2019 ULI Leadership Institute
Leadership Project

Transit Oriented Development ("TOD") financing options for the SMART Plan

Presented to: Citizens' Independent Transportation Trust (CITT)

May 8, 2019

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Urban Land Institute – Leadership Institute

ULI's Leadership Institute is an immersive and engaging leadership program that educates and prepares emerging leaders with the tools to solve South Florida's most critical real estate and land use issues. The Leadership Institute cultivates leadership and life-strategy skills by teaching emerging leaders in the real estate and land use industries how the Southeast Florida/Caribbean region gets built.

ULI Leadership Project (LP)

The culminating exercise for the Leadership Institute will be a series of Leadership Projects (LPs), where teams of Leadership Institute participants work over a seven-month period to address a particular local land use or policy challenge. Teams are responsible for providing expertise and developing recommendations on how communities can achieve local planning goals while also making the greatest regional contribution toward sustainable and equitable development. The Leadership Project is designed to harness the strength, experience, and leadership of the ULI Leadership Institute participants ("LP Team") to partner with local non-profit entity ("Client") and address a tangible land use or real estate challenge. The LP Team shall collaborate with the Client to develop a scope of work and objectives of the LP.

Team 5: Transit Trust

- Claudia Correa: ccorrea@langan.com
- Jorge Escobar: EPineiro@allenmorris.com
- Enrique 'Henry' Pineiro: jorge.escobar@hklaw.com
- Charles Russo: Charles.Russo@nuveen.com
- Neal Schafers: schafers@miamidda.com

Project:	**Develop Transit Oriented Development ("TOD") financing options for SMART Plan rapid transit corridors in Miami-Dade County**
Client:	Citizens' Independent Transportation Trust ("CITT") aka Transportation Trust. The Transportation Trust is the 15-member body created to oversee the People's Transportation Plan funded with the half-penny sales surtax, created in 2002. **Javier A. Betancourt**, Executive Director Javier.Betancourt@miamidade.gov (305) 375-1357
Brief Description:	Miami-Dade continues to work to develop their mass transit plan referred to as the SMART Plan. The SMART Plan is a comprehensive plan which advances six rapid transit corridors to the Project Development and Environment (PD &E) study phase to determine the costs and potential sources of funding for the projects. CITT, working collaboratively with the community and private sector would like to develop a funding strategy to assist in developing the TOD districts around the SMART Plan to help make the transportation plan effective.
General Questions:	**DRAFT** questions and results for the LP *(to be confirmed by Client)*: 1. Identify the corridors and/or sections of corridors within the SMART Plan to evaluate – identifying funding mechanisms for the entire SMART Plan is too comprehensive.

	2. What are mechanisms that communities around the world have utilized to encourage TOD development around transit stations that have been effective? 3. In evaluating the options available for TOD, what are the strengths and weaknesses of each as they apply to the specific corridor? 4. On the assumption that the County can only provide basic transit stop(s) along the corridor, are there TOD funding mechanisms that will help develop a more robust and active station with private funds? If so, which stops would be most ideal for encouraging this type of arrangement?
Purpose of LP:	The Leadership Project ("LP") is designed to harness the strength, experience, and leadership of the ULI Leadership Institute participants ("LP Team") to partner with local non-profit entity ("Client") and address a tangible land use or real estate challenge. The LP Team shall collaborate with the Client to develop a scope of work and objectives of the LP.
Task:	The LP Team shall: • Conduct research • Due diligence • Data analysis • Interview stakeholders/industry experts • Synthesize findings/conclusions • Develop final recommendations • Create final presentation to Client and to ULI
Deliverables:	1. PowerPoint presentation to Client and to ULI a. Should document the team's approach, research, and recommendations, and should be tailored to meet your Client's needs. b. Should be delivered by all member of the LP Team 2. Electronic and printable hard copy report a. One-page Executive Summary Memo describing project and recommendations b. Written report that incorporates the information in the presentation but should be expanded include the research and detailed findings. The written report should be in electronic format and easily printable.

Executive Summary

The Strategic Miami Area Rapid Transit (SMART) Plan is a bold infrastructure investment program that will expand transit options in Miami-Dade County along six (6) critical corridors that are linked to local, regional, national, and global economic markets, and will affect 1.7 million residents and 855,000 employees. Since all six corridors have been identified as priorities, all available funding mechanisms need to be identified for the following:

1. Rail Infrastructure
2. Transit Station
3. TOD Projects
4. Rolling Stock
5. Operations
6. Maintenance

Furthermore, if BRT (Bus Rapid Transit) costs a minimum average of $300 million/per corridor, and Heavy Rail costs a minimum average of $2 billion/per corridor, depending on the technology selected, total costs could range from $1.8 billion to $12 billion. Moreover, those cost estimates are just to finance the construction of the corridors (infrastructure and rolling stock), not the planning & design pre-construction, and the operations and maintenance post-construction.

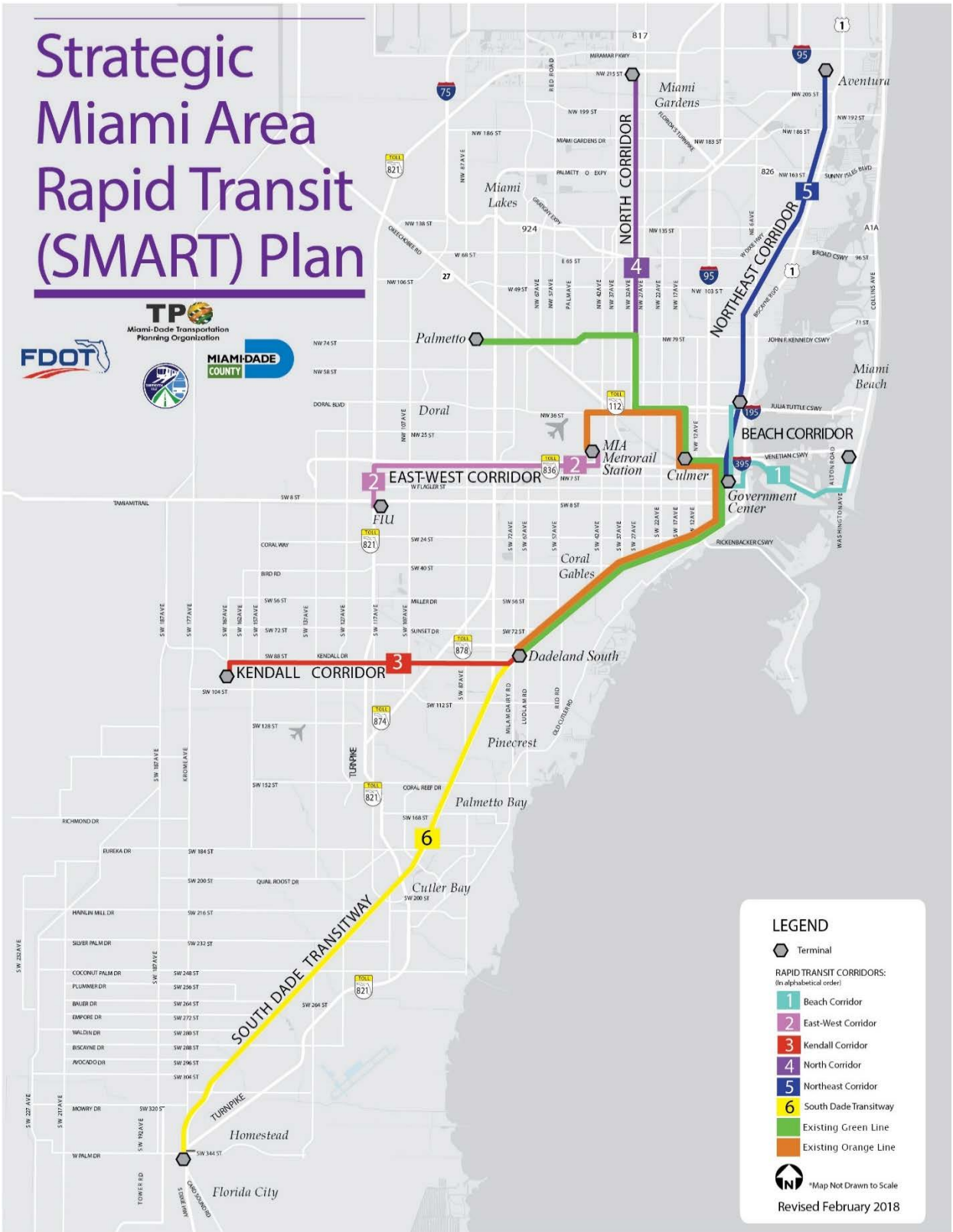
Therefore, the overriding goal of this Leadership Project (LP) is to provide our client, the Citizens' Independent Transportation Trust (CITT), with as many insights and tools as possible so that they may make the most informed decisions as to which funding mechanisms they should pursue. To that end, our team has conducted numerous interviews with industry experts and local stakeholders regarding transit systems and transit-oriented developments (TOD), and financing of both. We researched relevant examples/ case studies of other cities that have successfully financed and implemented transit systems, corridors and TOD stations.

Lastly, this LP attempts to document all the different funding mechanisms available, provide a breakdown of each, list relevant examples, and offer our group's collective recommendation as to which mechanisms should be pursued and for what. Perhaps the most utilitarian component of this LP is the Funding Mechanisms spreadsheet found on page 82 and will be provided to the client in an Excel format. *Note: this spreadsheet focuses primarily on Corridor infrastructure, transit stations, TOD projects, and rolling stock. However, our full report also identifies and recommends funding mechanism that can be utilized for Operations and Maintenance (O&M).*

Finally, from our collective research, we believe:

- Several pre-funding strategies must be adopted in order to qualify for some types of funding, some of these strategies and recommendations are listed on page 80.
- To win competitive grants, communities/organizations/agencies really need to differentiate themselves. They need to demonstrate why they are unique, and why their projects are a worthy, long-term investment.
- For the financing of corridor infrastructure and rolling stock, hiring a highly successful professional grant writer is the best investment a public agency can make.
- For the financing of the stations themselves (and surrounding TOD infrastructure) Public Private Partnerships (P3s) are the ideal instrument, as the private sector has the financial and developmental expertise/skillset, and are able to move at a significantly quicker rate.

SMART Plan Overview



SMART Plan Map

Courtesy of: www.miamidda.com/services-initiatives/placemaking-transportation/transportation/smart-plan/

The Strategic Miami Area Rapid Transit (SMART) Plan is a bold infrastructure investment program of projects with the overall goal significantly improving transportation mobility, and providing a world-class transit system that will support economic growth and competitiveness in the global arena. The SMART Plan will expand transit options in Miami-Dade County along six (6) critical corridors that are linked to local, regional, national, and global economic markets, as highlighted below. Another critical component of the SMART Plan will be a network of Express Buses, known as Bus Express Rapid Transit (BERT), which will connect the SMART rapid transit corridors on limited access facilities, promoting the active expansion of South Florida's Express Lanes network with the implementation of six (6) identified BERT express lane concepts. This innovative approach effectively expands the reach of transit in Miami-Dade County and beyond, and will affect 1.7 million residents and 855,000 employees.

CORRIDORS

1. Beach Corridor: Highest tourist demand in region with major employment centers. This corridor will connect Downtown Miami (and possibly Midtown) to Miami Beach. Owner: Miami-Dade TPO & Miami-Dade DTPW. www8.miamidade.gov/global/transportation/smart-plan-beach-corridor.page

2. East-West Corridor: Heaviest commuter travel for international, state and local businesses. This corridor will connect FIU and the City of Doral to the Miami Intermodal Center/Miami Airport along the heavily congested Highway 836. Owner: Miami-Dade TPO and Miami-Dade DTPW. www8.miamidade.gov/global/transportation/smart-plan-east-west-corridor.page

3. Kendall Corridor: One of the most congested arterial roadways with the highest demand. This corridor will connect the western suburbs of Kendall and Miami Executive Airport to the Dadeland Mall (and southernmost Metrorail terminal). Owner: PD&E by FDOT District 6 and Land Use & Visioning by Miami-Dade TPO. www.miamidadetpo.org/smartplan-kendall-corridor.asp

4. North Corridor: Key regional mobility linkage for access to jobs, stadium and educational facilities. This corridor will link the northwestern suburbs of Miramar & Miami Gardens (and possibly a large park n' ride at the Turnpike) and connect to the existing Metrorail Green Line. Owner: PD&E by FDOT District 6 and Land Use & Visioning by Miami-Dade TPO. www.fdotmiamidade.com/27thAvenueRapidTransit.html

5. Northeast Corridor: High transit demand and part of a critical regional corridor to Palm Beach County. This corridor is the southern part of the Tri-Rail Coastal link and will eventually stretch 85 miles from Miami to Jupiter. Within Miami-Dade County, this line will connect Downtown Miami to Aventura, with stops in Midtown, Miami Shores, and North Miami. Owner: PD&E by FDOT District 6 & 4 and Land Use & Visioning by Miami-Dade TPO. http://tri-railcoastallinkstudy.com/

6. South Corridor: Experiencing the fastest population growth in Miami-Dade County. The longest corridor of the six, the South will connect Dadeland Mall Metrorail terminal to the fast-growing cities of Homestead and Florida City. The only corridor with a central land/ROW already in place. Owner: PD&E by Miami-Dade County Transportation and Public Works (DTPW) and Land Use & Visioning by Miami-Dade TPO.
www8.miamidade.gov/global/transportation/smart-plan-south-dade-transit-way-corridor.page

Problem Statement

The SMART Plan has six corridors and they have ALL been identified as priorities. The Citizens' Independent Transportation Trust (CITT) will be responsible for funding all of them. If BRT (Bus Rapid Transit) costs a minimum average of $300 million/per corridor, and Heavy Rail costs a minimum average of $2 billion/per corridor, depending on the technology selected, total costs could range from $1.8 billion to $12 billion. Moreover, those cost estimates are just to finance the construction of the corridors

(infrastructure and rolling stock), not the planning & design pre-construction, and the operations and maintenance post-construction.

Questions/Takeaways

- How can the SMART Plan be funded?
- How can an individual corridor be funded? Tracks, Stations, Rolling Stock, User Fees
- How can a single station on an individual corridor be funded?
- What are all the possible funding mechanisms that can be utilized?
- Can maintenance and operations be funded as well?
- What are all the best practices to engage in before considering funding options?
- What are prominent examples of public private partnerships that successfully funded TOD projects?

Northeast Corridor Overview

Link: http://tri-railcoastallinkstudy.com/

Owners: PD&E by **FDOT District 6 & 4** and Land Use & Visioning by **Miami-Dade TPO**

Project Contacts: Amie Goddeau, FDOT Project Manager, FDOT District 4, 3400 West Commercial Boulevard, Fort Lauderdale, Florida 33309-3421; amie.goddeau@dot.state.fl.us

Project Description: The Tri-Rail Coastal Link Study, formerly known as the South Florida East Coast Corridor (SFECC) Study, proposes reintroducing passenger service along an 85-mile stretch of the Florida East Coast (FEC) Railway corridor between downtown Miami and Jupiter. Such service will connect the hearts of 28 densely-populated municipalities in eastern Miami-Dade, Broward and Palm Beach Counties. FDOT has completed Phases I and II of this study which is about to enter the federal environmental process. Within Miami-Dade County, the last stop (furthest north) would be Aventura.

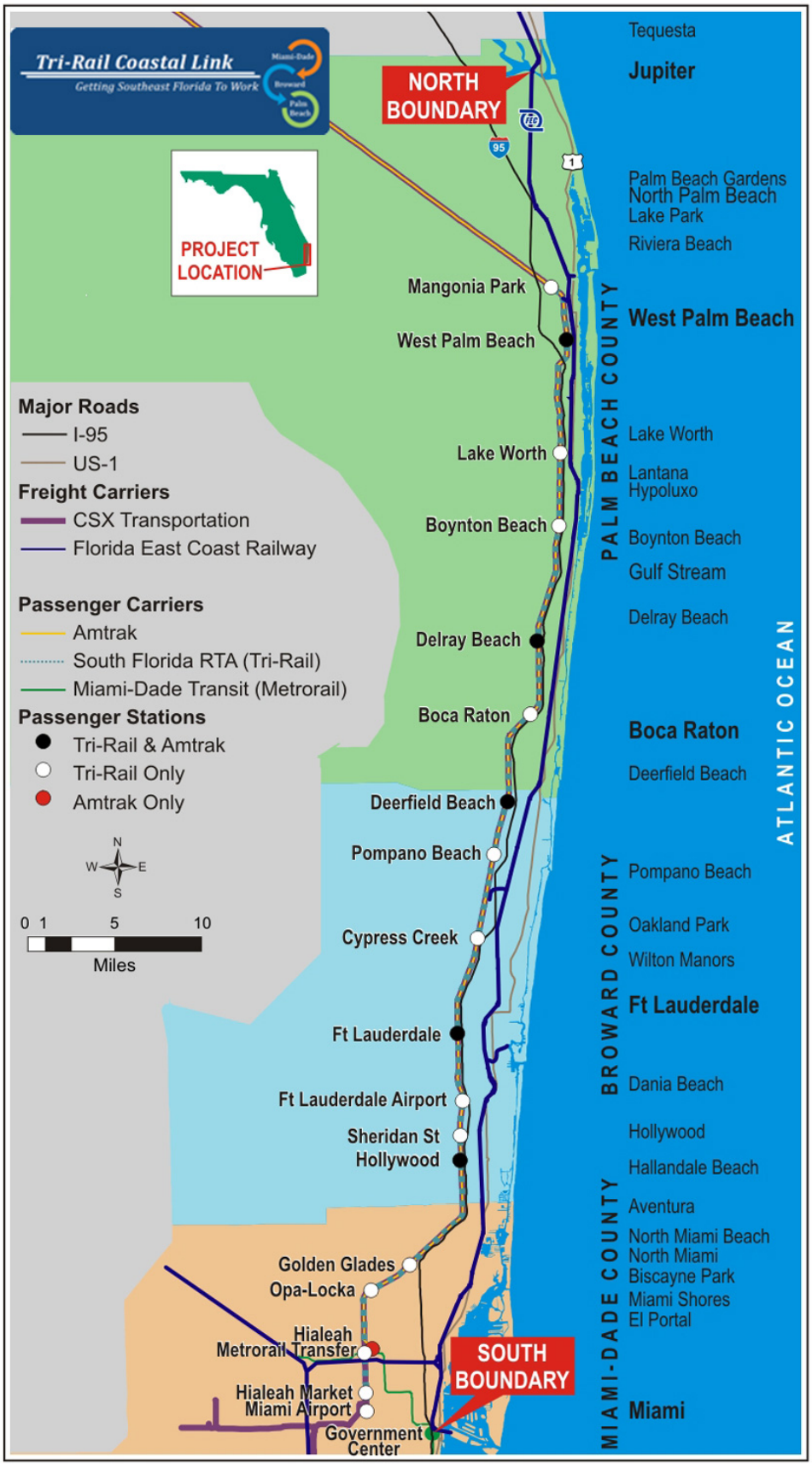
Project Goals: A plan to expand commuter passenger train service that will connect downtowns from Miami to Jupiter along 85 miles of FEC tracks. Tri-Rail currently runs on CSX tracks mostly west of I-95. This proposed new service will run through the downtowns and augment existing service.

Project Benefits:

- Connects Downtown Miami to Aventura
- Connection to Palm Beach County
- Within 2-mile radius: 323,000 residents and 239,000 jobs

Possible Modes:
Heavy Rail Transit (HRT)
Possible Station Locations:

- Downtown Miami
- Midtown/Design District
- 79th St/Upper Eastside
- North Miami
- North Miami Beach
- Aventura



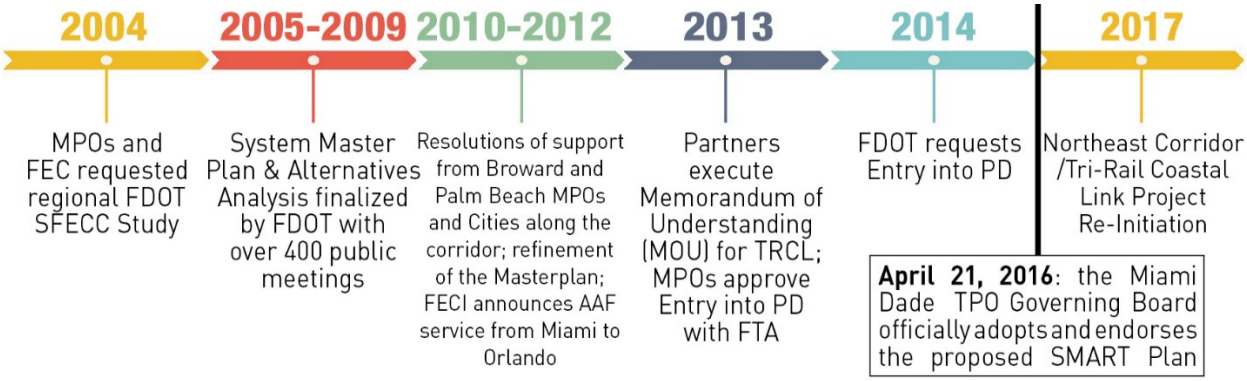
Tri-Rail Coastal Link Map

Courtesy of: www.tri-raildowntownmiamilink.com/

Northeast Corridor Plan Map

Courtesy of: www.miamidda.com/services-initiatives/placemaking-transportation/transportation/smart-plan/

Northeast Corridor Historical Timeline



Focus Areas

How to fund:

7. Planning Efforts (already underway)
8. Design (funding is available; County is already putting together a BID package for Design/Build)
9. Rail Infrastructure:
    a. New tracks are not needed on this corridor
    b. Tracks have already been widened for double-tracking (freight and passenger)
    c. Positive Train Control has already been implemented (however, Tri-Rail and FECI utilize different systems. There may be an large additional cost to convert)
10. Rail Leasing: Since FECI owns the tracks/land/ROW, operator will have to pay to utilize tracks. This amount could be well over $100 million
11. TOD Station Infrastructure (numerous funding mechanisms are available for the actual stations; see funding mechanism checklist in the appendix)
12. Rolling Stock: Actual Trains (funding is available)
13. Operations (funding is available, but very limited)
14. Maintenance (funding is available, but very limited)

Final Problems/Constraints to Note

FECI (who owns the tracks and ROW along the Northeast Corridor) is still in negotiation with Miami-Dade County for a lease agreement for use of the tracks. That lease is rumored to be around $140 million; and that is just for the Miami-Dade County portion. Another additional lease agreement (and additional financing) would need to be finalized with SFRTA for the Broward County portion.

In regards to the Northeast Corridor, FDOT's PD&E study and Miami-Dade TPO's Land Use & Visioning study are focused on developing the corridor from Downtown Miami to Aventura. However, this corridor is a part of the larger SFRTA Tri-Rail Coastal link, which is proposed to reach as far north as Jupiter, Florida. And the biggest hurdle in connecting this corridor from Miami-Dade County, through Broward County, and in to Palm Beach County is the New River Bridge in Fort Lauderdale. Currently there are fourteen (14) freight trains per day crossing that bridge. Now with intercity passenger rail (Virgin/Brightline) there are an additional 1-2 crossings per hour. If the Northeast Corridor/Coastal Link becomes a reality, and an additional 3-6 crossings per hour are allowed, the marine community in Fort Lauderdale will fight back hard, as this can potentially have a great effect on their business. So, an idea has been proposed to build a fly-over bridge that will accommodate all the commuter trains, as they weigh much less than the freight trains. The proposed bridge would cost approx. $150 million.

Interviews: Stakeholders / Industry Experts

Subject: Citizens Independent Transportation Trust (CITT) and the SMART Plan

Javier Betancourt

Executive Director, Citizens Independent Transportation Trust (CITT)
Former Economic Development Director, City of Coral Gables
Former Deputy Director, Miami Downtown Development Authority (DDA)
Javier.Betancourt@miamidade.gov 305-375-1357

Context

- In Nov. 5 2002, a question regarding the approval or rejection of County transportation expansion was presented on a general election ballot. The results showed that registered County voters were in favor of and approved the Transportation Trust to oversee the proceeds of the voter-approved ½ Cent Charter County Sales Surtax to implement the 21 (PTP)
- Under the PTP's $17 billion dollar business plan, Miami-Dade County commits to adding more buses and routes, improving service, expanding rapid transit and creating thousands of transportation and construction-related jobs over the next 25 years.
- The CITT is the 15-member body created to oversee the PTP funded with the half-penny sales surtax. That surtax has generated $3 billion over 16 years. Most of the funds have been used to fund the Metrorail airport extension (3 miles), new Metrorail cars, and operations and maintenance costs.
- The CITT will also oversee the funding mechanisms for the SMART Plan
- Land Use and Visioning studies are underway for each of the corridors of the SMART Plan.
- Once the corridor studies are complete, the Miami-Dade TPO will decide priorities/next steps, CITT will be responsible for funding it, and MDT (Miami-Dade Transit) will be responsible for owning, operating and maintaining.

