/Year

- Parramore BRT:

- Capital costs: \$18.72 Million

- Operation & Maintenance: \$500k/Year



## LYMMO Central Corridors



# SunRail

- **61-mile System from Deland to Poinciana**
  - *17 total stops*
- **4 Orlando Stops**
  - *Florida Hospital / Health Village*
  - *LYNX Central*
  - *Church Street*
  - *Orlando Health / Amtrak*
- **SunRail Status:**
  - *Phase I operations start Summer 2014*
  - *Phase II in late 2015*









# Downtown Development: Creative Village

- 68-acre mixed-use development including:

- *1,500 multi-family units*
- *225 hotel rooms*
- *1,200,000 square feet of office/creative space*
- *150,000 square feet of retail/commercial space*
- *25,000 square feet of K-12 education space*
- *500,000 square feet of higher education space*



# Downtown Development: Orlando Venues

- Amway Center
- Dr. Phillips Center for the Performing Arts
- MLS Soccer Stadium
- Sports & Entertainment District



Amway Center. Photograph by Ben Tanner.



# Downtown Development: Amway Center

- **Opened Downtown: October 1, 2010**
- **Square Footage: 800,000**
  - *Previous Venue: 367,000*
- **Total Project Cost: \$480 Million**





# Downtown Development: Dr. Phillips Center

- Opening Downtown: Fall 2014
- Seating Capacity: 4,700
  - *Previous Venue: 2,518*
- Square Footage: 330,000 SF
  - *Previous Venue: 65,487 SF*
- Total Project Cost: \$383 Million



# Downtown Development: Soccer Stadium

- Opening Downtown: 2015
- Seating Capacity: 17,000 - 22,000
- Total Project Cost: \$80 Million (Public & Private)
- Schedule:
  - *Sep/Oct 2013: City Council & County Approval*
  - *Oct/Nov 2013: MLS Franchise designation (Subject to Local Approvals )*

# Downtown Development: SED Development

- **Sports and Entertainment District (SED)**
- **Hotel**
  - *Rooms: 300*
  - *Square Footage: 300,000 SF*
- **Office Space: 150,000 SF**
- **Retail Space: 100,000 SF**
- **Parking Spaces: 660**
- **Total Project Cost: \$100,000,000**



# LYMMO's Downtown Expansion

Laura Minns, AICP - LYNX



# Agenda

- LYNX Overview
- New Starts Process
- FTA Oversight
- LYMMO Expansion



# LYNX Overview

- **Independent Authority**
- **Funded by FTA, FDOT, and Local Governments**
- **Serves 3-County Area –**
  - *Orange*
  - *Osceola*
  - *Seminole*
- **5 Member Board – FDOT District 5 Secretary, City of Orlando, Orange, Seminole & Osceola County**





# LYNX Overview

- **1.8 Million Population**
- **30 Million Trips Last Year**
- **2500 Sq Mi. Service Area – larger than Delaware**
- **3 Counties + City of Orlando on the Board**
- **Provide Purchased Transportation to 3 more counties**
- **\$115M Operating Budget**
- **300 Buses**
- **250 Paratransit Vehicles**
- **70 Van Pools**
- **66 Fixed Routes**
- **2 Express Routes**
- **2 Fast Link Routes**
- **9 Flex Routes**

# East / West BRT

- Connects Thornton Park and Parramore
- 3.5-mile route
- 15 stations
- 10 min. peak/15 min. off-peak service
- Hours of Operation:
  - Weekdays: 6 am – 10pm;
  - Sat: 10 am – 12 am;
  - Sun: 10 am – 10pm
- Ridership:
  - Potential 4,500 daily riders