Introduction to Various Funding Mechanisms

- ½ Penny Charter County Sales Surtax
- TIF - Tax increment financing: as property values increase in a selected district, you capture that value and redirect it into projects. In Miami-Dade, anything over 4% goes to transit (the rest goes to general revenue). They are already looking into this with all of the SMART Plan corridors. Expect $8.5 Billion of committed dollars over a 30-40 year pro forma.
- SAD - Special Assessment District: commercial properties (and even residential) can agree to self-assess
- CDC - Community Development Districts: Miami World Center and Gulfstream Park are examples. At Gulfstream there is an added tax at every restaurant, and possibly even the retail stores.
- P3 - Public-Private Partnership: a contractual arrangement where a government agency contracts with a private partner to renovate, construct, operate, maintain, and/or manage a facility or system that provides a public service.
- MDX - Miami-Dade Expressway Authority: So far, they only use toll dollars on highway projects, but they do have the ability to finance transit. Particularly on the East-West Corridor along SR 83/Dolphin Expressway.
- Federal Matching Grants: Harder to acquire & less percentage for matching. Used to be 75%, then 50%, now 25%, and they are very competitive with all other states.
- State Matching Dollars: Harder to acquire as newly elected House Speaker is not transit advocate.

- What are some other innovative financing options that other municipalities have utilized successfully?

Subject: Financing for Private Inter-City Passenger Rail & Transit-Oriented Developments

John Guitar

Current Managing Director, Vice Chairman, Blanca Commercial Real Estate
Former Senior VP of Business Development at Florida East Industries (FECI) Brightline
John.guitar@blancacre.com

Context

Florida East Coast Industries (FECI) owns a 351-mile long corridor from St. Augustine to Miami. The corridor is comprised of 12 million s.f. of land with an average width of 100'. FECI begins due diligence on successful inter-city passenger rail systems. Most are based on a 200-400 mile radius: less than 200 miles, the average person/family will most likely drive; more than 400 miles, the average person/family will most likely fly. Orlando is 235 miles from Downtown Miami. By 2012, FECI/Fortress launches All Aboard Florida, a high speed intercity passenger rail service that will combine about 200 miles of existing tracks with a new 40 mile corridor. Preliminary plans include the option to expand service to Tampa Bay and Jacksonville. FECI predicts overall project will cost over $1 billion. Because FECI already owns the land, there is no need for land acquisition or ROW leases.

Key Takeaways

- Do we want to research funding options/mechanisms that have been utilized elsewhere and see how they can be applied to all SMART Plan corridors? Or one corridor specifically?
- Do we want to study at a more granular/detailed level and look at one specific site on one corridor and do a pro forma for a mixed-used TOD (transit-oriented development)?
- Can we also look at financing mechanisms that will allow for a return on investment for a potential developer?
- Another option to consider: look at pass-throughs for commercial property owners.
- A pass-through lease is a contract where specified operating expenses "pass through" from the landlord to the tenant. These additional expenses can include any combination of property taxes, insurance, maintenance, repairs and utilities.

Timeline

2007: Fortress Investment Group, an investment management/private equity firm based in NYC, acquired FECI for $3.5 billion in cash
2012: FECI announces they are developing a privately owned and operated rail system between Miami and Orlando.
2014: Construction begins on all three stations: West Palm Beach, Fort Lauderdale and Miami
2015: All Aboard Florida switches name for the project to Brightline
2017: USDOT approves tax-exempt bond allocation for $1.15 billion for Phase II (WPB to Orlando)
2018: Brightline begins daily operations between West Palm Beach to Fort Lauderdale (and Miami a few months later)
2019: Brightline forms a strategic partnership with Virgin Group and is renamed Virgin Trains

Business Plan

- Population: **5 million** people living in South Florida (Miami-Dade, Broward, and Palm Beach)
- When including counties up to Orlando, the population number surges to **9 million**
- Getting passengers from Miami (airport or cruise lines) to Orlando (Disney) is the key; the premium ticket (approx $150) to Orlando is the key to profitability
- Real estate development at and surrounding stations
- Upzoning, Transfer-Development Rights (TDRs), P3s
- Fortress' investment in Brightline has a 10-year window where investors need to be paid back (IRR). Therefore time is everything.

Costs

- No land acquisition or ROW needed; sometimes this is the biggest cost
- Stations:
    - Brightline Miami Central: approx. $107 million (12 acres/5 City Blocks)
    - Brightline Fort Lauderdale: approx. $30-40 million (4.5 acres)
    - Brightline West Palm Beach: approx. $30-40 million (4.5 acres)
    - Typical MetroRail Station: approx. $20-30 million each
    - Typical TriRail SFRTA Station/platform: approx. $4-5 million
- Variables:
    1. Rail Infrastructure: New Tracks? Track-widening? Cross Capability? Positive Train Control?
    2. TOD Station Infrastructure:
        - Parking: perhaps the greatest cost factor: surface parking lots vs parking decks.
        - Stations usually require 200-400 cars depending on location/density
        - Platform Style: Center platform requires pedestrian bridges, which are a significant expense (need a minimum in of 18-20' clearance over trains)
        - Side platform is much cheaper, but does not allow double-tracking.
        - Mixed Use: Retail? Food & Beverage? Office? Residential? Hotel?
        - Enclosed train station: air-conditioning is expensive
    3. Rolling Stock: Actual trains
        a. Custom built trains from Siemens (California) total cost = $450 million
- TOTAL BRIGHTLINE INVESTMENT = **$1.8 billion**

Funding Mechanisms

- RRIF – federal loans were not utilized because they felt it was a slow-moving program. 20-30 year program at 3-4% government-backed rate. However, the program is usually intended for freight rail, and they felt like that agency could not respond quick enough for their timeline.
- Bond Financing Market:
    - In early stages, they had to rely on speculative, high-yield bond financing = $450 million
    - That $450 million paid for track infrastructure and bare-bones stations
    - Used their 351-mile corridor land as collateral ($1.5 billion), but the bond holders did not know what to do with it. Is it really liquid? Can it be traded?
    - Had a separate company (Parallel Infrastructure) that would grant easements in the form of leases (5,000 of them) for any infrastructure crossing: water lines, sewer lines, fiber optics. Very profitable: $18 million/yr.
    - Once train was operating, they refinanced infrastructure bonds to medium yield: 11% financing to 5%

- Office Financing, Retail Financing and Residential Financing were all separate entities

Issues

- Miami 21 did not work for Miami Central, or perhaps any TOD. They had to work with the County to rewrite the RTZ zoning to make Miami Central work with development bonus rights.
- Miami Central Station: 1 ground lease; 5 owners:
    1. Station
    2. Retail
    3. Office
    4. Residential Tower 1
    5. Residential Tower 2
- Utilized a CC&R (Covenants, Conditions, and Restrictions). The Declaration of CC&Rs is the legal document that lays out the guidelines for a planned community, or in this case a TOD. The CC&Rs are recorded in the county records in the county where the property is located and are legally binding.
- 3 Miami Central houses the parking: 600 spaces, 12 stories, 96,000 sq. ft of office space.
- For West Palm Beach, to build any residential, City requires office: for every 100 residential units = 100,000 sf of office space.
- Because the City wanted the station and service, and because Brightline self-financed the station, they waived the office requirements, gave them a height variance, and allowed them to utilize Transfer Development Rights (TDR) bonus to build 24 stories.
- Park-Line Palm Beaches Tower is 24 stories with 8 level parking garage = 760 parking spaces; 400 spaces for Brightline; 360 for condo
- Developer company (FECI) built out parking spaces and then sold them back to the train operator company (Brightline). Costs were around $30,000 per parking space.
- Security issues if you do trains underneath office/residential/and particularly civic structures; bomb mitigation and security plan might be needed.

Key Takeaways

- Consider your timeline to determine which financing mechanisms work best for you.
- Biggest worry: too much $ spent on land acquisition & infrastructure and too much debt
- Private investment & development can be key to TOD success:
    - Build the station/platform, parking and other infrastructure. We own it and you (the government operate the train)
    - Development bonus rights are a crucial incentive
- TOD development key: find partners and relationship lenders that can do complicated deals
- P3's: should rely heavily on the private side for their financial and development skillset
- Ideal scenario: Gov't owns the land, lets developer take the risk and get a piece of the revenue of the through ground lease, and gov't gets benefit through higher tax base.
- Parking at stations is key, particularly park n ride stops: 200-400 cars usually needed.
- There are numerous destinations stops along the Northeast Corridor that are desirable: Aventura Mall, Gulfstream Park Racing & Casino
- There are numerous destinations stops along the North Corridor that are desirable: Hard Rock Stadium, Seminole Hard Rock Hotel & Casino

Subject: Transit-Oriented Development & Financing Mechanisms

John L. Renne

Director & Associate Professor, Coordinator of Undergraduate Programs, Florida Atlantic University (FAU) Center for Urban & Environmental Solutions
Honorary Research Associate, Transport Studies Unit, University of Oxford
jrenne@fau.edu

Context

Transit Oriented Development is a fast growing trend in creating vibrant, livable, sustainable communities. Also known as TOD, it's the creation of compact, walkable, pedestrian-oriented, mixed-use communities centered around high quality train systems, lessening (or completely removing) the complete dependence on a car for mobility and survival.

Transit oriented development is regional planning, city revitalization, suburban renewal, and walkable neighborhoods combined. Numerous cities have embraced the concept across the nation as they create some of the most desirable places to live, work, and play. Real estate developers have quickly followed to meet the high demand for quality urban places served by rail systems.

Transit oriented development is also a major solution to the serious and growing problems of climate change and global energy security by creating dense, walkable communities that greatly reduce the need for driving and energy consumption. This type of living arrangement can reduce driving by up to 85%.

Discussion

- Transit-Oriented Development (TOD) is a dense, mixed-use and pedestrian-focused development located within a 10 minute walk, or quarter-mile of a fixed-transit station
- Many communities encourage TOD as strategy to revitalize neighborhoods near fixed-transit stations, including rail, ferry and bus-rapid transit stations.
- Proponents tout numerous public benefits of TOD's:
    - More sustainable settlement pattern with lower impacts to the natural environment through less vehicle travel, thus lowering carbon emissions which cause climate change.
    - Return on investment due to generating additional ad valorem tax revenue from surrounding real estate properties
    - Spurs local economic development, including new jobs
    - Increase in commercial activity, including retail and food & beverage
    - Increase in National Average Home Values:
        - TOD $350 sf
        - TAD: $200 sf
        - National Average: $180 sf
    - Corporate attraction & retention: TOD's have a strong impact on the location decisions of many different types of businesses, particularly those which employ a highly educated, highly compensated and skilled workforce
    - Health: first and last mile connections usually include walking. Expenses related to obesity or being overweight are estimated to total in excess of $120 billion per year in the United States

- Opportunity Zone Incentive: Allows people to take capital gains from any business and you invest it in an opportunity zone. Tax-deferred payment for 8 years. Tax reduction in any investment gains. Double incentive
- There are a lot more sources available for funding these days, not just traditional banks. These institutions are more nimble than traditional banks.
- Incentivize: when property is not taxed, only the improvements
- The most difficult hurdle still remains parking: there is a tension between government, developers and financiers. The first two both want less parking (and therefore much less costs) but the banks that are financing the projects are hesitant to fund projects without adequate parking.

Further TOD Research

In early 2019, the Miami-Dade Board of County Commissioners developed and adopted a comprehensive development master plan ordinance that increases allowable density along six rapid transit corridors. This action was taken by local lawmakers specifically to encourage transit-oriented developments (TOD). The new zoning rule allows developers to build TODs outside city limits and offer 60 residential units per acre within one-quarter mile of any of the six corridors; 36 units per acre between one-quarter and one-half mile of a corridor; and 18 units per acre within one-half mile and a mile of a corridor. A recently created tax zone around these corridors is expected to generate almost $2 billion during the next 30 years.

TODs are planned around light-rail or commuter train service and typically include a mix of uses to draw in those looking for a live-work-play environment, at the very least, a walkable one. Also driving interest in TODs, according to the Transit Oriented Development Institute, is the desire to travel to and from work and other activities without having to deal with traffic congestion, as well as the growing interest in urban-style living. Supporters of TODs also claim that they are a sustainable and health-conscious approach to development, reducing drive time by as much as 85% and encouraging daily walking.

Zoning and other regulation changes that encourage TODs can also create more opportunities for contractors, architects and businesses in general. Development around the $2 billion Southwest light-rail stations in the Minneapolis area, for instance, is on track to exceed $1 billion.
www.constructiondive.com/news/600m-miami-transit-oriented-development-breaks-ground/552909/

Key Takeaways

- If utilizing Public Private Partnerships is the ideal instrument towards the financing of transit stations, then large-scale TODs are the best option due to:
  - The multitude of financing options
  - The attractive incentives that can be offered to private developers.
  - TOD residential units sell/lease quicker than national average
  - TOD office space rents/leases for more dollars per square foot.
  - When a TOD is attached to federal loan or grant application, it brings up their rankings in their NEPA studies.

Subject: Public and Private Financing Mechanisms for Transit Systems; Capital Costs, Maintenance & Operations

Christine Vineis

President & CEO, Capital Partnerships LLC
Former Director of Public Affairs, Mid-Ohio Regional Planning Commission
cvineis@capital-partnerships.com

Context

Christine Vineis, and her company Capital Partnerships, specializes in public and private funding, advising on the strategic positioning of projects, federal & state government relations, grant writing, public affairs practice, and the art of strategic government financing plans leveraged by high level relationships. To date, they have successfully won $1.5 billion of public funds for their client projects. Their sectors of expertise are economic development, the arts, healthcare, and transit & infrastructure.

Funding Mechanisms Discussed

TIFIA Loans – The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. Many surface transportation projects - highway, transit, railroad, intermodal freight, and port access - are eligible for assistance. Each dollar of Federal funds can provide up to $10 in TIFIA credit assistance - and leverage $30 in transportation infrastructure investment, i.e. 1/3 loan of total cost.

Example: Dulles Corridor MetroRail public transit project in Washington DC. In collaboration with the Virginia counties of Fairfax and Loudoun, the Metropolitan Washington Airports Authority (MWAA), is constructing a 23-mile extension of the existing Metrorail system. Through TIFIA, USDOT will provide credit assistance up to $1.87 billion for the Metro extension, including parking facilities and a station.
www.transportation.gov/tifia/financed-projects/dulles-corridor-metrorail-project

USDOT FTA

The Federal Transit Administration (FTA) provides financial and technical assistance to local public transit systems, including buses, subways, light rail, commuter rail, trolleys and ferries. FTA also oversees safety measures and helps develop next-generation technology research. Transit services supported by FTA span many groups and provide wide-ranging benefits. Since 1964, FTA has partnered with state and local governments to create and enhance public transportation systems, investing more than $12 billion annually to support and expand public rail, bus, trolley, ferry and other transit services. That investment has helped modernize public transportation and extended service into small cities and rural communities that previously lacked transit options.

This FTA discretionary grant program funds transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. There are two grants that can be used for TOD development:

Section 5309: Fixed Guideway Capital Investment Grants – Provides grants for new and expanded rail, bus rapid transit, and ferry systems that reflect local priorities to improve transportation options in key corridors. www.transit.dot.gov/capital-investment-grants-5309

New Starts

- Total project cost is equal to or greater than $300 million
- New fixed guideway system (light rail, commuter rail etc.)
- Extension to existing system
- Fixed guideway BRT system
- Requires completion of two phases in advance of receipt of a construction grant agreement: PD&E

Small Starts

- Total project cost is less than $300 million and total Small Starts funding sought is less than $100 million
- New fixed guideway systems (light rail, commuter rail etc.)
- Extension to existing system
- Fixed guideway BRT system
- Corridor-based BRT system
- Requires completion of one phase in advance of receipt of a construction grant agreement: Project Development.

www.transit.dot.gov/funding/grant-programs/capital-investments/fact-sheet-fixed-guideway-capital-investment-grants-new

Section 5339: Bus & Bus Facilities Fact Sheet – The Grants for Buses and Bus Facilities program (49 U.S.C. 5339) makes Federal resources available to States and designated recipients to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities. Funding is provided through formula allocations and competitive grants. A sub-program provides competitive grants for bus and bus facility projects that support low and zero-emission vehicles.
www.transit.dot.gov/funding/grants/bus-and-bus-facilities-fact-sheet-section-5339

Pilot Program TOD Planning Section 20005B – The Pilot Program for TOD Planning helps support FTA's mission of improving public transportation for America's communities by providing funding to local communities to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment. Comprehensive planning funded through the program must examine ways to improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations.

On December 18, 2018, FTA announced project selections that will receive a share of $16.6 million in FY2018 TOD Planning grants supporting comprehensive planning projects that improve access to public transportation. To note: the cities of Jacksonville and Tampa were both awarded these competitive grants.
www.transit.dot.gov/TODPilot

Congestion Mitigation and Air Quality Improvement (CMAQ) Program – State and local governments can use CMAQ funding to support efforts to meet National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) in both nonattainment and maintenance areas for carbon monoxide (CO), particulate matter (PM) and ozone (O3). Nonattainment areas are those where air pollution levels exceed NAAQS. Maintenance areas are those that were out of compliance with NAAQS for these pollutants but now meet the standards.

How CMAQ Funds May Be Used in Public Transportation:

- New Transit Service
- System or Service Expansion:
- New Vehicles:
- Fare Subsidies

Example: Houston, TX**.** A reduced transit fare program was offered in August, when ozone readings are typically highest. CMAQ funds covered $2.6 million of the $3.5 million cost. Estimated emission reductions: 80.4 kg/day of VOC and 95.2 kg/day of NOx.
www.fhwa.dot.gov/environment/air_quality/cmaq/

JARC - Job Access and Reverse Commute Program (5316) – The Job Access and Reverse Commute (JARC) program was established to address the unique transportation challenges faced by welfare recipients and low-income persons seeking to obtain and maintain employment. Many new entry-level jobs are located in suburban areas, and low-income individuals have difficulty accessing these jobs from their inner city, urban, or rural neighborhoods. In addition, many entry level-jobs require working late at night or on weekends when conventional transit services are either reduced or non-existent. Finally, many employment related-trips are complex and involve multiple destinations including reaching childcare facilities or other services.

JARC funds may be used to finance capital, planning and operating expenses. The Federal share of eligible capital and planning costs may not exceed 80 percent of the net cost of the activity. The Federal share of the eligible operating costs may not exceed 50 percent of the net operating costs of the activity. Recipients may use up to 10 percent of their apportionment to support program administrative costs including administration, planning, and technical assistance, which may be funded at 100 percent Federal share. The local share of eligible capital and planning costs shall be no less than 20 percent of the net cost of the activity, and the local share for eligible operating costs shall be no less than 50 percent of the net operating costs*. Note: this program is currently repealed. It may be brought back in the future, but for now, funding should be sought through the The Urbanized Area Formula Funding program (49 U.S.C. 5307)*
www.transit.dot.gov/funding/grants/grant-programs/job-access-and-reverse-commute-program-5316

Urbanized Area Formula Grants – 5307 – The Urbanized Area Formula Funding program (49 U.S.C. 5307) makes federal resources available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census. The federal share is not to exceed 80 percent of the net project cost for capital expenditures. The federal share may be 90 percent for the cost of vehicle-related equipment attributable to compliance with the Americans with Disabilities Act and the Clean Air Act. The federal share may not exceed 50 percent of the net project cost of operating assistance.
www.transit.dot.gov/funding/grants/urbanized-area-formula-grants-5307

FHA – Federal Highway Administration

The Federal Highway Administration (FHWA) is an agency within the U.S. Department of Transportation that supports State and local governments in the design, construction, and maintenance of the Nation's highway system (Federal Aid Highway Program) and various federally and tribal owned lands (Federal Lands Highway Program). Through financial and technical assistance to State and local governments, the

Federal Highway Administration is responsible for ensuring that America's roads and highways continue to be among the safest and most technologically sound in the world.

Transportation Alternatives Program (TAP) – The Florida Department of Transportation's TAP focuses on improvements which create alternatives to transportation for the non-motorized user and enhancements to the transportation system for all users. FDOT administers TAP programs through the Local Agency Program (LAP). The program uses a competitive selection process. TAP funding is divided into two categories. Fifty (50) percent of the funds are sub-allocated to areas based on population while the other fifty (50) percent may be obligated to any part of the state. Local government, Regional Transportation Authorities, Transit Agencies, Natural Resource or Public Land Agencies, School districts or local education agencies, or Tribal governments are eligible to apply.

Nine activities are eligible for funding including construction, planning and design of on- and off-road facilities for bicyclists and pedestrians:

- Construction, Planning, and Design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990
- Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users
- Construction of turnouts, overlooks, and viewing areas
- Community improvement activities, including
    - Inventory, control, or removal of outdoor advertising;
    - Historic preservation and rehabilitation of historic transportation facilities;
    - Vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control; and
    - Archaeological activities relating to impacts from implementation of a transportation project eligible under 23 USC.
- Construction, Planning, and Design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990
- Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation to:
    - Address storm water management, control, and water pollution prevention or abatement related to highway construction or due to highway runoff including activities described in 23 USC 133(b)(3) [as amended under the FAST Act], and 328(a) and 329 of Title 23; or,
    - Reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats.
- The Recreational Trails Program under 23 USC 206
- Safe Routes to School Projects

www.fhwa.dot.gov/environment/transportation_alternatives/

The FAST Act Surface Transportation Dollars – The FAST Act authorizes $305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs.
www.transportation.gov/fastact/innovative-financing-factsheet

The **Recreational Trails Program** (RTP) – RTP provides funds to the States to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. The RTP is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). Federal transportation funds benefit recreation including hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles.
NOTE: *A full TOD requires much more than just the station. These funds can be used for all the infrastructure needed surrounding the station: trails, sidewalks, pedestrian bridges, bathrooms, parking lots, etc*. www.fhwa.dot.gov/environment/recreational_trails/

USDOT COMPETITIVE GRANTS

USDOT BUILD grants – The Better Utilizing Investments to Leverage Development grant is a competitive program that awards up to $25 million for projects which are evaluated based on merit criteria that include safety, economic competitiveness, quality of life, environmental protection, state of good repair, innovation, partnership, and additional non-Federal revenue for future transportation infrastructure investments. Fiscal Year 2019 BUILD Transportation grants are for investments in surface transportation infrastructure and will be awarded on a competitive basis to projects that will have a significant local or regional impact. BUILD funding can support roads, bridges, transit, rail, ports or intermodal transportation. Selection criteria encompass safety, economic competitiveness, quality of life, state of good repair, innovation and partnerships with a broad range of stakeholders.

The Consolidated Appropriations Act of 2019 made available $900 million for National Infrastructure Investments, otherwise known as BUILD grants. For this round of BUILD grants, the maximum grant award is $25 million, and no more than $90 million can be awarded to a single State. The deadline to submit an application for the FY 2019 BUILD Transportation Discretionary Grants program is July 15, 2019.
www.transportation.gov/BUILDgrants

INFRA GRANTS – USDOT's Infrastructure For Rebuilding America Grants program provides dedicated, discretionary funding for projects that address critical issues facing our nation's crumbling infrastructure. This program focuses on creating opportunities for all levels of government and the private sector to fund infrastructure, using innovative approaches to improve the necessary processes for building significant projects, and increasing accountability for the projects that are built.

INFRA advances a grant program established in the FAST Act of 2015 and utilizes updated criteria to evaluate projects to align them with national and regional economic vitality goals and to leverage additional non-federal funding. The program will increase the impact of projects by leveraging federal grant funding and incentivizing project sponsors to pursue innovative strategies, including public-private partnerships. The Department will make awards under the INFRA program to both large and small projects. For a large project, the INFRA grant must be at least $25 million. For a small project, the grant must be at least $5 million. For each fiscal year of INFRA funds, 10 percent of available funds are reserved for small projects.

Eligible INFRA project costs may include: reconstruction, rehabilitation, acquisition of property (including land related to the project and improvements to the land), environmental mitigation, construction contingencies, equipment acquisition, and operational improvements directly related to system performance. In FY18, INFRA grants in the amount of nearly $1.5 billion were awarded to 26 projects. www.transportation.gov/INFRA.