# East / West BRT

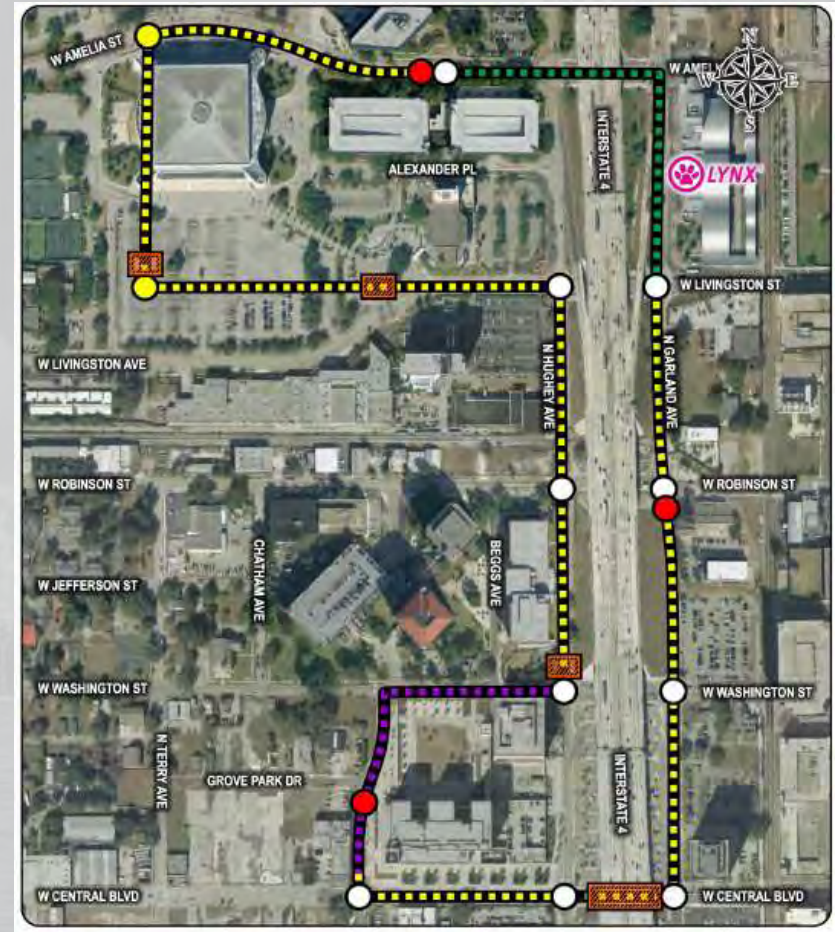
- **Funding - Preliminary Design & Construction**
  - *New Starts Grant - \$7.92 Million*
  - *City of Orlando - \$1,356,000*
  - *CRA Contribution - \$644,000*
- **Schedule**
  - *Oct–Dec 2011: Advertise RFP/*
    - *Select Consultant*
  - *Mar–Aug 2012: Design*
  - *Feb 2013: Construction*
  - *Spring 2014: Begin Operations*





# Parramore BRT

- Connects Parramore, Amway Center, LYNX Central Station & SunRail
- 2-mile route
- 9 stations
- 10 min. peak/  
– *15 min. off-peak service*
- Hours of Operation:
  - *Weekdays: 6 am – 10pm*
  - *Sat: 10 am – 12 am*
  - *Sun: 10 am – 10pm*
- Ridership:
  - *Potential 4,150 daily riders*



# Parramore BRT

## ■ Funding

- *TIGER II Grant for preliminary design & construction*  
*\$13 Million*
- *City of Orlando*  
*\$612,000*
- *Private funding source*  
*\$644,000*

## ■ Schedule

- *Oct–Dec 2011: Design Build Team selected*
- *April 2012- Aug 2013: Design Completed*
- *Sep 2013 – June 2014: Construction*
- *Summer 2014: Begin Operations*