EDA Economic Development Assistance Programs – The Economic Development Administration is an agency in the United States Department of Commerce that provides grants and technical assistance to economically distressed communities in order to generate new employment, help retain existing jobs and stimulate industrial and commercial growth through a variety of investment programs. The two caveats with these grants are the City will have to prove that there is a high percentage of unemployment around the proposed station, and that the jobs that will be created need to be high-paying jobs, i.e. tech, engineering, etc. If office space is a component of the TOD, priority should be given to tenants that offer high-paying jobs. www.grants.gov/web/grants/view-opportunity.html?oppId=306735,

Other Non-Traditional Funding Sources to Consider

NEA Creative Placemaking Grants – The National Endowment for the Arts grants program funds projects help to transform communities into lively, beautiful, and resilient places with the arts at their core. Creative placemaking is when artists, arts organizations, and community development practitioners deliberately integrate arts and culture into community revitalization work - placing arts at the table with land-use, transportation, economic development, education, housing, infrastructure, and public safety strategies. Creative placemaking supports local efforts to enhance quality of life and opportunity for existing residents, increase creative activity, and create a distinct sense of place.

Example: Murals on parking garage at TOD station; sculptural art at station or on sidewalks; sidewalk with embedded art in the hardscapes; signage; benches; lighting.
www.arts.gov/artistic-fields/creative-placemaking

The Rockefeller Foundation – The Rockefeller Foundation advances new frontiers of science, data, policy and innovation to solve global challenges related to health, food, power and economic mobility. As a science-driven philanthropy focused on building collaborative relationships with partners and grantees, The Rockefeller Foundation seeks to inspire and foster large-scale human impact that promotes the well-being of humanity throughout the world by identifying and accelerating breakthrough solutions, ideas and conversations. For more information, visit www.rockefellerfoundation.org.

Example: In 2013, the Rockefeller Foundation awareded a $1.2 million, four-city project to support local efforts to build bus rapid transit (BRT) systems in Boston, Chicago, Nashville, and Pittsburgh. In each city, the grant will support research, communications, and community outreach efforts to engage and educate local stakeholders on the benefits of BRT. The Rockefeller Foundation also awarded a $30 million grant to the Adrienne Arsht Center here in Miami for resilience at the Atlantic Council.

United States Department of Agriculture (USDA) National Institute of Food and Agriculture – Food deserts are locations without easy access to fresh, healthy, and affordable foods. Food consumed in food deserts is often high in cholesterol, sugar, and fat. NIFA is working to eradicate food deserts throughout the country though a variety of programs. https://nifa.usda.gov/grants

Community Food Project (CFP) – CFP grants provide communities with the funds they need to re-establish local control over their food supply. The primary goals of the CFP are to: Meet the food needs of low-

income individuals through food distribution, community outreach to assist in participation in Federally assisted nutrition programs, or improving access to food as part of a comprehensive service; Increase the self-reliance of communities in providing for the food needs of the communities; Promote comprehensive responses to local food access, farm, and nutrition issues; and Meet specific state, local or neighborhood food and agricultural needs including needs relating to: Equipment necessary for the efficient operation of a project; Planning for long-term solutions; or The creation of innovative marketing activities that mutually benefit agricultural producers and low-income consumers. https://nifa.usda.gov/funding-opportunity/community-food-projects-cfp-competitive-grants-program

Healthy Food Financing Initiative (HFFI) – The Healthy Food Financing Initiative (HFFI) represents the Federal government's first coordinated program to eliminate "food deserts." The HFFI supports projects that increase access to healthy, affordable food in communities that currently lack these options. Through a range of programs at the U.S. Departments of Agriculture, Treasury, and Health and Human Services, HFFI will expand the availability of nutritious food, including developing and equipping grocery stores, small retailers, corner stores, farmers markets, cooperatives and food hubs selling healthy food. Businesses, non-profit organizations, cooperatives and State Departments of Agriculture are eligible for funding. The Community Economic Development (CED) Program is a key part of the HFFI. www.acf.hhs.gov/ocs/programs/community-economic-development/healthy-food-financing

Example: If proposed TOD station includes a food bank or organic food grocery store, a considerable grant could be acquired.

Key Takeaways

- There are numerous funding opportunities, especially non-traditional grants that are worth exploring. And unlike federal loans, you do not need to pay them back, usually just match.
- To win competitive grants, communities/organizations really need to differentiate themselves. Show why you are unique, and why this is a worthy investment.
- Hire a professional grant writer. The relatively small financial amount spent upfront on an experienced grant writer has the potential to return a huge investment long-term.

Subject: Miami-Dade County Department of Transportation & Public Works (DTPW) and the SMART Plan

Frank Guyamier
Deputy Director, Engineering, Planning and Development, Miami-Dade County
Frank.Guyamier@miamidade.gov

Carlos Cruz-Casas
Assistant Director, Miami-Dade County DTPW
Carlos.Cruz-Casas@miamidade.gov

Robert Villar
Assistant Director, Financial Services, Miami-Dade County DTPW
Robert.Villar@miamidade.gov

Albert Hernandez
Assistant Director, Engineering, Planning and Development, Miami-Dade County Transit
Albert.Hernandez@miamidade.gov

Isabel Padron
Chief, Miami-Dade County DTPW

Isable.Padron@miamidade.gov

Jie Bian

Principal Planner, Miami-Dade County DTPW
Jie.bian@miamidade.gov

Context

Miami-Dade Transit is the primary public transit authority of Miami, Florida, United States and the greater Miami-Dade County area. It is the largest transit system in Florida and the 15th-largest transit system in the United States. Miami-Dade County Department of Transportation & Public Works (DTPW) goal is to connect people to places by providing a high-quality, safe, reliable, clean, and efficient mass transit system that meets the travel needs of the County's growing population and we provide vital transportation infrastructure systems and services.

DTPW provides all traffic signals countywide, along with all traffic control signs, street signage and pavement markings and all County and State-owned street lights. They build, operate and maintain movable and fixed bridges, swales, roadway surface repairs, guardrails, and along County road rights-of-way. DTPW also operates and maintains the Rickenbacker and Venetian Causeways, manages the County Stormwater Utility for flood and water quality protection and maintain the secondary canal system. Finally, they also handle permits for all work within rights-of-way, and code enforcement of unpermitted work is also handled by their Public Works division.

In regards to the SMART Plan, DTPW is responsible for the Project Development and Environment (PD&E*)* Studies as required by the National Environmental Policy Act (NEPA) for the following corridors:

- Beach Corridor
- East-West Corridor
- South Dade Transitway Corridor

South Corridor Discussion

The alignment has been picked, Bus Rapid Transit (BRT) has been selected as the locally preferred alternative (LPA) for technology, and what is left is to determine are station locations and financing. DPTW will develop BRT stations with the idea that at a later date, they can be transformed/upgraded to Heavy Rail at-grade. To do so they are building stations with:

- Center Platforms (busses will have boarding via left doors(
- Larger overhead clearance to accommodate trains
- Crossings for BRT will have railroad crossing gates
- Parking garages that have flat parking levels with ramps so that the structure can possibly be retrofitted at a later date.

Funding Mechanisms Discussion for the South Corridor

USDOT FTA Small Starts Grants – Provides grants for new and expanded rail, bus rapid transit, and ferry systems that reflect local priorities to improve transportation options in key corridors; total cost not to exceed $300 million. For the entire Southeast Corridor, the County applied for the maximum amount: $100 million. The minimum matching $100 million will come from an FDOT/County split, or it is possible that both FDOT and the County will put in $100 million each.

USDOT Better Utilizing Investments to Leverage Development (**BUILD) Grants** – DTPW was awarded a $9.5 million BUILD federal grant to improve two Park and Ride facilities along the South Dade Transit Way – one of six corridors in the Strategic Miami Area Rapid Transit (SMART) Plan.

The two facilities, which are currently surface lots, will be upgraded and expanded to include:

- Parking garages.
- Additional sidewalks.
- Access points to improve pedestrian access.
- A pick-up/drop-off area for Transportation Network Entities (TNEs), such as Uber and Lyft.
- Dedicated area for municipal circulators.
- Upgrades that will include additional general parking, short-term parking, disabled parking, stroller parking, vanpool/carpool parking, electric vehicle parking with an associated charging station, and motorcycle and scooter parking spaces.
- Bike sharing capacity and bicycle parking.
- A community center.

Public–Private Partnership (**P3**) – a cooperative arrangement between two or more public and private sectors, typically of a long-term nature. The last twenty years have seen a clear trend towards governments across the globe making greater use of various P3 arrangements. P3s are best seen as a special kind of contract involved in infrastructure provision, such as the building and equipping of schools, hospitals, transport systems, water and sewerage systems.

Other Metrorail TOD stations have been built by P3's in the past:

- Dadeland South: land owner engaged in talks with the County. Rather than worry about imminent domain, owner decided to donate the land, and then lease it back on a long-term lease. County gets participation rights
- Dadeland North
- Douglas Station

Example: **Link at Douglas** – Adler Group and 13th Floor Investments recently broke ground on the $600 million Link at Douglas, a mixed-use, transit-oriented development in Coconut Grove, Florida, that is one of the biggest projects in area history. The five-tower project, located on the Miami-Dade Transit's Metrorail, will offer 1,400 residential units; 280,000 square feet of office space; a 25,000-square-foot public plaza; and 25,000 square feet of retail space.

In addition to being connected to Miami International Airport, downtown Miami and other destinations in the Miami-Dade region via Metrorail, transportation options in and out of the development will also include the Coral Gables trolley, bus service, bike and pedestrian paths and rideshare services.

Example: **Tupperware Sunrail Station** – Another precedent for P3 financed and developed train stations is the Tupperware train station on the SunRail's commuter rail system in the Greater Orlando area. The SunRail system comprises 16 stations along a former CSX Transportation line connecting Volusia County and Osceola County through Downtown Orlando. The SunRail system is financed by the state and federal governments and the counties it serves. SunRail is Florida's second commuter rail system after South Florida's Tri-Rail. The Tupperware Brands company has a corporate campus near the SunRail system and wanted a stop nearby. So, they donated their land to FDOT, they changed their zoning, upzoned, financed and built the station.

Example: **SW 174th St Station** – Currently along the Southeast corridor, Palmetto Bay is looking at developing a downtown center where SW 174th St, Dixie Highway, US1 and the FEC corridor all merge. The City asked DTPW to move their proposed BRT station to this location. South Motors Automotive Group will donate 1.5 acre parcel, DTPW will donate 30,000 sf. for parking.

Key Takeaways

- Having private developers build TOD stations can save a great amount of time and money
- County is preparing bid documents for private developers to build out TOD stations according to their standards/requirements
- Important incentives will attract private development:
  - Development Rights
  - Upzoning (any property within a Rapid Transit Zone (RTZ)
  - If County owns lands, developer pays no taxes on the land, only on the improvements.
  - Naming Rights: through development agreement, Swire Properties/Brickell City Centre rebuilt, upgraded and maintains Metromover station for naming rights.

Subject: City of North Miami Transit Options and TOD development

Tanya Wilson
Planning, Zoning & Development Director, City of North Miami
twilson@northmiamifl.gov

Samuel Blatt
Economic Development Manager, City of North Miami
sblatt@northmiamifl.gov

Debbie Love
City Planner, City of North Miami
dlove@northmiamifl.gov

Derrick Cook
Zoning Manager, City of North Miami
dcook@northmiamifl.gov

Amanda Murray
Senior Planning Technician, City of North Miami
amurray@northmiamifl.gov

Context

The City of North Miami is a suburban city located in northeast Miami-Dade County, about 10 miles north of Downtown Miami. The city lies on Biscayne Bay and hosts the Biscayne Bay Campus of Florida International University, and the North Miami campus of Johnson & Wales University. Originally the town of "Arch Creek", the area was incorporated as the "Town of Miami Shores", which was renamed the "Town of North Miami" in 1931. It was reincorporated as a city in 1953, and is currently known as “NoMi”. As of 2010, the population recorded by the U.S. Census Bureau is 58,786. With almost 60,000 residents, North Miami is the sixth largest city in Miami-Dade County. It is also one of the most ethnically diverse cities in South Florida. North Miami has the second highest percentage of Haitian residents in the US, with 33.00% of the US populace, followed by Cuban residents (4.43%) Jamaican residents (3.30%) Dominican residents (1.72%) and Bahamian residents (1.20%).

As it pertains the SMART Plan Northest Corridor, North Miami is also one of the six transit stops – Dowtown Miami, Midtown/Design District, 79th St/Upper Eastside, North Miami, North Miami Beach, Aventura – in Miami Dade County along the future Tri-Rail Coastal Link that will provide regional public transit and connectivity to Jupiter, West Palm and Fort Lauderdale in the north. In their 2018 "North Miami Mobility Hub and TOD Strategic Plan", the NoMi Mobility Hub is proposed around the future transit station near the 125th Street/123rd Street/ FEC Railway corridor intersection and includes the surrounding urban areas and neighborhoods. It will allow for a seamless integration of all transportation modes with a high quality user experience. It will bring together an intensive concentration of work, live, shop, and/or play activities comfortably accessible by foot, within approximately a half-mile radius or a 10-minute walking distance. In addition, the Mobility Hub will serve as the origin, destination, or transfer point for a significant portion of NoMi trips.

Funding Mechanisms North Miami is Considering for TOD Development

USDOT BUILD grants – The Better Utilizing Investments to Leverage Development grant is a competitive program that awards up to $25 million for projects which are evaluated based on merit criteria that include safety, economic competitiveness, quality of life, environmental protection, state of good repair, innovation, partnership, and additional non-Federal revenue for future transportation infrastructure investments. www.transportation.gov/BUILDgrants

US HUD Choice Neighborhoods Planning Grants Program – The U.S. Department of Housing and Urban Development Choice Neighborhoods program leverages significant public and private dollars to support locally driven strategies that address struggling neighborhoods with distressed public or HUD assisted housing through a comprehensive approach to neighborhood transformation.
https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy18cnpg

FDOT County Incentive Grant Program – The Florida Department of Transportation County Incentive Grant Program (CIGP) was created for the purpose of providing grants to counties, to improve a transportation facility including transit which is located on the State Highway System (SHS) or which relieves traffic congestion on the SHS, per Section 339.2817, Florida Statutes.
www.fdot.gov/programmanagement/LP/CIGP/Default.shtm

FDOT Transportation Regional Incentive Program (TRIP) – TRIP was created to improve regionally significant transportation facilities in "regional transportation areas". State funds are available throughout Florida to provide incentives for local governments and the private sector to help pay for critically needed projects that benefit regional travel and commerce. The Florida Department of Transportation (FDOT) will pay up to 50 percent of the non-federal share of project costs for public transportation facility projects.
www.fdot.gov/programmanagement/LP/TRIP/Default.shtm

EDA Economic Development Assistance Programs – The Economic Development Administration is an agency in the United States Department of Commerce that provides grants and technical assistance to economically distressed communities in order to generate new employment, help retain existing jobs and stimulate industrial and commercial growth through a variety of investment programs. The two caveats with these grants are the City will have to prove that there is a high percentage of unemployment around the proposed station, and that the jobs that will be created need to be high-paying jobs, i.e. tech, engineering, etc. If office space is a component of the TOD, priority should be given to tenants that offer high-paying jobs. www.grants.gov/web/grants/view-opportunity.html?oppId=306735,

Florida Department of Economic Opportunity Florida Job Growth Grant Fund – In its first year, the Florida Job Growth Grant Fund provided $85 million for public infrastructure and job training projects that support growth and employment in Florida's diverse industries. In 2018-19, another $85 million will be provided for public infrastructure and job training projects in Florida. Public infrastructure projects can include transportation and utilities needed to support economic development.
http://floridajobs.org/jobgrowth

Miami Dade Transportation Planning Organization (TPO) Municipal Grant Program – The Municipal Grant Program (MGP) was developed to have municipalities within Miami-Dade County submit transportation planning proposals to the TPO to receive funding on a competitive basis. Participation in the program requires a minimum 20% funding commitment from the municipality.
http://miamidadetpo.org/municipal-grant-program.asp

Other Investment Strategies

PRIVATE INVESTMENT

This is the single most important source of redevelopment funding. The general rule for successful revitalization is that private investment usually must exceed public funding by three to four fold. Such funding takes the form of equity investment and conventional real estate loans.

LEASING

Public-owned land, buildings, equipment, etc. can be leased to developers for projects. For the developer, this reduces the need for capital investment in land, buildings, etc. or debt service on money borrowed to finance the purchase of such things as land, building, and equipment. The governmental entity receives lease payments which are deductible from the developer's income tax. The lease may also include a purchase option.

JOINT VENTURES

In real estate syndication ventures, the implementation and/or governing body can contribute equity capital to a project. This has the effect of reducing equity requirements from the developer and/or reducing the amount of debt service. Through equity syndication, tax subsidy benefits can be passed on to investors in the form of depreciation, investment tax credits, deferral of taxes and capital gains.

DENSITY TRANSFERS

Under this approach, density can be transferred or purchased from private property owners, in addition to being purchased or 'bonused' from the County or City. The density transfer approach works well where the planning goal is to shift development from a 'sending area' to a 'receiving area' (for example, from a protected environmental/natural area to an area where it is in close proximity to a transit station). Land availability must be managed to maintain market demand for 'receiving areas', otherwise 'sending areas' will not be adequately compensated. Density transfers are proven techniques to protect heritage amenities, environmental resources and to capitalize on public investments such as transit stations.

DEVELOPMENT INCENTIVES

To further stimulate private investment the City, working with the City of North Miami, can provide development incentives through various means, including: facade, landscape, signage or property improvement grants; payment of impact fees; provision of site specific infrastructure improvements to address any deficiencies; participation in environmental clean-up of contaminated sites; flexibility in the application of use restrictions and increasing intensity of site use; flexible parking regulations; grants or

low interest loans for life safety improvements; joint business support ventures such as district business identification signage or centralized marketing strategies. Most of the public sector economic development incentives are pass-through allotments of Community Development Block Grants, road funding from the Coordinating Council for Economic Development, and EDA grants. The following are some of the economic development incentives used within the State: DISCRETIONARY JOB

DEVELOPMENT CREDIT (JDC)

A discretionary incentive that rebates a portion of new employees' withholding taxes that can be used to address the specific needs of individual companies. JDCs are approved on a case-by case basis by the S.C. Coordinating Council for Economic Development (CCED). To qualify, a company must meet certain business requirements. STATUTORY JOB TAX CREDIT (JTC) A statutory incentive offered to companies, both existing and new, that create new jobs in the state. The credit is available to companies that establish or expand manufacturing facilities, distribution and processing facilities, corporate headquarters, research and development facilities and qualified service-related facilities.

CORPORATE HEADQUARTERS CREDIT

In an effort to offset the cost associated with relocating or expanding a corporate headquarters facility, Florida provides a generous 20 percent credit based on the cost of the actual portion of the facility dedicated to the headquarters operation or direct lease costs for the first five years of operation. The credit can be applied against either corporate income tax or the license fee. These credits are not limited in their ability to eliminate corporate income taxes and can potentially eliminate corporate income taxes for as long as 10 years from the year earned. Eligibility for this credit is determined by meeting a number of specific criteria.

RESEARCH AND DEVELOPMENT TAX CREDIT

In order to reward companies for increasing research and development activities in a taxable year, Florida offers a credit equal to 5 percent of the taxpayer's qualified research expenses in the state. The term "qualified research expenses" is defined in Section 41 of the Internal Revenue Code. The credit taken in any one taxable year may not exceed 50 percent of the company's remaining tax liability after all other credits have been applied. Any unused portion of the credit can be carried forward for 10 years from the date of the qualified expenditure.

Key Takeaways

- There are a number financing options available to the City of North Miami to plan, design, and build a TOD hub as part of the both the SFRTA/Tri-Rail Coastal Link and the FDOT/TPO SMART Plan Northeast Corridor.
- At the proposed location for the TOD hub, there currently exists nearly 2 acres that could be redeveloped for the station.
- Utilize constraints as an opportunity:
    - The high percentage of residents that do not own a vehicle and rely on mass transit to commute to work should be highlighted for grants
    - The City's higher unemployment and poverty rates should be highlighted for grants, particularly economic development assistance grants
- Private investment & development can be key to NoMi's TOD success:
    - Find developers that are willing to build the station/platform for incentives: upzoning, greater FAR, development bonus rights, less or no taxes on the property only the improvements, less impact fees, and possible sharing of parking revenue.
    - A true TOD hub that offers transit connections, office space, a tech center, residential units, food & beverage options and limited retail could positively change the fabric of North Miami for years to come.

Additional Sources:

(North Miami, Florida) https://en.wikipedia.org/wiki/North_Miami,_Florida

Collaboration between the City of North Miami, North Miami CRA, and IBI Group (2018, December 11) *The North Miami Mobility Hub and TOD Strategic Plan – Final Report*

Collaboration between the City of North Miami, North Miami CRA, and IBI Group (2018, December 11) *The North Miami Mobility Hub and TOD Strategic Plan – Appendix*

ULI Advisory Services Panel Report (2016, May 22-27) *Arch Creek Basin, Miami-Dade County Florida, Addressing Climate Vulnerabilities and Social Equity with an Adaptation Action Area Framework*

Funding Mechanisms and Recommendations

The tools are organized into seven categories:

A. **DIRECT FEES:** Charges paid by the users of the infrastructure.

1. User fees and transportation utility fees
2. Parking Fees
3. Congestion pricing

B. **DEBT TOOLS:** Mechanisms for borrowing money to finance infrastructure.

1. Private debt
2. Industrial loan companies and industrial banks
3. General obligation bonds
4. Revenue bonds
5. Private activity bonds
6. Certificates of participation and lease revenue bonds
7. Revolving loan funds
8. State infrastructure banks
9. Grant anticipation revenue vehicle bonds
10. Railroad Rehabilitation and Improvement Financing

C. **CREDIT ASSISTANCE:** Mechanisms that improve the creditworthiness of the borrower issuing a bond or requesting a loan and thus provide access to better borrowing terms.

1. Credit assistance tools
2. Transportation Infrastructure Finance and Innovation Act

D. **EQUITY SOURCES:** Tools that allow private entities to invest (i.e., take an ownership stake) in infrastructure in expectation of a return.

1. Public-private partnerships
2. Infrastructure investment funds

E. **VALUE CAPTURE MECHANISMS:** Tools that capture the increased value or savings resulting from the public provision of new infrastructure**.**

1. Impact Fees
2. Joint Development
3. Land Value Taxation
4. Negotiated Extractions
5. Special Assessment Districts (SAD)
6. Tax increment financing (TIF)

F. **GRANTS:** Funds that do not need to be paid back.

1. Congestion Mitigation and Air Quality Improvement Program
2. Transportation Alternatives Program (Formerly Transportation Enhancements Program)
3. Urbanized Area Formula Funding Program
4. Community Development Block Grant Program
5. Economic Development Administration grants
6. Foundation grants
7. Program-related investments

G. **EMERGING TOOLS:** New concepts for making TOD-related infrastructure possible. Most of the tools in this category do not fit neatly into any of the other categories.

1. Structured funds
2. Land banks
3. Redfields to greenfields
4. National infrastructure bank

Funding Mechanisms and Recommendations

Direct Fees

Direct fees charge people for using public infrastructure or goods. Fees can be charged for new and existing development and are, therefore, applicable in strong and weak real estate markets. However, the rate at which a fee can be set generally depends on local conditions. For example, parking fees or bridge tolls can be set higher in places with strong demand from drivers.

1. User Fees and Transportation Utility Fees:

User fees and rates are charged for the use of public infrastructure or goods, including transit, parking facilities, water or wastewater systems, and toll roads or bridges. Local governments or utilities might be able to issue bonds backed by user fee revenue to pay for new or improved infrastructure. Such fees and rates are typically set to cover a system's yearly operating and capital expenses, including annual debt service for improvements to the system. Transportation utility fees are assessments on property that are designed to be closely related to transportation demand and can therefore spread the costs of financing local roads or other transportation services among users in a fashion that approximates a user fee. Because it is not a tax, a transportation utility fee typically does not require voter approval. The fee can be a flat fee for each property, or it can apply a formula based on units of housing, number of parking spaces, or square footage. It can also be based on the estimated trip generation rate for a property type. Transportation utility fees are most commonly used for roads, but they can also be used to provide a dedicated funding source for transit systems.

Certain Types of User Fees:

(a) User Fees/Passenger Fares: A User fee is a sum of money paid as a necessary condition to gain access to a particular service or facility. A fare is the fee paid by a passenger for use of a public transport system (i.e.: rail, bus, taxi, etc.).