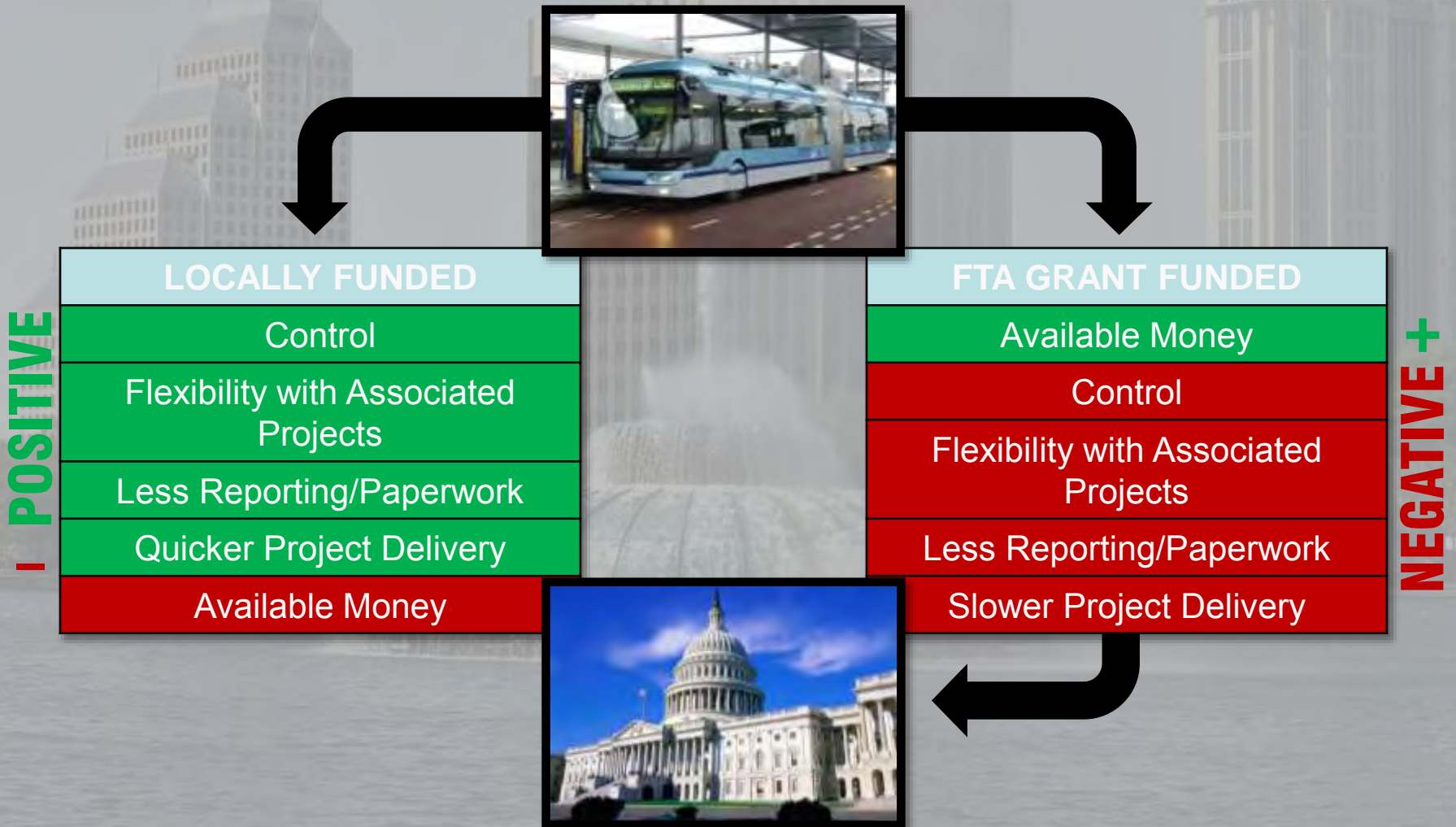


# Total Project Costs

East/West BRT	FTA Federal Earmark	\$ 7,920,000
	City Match	\$ 2,396,000
	<b>Total Cost</b>	<b>\$ 10,316,000</b>
Parramore BRT	FTA TIGER II Grant	\$ 13,000,000
	Match	\$ 3,750,000
	<b>Total Cost</b>	<b>\$ 16,750,000</b>
	3 additional vehicles for Parramore	\$1,500,000
<b>Total Project</b>		<b>\$ 28,566,000</b>

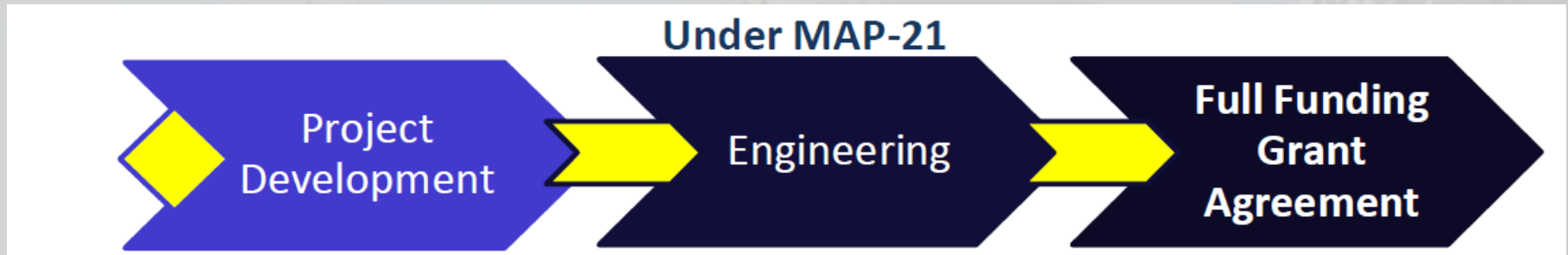


# Funding a Local Transit Project



*MAP-21 Benefits to Grantee Helps level the comparison!*

# Federal Process



- NEPA Compliance
- Alignment & LPA
- LRTP Adoption

- Funding Commitment
- Final Design

- Construction

- Generally a 3-step process
- Planning & NEPA conducted within Project Development