(b) Highway Tolls: also known as a turnpike or tollway, is a public or private road (almost always a controlled access highway in present day) for which a fee (or toll) is assessed for passage. It is a form of road pricing typically implemented to help recoup the cost of road construction and maintenance.

(c) Express Lanes: toll prices a set to manage traffic and have just the right amount if vehicles in the lane to provide a reliable, shorter travel time. On some Express Lanes, tolls can change in price depending on the level of congestion (*See Congestion Pricing* below).

Example of User Fees in Practice: Corvallis, Oregon Corvallis Sustainability Initiatives Fee (Transportation Utility Fee); Description: In February 2011, the city of Corvallis implemented a sustainability initiatives fee that pays for free bus service and maintenance of sidewalks and public trees. The city charges residents and businesses the fee via the water bill to reduce administrative costs. The transit portion of the fee

varies by the number of trips a property is expected to generate; a single family residential property is charged $2.75 a month. In addition, all properties are charged $1.30 a month for sidewalk and public tree maintenance. The sidewalk maintenance and urban forestry fees are based on the assumption that all residents and businesses benefit equally from sidewalks and from a healthy public tree system.

Recommendation: Use of certain types of User Fees is recommended as a financing mechanism combined with other sources of funding. Specifically, User Fees/Passenger Fares can serve as a stable revenue stream, but other types such as Highway Tolls and Express Lanes are a bit more difficult to coordinate as they require buy in from different government entities (i.e.: FDOT).

2. Parking Fees:

Parking fees may be established within a district, or region-wide to fund transit investment.

Example: Portland implemented a parking fee to compliment the use of TIF and SADs when building its streetcar project. As potential TOD redevelopment areas were identified, the City of Portland and Portland Streetcar Inc. joined with private developers to develop plans.

Recommendation: This is a viable funding source as the potential from parking fees at new stations can be enough to help pay the parking bonds needed to build parking garages.

3. Congestion Pricing:

Congestion Pricing is the use of pricing mechanisms to manage demand for services during peak periods. The economic rationale is that, at a price of zero, demand exceeds supply, causing a shortage, and that the shortage could be corrected by charging a price rather than by increasing the supply. Usually this means increasing prices in certain times or places where congestion occurs or introducing a new user fee when peak demand exceeds available supply. Congestion pricing has been widely used by telephone and electric utilities and public transit agencies. More recently, it has been implemented to mitigate congestion on roadways and bridges.

Examples of Congestion Pricing in Practice: Orange County, California SR-91 Express Lanes; Description: SR-91 in Orange County has used congestion pricing since the mid-1990s. As required by state law, the Orange County Transportation Authority, in consultation with the California Department of Transportation and the Riverside County Transportation Commission, annually issues the SR-91 Implementation Plan. The plan establishes a multiphase program of projects eligible for funding from excess SR-91 Express Lanes toll revenue, which can include transit and highway improvements. In 2010, SR-91 generated nearly $42 million in revenue. The first set of projects is anticipated to be completed by 2016 and includes six improvements at a total cost of approximately $1.57 billion.

Recommendation: While the use of Congestion Pricing can be an effective tool to relieve congestion and support development of transit-related projects, it can be a time consuming process and demands political commitment and would be difficult to approve. Therefore, we do not recommend this type of Direct Fee.

Debt

Debt tools are mechanisms for borrowing money to finance infrastructure. Local governments can access credit through private financial institutions, the bond market, or other, specialized mechanisms that the federal government and states have established for financing particular types of infrastructure. Local governments can issue debt for projects that do not generate revenue (typically in the form of general obligation bonds), but most types of debt must be secured by revenue generated either by the infrastructure that the debt is used to fund (e.g., parking or utility fees) or within the geographic area that will benefit from the improvement (e.g., tax-increment financing generated by property or sales tax increases can typically be used to pay for improvements only in a specified area). Except for debt that is secured by revenue such as property taxes that is related to real estate performance, the availability of debt is not usually related directly to the strength of the local real estate market. Rather, potential lenders, including private financial institutions as well as bond investors, decide how much they are willing to lend and on what terms based on the creditworthiness of the borrower and the reliability of the revenue stream that will be used for repayment (e.g., taxes, user fees, or leases).

1. Private Debt:

Public entities can borrow money from commercial banks, industrial loan companies (ILC) or industrial banks (IB), and other private financial institutions to finance revenue-generating infrastructure. ILCs and IBs are regulated by their state chartering authorities and, at the federal level, by the Federal Deposit Insurance Corporation. Most ILCs and IBs serve as small financing companies; however, some have expanded their operations to include some commercial and collateralized real estate lending. Largely operating as a bank would, ILCs and IBs are authorized to make consumer and commercial loans, issue credit cards, and to accept federally insured deposits, but most ILCs and IBs do not operate on a retail basis with branches in a community.

Example: Utah Housing Corporation $150 Million Line of Credit; Description: In Utah, UBS Bank USA, an ILC that is the banking affiliate of UBS Wealth Management Americas, provided the Utah Housing Corporation, a public corporation created by the state, with a $150-million line of credit to help ensure the housing corporation's ability to provide mortgages and down-payment assistance for first-time homebuyers. The Utah Housing Corporation typically finances mortgages through the sale of tax-exempt housing bonds. Because the sale of bonds might occur infrequently, the UBS-backed line of credit fills a short-term financing gap for the housing corporation.

Recommendation: Use of ILCs or IBs is recommended as a financing mechanism. However, financing for TOD infrastructure from an ILC or IB would typically be like getting financing from any other bank, and government agencies would be subject to the same interest rates as any conventional loan.

2. Industrial Loans/Industrial Banks:

A structured fund is a loan fund that pools money from different investors with varying risk and return profiles. Structured funds have a dedicated purpose, which is clearly defined before the fund is formed, and are managed by professionals with fund formation and loan underwriting experience. Communities have been increasingly interested in using structured funds as a property acquisition tool to support affordable housing development, particularly near transit.

3. (GOB) General Obligation Bonds:

General obligation bonds are a type of municipal bond used in general public finance or municipal finance. General obligation bonds are generally tax-exempt and are issued for municipal projects that do not

generate revenue. They are backed by the "full faith and credit" of the issuer rather than the revenue from a project. Typically, no assets are used as collateral. General obligation bonds can be issued by government entities including states, counties, cities, redevelopment agencies, special-purpose districts, school districts, or public utility districts. The issuer uses proceeds from the bond sale to pay for capital projects, such as utilities, housing, public transit facilities, parks, water delivery systems, and other projects, or for other purposes that it cannot or is not willing to pay for with other available funds.

Example: Washington Dulles Corridor Metrorail Project in Northern Virginia. Voters in the Virginia counties of Arlington, Fairfax, Loudoun, and Prince William approved over $1.6 billion in general obligation bonds for transportation projects. About one-third of these bonds support a 23-mile Metrorail extension from Fairfax County to Loudoun County. General funds, which come from primarily local property taxes, are used to pay the debt service.

Recommendation: This is a viable and effective funding mechanism. Can be easily issued and proceeds can be repaid from local property taxes. The City of Miami recently passed the Miami Forever GOB bond with most of the funds allocated to resilience and affordable housing.

4. Revenue Bonds - Transit Fees/Parking Fees:

A revenue bond is a type of municipal bond that is secured by a specific revenue stream. Revenue bonds can be issued by cities, counties, and, in some states, special districts to finance improvements for a revenue-producing enterprise. Revenue bonds are repaid solely from the revenue generated by the financed facility (e.g., an airport, water system, or sewer system). The revenue used to back the bonds can include service charges or rates, tolls, connection fees, admission fees, and rents. Revenue bonds can finance transit facilities, with fare box revenue providing part of the revenue stream required to secure the bond. Under the typical revenue bond structure, income from the revenue-generating enterprise is put into a revenue fund. Expenses for operations and maintenance are paid first from the revenue fund. Only after those costs are paid do revenue bondholders receive payments. Most project-backed revenue sources are less secure than taxes that would back a general obligation bond. In addition, revenue bonds are not backed by the full faith and credit of a public entity, as general obligation bonds are. For these reasons, revenue bonds carry a somewhat higher default risk and therefore higher interest rates than general obligation bonds.

Example: West Dublin/Pleasanton BART Station and Transit Village Location: Dublin, California. The Bay Area Rapid Transit (BART) recently completed the $106-million West Dublin/Pleasanton Station, a new transit station built on an existing commuter rail line. One of the most challenging aspects of the project was that structured parking needed to be built before other revenue-generating components of the project. BART used bond financing to build the station and structured parking. The debt service on the bonds will be repaid using proceeds from planned real estate development, as well as BART parking and fare box revenue. The cities of Dublin and Pleasanton and Alameda County agreed to place a total of $8 million in a reserve account, which will be used if there is a shortfall in the debt service on the bonds or in station operating costs.

Recommendation: This is a viable option whereas the revenue from the commercial spaces at the new station and parking revenue from the parking fees can repay the revenue bond.

5. Private Activity Bonds:

Private activity bonds (PABs) are federal-and state-tax-exempt securities issued by state or municipal governments to provide financing for private entities. The federal government imposes a limit on how

many PABs each state can issue annually based on the state's population. Although programs vary by state, PABs are used to finance projects with a public benefit such as low-income housing development, hazardous and solid waste facilities, redevelopment projects, and infrastructure projects like sewer, water, and energy systems. PABs are secured by and repaid from revenue generated by the project that they financed. PABs are not backed or guaranteed by the issuing municipality. PABs were not available to finance transportation infrastructure until the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) added transportation infrastructure to the types of projects that can be funded with PABs and set aside $15 billion for DOT to allocate among qualified projects. This $15 billion is not subject to any individual state's PAB volume cap. By providing low-cost financing to projects with private involvement, the DOT PAB program aims to increase private investment in transportation infrastructure. As of May 2011, 30 percent of the $15 billion had been allocated to seven projects, leaving just over $10 billion of PABs for future projects.

Example: Denver Eagle Public-Private Partnership, Denver, Colorado. The population of the Denver metropolitan area is projected to grow 154 percent between 2000 and 2020. After considering options to expand the existing infrastructure to serve the future population, Denver's Regional Transportation District (RTD) decided to build 122 miles of new commuter and light rail, 18 miles of bus rapid transit service, and 21,000 new parking spaces at bus and rail stations. Due to the size of the expansion, RTD decided to finance and build the project in stages. The Eagle segment, consisting of the 22.8-mile East Corridor and the 11.2-mile Gold Corridor, will be built under a public-private partnership. The private sector is responsible for designing, building, partially financing, and operating the system, but RTD will retain ownership of all assets. The concession term (i.e., the time the private sector will be responsible for the project) is 34 years—five years for construction and 29 years for operation. The total financing package is $1.64 billion. The private sector is contributing $54.3 million in equity. RTD issued $397.8 million in private activity bonds and is providing $1.14 billion in construction payments and $44 million in pre-completion service payments. In addition, RTD will make monthly service payments to the developers after completion based on performance. The private-sector partners will have to comply with specific standards (e.g., response times to incidents and infrastructure maintenance). When the private partner does not meet those standards, RTD can reduce its service payments. RTD expects to pay a maximum of $5.5 billion in service payments over the life of the contract.

Recommendation: This is a viable funding option assuming there available PAB dollars in the program when this project is submitted.

6. Certificates of participation (COPs) and lease revenue bonds (LRBs):

Certificates of participation (COPs) and lease revenue bonds (LRBs) are tax-exempt bonds usually secured with revenue from an equipment or facility lease. 31 These instruments are issued by state authorized entities (e.g., state public works boards, joint powers authorities, municipalities, or transit agencies). COP and LRB transactions can be complex, requiring knowledge of leasing, real estate law, corporate entity formation, and securitization, in addition to public finance and tax law. Therefore, their costs of issuance tend to be high and are worthwhile only for larger projects or groups of smaller projects.

Example: Sacramento Regional Transit District's light-rail system Location: Sacramento, California Description: In 1985, the city of Sacramento issued $29.4 million of COPs for funding needed to complete the Sacramento Regional Transit District's light-rail system when costs rose above the original project estimate of $131.2 million (Exhibit B-3). The city's share of the project rose from 5.1 percent to 19 percent due to the cost 33 overruns.

Recommendation: This may be a viable funding option.

7. RLF Revolving Loan Funds

A revolving loan fund (RLF) is a pool of money dedicated to specific kinds of investments. The money used to repay loans replenishes the fund and is loaned out again.35 RLF initial funding sources are typically public or private "seed money" and/or an ongoing revenue stream. The capitalization or initial funding could come from appropriations, grants, borrowing of capital funds, or the proceeds of a onetime asset sale. The ongoing revenue stream could be a dedicated portion of an existing or new tax.

Government agencies or nonprofits establish RLFs to help projects move forward by providing access to capital funds through a variety of financing mechanisms, including loans with rates and repayment terms that could be more favorable than the borrower could find in the market and credit assistance tools such as letters of credit,36 lines of credit,37 bond insurance, debt service reserves, and debt service guarantees. RLFs can provide access to capital markets for projects that have poor risk profiles to meet economic development (e.g., new business development), environmental (e.g., safe drinkingwater), or other public policy goals. RLF financing can also be useful for projects where the revenue stream might be irregular. RLF customers can include local governments, special districts, state agencies, private corporations, or nonprofit organizations.
The scale of financed projects varies depending on the fund's policies. Loans can range from $100,000 to tens of millions of dollars. For infrastructure projects, the loan term can range between 10 and 30 years.

Recommendation: Due to the complex nature of creating a revolving loan fund, we do not recommend pursuing this option. Creating an RLF requires consensus on numerous institutional, financial, and managerial decisions that can involve several stakeholders such state agencies, private donors, and potential users. In addition, how the RLF is managed largely determines the fund's long-term sustainability. While it might be tempting to leverage an RLF as much as possible, higher leverage also leads to higher risk exposure and can make the fund less sustainable in the long run.

A major challenge for RLFs is to provide access to capital funds to projects that could create social benefits but have a poor risk profile due to a lower likelihood of loan repayment (typically non-revenue generating projects). To be self-replenishing, RLFs must generate enough return in interest and principal payments. Therefore, an RLF's success depends largely on enforcing loan repayments; any defaults on project loans will reduce the number of additional loans that can be made. The RLF's ability to sustain itself relies heavily on the fund managers' ability to mitigate the risk of poor risk profile projects. Strategies could include investing in diverse sectors or projects and requiring additional credit assistance.

8. State Infrastructure Banks

State infrastructure banks (SIBs) help finance infrastructure projects through a variety of mechanisms, including loans with rates and repayment terms that are better than the borrower could find in the market and credit assistance tools such as letters of credit, lines of credit, bond insurance, debt service reserves, and debt service guarantees. The money used to repay loans goes to the bank for additional lending. SIBs thus function as a type of RLF. SIB customers include local governments, special districts, state agencies, private corporations, and nonprofit organizations.

SIBs are state-run revolving funds that make loans, provide credit enhancements, and other forms of non-grant assistance to surface transportation projects. The SIB Program allows states to capitalize revolving loan funds with regularly apportioned Federal-aid (Title 23) highway funds. Separate transit and rail accounts may also be capitalized with Title 49 Federal-aid funds.

Example: The South Carolina Transportation Infrastructure Bank issued a series of bonds in amounts ranging from $270 million to $370 million between 1998 and 2003 that were supported primarily by state truck registration fees, loan repayments from the counties, federal highway program apportionments, and non-tax revenue funding from the South Carolina Department of Transportation. The Cooper River Bridge was a component of these bonds.

Recommendation: This is a viable option as some states have established specific programs to help regional transportation projects that meet certain conditions. For example, Florida set aside $100 million for regional projects on the condition that at least 25 percent of the costs be matched by other sources. In addition, Florida's SIB provides emergency loans for disaster damage to transportation infrastructure. SIBs also complement traditional funding techniques and serve as a useful tool to meet project-financing demands, stretching both Federal and State dollars.

9. GARVEE: Grant Anticipation Revenue Vehicle Bonds:

Grant anticipation revenue vehicle bonds (GARVEEs) are federal-tax-exempt debt mechanisms (e.g., bonds, notes, certificates, mortgages, or leases) that are backed by future Title 23 federal transportation funding. This financing mechanism is suitable when a state cannot construct projects using traditional pay as you go funding. GARVEE financing allows the state to use future federal highway funds as the revenue stream to pay debt service. This tool allows the state to accelerate construction timelines and spread the cost of a transportation facility over its useful life. GARVEEs expand access to capital markets as an alternative or in addition to potential general obligation or revenue bonding capabilities. The benefit of upfront monetization of federal funds needs to be weighed against the cost of consuming a portion of future appropriations to pay debt service. A state, political subdivision, or public authority such as an SIB can issue GARVEEs. No federal prohibition or restriction prevents a local government from issuing a GARVEE. However, local governments might face more legal and financial requirements from investors than state governments since they are perceived as higher risk than state governments.

Example: Fast Forward - Georgia's Congestion Relief Program Main Agency: Georgia Department of Transportation. Georgia's Fast Forward, a six-year, $15.5-billion transportation program introduced in 2004, aims to add capacity to Georgia's highways and improve the existing highway network so that it operates more efficiently. Projects selected for the program are intended to provide short- and long-term congestion relief. Among the projects is a $286-million bus rapid transit project on two heavily congested corridors in the Atlanta area. Fast Forward is funded using GARVEE bonds, general obligation bonds, guaranteed revenue bonds, and federal funds. The agencies involved in Fast Forward are the Atlanta Regional Commission, the Georgia State Road and Tollway Authority, the Georgia Regional Transportation Authority, and local governments.

Recommendation: This does not appear to be a viable funding source for the rail portion but possibly for a parking structure with DOT approval.

10. RRIF: Railroad Rehabilitation & Improvement Financing

The RRIF program was established by the Transportation Equity Act for the 21st Century (TEA-21) and amended by the Safe Accountable, Flexible and Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU). Under this program the FRA Administrator is authorized to provide direct loans and loan guarantees up to $35.0 billion to finance development of railroad infrastructure. Up to $7.0 billion is reserved for projects benefiting freight railroads other than Class I carriers.

The funding may be used to:

- Acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and shops;
- Refinance outstanding debt incurred for the purposes listed above; and
- Develop or establish new intermodal or railroad facilities

Direct loans can fund up to 100% of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing to the government.

Example: Dallas Area Rapid Transit the U.S. Department of Transportation's Build America Bureau will provide the Dallas Area Rapid Transit (DART) System a $908 million Railroad Rehabilitation & Improvement Financing (RRIF) direct loan for financing the Cotton Belt Rail Project. DART anticipates that the 26-mile corridor that runs from Plano, through Addison, to DFW Airport will be completed by the end of 2022.

Recommendation: The RRIF is a viable funding mechanism for any transit project, but particularly one managed by public agencies. Eligible borrowers include railroads, state and local governments, government-sponsored authorities and corporations, limited option freight shippers that intend to construct a new rail connection, and joint ventures that include at least one of the preceding.

CREDIT ASSISTANCE

United States Department of Transportation has developed several financial mechanisms to help project sponsors access credit to implement needed transportation improvements. Federal credit assistance can take one of two forms: loans via Federal highway funds directly from a State DOT or from the Federal government; and credit enhancements, where a State DOT or the Federal government makes Federal funds available on a contingent (or standby) basis. Credit enhancement helps reduce risk to investors and thus allow project sponsors to borrow at lower interest rates. Loans can provide the capital necessary to proceed with a project, reduce the amount of capital borrowed from other sources and may also serve a credit enhancement function by reducing the risk borne by other investors.

1. U.S.C. Title 23, Section 129 Loans:

Section 129 (a)(7) of Title 23 commonly referred to as Section 129 loans allow states to lend apportioned Federal-aid highway funds to toll and non-toll projects generating dedicated revenue streams. Revenue sources can include, but not be limited to, tolls, excise taxes, sales taxes, real property taxes, incremental property taxes, and motor vehicle taxes.

Example: The President George Bush Turnpike Project in Texas was advanced with a $135 million Section 129 loan.

Recommendation: Section 129 may not be a viable finding mechanism as it will have a dedicated revenue stream from the direct pay customers that will be using the rail way but unsure if rail falls under this Highway program. This program allows states to use regular Federal-aid highway apportionments to fund direct loans to projects with dedicated revenue streams

2. The Transportation Infrastructure Finance and Innovation Act (TIFIA):

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments. TIFIA can help advance qualified, large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues. Many surface transportation projects - highway, transit, railroad, intermodal freight, and port access - are eligible for assistance. Each dollar of Federal funds can provide up to $10 in TIFIA credit assistance - and leverage $30 in transportation infrastructure investment.

Example: TIFIA is Washington Dulles Corridor Metrorail Project Location, Northern Virginia, The Metropolitan Washington Airports Authority (MWAA) is constructing a 23-mile extension of the existing Metrorail system, which will be operated by WMATA (Exhibit B-4). At the end of 2011, DOT, WMATA, MWAA, and the Virginia counties of Fairfax and Loudoun entered into an agreement under which MWAA and the counties will receive credit assistance for the Dulles Corridor Metrorail Project. Through TIFIA, DOT will provide credit assistance up to $30 million for projects including parking facilities and a station.

Recommendation: TIFIA program is a viable funding source. Through TIFIA, DOT will provide credit assistance up to $30 million for projects including parking facilities and a station.

EQUITY SOURCES

1. Public–Private Partnership (P3):

A cooperative arrangement between two or more public and private sectors, typically of a long-term nature. The last twenty years have seen a clear trend towards governments across the globe making greater use of various P3 arrangements. P3s are best seen as a special kind of contract involved in infrastructure provision, such as the building and equipping of schools, hospitals, transport systems, water and sewerage systems.

A public-private partnership (P3) is defined as “a contractual agreement between a public agency (federal, state, or local) and a private-sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public. In addition to the sharing of resources, each party shares in the risks and rewards in the delivery of the service and/or facility.”76 An infrastructure P3has the following key elements:

- A long-term contract between a public-sector party and a private-sector party.
- Design, construction, financing, and operation of public infrastructure by the private-sector party.
- Payments over the life of the P3contract to the private sector for the use of the facility,made either by the public sector or by the general public as users of the facility.
- The facility remaining in public-sector ownership or reverting to public-sector ownership at the end of the P3 contract.

In a typical P3, the private entity provides the capital cost to finance the project. If the project generates enough revenue to cover its construction and operation costs, the P3 will commonly use a concession lease where the private partner makes an upfront or ongoing payment to the public partner in exchange for developing (if required), financing, operating, and maintaining the asset. Under this approach, the

private partner would collect the revenue generated by the asset. Examples of this type of P3 arrangement are parking facilities, toll roads, airports, and ports.

Example: The Eagle P3 is part of RTD's 2004 voter-approved FasTracks plan to expand transit across the Denver metro region. The $2.2 billion project – $1.03 billion in federal funds, $450 million in private financing – comprises the University of Colorado A Line, G Line and the first segment of the B Line to Westminster, procurement of 56 commuter rail cars and a commuter rail maintenance facility, all scheduled for completion in 2016. Beyond the federal loans and grants, other funding sources include RTD sales taxes and the contractor's financial contribution. RTD entered into a 34-year agreement with Denver Transit Partners (DTP) under which it will pay DTP to operate and maintain the system; DTP repays its private financing from that amount, much like home mortgages are repaid.

Recommendation: P3 financing might be the best financing mechanism of all for the SMART Plan, and particularly the Northeast Corridor. By giving private companies/developers incentives, they can plan, design, finance and construct much of the needed infrastructure at no cost to government agency, AND complete all of those tasks at much quicker rate.

2. Infrastructure investment funds

An investment fund is a pool of funds collected from many investors to invest in infrastructure, often in the form of a public-private partnership. An infrastructure investment fund can be the financing tool that pays for a public project's capital cost under a public-private partnership. Some pension funds have increased their allocation to alternative investments like infrastructure in an attempt to both reduce risk through diversification and generate higher risk-adjusted returns.

Similar to other types of public-private partnerships, infrastructure investment funds seek projects with stable, predictable, and long-term income streams. While infrastructure investment funds have not been widely used in the United States, there are examples of private investment in infrastructure through public-private partnerships in states or localities where enabling legislation exists. This tool has not been applied to TOD-related infrastructure as defined in this report, although public-private partnerships have been used to finance transit. However, infrastructure investment funds could invest in revenue-generating, TOD-related infrastructure projects like parking, utilities, and toll roads if the project generated sufficient returns to be an attractive investment.

Example: In 2012 the Chicago City Council passed an ordinance to create the Chicago Infrastructure Trust, a nonprofit entity that the city will use as a financing tool for a planned $1 billion in infrastructure projects. Under the Chicago Infrastructure Trust, the city is making agreements with private investment and financing firms to provide financing for infrastructure projects that have a defined revenue stream or the potential for a fee or surcharge that would pay back the investment.

Recommendation: Infrastructure Investment Funds are a possible option for funding. However, attracting investment from investment funds to infrastructure projects requires a certain level of project readiness such as environmental clearance and secure cash flows (e.g., tolls, lease payments, or public guarantees), often with inflation-protected returns. In addition, the transaction costs of public-private partnerships can be high because this type of financing is typically very complicated. A public agency could have difficulty determining if it is getting a good deal and must rely on a group of legal, financial, insurance, and technical advisors.

VALUE CAPTURE MECHANISMS

Value Capture, or the recovery of private revenues due to transit investment, is becoming an important aspect of public transportation financing. When done successfully, value capture can fund 20%-50% of a project's capital costs, and supplement traditional funding sources such as local sales/property taxes, state and federal grants, bonds, and government loan programs (such as TIFIA and RRIF).

1. Impact Fees:

Impact fees are a form of value capture where payments are collected from newly developed real estate around public infrastructure. The fees may go into a fund directed towards further investments in the area, or to recouping the costs of previous capital investments. The method differs from other value capture methods in that the fees are usually collected up-front when a development is launched, rather than in the future. Impact fees are somewhat rare in transit (only around one-half of states currently permit the use for transit, which is typically limited to capital costs) and are more commonly used with residential development. However, California and Florida are two states that currently allow the use impact fees for both transit capital and operating costs. For a municipality wishing to move forward with transit impact fees, they must be willing to devote resources to studying the proposed impacts, reaching out to stakeholders (planners, transit providers, municipalities, agencies, the private sector), and to developing an ordinance with language that is applicable with state law.

Example: San Francisco has had transit impact development fees (TIDF) since 1981, to provide additional revenue for Muni (SFMTA) in anticipation of higher transit demand.

Recommendation: This may or may not be a viable source of funding source. If the potential public infrastructure provides enough of an increase in value to entice real estate developers to pay the impact fees and garner their minimum required return on investment then it can prove to be viable.

2. Joint Development:

Joint development refers to the practice of developing public transit agency-owned land in partnership with a private entity. This may also include the selling or leasing air rights over public transportation agency land. This can provide new sources of revenue for public transportation agencies, meaning more funding for transit improvements. Depending on how much land the agency owns, its role in the development could be limited.

Example: In 1981, the Bethesda Metro Center Limited Partnership entered into a 50-year lease agreement with the Washington Metropolitan Area Transit Authority (WMATA), the regional transit agency. The project contains a variety of office, retail, and hotel space, and generates minimum annual lease revenue of $1.6 million.

Recommendation: This may not be a viable value capture opportunity as it is unclear how much public land can be used along the existing private rail way.

3. Land Value Taxation:

Though not as common in the United States, land value taxation is another way of capturing the value of public infrastructure. It works by placing a levy on the unimproved value of land rather than structural building improvements (or taxing the land at a higher rate than the buildings). This gives developers an

incentive to build rather than wait for the value of the land to keep rising, as they will want to bring in income from high valued land (areas close to public transit). With developers taxed on their land ownership rather than their building ownership, it is argued that more supply will be offered in compact developments near transit, therefore disincentivizing sprawl.

Example: Pittsburgh taxes buildings at one-sixth the tax rate on land values. Despite the severe depression in steel and related industries that was occurring during this time, residential and office development within Pittsburgh grew substantially.

Recommendation: This does not appear to be a viable funding source as it there is very little undeveloped land allow the existing rail way.

4. Negotiated Extractions:

Direct payments to local governments from a private developer can be used to offset development investment costs. These may be set a necessary condition before a development approval is granted.

Example: This method was utilized in the Boston Landing development project in which New Balance developed its new headquarter building and the surrounding land. When regulations prevented the NB Development Group from realizing their parking objective, they sought to utilize the nearby MBTA Framingham/Worcester commuter rail line to increase transportation options. In 2012, NB Development agreed to design, fund, and construct a new $25 million MBTA station at the site and pay for its operation and maintenance costs for 10 years ($470,000). The station also aligned with New Balance's desire to be more leading edge and youthful. Mass DOT provided $800,000 towards station construction and $8.3 million towards signal and track work for the Worcester line. The station opened in May 2017.

Recommendation: This is a viable option for funding: as an example for the Aventura Station it may be advantageous for Aventura Mall to build a station across from their property to increase their potential traffic.

5. Special Assessment Districts (SAD):

Local jurisdictions may create special assessment districts around public transit infrastructure to bring in revenue from beneficiaries. They can impose new fees or tax increases on property owners within those areas to reimburse public investments in transit. The taxes can be based on property value, or sales, special business fees, or other measures of value, and can last for a fixed duration of time. SADs generate revenue from both existing and future developments (not the case for impact fees and negotiated extractions). Note that in order to implement a SAD, a referendum vote of property owners is typically required to pass. In some jurisdictions, SADs are prohibited.

Example: Value capture was essential in financing Washington Metro's Dulles Corridor Project (one-fifth of Phase 1 was funded through value capture). This project required multiple partners, from WMATA (responsible for operations), to the Metropolitan Washington Airport Authority (responsible for construction), LEADER (a private development group that helped organize and advocate for funding), to local, state, and federal governments.

Recommendation: This may be a viable funding source.

6. Tax Increment Financing (TIF):

Tax Increment Financing districts can be established by local or state governments to raise funds from the properties within a district or area of redevelopment. The tax revenue within a district is capped at a certain level and all revenue over the capped amount, resulting from the increase in value, is directed into the TIF fund. In other words, value is captured from the market appreciation of current development, and the incremental value of new development because of transit investment. Because this occurs over time, developers are not overburdened with up-front costs. TIF has been used to finance station infrastructure, parking facilities, and other capital projects.

Example: Denver utilized a TIF district (along with other value capture tools) for its Union Station redevelopment project, in which the station would be transformed into a multimodal hub of bus, light rail, commuter rail, and Amtrak. The surrounding area was planned to become a variety of mixed-use TOD, as downtown real estate demand was predicted to increase dramatically in the coming years. The Denver Downtown Development Authority (DDA) was created by statute and had authority to utilize TIF (to pay back federal loans and other debts. Note that the RRIF loan was secured by the full faith and credit of the City and County of Denver in the event of a shortfall in revenue from TIF. After 13 years of planning and construction, the Denver Union Station Project was completed in 2014.

Recommendation: This is a viable funding source similar to the example above the same used in the New York – Florida Avenue case study in this project to fund a new station from commercial property owners within .5 miles of the station.

GRANTS

In general, grants are funds that do not need to be paid back and are typically provided by a higher level of government to a lower level of government (e.g., from the federal government to states or localities, or from states to local governments) or by a philanthropic entity. The following discusses the federal grants that are commonly applied to TOD projects as well as some of the most common philanthropic investments in TOD.

Federal Transportation Grants: Local governments typically access these federal transportation funds through metropolitan planning organizations (MPOs) and/or state departments of transportation. Federal grants that can be used for TOD infrastructure include:

1. Congestion Mitigation and Air Quality Improvement (CMAQ) Program: This program funds transportation projects or programs that contribute to improving air quality and relieving congestion, including pedestrian and bicycle improvements, transit, and demand management projects that support better decision-making for travelers choosing modes, times, routes, and locations. Although local match requirements for CMAQ vary by state, generally the federal government will pay for up to 80 percent of eligible project costs; the remainder is the responsibility of the project sponsor. Because of this local match requirement and the scarcity of federal funding for these types of transportation improvements compared to the demand, project sponsors often end up combining many sources of funding for a single project, extending project timelines and creating logistical complications because of the need to accommodate differing funding schedules.

Example: Folson, California Bike Station and BikeLink Parking Technology at Transit Stations; Description: The Sacramento Area Council of Governments awarded Folsom, California $158,000 of CMAQ funds through their 2008 Regional Bicycle & Pedestrian Funding Program to build a new bike station and retrofit 22 bike lockers with BikeLink technology and purchase an additional 50 BikeLink lockers. BikeLink cards

allow bicyclists to have around-the-clock access to secure bicycle lockers. The project improves bicycle access to two light rail stations as well as to a major transfer point for local bus service. The city of Folsom provided matching funds of $18,000.

Recommendation: Use of CMAQ is recommended as a financing mechanism combined with other sources of funding.

2. Transportation Alternatives Program (TAP): This program funds a wide range of TOD infrastructure projects, including pedestrian and bicycle access improvements, streetscape improvements. The federal government will pay for up to 80 percent of a transportation alternatives project, with the remainder being the responsibility of the project sponsor. Because of this local match requirement and the scarcity of federal funding for these types of transportation improvements compared to the demand, transportation alternatives project sponsors often end up combining many sources of funding for a single project, extending project timelines and creating logistical challenges involving the need to accommodate different funding schedules.

Example: Boulder, Colorado 28th Street Improvements Project (at Boulder Junction); Description: The 28th Street Improvements Project transformed 2 ½ miles of 28th Street into an attractive, multimodal corridor by adding new regional bus service and making extensive pedestrian and bicycle improvements. The corridor serves as a gateway for the city of Boulder and the Boulder Junction, which will be built around a stop on the planned U.S. 36 Bus Rapid Transit Corridor. Part of the funding came from the Transportation Enhancements program, including $395,000 for a pedestrian crossing (with a local match of $395,000) and $600,000 for bicycle facilities (with a local match of $150,000).

Recommendation: Use TAP is recommended as a financing mechanism combined with other sources of funding.

3. Urbanized Area Formula Funding Program: The federal Urbanized Area Formula Funding Program funds transit capital costs, maintenance of passenger facilities, and transportation related planning. For urbanized areas with populations of 200,000 or more, Urbanized Area Formula funds flow directly to a designated recipient selected locally to apply for and receive federal funds—typically the region's MPO. In general, the federal share of a project funded with Urbanized Area Formula cannot exceed 80 percent of the project cost.

Example: New Haven, Connecticut Union Station Interconnect; Description: This 2008 project expanded bicycle access to Union Station, the intermodal center of Connecticut passenger rail service. The project included the development of 4.6 miles of bicycle lanes and associated road safety improvements to connect the station to downtown and other neighborhoods. It also included 100 new bicycle parking spaces at the station. Funding included $130,500 in transit enhancement funds under the Urbanized Area Formula Program and a $14,500 local match.

Recommendation: Use of the Urbanized Area Formula Funding Program is recommended as a financing mechanism combined with other sources of funding.

4. Community Development Block Grant (CDBG) Program: The CDBG Program, administered by the U.S. Department of Housing and Urban Development (HUD), is intended to ensure decent affordable housing, community services to vulnerable neighborhoods, and job creation and retention of businesses. CDBG provides annual formula grants to local government agencies and states in several program areas. The Section 108 Loan Guarantee Program is the most relevant to providing TOD infrastructure. The

program allows communities to leverage CDBG funds into federally guaranteed loans for economic revitalization projects. This tool is not focused on TOD infrastructure but could be used in combination with other funding and financing tools for a larger TOD project that meets CDBG criteria.

Example: Oakland, California EastLake Streetscape Improvement Project (AC Transit and Lake Merritt BART Station); Description: The city of Oakland widened sidewalks and repainted crosswalks, added bulb-outs at intersections and bus stops, and installed pedestrian amenities in the transit-accessible neighborhood of EastLake. Funding sources included $85,000 from CDBG, $1,730,000 in MTC grants, $200,000 from the Transportation Fund for Clean Air, $200,000 from the Oakland Capital Improvement Program, $442,000 from a transportation sales tax and $412,000 in other local funds.

Recommendation: Use of CDBG is recommended as a financing mechanism combined with other sources of funding.

4. Better Utilizing Investments to Leverage Development (BUILD): Previously known as Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grants, the program is to fund projects that have a significant local or regional impact. DOT receives hundreds of applications to build and repair critical pieces of freight and passenger transportation networks, and the BUILD program enables DOT to examine these projects on their merits to help ensure that taxpayers are getting the highest value for every dollar invested. BUILD can provide capital funding directly to any public entity, including municipalities, counties, port authorities, tribal governments, MPOs, or others in contrast to traditional Federal programs which provide funding to very specific groups of applicants. The BUILD program enables DOT to use a rigorous merit-based process to select projects with exceptional benefits, explore ways to deliver projects faster and save on construction costs, and make needed investments to infrastructure.

Example: Miami, Florida South Date Transitway Park-and-Ride Improvements; Description: In 2018, DOT awarded Miami-Dade County, Florida $9,500,000 (out of a total project cost of $19,000,000) in BUILD grants to expand and improve two existing park-and-ride facilities along the South Dade Transitway Corridor – a Bus Rapid Transit (BRT) line – at SW 152nd Street and SW 168th Street. The project includes additional sidewalks, improved pedestrian access, bicycle parking facilities, a kiss-and-ride, additional parking for individuals with disabilities, and electric vehicle parking with charging stations.

Recommendation: The BUILD Program, although highly competitive, is recommended as a possible financing mechanism (if funds are awarded) combined with other sources of funding.

5. Federal Transit Administration (FTA) Pilot Program for TOD Planning: The Pilot Program for TOD Planning helps support FTA's mission of improving public transportation for America's communities by providing funding to local communities to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment. Comprehensive planning funded through the program must examine ways to improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations.

Example: Jacksonville, Florida Ultimate Urban Circulator; Description: In 2018, the FTA awarded the Jacksonville Transportation Authority $1,015,280 to plan for TOD along the proposed Ultimate Urban Circulator, which is the planned modernization of the existing Skyway monorail system in Jacksonville into an autonomous circulator.

Recommendation: The FTA Pilot Program for TOD Planning Program, although highly competitive, is recommended as a possible financing mechanism (if funds are awarded) combined with other sources of funding.

6. Federal Community and Economic Development Grants: The federal government has several grant programs dedicated to housing for low-income households and other community and economic development. While these tools are not focused on TOD infrastructure, they can be used as part of a larger TOD project. Federal community and economic development grants include:

(b) Economic Development Administration (EDA) Grants: EDA, an agency in the U.S. Department of Commerce, provides grants to economically distressed communities to generate new employment, help retain existing jobs, and stimulate industrial and commercial growth. Some EDA funding is reserved for public works projects, which can include a wide range of infrastructure types provided the project has an economic development purpose. Local governments apply directly to the EDA when grants are available. EDA funds are available only to communities meeting the agency's criteria for economic distress, so EDA-funded projects are usually located in areas with weak real estate markets.

Example: Seaside, California West Broadway Urban Village Infrastructure Grant; Description: EDA provided grant funding for the city of Seaside to take the first step toward implementing the West Broadway Urban Village Specific Plan, which envisioned the West Broadway area as the core of a new pedestrian- and bicycle-friendly, transit-oriented urban village. The infrastructure improvement phase of the project includes streetscape and intersection improvements, development of pedestrian and bicycle amenities, and the upgrade of public utilities within the public right of way. Funding sources for the $1.35 million project included a $945,000 EDA grant and $400,000 in local matching CDBG funds.

Recommendation: Use of EDA is not recommended as a financing mechanism in this case since funds are available only to communities meeting the agency's criteria for economic distress.

3. Philanthropic Sources:

(a) Foundation Grants: Foundations, including private foundations and public charities, are nongovernmental organizations that make grants with a charitable purpose. Studies have found that foundations are interested in supporting TOD. Most of their funding to date has provided affordable housing or social services around transit facilities or even funded the transit itself. However, they may also be open to funding the infrastructure to support TOD. Because grant programs are typically competitive, grants are unpredictable funding sources.

Example: Baltimore, Cleveland, Detroit, Newark and Minneapolis-St. Paul – Living Cities Integration Initiative; Description: The Living Cities Integration Initiative provided $85 million in grants and loans to five cities (Baltimore, Cleveland, Detroit, Newark, and Minneapolis-St. Paul) for initiatives that encourage public, private, nonprofit, and philanthropic sectors to work together to make communities work for low income people. Projects in Baltimore and Minneapolis-St. Paul have a focus on TOD. The Minneapolis-St. Paul project will convene local, regional, and state government; the private sector; and nonprofit and philanthropic organizations to create and preserve transit-accessible affordable housing and mixed-use, mixed-income developments; help small businesses deal with disruptions caused by transit corridor construction; and catalyze neighborhood-led development along three regional transit lines. The Baltimore Integration Project will focus on creating job opportunities and improving neighborhoods in Central and East Baltimore, while preparing residents for opportunities created by the construction of the Red Line, a 14-mile east-west transit line.

Recommendation: Use of Foundation Grants is not recommended as a financing mechanism in this case since grants are unpredictable funding sources and are largely untested for TOD infrastructure.

(b) Program-Related Investments (PRIs): Foundations make program-related investments to support their philanthropic mission and leverage their donations. Unlike grants, foundations expect program related investments to be repaid, although production of income or appreciation of property cannot be a significant purpose. Program-related investments allow the recipient to borrow capital at lower rates than might otherwise be available. For the funder, the principal benefit is that the repayment or return of equity can be recycled for another charitable purpose, assuming the investment is repaid. While many program-related investments in the past have supported affordable housing and community development, they have also funded capital projects ranging from rehabilitating historic buildings to preserving open space and wildlife habitat. A 2009 report on foundation support for TOD found that "for the most part, funders have not made significant PRIs for TOD-specific investments, although there is considerable interest in moving in that direction. PRIs in this arena primarily have been used to support TOD-related property acquisition efforts, including paying for upfront support for a land acquisition fund, or, supporting a citywide land acquisition fund for affordable housing."

Example: United States Living Cities Catalyst Fund; Description: In 2008, seven foundations invested a total of more than $20 million in the Living Cities Catalyst Fund. The Catalyst Fund provides below-market loans and guarantees to nonprofit organizations that create opportunities and make markets work for low-income communities. Most investments have not been focused on TOD. However, in 2011, the fund invested $3 million in the Bay Area Transit Oriented Affordable Housing Fund.

Recommendation: Use of PRIs is not recommended as a financing mechanism in this case since investments are not normally focused on TOD infrastructure.

EMERGING TOOLS

In addition to the established tools discussed in this project, several new concepts for making TOD infrastructure possible are emerging but still need closer research for applicability to the Northeast Corridor:

1. Structured funds:

A structured fund is a loan fund that pools money from different investors with varying risk and return profiles. Structured funds have a dedicated purpose, which is clearly defined before the fund is formed, and are managed by professionals with fund formation and loan underwriting experience. Communities have been increasingly interested in using structured funds as a property acquisition tool to support affordable housing development, particularly near transit.

2. Land banks:

Land assembly and acquisition can be a challenge for TOD because land near transit is often scarce and generally costs more. Land banks are not funding or financing sources, but communities' interest in their applicability to TOD has been growing because they are used to acquire property and are often linked to a social mission, such as neighborhood stabilization or affordable housing. While land banks have not been

used for TOD infrastructure, assembling developable land in station areas could make TOD and the associated infrastructure projects more feasible.

3. Redfields to greenfields:

Redfields to greenfields is a concept for converting underused or distressed properties into an asset. A local government agency acquires underused properties (redfields) in an area and converts them into new parks (greenfields). Redfields to greenfields is not tied to any funding source; in fact, the local government would need to identify a funding source to pay for property acquisition and convert the property into a park, which could include parks that are part of a mixed-use TOD. The new park could boost property values of surrounding properties, increasing property tax revenue.

4. National infrastructure bank:

A national infrastructure bank would finance transportation and potentially other types of infrastructure across the country by providing federal credit assistance, such as direct loans and loan guarantees to local governments. The United States does not currently have such a bank, but Congress has considered several proposals that would encourage investment in infrastructure from nonfederal sources through a mostly self-sustaining entity.

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CASE STUDIES

ATLANTA BELTLINE CASE STUDY

The Project

The Atlanta Beltline is known as one of the most wide-raging ambitious urban redevelopment projects in the United States today. The project consists of connecting four historic rail lines to form 22 miles of pedestrian friendly rail transit (modern streetcar), 33 miles of multi-use trails, 1,300 acres of parks, 5,600 affordable housing units and remediation of 1,100 acres of brownfields with a target completion date of 2030.

Atlanta Beltline Map

Courtesy of: https://beltline.org/

The History

1999 - The project began as Georgia Tech graduate student Ryan Gravel's thesis.

2002 - The idea gained grassroots support through neighborhood meetings across the City.

2004 - The thesis was validated by three separate studies, all of which concluded that the proposal in the student's thesis was achievable and identified a corridor wide tax allocation district (TAD), also known as tax increment financing (TIF) as a way to pay for up to 70 percent of the project's cost.

2005, 2006 - The Atlanta Development Authority worked with other City departments and civic leaders to continue community engagement obtain approval of a redevelopment plan and a TAD and create a five-year work plan for the early stages of the project.

2007, 2008 – A master planning effort began for ½-mile areas on either side of the corridor, which resulted in master plans for 10 distinct subareas that include land use, transportation and open space. The Metropolitan Atlanta Rapid Transit Authority (MARTA) approved the 22-mile rail loop proposal and federal funding was obtained for initial engineering and design, the firs trail opened, the first TAD bonds were issued.

2009 through 2012 - Opening of trails and revitalization of parks continued, while grants were secured for sections of trails.

2013 - The Atlanta BeltLine Inc. adopted a strategic Implementation Plan for the next 17 years of the project.

2015 - The Atlanta Streetcar System Plan (SSP) was adopted by the City Council. The SSP calls for 50 miles of new streetcar routes and 12 miles of connected transit, connecting the streetcar system along major on-street corridors to the Atlanta Beltline. The Integrated Action Plan (IAP) was completed which determines how to achieve the strategic plan's economic and housing goals.

2016 – Two funding referenda were passed, a ½ penny sales tax in funding for MARTA a 4/10 penny sales tax in funding for transportation system in Atlanta.

2017 – 2,565 affordable workforce units are accounted for under the Atlanta Housing Authority program that provides down payment assistance and 300 affordable housing units are under active planning and financing by private developers.

2019 – Total investment $559 million, 5.15 miles of transit projects are designed an 16 miles are under NEPA review, 16.1 miles of trails have been designed and 11 miles of trails have been delivered, 315 acres of parks have been delivered, 4.1 miles of street scape projects have been designed and 2.3 miles have been delivered, 11,200 jobs have been created, and 2,682 affordable units have been delivered.

The Funding

The total estimated cost of the project reflected in the 2013 strategic implementation plan (SIP) is $4.75 billion, which included an annual 2.0% inflation rate and $350 million in expenditures between 2008 and 2013. The table below identifies the sources of funding in the 2013 SIP.

ATLANTA BELTLINE SOURCES OF FUNDS

SOURCES	$ MILLIONS	
TAD	$1,455	33%
Federal Funds (estimated)	$1,272	29%
Federal, State, Regional or Local Funding for Streetscapes (estimated)	$323	8%
Local Funding for Parks (estimated)	$157	4%
Private Funds (estimated)	$275	6%
Unidentified	$891	20%
TOTAL SOURCES	$4,393	100%

Source: Atlanta BeltLine 2030 Strategic Implementation Plan Final Report December 2013

TAD

In 2005 it was estimated the TAD will yield $3 billion in projected tax revenues over its 25-year duration, the projections reevaluated in 2012 following the great recession and the TAD projection was adjusted to $1.4 billion for the remainder of the life of the TAD (2012- 2030). The table below illustrates the 2012 projections. As part of the creation of the TAD the three agencies that receive funding from the TAD area, which are the City of Atlanta, Fulton County and the Atlanta Public Schools. Agreed to receive tax revenue at 2005 levels during a 25-year period for which the TAD will capture any new property tax revenue generated as development occurs in the district. The Atlanta Public Schools negotiated to receive fixed cash payment from the TAD totaling $150 million, which is equivalent to 5% of originally estimated $23billion total revenue, with no payments for the first five years and a $7.5 million per year payment years 6 through 25. Fulton County negotiated to receive a $1.35 million per year payment years 6 through 25.

The initial intent and estimates for the TAD, were made under the assumption that TAD revenue would be used for financing as the revenue was received. However, a more aggressive form of financing means has been used thus far, in which TAD bonds are issued which allows the Atlanta BeltLine to receive upfront funding for project cost and then use the TAD revenue to repay the bonds over an extended period.

Federal Funds

To date the project has received more than $25 million in federal funds through the Atlanta Regional Commission and the Georgia Department of Transportation. The intent of the BeltLine is to apply for the maximum potential amount of federal funds from the Federal Transit Administration and the Federal Highway Administration. The BeltLine plans to pursue the FTA's New Stars program and the federal transportation infrastructure finance and Innovation Act (TIFIA) loan program.