# Design-Build Method of Project Delivery

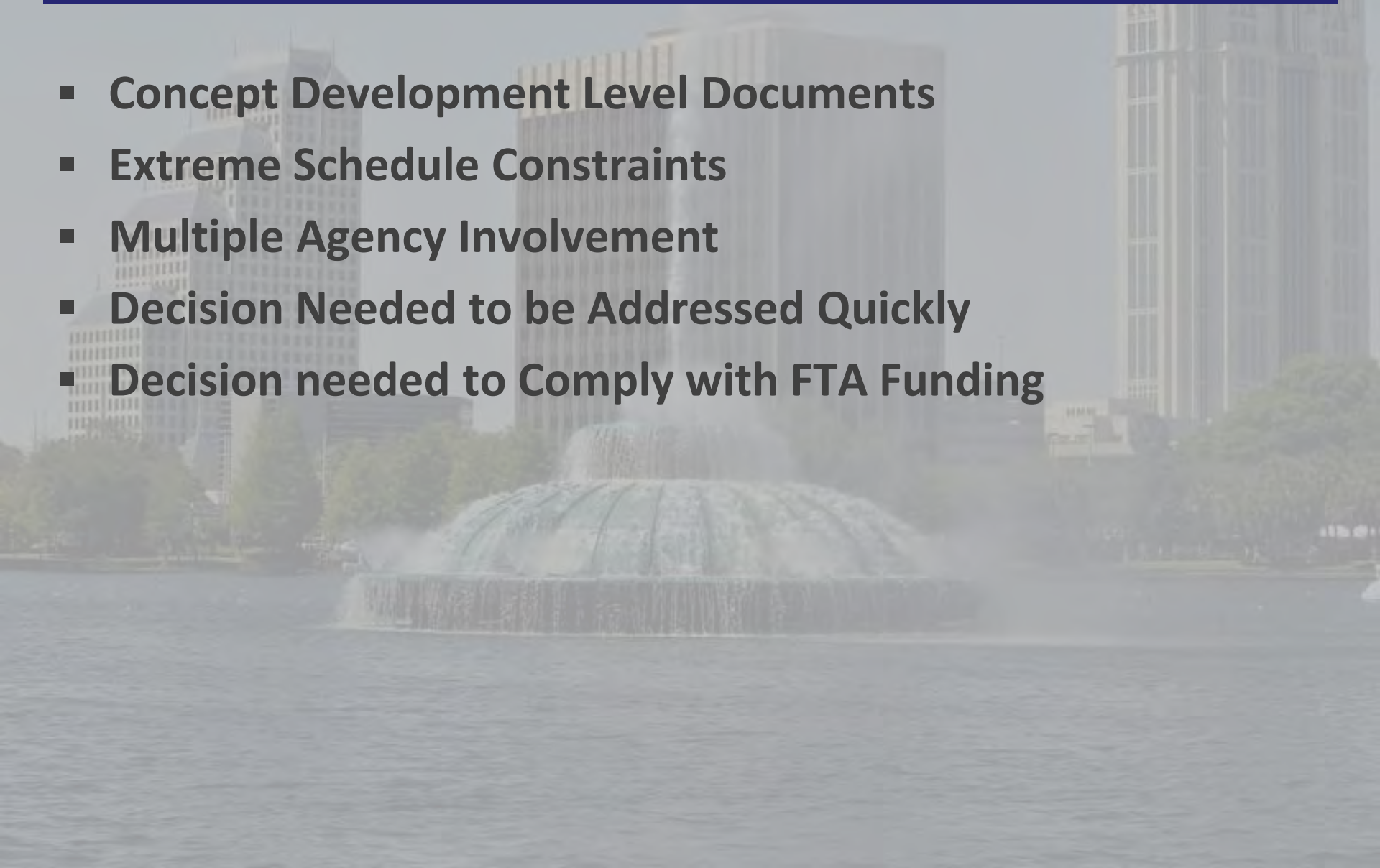
James Avitabile, PE, DBIA – RS&H





# Project Challenges

- **Concept Development Level Documents**
- **Extreme Schedule Constraints**
- **Multiple Agency Involvement**
- **Decision Needed to be Addressed Quickly**
- **Decision needed to Comply with FTA Funding**