Local Funds

The City of Atlanta has funded and plans to continue to fund the building of parks and trails through park improvement bonds on a case-by-case basis. The SIP also estimates being able to count on some funding from the local Department of Watershed Management on a case by case basis for projects that include reservoir and stormwater management improvements.

Private Funds

Private funds are to be sought out from philanthropic organizations, private donors, private-public partnerships, joint development programs and direct private investments. As of 2014 the BeltLine had received $39 million in private philanthropic grants with a total of $41 million in private funds.

Applicability to SMART Plan North East Corridor

The 22-mile rail line loop will connect 45 neighborhoods, which are socioeconomically different; the makeup of the communities along the Atlanta BeltLine loop is very similar to that of the communities along the SMART Plan North East Corridor. The Miami-Dade County Transportation Trust, can use the Atlanta BeltLine 2005 five year work plan and the 2030 Strategic Implementation Plan Final Report to find and extrapolate organizational, planning, community engagement and funding mechanisms for the SMART Plan as a whole but specially for the North East Corridor as it is very similar to the 22-mile loop in:

- Use of existing transit corridors
- Use of multi-station TIF revenue that allows strong market areas to support weak market areas.
- Use of multi-layer funding from federal to local level and inclusion of private-public partnerships.
- Need for individual areas master planning.
- Possible eligibility for federal level funding if organized correctly.
- High likelihood of successful TOD development.
- High number of Stakeholders.

First Section of the Atlanta Beltline: 2.4-mile West End Trail
Courtesy of: https://perkinswill.com/work/atlanta-beltline.html

Lessons Learned

- Plan implementation is difficult and lengthy because of the many stakeholder groups. This requires the creation of multiple agencies and committees to keep the plan moving through multiple governmental terms.
- TAD/TIF programs rely heavily on real estate development, estimates and planning must account for possible economic recessions.
- Multi-Decade projects should plan for a layering of funding that relies on more than one major funding source.

Sources:

EPA Infrastructure Financing Options for Transit-Oriented Development, January 2013

Atlanta BeltLine Annual Report 2018

Atlanta BeltLine 2030 Strategic Implementation Plan Final Report, December 2013

https://beltline.org/ accessed April 21, 2019

DALLAS TOD TIF DISTRICT CASE STUDY

Background

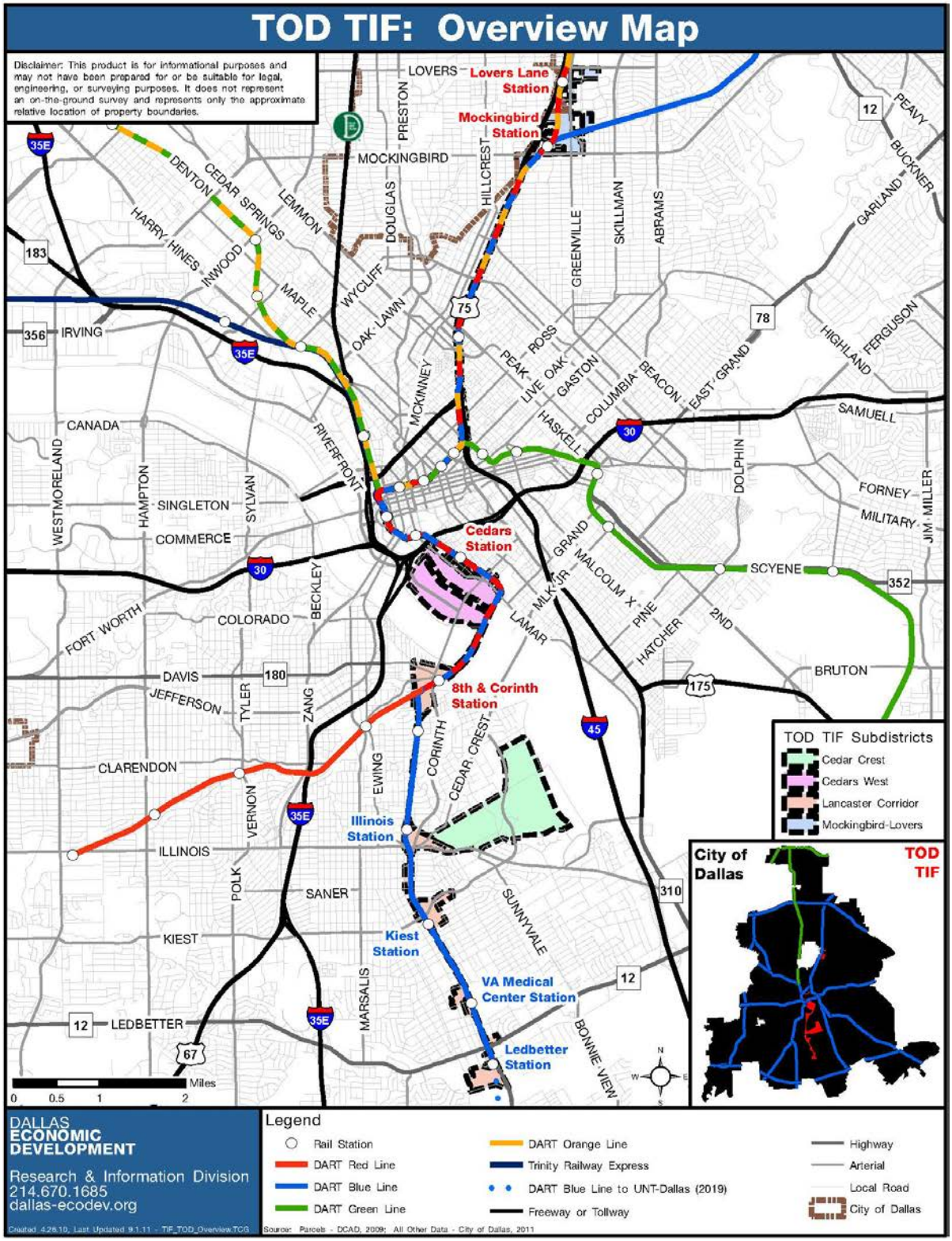
Southern Dallas, which was physically and economically separated from downtown after the construction of Interstate 30 in the 1960s, is undergoing a renaissance focused on transit-oriented development (TOD). Dallas-based developers are focused on revitalizing the "wrong side of the highway" with adaptive redevelopment of historic buildings and new construction of hotels, apartments, lofts, offices, restaurants, shops, and entertainment venues.

Dallas Area Rapid Transit (DART) is America's longest light-rail system, with 92 miles of track and 62 total stations. The southern Dallas area is home to 45 percent of the population but produces only 15 percent of its tax base. Helped by private investments and public financing strategies such as tax increment financing (TIF) districts, southern Dallas TOD areas have welcomed jobs and housing for middle- and lower-income residents by mixing market-rate and affordable housing with amenities and new public investments in infrastructure linked to the light-rail stations.

The Project

In 2008 the city of Dallas approved a series of new transit-oriented development tax increment financing district (TOD TIF District) along eight Dallas Area Rapid Transit (DART) light rail corridor. The process of planning, developing new policies, and conducting negotiations between the city and multiple partners and stakeholder groups, including DART, Southern Methodist University, and other local partners, to establish the district took four years. As originally approved, the TOD TIF District covered 558 acres. TIF was considered an especially appealing alternative for DART and the city because real estate market conditions and community needs vary greatly among the different station areas. In 2010, the TOD TIF District was expanded to include 1,167 acres in four subdistricts: (i)

Mockingbird/Lovers Lane Subdistrict, (ii) Cedars West Subdistrict, (iii) Cedar Crest Subdistrict, and (iv) Lancaster Corridor Subdistrict.



Courtesy of: https://urbanland.uli.org/industry-sectors/infrastructure-transit/tod-fueling-growth-southern-dallas/

Over its 30-year life, the district is projected to generate over $185 million in tax increment (in 2009 dollars). The Dallas TOD TIF District was created to stimulate development in certain subdistricts by funding public improvements with revenue generated by other subdistricts. The Dallas TOD TIF District allows revenue from the neighborhoods in the northern portion of the corridor, which have higher land values and greater potential for growth in the increment, to be used in less-developed areas in the Lancaster Corridor area south of the Trinity River, which has more infrastructure needs. The TIF will also provide infrastructure and pedestrian improvements around DART stations that would not otherwise be possible, as well as funding for affordable housing throughout the district.

Funding Sources and Financing Mechanisms

The Dallas TOD TIF funds projects case by case rather than having a list of planned infrastructure improvements for the district. In addition to funding infrastructure, the increment can be used for grants to help finance TOD projects in the district. The TIF revenue will be used for the infrastructure improvements needed for individual development projects and to improve pedestrian connections to DART stations from the surrounding neighborhoods. See Exhibit 1 below for an example of a project receiving TIF revenue from the TOD TIF District.

Exhibit 1:
Dallas TOD TIF District Project Example: Lancaster Urban Village Project.

The planned Lancaster Urban Village project in the Lancaster Subdistrict is a development project receiving tax increment funding for TOD infrastructure. The mixed-use project will include 193 residential units, 20 percent of which are required to be affordable; onsite amenities including a clubhouse and swimming pool; 14,000 square feet of retail and small office space; and structured parking to serve the project and an adjacent 46,568-square-foot expansion of the Dallas Urban League, a job-training and social service nonprofit agency. A groundbreaking ceremony occurred in March 2012. The following table shows funding sources and uses for the $25.8 million project.

Funding Source:	**Amount:**
HUD (221(d)(4)loan)	$12,400,000
City of Dallas Section 108	$7,400,000
Public-private partnership	$3,200,000
New markets tax credits	$2,800,000
TOTAL	**$25,800,000**

The project is receiving a TIF contribution that will repay the city's Section 108 loan and partially repay the public-private partnership funding. The TIF contribution will be used for infrastructure improvements as shown in the following table.

TIF Improvement Category:	**Amount:**
Infrastructure	$2,200,000
Demolition	$300,000
Grant for high-density project	$1,700,000
Affordable housing	$4,300,000
TOTAL	**$8,500,000**

The infrastructure costs to be funded include stormwater upgrades in the Lancaster Corridor Subdistrict that must be addressed before any redevelopment can occur in the area. No other existing city funds can pay for the proposed stormwater upgrades.

Source: City of Dallas Office of Economic Development "Dallas TOD Experience and TOD TIF District." 2010

A fundamental goal of the Dallas TOD TIF District is to permit tax increment sharing from the Mockingbird/Lovers Lane Subdistrict to trigger redevelopment of the Lancaster Corridor Subdistrict in the city's southern sector, where development has lagged for many years. The financing plan for the TOD TIF District allocates 40 percent of the increment generated from the Mockingbird/Lovers Lane Subdistrict to the Lancaster Corridor Subdistrict. An additional 20 percent of the increment from the Mockingbird/Lovers Lane Subdistrict will be allocated to the district-wide affordable housing budget. The remaining 40 percent of the Mockingbird/Lovers Lane Subdistrict increment will be used for projects in that area. The financing plan allocates 10 percent of the increment generated in the Cedars West Subdistrict to the Lancaster Corridor Subdistrict and 10 percent to the districtwide affordable housing budget. The remaining 80 percent of the Cedars West Subdistrict increment will be used for projects in that subdistrict because Cedars West has significant infrastructure needs.

As of late 2011, a mixed-use project, with 55 dwelling units and 3,720 square feet of retail valued at $9.5 million, has been completed. In addition to the Lancaster Urban Village Project described in Exhibit 1, several significant development projects with a total projected value of about $85 million have been planned or are under construction in the TOD TIF District, including two mixed-use projects and a boutique hotel. Southern Methodist University, located in the Mockingbird/Lovers Lane Subdistrict, is also planning major projects in the area, including the George W. Bush Presidential Library and campus facilities.

<u>Lessons Learned</u>

- Keys to Success:
    - TIF revenue can be applied to infrastructure that does not generate revenue, making it applicable to a wide variety of infrastructure.
    - A multistation TIF district relies heavily on property tax increment from new development and therefore requires a strong real estate market to be viable. As with the Atlanta BeltLine, the Dallas TOD TIF District creates the opportunity to fund infrastructure projects in relatively weak-market subareas using the revenue generated in stronger-market subareas.
- Key Barriers:
    - Implementation for a multistation TIF district tends to be lengthy because it requires negotiations with multiple stakeholder groups, which can include overlapping jurisdictions, neighborhood groups, and property owners. In the Dallas TOD TIF District, the planning and negotiation process took four years.
    - TIF is a cross-subsidy from some public services to others, and public authorities need to understand such trade-offs. Because the property taxes allocated to other services are frozen for a long time, inflationary pressures and population growth tend to quickly diminish their per capita value, affecting the quality and quantity of the services funded through property taxes.
    - Despite the clear benefits of using TIF across multiple station areas and allowing revenue generated in one station area to be deployed in another, the city of Dallas anticipates that TIF revenue alone will be insufficient to cover all of the costs for TOD infrastructure

improvements in the district. Even with the potential to share increment across subdistricts, the city anticipates pursuing a diverse set of other potential funding and financing sources.

Applicability to Other Places

Laws regulating the use of TIF vary from state to state, so the applicability of a multistation TIF district would also vary, but a TIF district is an especially appealing alternative along a transit corridor where real estate market conditions and community needs can vary greatly among the different station areas. This district-level financing tool presents a particular opportunity for places where public infrastructure needs to be rebuilt and where the value captured from strong-market subareas could fund improvements in weaker-market subareas. Because TIF, like most value capture mechanisms, is designed to be deployed within a single jurisdiction, corridors or districts that encompass multiple jurisdictions are likely to be more difficult locations to employ a TIF strategy.

Sources:
Center for Transit-Oriented Development. *Capturing the Value of Transit*. November 2008. http://reconnectingamerica.org/resource-center/books-and-reports/2008/capturing-the-value-of-transit-3.

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https://urbanland.uli.org/industry-sectors/infrastructure-transit/tod-fueling-growth-southern-dallas/ accessed April 30, 2019

Denver FasTracks CASE STUDY

Background

Although rail had been passing through the frontier city of Denver since the late 1800's, the first published plan for mass transit was developed by the Regional Transportation District (RTD) in the 1970's. RTD was created in 1969 by the Colorado General Assembly to develop, operate, and maintain a mass transportation system for the benefit of 2.92 million people in RTD's service area: 2,342 square miles serving 40 municipalities in all or part of eight counties.

RTD's initial plan focused on how to better connect Denver and Golden, an area commonly called the West Corridor. A Major Investment Study (MIS) for the West Corridor was completed in 1997, and this alignment, known as the Locally Preferred Alternative (LPA), was based on input from neighborhood residents, businesses and local elected officials and adopted by the RTD Board and later the Denver Regional Council of Governments.

In June 2001, RTD kicked off a comprehensive study to consider both the positive and negative impacts of the West Corridor LPA alignment. The finished product of this study was the Environmental Impact Statement (EIS). The goal of the EIS was to understand the technical, environmental and community challenges and opportunities associated with using light rail to mitigate the tremendous growth and congestion expected in the West Corridor over the coming decades. Throughout the EIS public involvement process, RTD held over 158 meetings, including public meetings and small group briefings. The Final EIS was submitted to the Federal Transit Administration (FTA) in late 2003. The FTA issued

a Record of Decision (ROD) in April 2004 which finalized the EIS process. Later that same year, voters in the eight counties approved a ballot initiative/sales tax increase of 0.4 percent to finance the project.

The Project

Denver FasTracks is the name of the City of Denver's regional public transit expansion plan, consisting of:

- Six (6) new light rail, electric commuter rail and diesel commuter rail lines, totaling 122 miles in combined length
- 57 new transit stations and stops
- 18 miles of a bus service between the cities of Denver and Boulder
- 21,000 new parking spaces; and
- The renovation of Denver Union Station as a multi-modal transportation hub.

Combined with existing lines/corridors/routes, FasTracks will eventually comprise eleven (11) rail lines, three (3) Denver International Airport Skyride lines, one-hundred twelve (112) local bus routes, fifteen (15) regional bus routes, eight (8) Flatiron Flyer airport shuttle buses, and five (5) free shuttle services: MetroRide, MallRide, Art Shuttle, HOP, and Senior Shopper.

FasTracks Timeline

1997 to 2004 – Planning and advocacy begin for what would become FasTracks.
2004 – Project commences with voters in eight (8) counties in the Denver Metro area approving a ballot initiative for a sales tax increase of 0.4 percent (4 pennies on every $10). Full project: 30-40 years.
2005 – Sales tax increase goes into effect in January.
2004 to 2006 – Engineering design begins with the initial segment, the West Rail Line. Federally-mandated environmental impact statements (EIS) are begun on all proposed lines/corridors. The municipal governments of Denver, Boulder, and Lakewood launch detailed studies of community redevelopment possibilities around station locations. The cities of Westminster, Thornton, Aurora, Greenwood Village, Englewood, Sheridan, and Arvada begin planning transit oriented development (TOD) areas around some of their proposed rail stations.
2011 – United States Department of Transportation (USDOT) approves $1 billion grant for Eagle P3 Project, which consists of the East and Gold commuter rail lines, covering half of the $2 billion cost of the construction of the two lines.
2012 – RTD receives an unsolicited proposal to build the I-225 Corridor line from Kiewit Infrastructure Co. After receiving three more bids, RTD selects a partnership/consortium of Graham Contracting Ltd., Balfour Beatty Rail Inc. and Harmon Contractors Inc. (GBBH) to build the corridor.
2013 – The first train line opens in April, the West Rail Line (W).
2014 – Renovation complete on Denver Union Station
2019 – Total investment $559 million, 5.15 miles of transit projects are designed and 16 miles are under NEPA review, 16.1 miles of trails have been designed and 11 miles of trails have been delivered, 315 acres of parks have been delivered, 4.1 miles of streetscape projects have been designed and 2.3 miles have been delivered, 11,200 jobs have been created, and 2,682 affordable units have been delivered.

Future Projects

- Central Extension
- Southeast Extension
- Southwest Extension
- Northwest Rail to Longmont

Cost Estimate

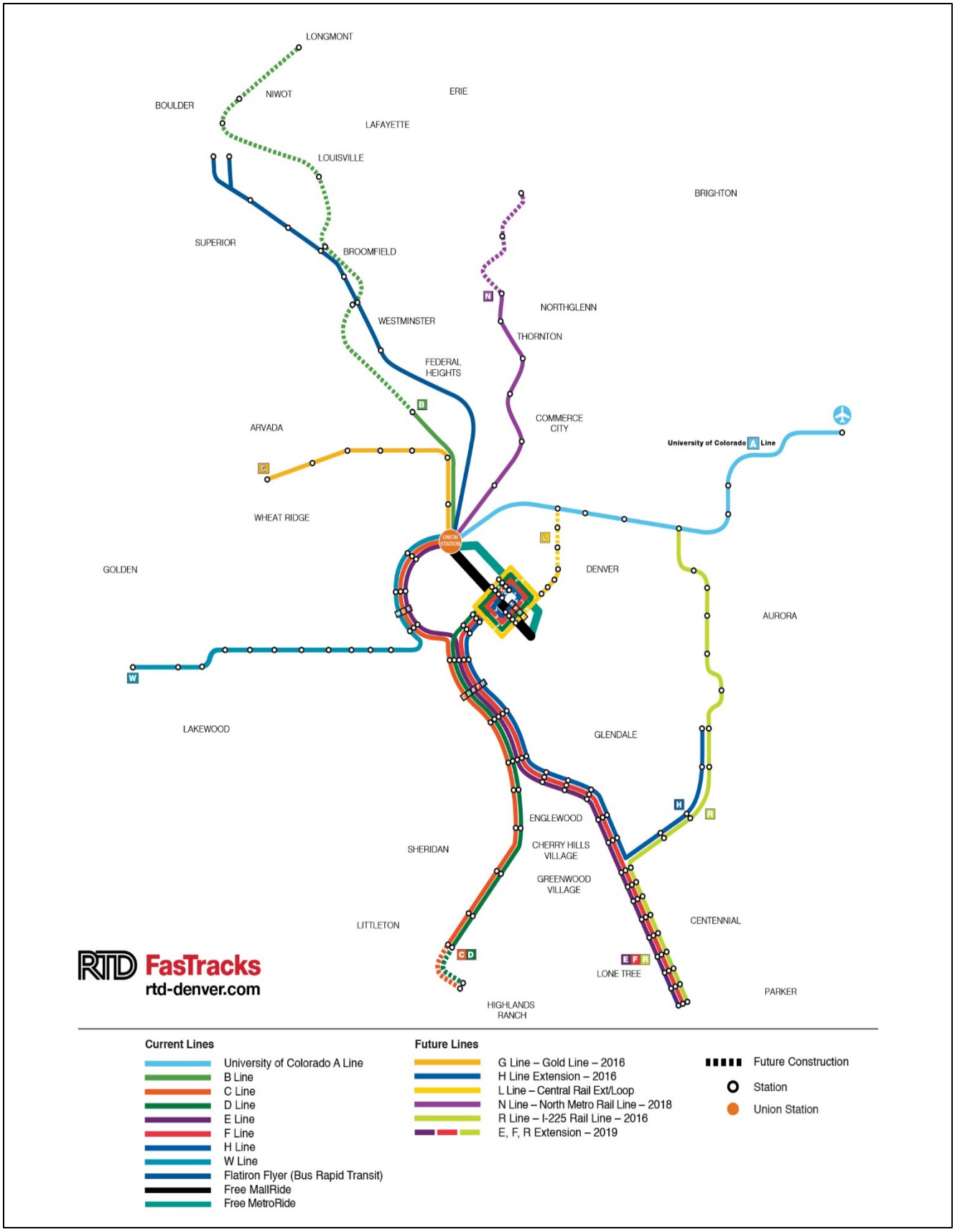
Original Cost Estimate:	$4.7 billion
Actual Cost:	$7.1 billion
Projected Revenues:	$4.1 billion

Funding Sources:

- Sales Tax Increase: 0.4 % (2014) ballot vote in eight (8) counties
- Sales Tax Bonds
- Transportation Infrastructure Finance and Innovation Act (TIFIA) Loans
- Certificates of Participation (COPs)
- "Pay as you go" Cash
- Federal New Start
- Other Federal Sources
- Local Contributions
- P3: Public/Private Partnership (Denver Union Station, North Metro and I-225 corridors, as well as the East Corridor, Gold Line and commuter rail maintenance facility projects)

Return on Investment (ROI)

- $5.3 billion has been invested or committed to date across the region
- Every $1 invested in transit infrastructure translates into a $4 dollar return over 20 years
- Creation of 13,000 direct full-time jobs since 2005



Denver FasTracks Corridor Map

Courtesy of: https://admin.rtd-fastracks.com/images/uploads/main/FasTracks_Line_Map_July_2016.jpg

FasTracks Service statistics

- Service Area population: 3.03 million
- Cities and towns served: 40 municipalities in 6 counties plus 2 city/county jurisdictions
- Square miles in service area: 2,342
- Weekday regular fixed-route scheduled miles: 140,471 (includes rail, Free MallRide, Free MetroRide)
- Annual regular fixed-route service miles operated: 43,801,049
- Active bus stops: 10,053
- Park-n-Ride facilities: 84 with 30,730 parking spaces
- Total number of regular fixed routes: 142
    - Commuter Rail: 2
    - Light Rail: 8
    - Local: 88
    - Limited: 16
    - Regional: 20
    - SkyRide: 3
    - Misc: 5 (Free MallRide, Free MetroRide, Art Shuttle, HOP, Senior Shopper)

Rail

Light rail

- Total vehicles: 172
- Miles of track: 58.5 (current) 122 (planned)
- Active Stations: 54

Commuter rail

- Total vehicles: 66
- Miles of track: 29 (G line: 35)
- Stations: 9 (G Line: 17)

Active bus fleet

- Total buses (all are wheelchair lift-equipped): 1,035
- RTD-owned and operated: 603
- RTD-owned, leased to private carriers: 432
- Peak-hour buses required: 808 AM, 841 PM
- Average age of fleet: 5.9 years (revenue)
- Annual diesel fuel consumption (RTD-operated buses only): 5.238 million gallons
- Access-a-Ride cutaways: 344
- FlexRide Ride cutaways: 54

Ridership

December 2016 - November 2017

- Average weekday boardings: 336,576
- Annual boardings: 100,942,818

December 2015 - November 2016

- Average weekday boardings: 329,855
- Annual boardings: 101,297,072

December 2014 - November 2015

- Average weekday boardings: 339,300

- Annual boardings: 103,377,797

Financials

Total Operating Budget

- 2017: $626.1 million
- 2016: $563.0 million
- 2015: $466.7 million

Staff

Budgeted number of RTD employees

- Salaried: 888
- Represented: 1,975
- Total: 2,863

Private Contractor Employees

- Fixed route: 953
- Paratransit (ADA & FlexRide): 655

Lessons Learned

- Patience, discipline and perseverance: Planning for FasTracks began in 1970s, the plan took greater shape in the 1990s, but it wasn't until the 2000s that the EIS was completed and sales tax increase (funding mechanism) approved. Full project won't be complete until 2040s.
- Thorough Public Outreach: during the EIS process, over 150 public meetings were held in 8 different counties
- Public buy-in: when voters approved the sales tax increase, this became the funding mechanism that provided the seed money to begin the project and a continuous funding stream.
- Exhaust all outside funding sources before returning to taxpayers: FasTracks relies on a minimum of nine (9) different funding sources so taxpayers don't feel like they are footing the entire bill.

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Denver Union Station (DUS) CASE STUDY

Background

By 1875, there were four different railroad lines operating in Denver: the Union Pacific, the Denver & Rio Grande Western, the Denver, South Park & Pacific, and the Colorado Central. This made passenger transfers between different railroad lines inconvenient. To remedy this issue, the Union Pacific Railroad proposed creating one central "Union Station" to combine the various operations. In February 1880, the owners of the four lines agreed to build a station at 17th and Wynkoop Streets. Union station opened in May 1881, burned downed in 1894 and was rebuilt in the Beau-Arts style, completed in 1914.

That same year, DUS was handling over 200 trains a day. However, by the 1920s and 1930s, over 80 trains served the station daily. By the latter half of the 20th century, there was a sharp decline in service for Union Station and countless other train stations in the United States as competition began to grow from automobiles and airlines. While periodic improvement occurred from the 1980s to the late 1990s, by the early 2000s RTD began planning a complete renovation.

The Project

Denver Union Station (DUS) is a $500-million, multiparty, multijurisdictional redevelopment project supported by local and federal funding and financing sources and includes:

- Construction of light rail and commuter rail stations
- A 22-bay underground regional bus station
- Extension of the 16th Street Mall and the associated shuttle service
- Accommodation of the Downtown Circulator bus service
- Street improvements
- Parking replacement

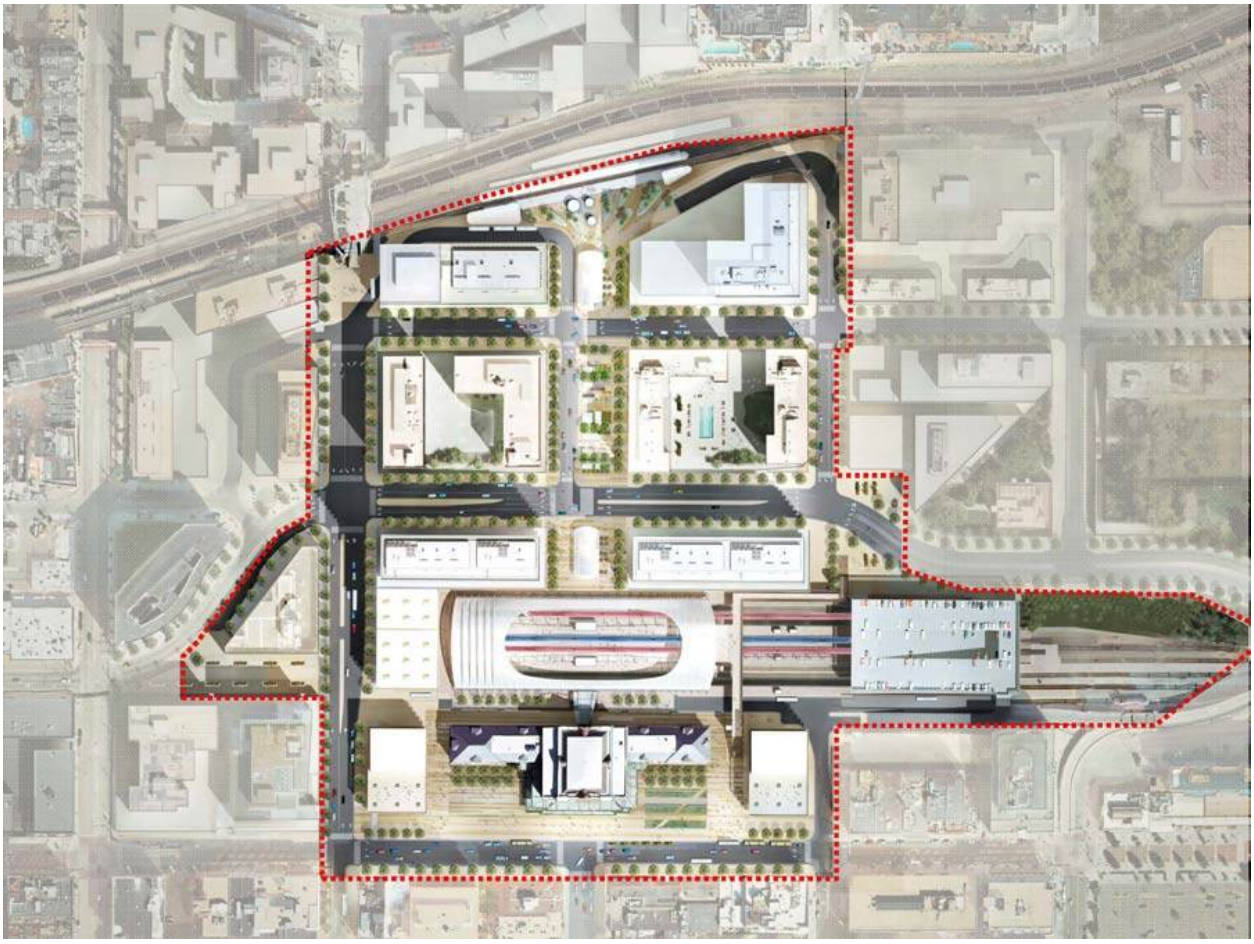
Beyond the transit components, the core plan for the DUS redevelopment includes four new buildings to the north and west of the station/tracks—including office, hotel, apartments, and condominium buildings—and two new office buildings, flanking the historic terminal building, to the south of the station. Numerous additional parcels, not part of the original 19.5 acres, are located to the north of the station, and the total space at buildout on the roughly 60-acre total site area is planned to include 4.6 million square feet of office, 734,000 square feet of retail and restaurants, 550 hotel rooms, and 3,000 residential units.

Phase I of DUS has been completed and is leased. It includes the Union Station Terminal building, bus terminal, train platform, light-rail platform, North Wing building, South Wing building, and public plazas and infrastructure. An additional 1,800 residential units and 2.34 million square feet of commercial property (office, retail, or hotel) is completed, under construction, or in the final design and approval phases on surrounding parcels.

Union Station Timeline

2001 – RTD purchases the core site area in accordance with a jointly funded Intergovernmental Agreement among RTD, the City and County of Denver, the Colorado Department of Transportation and the Denver Regional Council of Governments.

2002 – The DUS project team is established to develop a master plan, rezone the site for TOD and produce an EIS. This master plan serves as the blueprint for redeveloping and preserving Denver's historic Union Station and the 19.85 acres of surrounding land.
2004 – Master plan is approved
2006 – The Union Station Neighborhood Company (USNC), a joint venture of Continuum Partners LLC/East West Partners, was selected as the master developer team.
2008 – The FTA signed the Record of Decision for the EIS, which gave the project the green light for redevelopment. The Denver Union Station Project Authority was created to manage the redevelopment project.
2009 – Kiewit Western Co. was selected as the design-build contractor for the transit project.
2010 – Construction at DUS began. FTA construction loans are arranged
2011 – The new light rail station opened at the west end of Union Station.
2012 – RTD awarded contract to Union Station Alliance to redevelop the historic Union Station building.
2014 – Grand opening ceremonies for the DUS Bus Concourse were held on May 9. Service began out of the new bus concourse and Market Street Station closed permanently on May 11.
2019 – Full buildout of DUS expected to be completed this year.



Denver Union Station Plan
Courtesy of: www.transportation.gov/tifia/financed-projects/denver-union-station

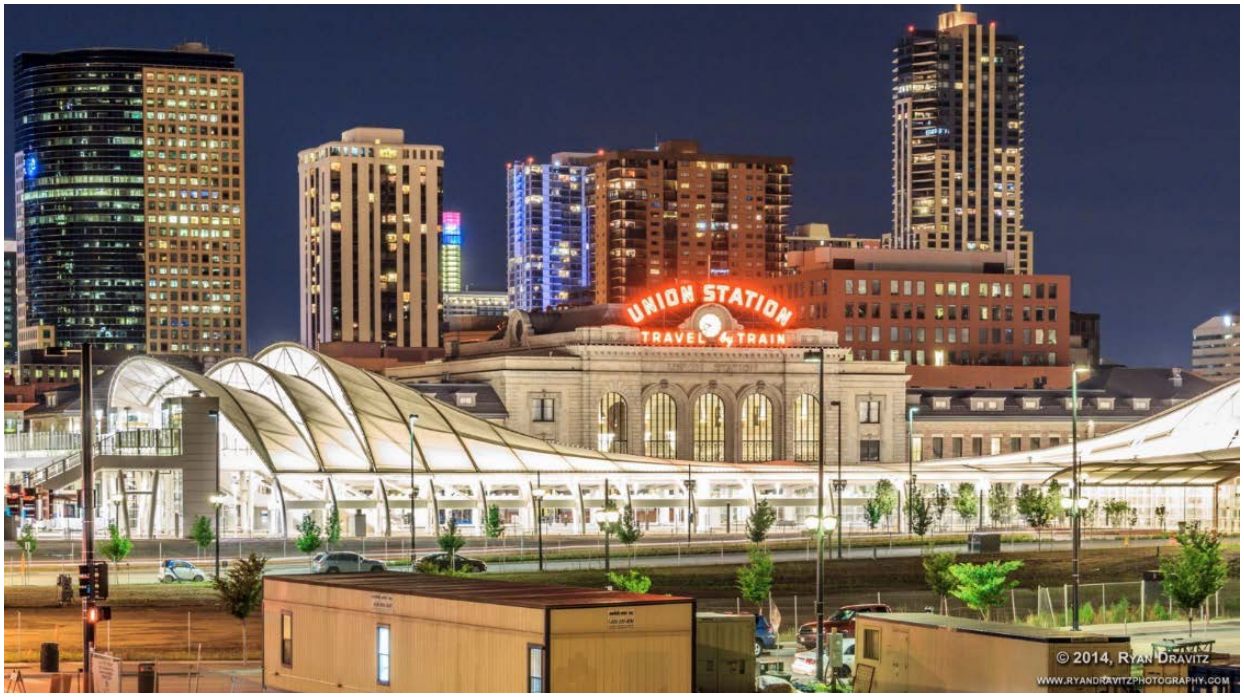


Image courtesy of: https://casestudies.uli.org/denver-union-station/

Denver Union Station SOURCES OF FUNDS

SOURCE	TYPE	AMOUNT	PERCENT
RRIF (Railroad Rehabilitation Improvement Financing)	Federal Loan	$155 million	30%
TIFIA (Transportation Infrastructure Finance & Innovation Act)	Federal Loan	$145.6 million	28%
Revenue during construction	Project Revenue	$57.5 million	11%
Federal Highway Administration Projects of National and Regional Significance Grant	Federal Grant	$45.3 million	8.5%
RTD contribution	Local Funding	$40 million	7.5%
American Recovery and Reinvestment Act Grant (Urbanized Area Formula and Federal Highway Administration Flex Funds)	Federal Grant	$28.4 million	5.5%
Other state and local funds	Local Funding	$19.9 million	3.8%
Land sales	Project Revenue	$17.4 million	3.3%
Federal Transit Administration Transit Capital Investment Program Grant	Federal Grant	$9.5 million	1.8%
TOTAL FUNDING		$518.6 million	100%

Breakdown of Funding Sources

P3: Public-Private-Partnership

P3 is a cooperative arrangement between two or more public and private sectors, typically of a long-term nature. The development of DUS featured numerous public and private entities, including the RTD, USNC, the City and County of Denver (CCD), the Denver Regional Council of Governments (DRCOG), the Colorado Department of Transportation (CDOT), and the Denver Union Station Project Authority (DUSPA). Also, Trammell Crow Company (TCC) was appointed owner representative for DUSPA. The FTA also provided

significant financing. In addition, a separate process conducted in 2010 resulted in the selection of Union Station Alliance as the developer of the Union Station Terminal.

The master developer for the project is the USNC, a joint venture of East West Partners and Continuum Partners. USNC obtained $187 million in cash and equity in the form of grants and direct sources, with each of the sources introducing new partners to the project. USNC also committed $38 million of its own money for land purchases.

RRIF

Railroad Rehabilitation Improvement Financing is a federal loan program administered by USDOT. Direct loans can fund up to 100% of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing to the government. While usually utilized for freight, FasTracks was one of the first passenger/commuter rail projects to employ RRIF loans, and was awarded $155 million.

TIFIA

Transportation Infrastructure Finance & Innovation Act is also a federal loan program administered by USDOT. For TIFIA loans, Projects must be greater than $50 million to qualify. The program offers a 35-year fixed rate loan for up to 33 percent of the cost of the project, non-variable interest rates, deferral payment options of up to five years after completion of the project, and ongoing debt service. FasTracks was awarded $145.6 million, and was the first commuter rail project (and TOD station) in US history to combine RRIF and TIFIA loans.

FHA Projects of National and Regional Significance (PNRS)

These federal grants are geared towards improving the safe, secure, and efficient movement of people and goods through the U.S. to improve the national economy. Evaluation and rating guidelines have been established to determine future project funding, and annual grans can total over $500 million. FasTracks was awarded $45.3 million.

RTD

Prior to FasTracks being approved, RTD acquired the original Union Station parcel, measuring 19.5 acres. This considerably lessened the land acquisition financial burden. But beyond that, RTD provided $165 million, which was annuitized at 5.65%, as the first source of repayment to the federal loans.

TIF

Tax Increment Financing districts can be established by local or state governments to raise funds from the properties within a district or area of redevelopment. The Downtown Denver Development Authority was created to encumber with new taxes approximately 40 acres of new development to serve as the second source of repayment. The funds collected via this mechanism, estimated to be $30 million over the life of the project, serve as an additional repayment stream for project financing.

ARRA - Urbanized Area Formula and Federal Highway Administration Flex Funds

Under the Obama Administrations Stimulus Act of 2009, many federal-aid highway programs have specific eligible transit activities identified in legislation. FasTracks utilized this mechanism in the amount of $28.4 million.

Municipality

CCD provided a moral obligation backstop against repayment shortfalls up to $8 million per year.

Return on Investment (ROI)

Since the completion of Phase I in 2014, DUS:

- Has generated $3.8 billion in total economic impact in the near term
- Has generated $2.9 billion total economic impact over the long term
- Has been responsible for creating 31,000 construction jobs
- Will continue to support an additional 18,500 jobs
- Expects to hit 200,000 passenger trips per day in 2030

Lessons Learned

- From the earliest stages of the project, all key entities were engaged in the dialogue around the planning process.
- DUS is a model example of how public/private partnerships can and do work.
- DUS takes full advantage of its central location and is a true transit hub where nine types of transportation converge, including pedestrian and bicycle traffic.
- An expandable design that is capable of growing in step with the neighborhood, city, and region.
- New and much-needed commercial and residential space, including a significant number of affordable housing units, in property adjacent to the station, all emphasizing walkability and blending effortlessly with the existing Lower Downtown (LoDo) neighborhood.
- The leasing strategy for the TOD focused on attracting a mix of Colorado-based tenants that would establish DUS as a destination in its own right, not just a stopping point for travelers.
- DUS's retail spaces were 100 percent preleased at 20 percent above market rates for the submarket.
- In its first year, The Crawford Hotel was one of the top-performing hotels in the city in terms of room rate, occupancy, and revenue per available room (RevPAR).

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WASHINGTON DC METRO - NEW YORK AVE STATION CASE STUDY

The Project

The New York Avenue-Florida Avenue-Gallaudet University Metrorail Station (New York Avenue Station) in Washington, D.C., constructed in November 2004, is an example of transportation infrastructure financing through a public-private partnership among local landowners, the local and federal governments, and the transit agency. It shows how government agencies can use special assessment districts to support financing and accelerate project delivery instead of using a pay-as-you-go approach.

Timeline

1976 - Original Red Line was built in 1976 and this station was not part of the original plan.

1996 – The idea of a station at New York Avenue was proposed as part of an overall greater improvements project for New York Avenue between Downtown Washington at the Maryland state line.

1998 – Washington D.C., produced an economic development plan, The Economic Resurgence of Washington D.C.: Citizens Plan for Prosperity in the 21st Century.

1999 – Washington D.C. Department of Housing and Community Development created New Your Avenue Task Force was formed and obtained $350,000 in funding from the city to produce a feasibility study that examined the possibility and economic benefits of a Metro Station at the intersection of New York and Florida Avenue.

1999 – Property owners in the vicinity of the station agreed in principle to contribute $25 Million in private funding for the project.

2000 – Non-residential property owners within 2,500 feet of the future station's entrance agree to pay a special assessment over 30 years to raise $25 Million dollars for the new station.

2000 – Ground Breaking

2002 – In May 2002, Metro awarded a design-build contract to the joint venture of Lane Construction/Slattery/Skanska for the design and construction of the station.

2004 - The station name was changed from New York Ave to New York Ave – Florida Ave – Gallaudet U at the end of 2004 the station opened as the 84th station and was the first infill station on the Metro system.

2007 – Noma Business Improvement District is created with an annual budget of $1.3MM

2011 – The station was renamed to NoMa – Gallaudet U on November 3, 2011, and formally christened with the new name on June 13, 2012.

Courtesy of: www.nomabid.org/wp-content/uploads/2017/09/MetroAnniversaryReport_RKG.pdf

The Funding

The total final cost of the project was $103.7 million with the federal government and private land owners each contributing $25 million and the D.C. government contributing $53.7 million. Its construction has served as a catalyst for new development and redevelopment of the NoMa neighborhood.

NEW YORK AVENUE SOURCES OF FUNDS

SOURCES	$ MILLIONS	
Tax Increment Financing (Private Owners Special Tax Assessments)	$25	24%
Federal Funds (estimated)	$25	24%
District of Columbia (estimated)	$53.7	52%
TOTAL SOURCES	$103.7	100%

Source: Washington Metropolitan Area Transit Authority (May 7, 2003). "Metro's Planning and Development Committee receives an update on the New York Avenue Metrorail station project"

Tax Increment Financing

Using a transportation infrastructure financing through public-private partnership with private landowners of nonresidential parcels within 2,500 feet of the future stations' entrances. Private landowners agreed to pay a special assessment over 30 years to raise the $25-million private sector contribution. This special assessment would be an additional charge on top of regular property taxes. The city financed the project by issuing bonds that would be repaid using the funds collected through the special assessment. The project components included the construction of the station and additional land acquisition around the station overall costs were reduced since the station did not require the construction of a new rail line to reach the area. Private property owners were initially reluctant to participate but eventually understood that the future increase in jobs and in investment would ultimately increase their property values.

Federal Funds

While negotiations with the private commercial property owners were taking place, Congress expressed support for the endeavor of using a public-private partnership to build the station. Congress agreed to match the funding of the property owners if the District could succeed in reaching an agreement. By matching the private contribution, Congress committed $25 million to the project.

In addition, they committed $6 million to the Metropolitan Branch Trail improvements, to build the station in a way that accommodates the planned bicycle and pedestrian trail. This brought the total federal contribution to $31 million. In addition to funds for the construction of the station, other Federal assistance came from the government's agreement to build offices in the area. It committed $100 million to build a headquarters for the Bureau of Alcohol, Tobacco and Firearms, which previously had offices scattered around the city. The headquarters would be on city-owned land directly across from the proposed station and would house 1,100 employees. In addition, another $100 million was committed to build new offices that would serve the US Securities and Exchange Commission. These federal commitments were an important element in the success of the station. Since the private landowners saw that the government was investing in the area, they were encouraged that the administration was committed to revitalizing the area and was able to confidently invest in the area through the special assessment.

District of Columbia

Despite financial and political uncertainties at the early stages of the project, the District of Columbia was one of the earliest contributors to the station by funding the $350,000 feasibility study discussed above. This study, in addition to the organizing efforts of the Department of Housing and Community Development, mobilized and educated the landowners and Congress about the potential impacts of the project and succeeded in achieving their contributions. As mentioned above, the District also granted Action 29 a $100,000 grant for community organizing and planning. In addition to its grants and organizing efforts, Mayor Anthony Williams committed $34 million from the district budget to fund the building of the station. This included $25 million, which based on estimates at the time, was thought to be 1/3 of the project costs, plus $9 million that the District gave to WMATA for its environmental assessment and planning efforts. However, by the end of construction, the District's financial contribution escalated to $53.7 million. These funds came from the city's capital budget, which is primarily funded by revenues from property, income and sales taxes.

Applicability to SMART Plan North East Corridor

The length of the corridor is approximately 14.5 miles long and like the New York – Florida Ave station is the only corridor to possess an active heavy rail line. The Northeast Corridor is comprised of a diverse population that is nearly an even split among White, Black and Hispanic residents. Similar to the New York-Florida Avenue station the Northeast Corridor is surrounded by areas that are densely populated by a lower income population in need of transit options.

- Use of existing transit corridors
- Use of multi-station TIF revenue that allows strong market areas to support weak market areas.
- Use of multi-layer funding from federal to local level and inclusion of private-public partnerships.
- Need for individual areas master planning.
- Possible eligibility for federal level funding if organized correctly.
- High likelihood of successful TOD development.
- High number of Stakeholders.

Lessons Learned

- Plan implementation is difficult and lengthy because of the many stakeholder groups. This requires the creation of multiple agencies and committees to keep the plan moving through multiple governmental terms.
- TAD/TIF programs rely heavily on real estate development, estimates and planning must account for possible economic recessions.
- Multi-Decade projects should plan for a layering of funding that relies on more than one major funding source.
- The project exceeded the predicted benefits of jobs and investment.
- Assessed valuation of the 35-block area increased from $535 million in 2001 to $2.3 billion in 2011.
- Estimated job creation exceeded 15,000 jobs 3 times what the feasibility study predicted.
- Estimated that the private investment into the area was $1.1 billion.
- Special Assessment allowed the project to proceed quicker than using pay-as-you-go funding approach because the district could issue bonds backed by promised future property tax revenue.
- Support from the city was essential to the project's success.
- Outreach and coordination with multiple parties was a critical component to the implementation.

Model Transferability

- A strong real estate market is essential to attract private investment.
- State laws that allow for the creation of a special assessment district.

Sources:

SMART PLAN CORRIDOR INVENTORY NORTHEAST CORRIDOR Prepared for Miami-Dade Transportation Planning Organization Prepared by MARLIN ENGINEERING, INC October 2017 http://www.miamidadetpo.org/smartplan-northeast-corridor.asp

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Metro's New York Ave-Florida Ave-Gallaudet U Metrorail Station Celebrates Five Years of Service, Washington, D.C., November 20, 2009 https://www.nomabid.org/metros-new-york-ave-florida-ave-gallaudet-u-metrorail-station-celebrates-five-years-of-service/

New York Avenue-Florida Avenue Galludet University Metro Station: A Case Study PB Consult http://www.transportation-finance.org/pdf/funding_financing/funding/local_funding/New_York_Avenue_Case_Study.pdf

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Local Example: City of North Miami

The City of North Miami is a suburban city located in northeast Miami-Dade County, about 10 miles north of Downtown Miami. The city lies on Biscayne Bay and hosts the Biscayne Bay Campus of Florida International University, and the North Miami campus of Johnson & Wales University. Originally the town of "Arch Creek", the area was incorporated as the "Town of Miami Shores", which was renamed the "Town of North Miami" in 1931. It was reincorporated as a city in 1953, and is currently known as "NoMi". As of 2010, the population recorded by the U.S. Census Bureau is 58,786. With almost 60,000 residents, North Miami is the sixth largest city in Miami-Dade County. It is also one of the most ethnically diverse cities in South Florida. North Miami has the second highest percentage of Haitian residents in the US, with 33.00% of the US populace, followed by Cuban residents (4.43%) Jamaican residents (3.30%) Dominican residents (1.72%) and Bahamian residents (1.20%).