# DBIA / Stakeholder Workshop

- **Local Project Stakeholders Included:**
  - *LYNX*
  - *City of Orlando*
  - *FDOT*
- **Design Build Institute of America – Central FL**
  - *Tom Connery – City of Orlando*
  - *Frank O'Dea – FDOT District Construction Engineer*
  - *Jim Avitabile – RS&H*

# DBIA Workshop

- **Project Administration Team**

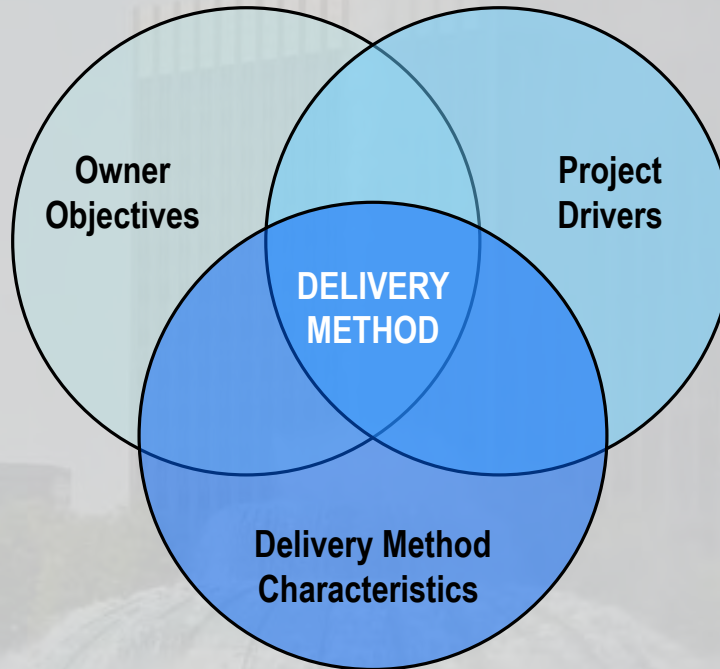
- *John Lewis, CEO, LYNX*
- *Edward Johnson, Chief of Staff, LYNX*
- *Laura Minns, AICP –Capital Strategic Planner, LYNX*
- *Tony Walter, Dir. Planning & Development, LYNX*
- *Claudia Korobkoff, Project Manager City of Orlando*
- *F. J. Flynn, AICP, Division Manager, City of Orlando*
- *Tom Connery, PE Div. Manager Capital Improvements, City of Orlando*



# Project Delivery Method Decision

## Process

- 1) Identify Owner Objectives
- 2) Identify Project Drivers
- 3) Prioritize
- 4) Select Delivery Method that Best Satisfies The Owner Objectives and Project Drivers



## Owner Objectives/ Project Drivers

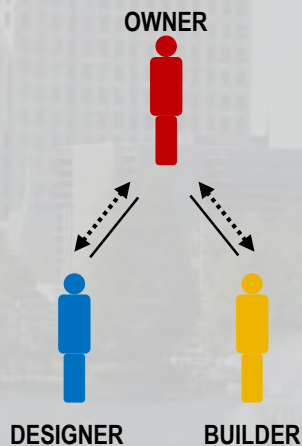
- Cost
- Schedule
- Quality
- Owner Resources
- Risk Allocation
- Selection Criteria
- DB Experience
- Level of Collaboration Desired
- Other

## Delivery Methods

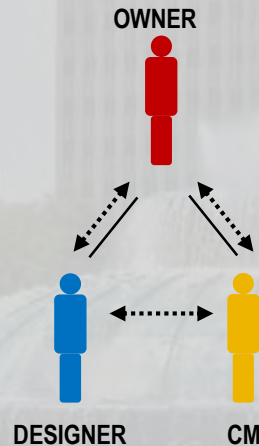
- 1) Design-Bid-Build
- 2) Construction Management at Risk
- 3) Design-Build - Lump Sum
- 4) Design- Build - Progressive

# Project Delivery Options

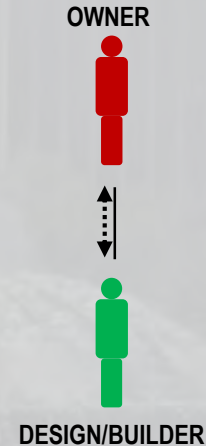
Design-Bid-Build



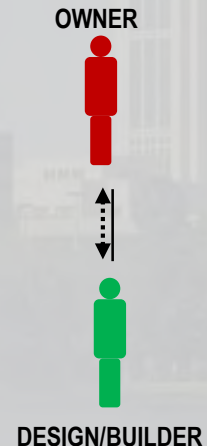
Construction Management at Risk



Design-Build Lump Sum



Design-Build "Progressive"



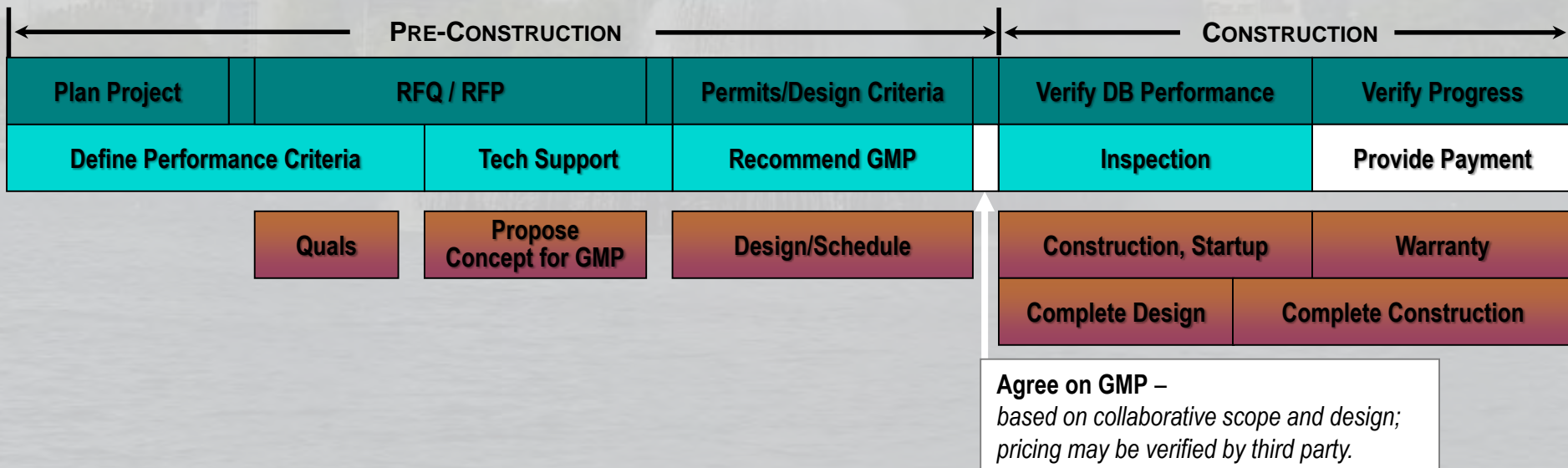
*TRADITIONAL DELIVERY*

*ALTERNATIVE DELIVERY*

# Progressive Design-Build Procurement Model

## Most effective when...

- Owner desires a clear delineation of responsibility
- Rapid project delivery is desired
- Early transfer of financial risk is important
- Owner selection of Design/Builder based on qualifications
- Owner desires greater control of design criteria
- Owner wants greater collaboration (involvement during the design)