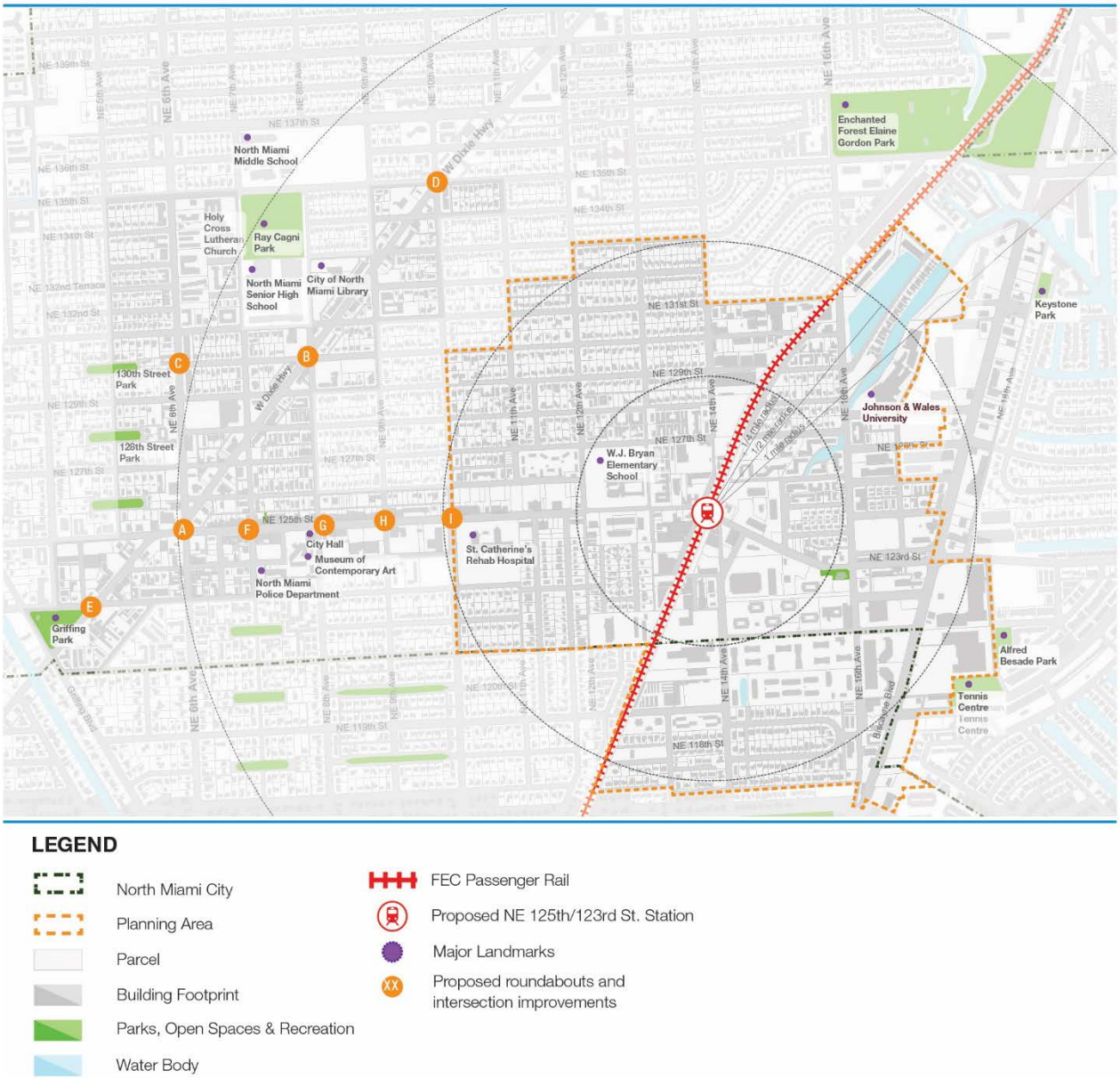
Strategically located between Miami and Fort Lauderdale, the North Miami is well served by an excellent regional roadway network- Interstate 95, US Highway 1, Florida Turnpike, West Dixie Highway and US Hwy 441. As the sixth largest city (in terms of population) in Miami Dade County, North Miami is a relatively low-density (7,328 persons/ sq. mile) bedroom community of Miami (12,605 persons/ sq.mile). North Miami is surrounded by the cities of North Miami Beach to the north, Village of Biscayne Park to the south, and unincorporated Miami-Dade County to the south.

North Miami is also one of the six transit stops – Downtown Miami, Midtown/Design District, 79th St/Upper Eastside, North Miami, North Miami Beach, Aventura – in Miami Dade County along the future Tri-Rail Coastal Link that will provide regional public transit and connectivity to Jupiter, West Palm and Fort Lauderdale in the north. The possibility of a future high frequency rail connection in North Miami provided the impetus for the City Council to implement a transit center overlay within a quarter-mile of the planned FEC Passenger Rail Station. The quality of life for residents will be enhanced with transit access to the mixed-use activity centers in the 125th Street Station area. Anchored by Johnson & Wales University, the 125th Street Station will connect the region to North Miami's commercial spine at 125th Street.

Another important factor to note is that **North Miami has the highest rate of transit users among than the other five cities along the corridor, and its residents own 0.90 vehicles per household. This**

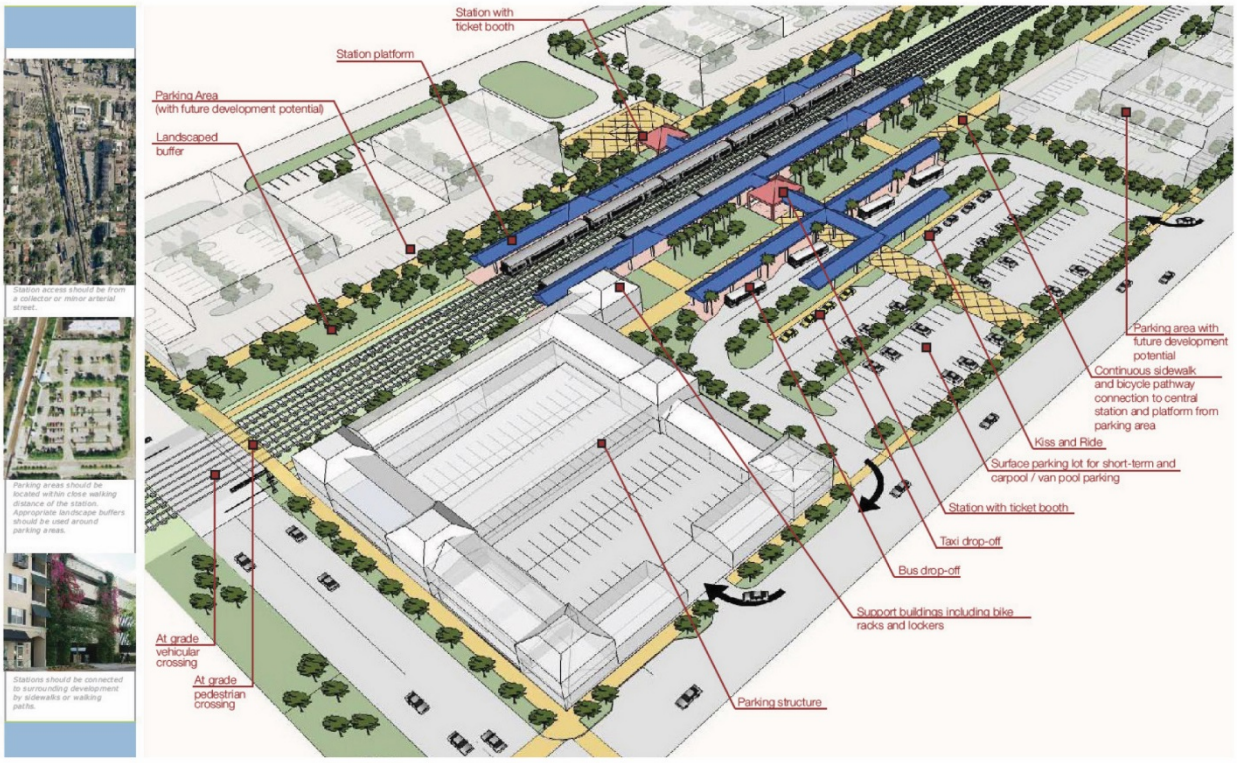
translates to their residents relying on mass transit to get to and from work. Further, the need for a transit hub is further reinforced by current demand. North Miami provides the NoMi Express, a free community bus service funded by MDC PTP. The NoMi Express employs four routes, covering a combined 102 stops, and is in operation Monday-Friday, 7am to 7pm. Between all four lines, its ridership numbers for 2018 totaled **363,160**.

The NoMi Mobility Hub is proposed around the future transit station near the 125th Street/123rd Street/ FEC Railway corridor intersection and includes the surrounding urban areas and neighborhoods. It will allow for a seamless integration of all transportation modes with a high quality user experience. It will bring together an intensive concentration of work, live, shop, and/or play activities comfortably accessible by foot, within approximately a half-mile radius or a 10-minute walking distance. In addition, the Mobility Hub will serve as the origin, destination, or transfer point for a significant portion of NoMi trips.



PROPOSED INTERSECTION IMPROVEMENT MAP SHOWING TOD TRANSIT HUB

(SOURCE: PHASE I REDEVELOPMENT PLAN & NE 125TH MULTIMODAL IMPROVEMENTS)



OPTION 1: LOCAL PARK-n-RIDE STATION

(SOURCE: The North Miami Mobility Hub and TOD Strategic Plan – Final Report)

OPTION 2: TOWN CENTER STATION

(SOURCE: The North Miami Mobility Hub and TOD Strategic Plan – Final Report)

What is Already in Place in North Miami?

- The North Miami Mobility Hub and TOD Strategic Plan (A Collaboration between the City of North Miami, North Miami CRA, and their consultant, IBI Group)
- Land Use & Zoning for TOD infill
- TOD Overlay District
- Tax Credits for Enterprise Community
- An Economic Development Manager
- CRA Grants for Property Improvements (i.e. building facades)
- Opportunity Zones

What are Opportunity Zones?

Opportunity Zones are census tracts generally composed of economically distressed communities that qualify for the Opportunity Zone program, according to criteria outlined in 2017's Tax Cuts and Jobs Act. Since the passage of the law, Opportunity Zones have been designated in all 50 states in the US, the District of Columbia, and five US possessions (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands). In fact, all of Puerto Rico falls into an Opportunity Zone.

The act allowed the Governor of each state to nominate up to 25 percent of eligible low-income census tracts as Opportunity Zones. Up to 25% of low-income neighborhoods that meet the income qualifications of the program (and up to 5% of non-low income tracts that meet other income and geographic requirements) in each state, district, or territory can be designated as Opportunity Zones. In states, territories, and districts with fewer than 100 census tracts, up to 25 census tracts can be designated as Opportunity Zones. Areas certified as Opportunity Zones retain their designation for ten years. More than 8,700 Qualified Opportunity Zones have already been qualified in the US and US territories.

How are Opportunity Zones Created?
Opportunity Zones are created through a nomination and designation process. Following the passage of the new tax reform, governors of US states and territories — as well as the mayor of Washington, DC — were given until April 2018 to nominate qualifying census tracts in their jurisdictions for Opportunity Zone designation. Because the Opportunity Zone program is intended to develop economically depressed areas, there are restrictions on which census tracts can qualify for designation. To qualify for nomination as an Opportunity Zone, a census tract must meet the following low-income requirements as defined by US Internal Revenue Code Section 45D(e):

- A poverty rate of at least 20%; or
- A median family income of:
    - No more than 80% of the statewide median family income for census tracts within non-metropolitan areas.
    - No more than 80% of the greater statewide median family income or the overall metropolitan median family income for census tracts within metropolitan areas.

Up to 25% of census tracts of each jurisdiction that met this criterion could be nominated. An additional 5% of each jurisdiction could qualify if they met a different set of income and geographic qualifications:

- A census tract that's contiguous with a low-income Opportunity Zone; and
- A median family income of no more 125% of the median family income of the adjacent Qualified Opportunity Zone.

Funding Mechanisms North Miami is Considering for TOD Development

USDOT BUILD grants: www.transportation.gov/BUILDgrants

US HUD Choice Neighborhoods Planning Grants Program:
https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo/fundingopps/fy18cnpg

FDOT County Incentive Grant Program: www.fdot.gov/programmanagement/LP/CIGP/Default.shtm

FDOT Transportation Regional Incentive Program (TRIP):
www.fdot.gov/programmanagement/LP/TRIP/Default.shtm

EDA Economic Development Assistance Programs:
www.grants.gov/web/grants/view-opportunity.html?oppId=306735,

Florida Department of Economic Opportunity Florida Job Growth Grant Fund:
http://floridajobs.org/jobgrowth

Miami Dade Transportation Planning Organization (TPO) Municipal Grant Program:
http://miamidadetpo.org/municipal-grant-program.asp

Other Investment Strategies

PRIVATE INVESTMENT

This is the single most important source of redevelopment funding. The general rule for successful revitalization is that private investment usually must exceed public funding by three to four fold. Such funding takes the form of equity investment and conventional real estate loans.

LEASING

Public-owned land, buildings, equipment, etc. can be leased to developers for projects. For the developer, this reduces the need for capital investment in land, buildings, etc. or debt service on money borrowed to finance the purchase of such things as land, building, and equipment. The governmental entity receives lease payments which are deductible from the developer's income tax. The lease may also include a purchase option.

JOINT VENTURES

In real estate syndication ventures, the implementation and/or governing body can contribute equity capital to a project. This has the effect of reducing equity requirements from the developer and/or reducing the amount of debt service. Through equity syndication, tax subsidy benefits can be passed on to investors in the form of depreciation, investment tax credits, deferral of taxes and capital gains.

Lessons Learned

- There are a number financing options available to the City of North Miami to plan, design, and build a TOD hub as part of the both the SFRTA/Tri-Rail Coastal Link and the FDOT/TPO SMART Plan Northeast Corridor.

- At the proposed location for the TOD hub, there currently exists nearly 2 acres that could be redeveloped for the station.

- Utilize constraints as an opportunity:
    - The high percentage of residents that do not own a vehicle and rely on mass transit to commute to work should be highlighted for grants
    - The City's higher unemployment and poverty rates should be highlighted for grants, particularly economic development assistance grants

- Private investment & development can be key to NoMi's TOD success:
    - Find developers that are willing to build the station/platform for incentives: upzoning, greater FAR, development bonus rights, less or no taxes on the property only the improvements, less impact fees, and possibly sharing of parking revenue.
    - A true TOD hub that offers transit connections, office space, a tech center, residential units, food & beverage options and limited retail could positively change the fabric of North Miami for years to come.

Pre-funding Recommendations

Many of the funding mechanisms described in the sections above, have strict prerequisites that require organized, well planned projects to qualify for funding. It is necessary that the FDOT, Miami-Dade County, CITT and the municipalities along the different SMART Plan corridors come together and organize a plan for each corridor and station area. The following recommendations are some of the strategies that can be used to position the SMART Plan to qualify for adequate funding.

Corridor Planning

Classify each corridor into one of the three basic corrido types, destination connector, commuter and circulator.

For example the North East Corridor is a Destination Connector as it has the potential to link residential neighborhoods to two major activity centers in Miami-Dade County, downtown Miami and the City of Aventura. Destination connector corridors are ideal for TODs as they tend to incentivize higher-density development. A strong Corridor Scale TOD plan is needed to make the North East Corridor a reality. The checklist below was developed based on the research and understanding of the lessons learned in the case studies outlined in this report, the interviews listed in the interview section, our experiences as real-estate professionals, residents and commuters of Miami-Dade County and the recommendations of the Center for Transit-Oriented Development.

Create a corridor level master planning effort that involves all municipalities along the corridor and can serve as guide to amend the municipalities' master plans and zoning regulations. By creating a master planning taskforce, that includes members of the County and municipal governments, as well as private developers with properties along the corridor and residents.

a. Identify development districts along the corridors,
b. Model the different market demands surrounding station areas,
c. Coordinate neighboring municipalities land use, to avoid land use conflicts
d. Create a system where municipalities can swap densities and share revenue along the corridor that would allow for low ridership areas to be sustained by high ridership areas, while density along the corridor

Community Engagement

Create a community engagement strategy that helps the residents of Miami-Dade County believe in the SMART Plan and overcome the "is never going to happen" mentality that exists among the residents by:

a. Creating a unified message between the County and the municipalities along the corridor.
b. Creating community engagement programs at the municipality and county level to generate grassroots support for the SMART Plan.
c. Creating a concise media strategy that communicates the unified message and support of the community.
d. Create County and Municipality level tasks forces and committees dedicated to community engagement.
e. Find and create strong alliances with major private sector stakeholders along the corridor so that individual station areas can have private sector champions.

f. Finalize station locations based on technical recommendations and input from the the different committees.

Positive community engagement will be necessary for the approval of possible funding strategies such as penny taxes or TIFs, positive community engagement is what makes successful plans outlast change in local government leaders.

Develop Station Area Design Standards

Develop street design standards for the different types of station areas that are acceptable to the County, the municipalities and FDOT.

a. Prioritize bicycle and pedestrian friendly street designs in station areas.
b. Consider adopting performance standards such as level of service for all modes and assess flexible TOD appropriate standards for autos.
c. Create safety and security plans for the station areas.

Create Opportunities for Workforce and Affordable Housing

Create a housing taskforce for the corridor that can develop a Mixed-Income TOD strategy. This can help gain community support, as well as help develop funding strategies for grants for specific stations along the corridor.

Funding Recommendations

	FUNDING SOLUTION	Funding Sources	Infrastructure /Tracks	Rolling Stock	Station	TOD
1	User Fee	DIRECT FEES	X	X	X	X
2	Highway Tolls	DIRECT FEES	X		X	X
3	Express Lane Fees	DIRECT FEES	X		X	X
4	Congestion Pricing	DIRECT FEES	X	X	X	X
5	Industrial Loans/Industrial Banks	DEBT				
6	GOB: General Obligation Bond	DEBT	X	X	X	X
7	Revenue Bonds - Transit Fees/Parking Fees	DEBT	X	X	X	X
8	Private Activity Bonds.	DEBT	X		X	
9	Certificates of Participation.	DEBT	X		X	
10	Revolving Loan Funds	DEBT	X		X	X
11	State Infrastructure Banks.	CREDIT ASSISTANCE	X	X	X	
12	GARVEE: Grant Anticipation Revenue Vehicle Bonds	DEBT			X	
13	RRIF: Railroad Rehabilitation Improvement Financing	CREDIT ASSISTANCE	X	X	X	
14	Section 129 Loans	CREDIT ASSISTANCE				
15	TIFIA: Transporation Infrastructure Finance & Innovation Act	CREDIT ASSISTANCE	X	X	X	X
16	P3: Public-Private Partnership.	EQUITY SOURCES	X	X	X	X
17	Infrastructure Investment Funds	EQUITY SOURCES	X		X	
18	Developer Fees & Exactions; Impact Fees	VALUE CAPTURE	X		X	X
19	Special Districts	VALUE CAPTURE			X	X
20	TIF: Tax-increment Financing	VALUE CAPTURE			X	X
21	TAD: Tax Allocation Distirct	VALUE CAPTURE			X	X
22	Joint Development.	VALUE CAPTURE			X	X
23	Community Development Districts	VALUE CAPTURE			X	

	FUNDING SOLUTION	Funding Sources	Infrastructure /Tracks	Rolling Stock	Station	TOD
24	CMAQ: Congestion Mitigation and Air Improvement Program (Federal)	GRANTS/PHILANTHROPIC	X	X		X
25	TAP: Transportation Alternatives Program (Federal & State)	GRANTS/PHILANTHROPIC			X	
26	Urbanized Area Formula Funding Program	GRANTS/PHILANTHROPIC			X	
27	CDBG: Community Development Block Grant Program	GRANTS/PHILANTHROPIC				X
28	EDA: Economic Development Administration Grants	GRANTS/PHILANTHROPIC				X
29	Program Related Investments. No.	GRANTS/PHILANTHROPIC				X
30	Foundation Grants (Philanthropic)	GRANTS/PHILANTHROPIC				X
31	BUILD: Better Utilizing Investments to Leverage Development	GRANTS/PHILANTHROPIC			X	
32	1/2 penny surtax	STATE/LOCAL FUNDS	X	X	X	
33	Structured Funds	EMERGING TOOLS			X	X
34	Land Bank	EMERGING TOOLS			X	X
35	Redfields to Greenfields	EMERGING TOOLS				X
36	National Infrastructure Bank	EMERGING TOOLS	X			

Bios

Claudia M. Correa – Claudia is a licensed professional engineer focusing on land development engineering for mixed-use, resorts and large-scale residential projects in Florida, the Caribbean and Latin America. As a Senior Project Manager at Langan's Miami Lakes office, Claudia is responsible for managing the design and permitting of various land development projects in Miami-Dade County.

Claudia has a bachelor's Degree in Civil Engineering from New Jersey Institute of Technology and a Master's Degree in Civil Engineering with a concentration in hydrology and hydraulics from Stevens Institute of Technology. Claudia was the recipient of the ACEC Young Professional of the Year Award in 2014.

Jorge R. Escobar – Jorge is an attorney in Holland & Knight's Miami office and a member of the firm's Real Estate practice. Mr. Escobar focuses his practice on the representation of clients in all aspects of commercial real estate transactions, including the acquisition, disposition, development and finance of multifamily, condominium, office, hotel, warehouse and mixed-use projects.

Mr. Escobar regularly represents local and national institutional lenders in connection with complex commercial loan transactions, including construction loans, permanent loans secured by real estate, asset-backed loans, collaborative modifications and workouts as well as distressed asset sales and acquisitions. Additionally, Mr. Escobar represents both private and public clients in the purchase, sale, leasing, and the development and financing of commercial real estate transactions.

Enrique "Henry" Piñeiro – Henry is Senior Vice President for The Allen Morris Company. The Allen Morris Company is one of the largest diversified real estate firms in the southeast specializing in Commercial, Office and Multi-Family Mixed-Use Development, Commercial Real Estate Brokerage and Property Management. Henry oversees the asset management of the company's extensive portfolio of properties.

He has over 30 years of South Florida real estate experience in every sector of the commercial real estate market including investment sales, tenant representation, property and asset management, real estate development, mortgage lending and financial analysis. Henry graduated Magna Cum Laude from Florida International University with a double major in Finance and Real Estate and a Master's degree in International Real Estate. He has earned the prestigious Certified Property Manager (CPM) designation of the Institute of Real Estate Management, the Certified Commercial Investment Member (CCIM) and the LEED AP designation.

Henry is actively involved with Florida International University Alumni Association, Board of Director and Parliamentarian for 2018, Miami-Dade County Affordable Housing Advisory Board, Vice Chair, Commissioner appointed for 2017-2018. Institute of Real Estate Management, Southeast Florida President-Elect and the Alzheimer's Association Southeast Florida Chapter, Board Chair 2009-2015 and currently on the Board.

Charles C. Russo – Director based in Miami, joins the team focusing on domestic acquisitions and asset management opportunities within the Southeast region. Charles joined TH Real Estate in 2017 as a Director of Office & Industrial Investment Management. Previously he worked for The Carlyle Group, Ge Capital and Thor Equities based in Los Angles and New York, respectively. He brings over 15 yeas of real estate experience serving acquisitions and asset management roles across all asset classes. Charles earned a BA from Trinity College and has completed a real estate finance and management programs at NYU, UCLA and the University of Southern California.

N**eal Schafers** – Neal joined the Miami Downtown Development Authority (DDA) in 2015, bringing with him 16 years of experience creating liveable communities and destinations through research, design, collaboration and onsite construction management. At the Miami DDA, Neal works closely with residents, businesses, elected officials, partner agencies and key stakeholders to drive the vision for all planning, urban design and transportation projects directly affecting downtown Miami specifically, and the greater South Florida region in general. Over the last three years, Neal has focused on several long-term, transformative projects such as the Miami Baywalk & Riverwalk, Flagler Street renovation, Biscayne green, Complete Streets and pedestrian priority zones, and mass transit initiatives like Brightline, the SMART Plan and Metromover expansion.

Prior to working for the Miami DDA, Neal was involved in golf course design, planning and landscape architecture. In 2007, he joined Edward Stone & Associates (EDSA) in Fort Lauderdale, FL. Over the course of eight years, his project experience ranged from resort & hospitality design to waterfront & urban design. He lived and worked abroad in Al Ain, Abu Dhabi, UAE and Shanghai.

Neal holds an undergraduate degree in communications from the University of Minnesota, and a Masters in Landscape Architecture form the University of Florida. While at UF, he also studied Historic Parks and Urban Design at the Paris Research Center in Paris, France.

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END OF LEADERSHIP PROJECT REPORT