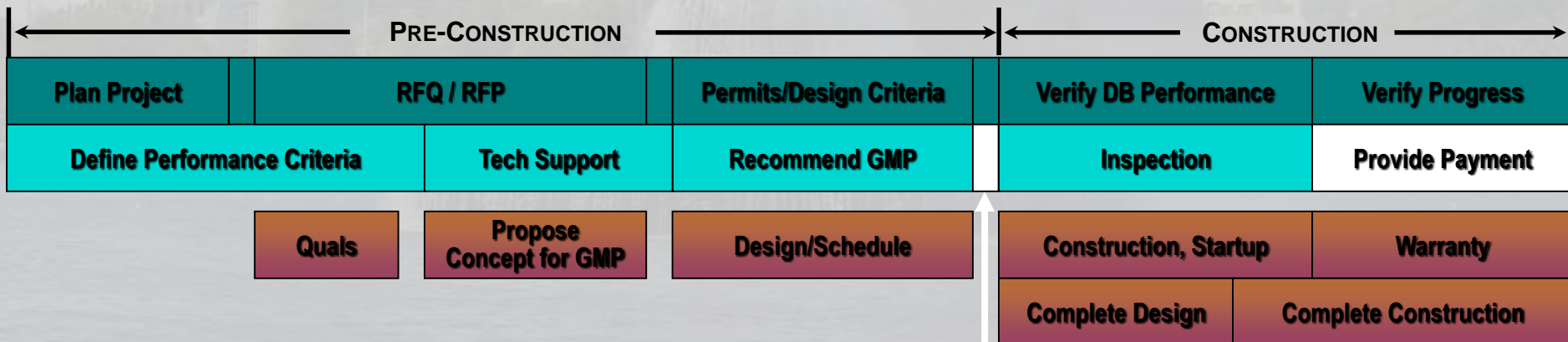




# Progressive Design-Build Procurement Model

## Advantages:

- Design/Builder bears responsibility for design and construction
- Eliminates design related change orders
- Shortest delivery schedule
- Reduced claims
- Ability to work to a budget & guarantee cost early with minimal investment
- Owner has second right of refusal (opt out and use DBB)
- All Owner issues addressed prior to price development
- Cost savings accrue to Owner
- Greatest collaboration (involvement during the design)

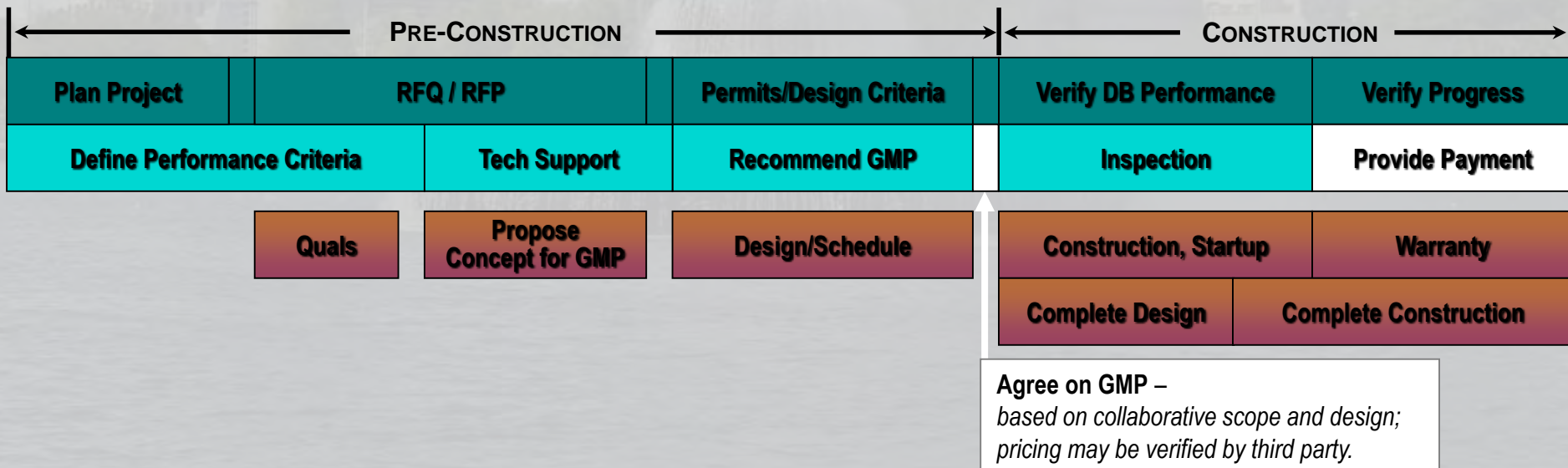


**Agree on GMP –**  
*based on collaborative scope and design;  
 pricing may be verified by third party.*

# Progressive Design-Build Procurement Model

## Questions:

- How will LYNX know they are getting the best price?
- What happens if LYNX Staff and Design/Builder cannot agree on the GMP?
- Where has this been done previously and by whom?
- Other questions?



# FTA Grants

Laura Minns, AICP - LYNX





# FTA Grants Agenda

- Federal Legislation (MAP-21)
- Necessary Local Support
- Project Partnerships
- FTA New Starts/Small Starts Process
- FTA Grant Opportunities

CAPITAL INVESTMENTS. NEW & SMALL STARTS. CORE CAPACITY



BUY AMERICA

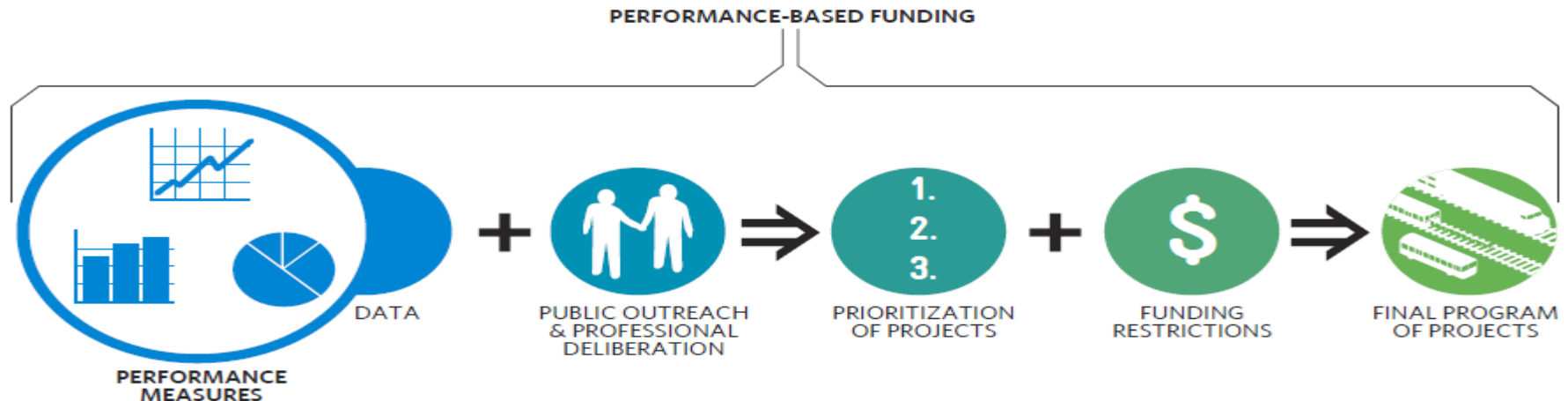


STATE OF GOOD REPAIR & ASSET MANAGEMENT



# MAP-21 & Transit Project Funding

- Moving Ahead for Progress in the 21<sup>st</sup> Century
- It's a two-year reauthorization of SAFETEA-LU through 9/30/2014
- Key Elements:
  - *Performance-based planning*
  - *Emphasis on asset performance and state of good repair*
  - *Predictable formula grants*
  - *\$21.3 billion for 2013 & 2014 public transportation*
  - *Streamlining delivery of New Starts/Small Starts grant projects*



# FTA New Starts Process

- Project Evaluation Criteria:
  - *Mobility Improvements*
  - *Economic Development Effects*
  - *Environmental Benefits*
  - *Cost Effectiveness*
  - *Land Use*
  - *Congestion Relief*
- Local Financial Commitment
  - *Need evidence of stable and dependable financing sources*
  - *Funds for construction, maintenance and operation*
  - *FTA looking for the reasonableness of the financial plan*

**Under MAP-21**





# Key Elements for Success

- Significant Local Support
  - *Project Advocacy*
  - *Funding Commitments*
    - Local Government
    - Private
    - Dedicated Funding (transit)
    - State & Federal
- Partnerships
  - *DOT for Projects on State Roads*
  - *Developers and Large Business Groups/Associations*
  - *Local Government*
  - *FTA*
    - Section 5309 Funds

# Primary FTA Grant Opportunities

- Section 5307- Urban Area Formula Grants
  - *Based on population, transit service levels*
  - *Makes up ~\$20M of LYNX Operating Budget*
- Section 5309 – Fixed Guideway Capital Investment Grants
  - *a.k.a. New Starts / Small Starts*
  - *Competitive grants for major investments*
- Section 5337 – State of Good Repair
  - *For Systems >7yrs old*
  - *LYMMO - \$250K annually for maintaining guideway, replacing rolling stock, system upgrades*
- Section 5326 – Asset Management Provisions
  - *Additional burden on Transit Agencies*

# Grant & Funding Opportunities



## FTA Grants

- Capital Investments
- Maintenance & Operations
- Special Planning Programs



## TIGER (Transportation Investment Generating Economic Recovery)

- Highly competitive grants
- Prove economic benefits



## TIFIA (Transportation Infrastructure Finance and Innovation Act)

- Federal credit program
- Leverage credit \$\$ to attract private and local funds



The background image shows a city skyline with several tall buildings. In the foreground, there is a large, circular fountain with multiple tiers, spraying water upwards. The water is dark and calm, reflecting the sky. The sky is a pale, hazy blue. A semi-transparent white rectangular box is overlaid on the image, containing the word "Discussion" in a bold, black, sans-serif font.

# Discussion

## Contact Information

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