



***Joint Development
Introduction
Sasha Page, Rebel
Sasha.Page@rebelgroup.com***



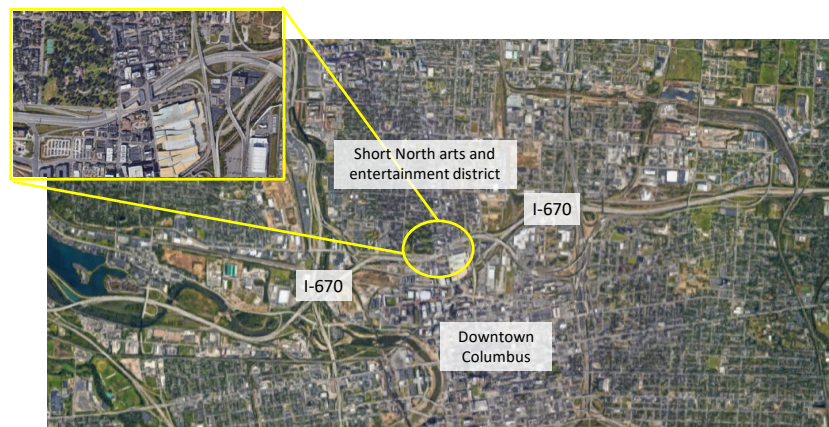
Joint Development (JD) Defined

Public agency/group of agencies partner with private developer or developers to improve use of land near, below, or above infrastructure

Agencies are now particularly focusing on JD to fund neighborhood connectivity and housing affordability

- **Opportunities:** Can help increase impact of key infrastructure and revitalize distressed areas
- **Challenges:** Take care to ensure that these projects do not create or worsen equity issues

The Cap at Union Station, Ohio



Map data ©2019 Google

JD Use By Mode

- **At grade** JD highway & road includes retail concessions & service stations
- **Above grade** JD projects include air rights over highways in areas where past construction divided neighborhoods.
- **Below grade** JD projects include broadband and utility projects, such as in Utah

Highways



- **At grade** JD has included a variety of housing, leveraging excess property or surface parking
- **Above grade** JD works well in high-density areas. Many transit agencies, e.g., as in NY and Washington, D.C., have engaged in air-rights transactions.
- **Below grade** JD projects include parking garages, broadband, and utility projects

Transit



JD Funding and Implementation

Funding

Implementation



Sources

- One-time land sale / up-front lease paid by developer, or
- Ground lease paid in installments



Uses

- Sale/transfer of easement or development rights



Funding /Finance

- Pay-as-you-go, or
- Loans or bonds

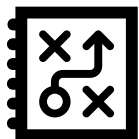
- Simple, at-grade JD projects (e.g., land sales /leases) tend to be easier
- Above- or below-grade JD projects are often complicated and more difficult

JD Legal, Market, & Political Considerations

Type	Considerations
Legal	<ul style="list-style-type: none">• Municipalities (through zoning) and States (through legal basis play role in enabling JD• Must meet Federal requirements if seeking to use Federal funds
Market	<ul style="list-style-type: none">• Financing for complex above-ground JD projects, like cap infrastructure, can be difficult (e.g., Union Station)• Air rights agreements mostly suitable for large cities with extensive transit• Air rights are attractive to developers through access to prime real estate near key transport infrastructure
Political	<ul style="list-style-type: none">• Can create public resistance, including for those projects that increase density and traffic• Opportunity to meet market and equity considerations

JD Economic & Equity Considerations

Challenges



Increased housing demand leads to increased rents and housing prices for existing residents, making neighborhoods unaffordable for them

JD policies and projects should include strong affordable housing protections

Opportunities



Air rights projects in particular can be used to accomplish broader social and equity goals

Cap projects, for example, can reintegrate neighborhoods

Federal funding & financing programs for JD

- **The USDOT Build America Bureau (BAB):** Provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit through the TIFIA and RRIF programs to support transportation infrastructure projects, including joint development projects. They help leverage other funding sources by providing flexible and attractive financing options
- **FTA Grants:** FTA's "Pilot Program for Transit-Oriented Development" supports JD, as do other FTA capital programs
- **FHWA Grants:** A number of existing programs, e.g., Surface Transportation Block Grant Program (STBG), Congestion Mitigation and Air Quality (CMAQ) Improvement Program, and Transportation Alternatives Program, can provide partial funding for JD

Recent updates to Federal Funding for JD

TRANSIT-RELATED

- **Affordable Housing Incentives:** New rules allow land transfer to transit stations without cost development of affordable housing results [[Source](#)]
- **EV Charging:** Bipartisan Infrastructure Law amended 49 U.S.C. § 5302 to include eligibility for electric vehicle charging infrastructure as part of a joint development project [[Source](#)]
- **Justice 40/Thriving Cities:** If a JD project makes use of Federal funds “covered” under Justice 40, it could be subject to certain requirements [[Source](#)], which prioritize projects for disadvantaged communities. The USDOT Thriving Communities Program has similar aims

HIGHWAY-RELATED

- **Highway ROW for climate, equitable communications, & energy reliability:** In 2021, FHWA released guidance clarifying that highway ROW “can be leveraged by State DOTs for pressing public needs relating to climate change, equitable communications access, and energy reliability” [[Source](#)]. Also, the new Reconnecting Communities Pilot (RCP) Program may support JD such as through capping [[Source](#)]



July 19, 2023



U.S. Department
of Transportation

**Federal Highway
Administration**

Innovative Finance/P3 for Joint Development

Jacob Vallo

Assistant General Manager

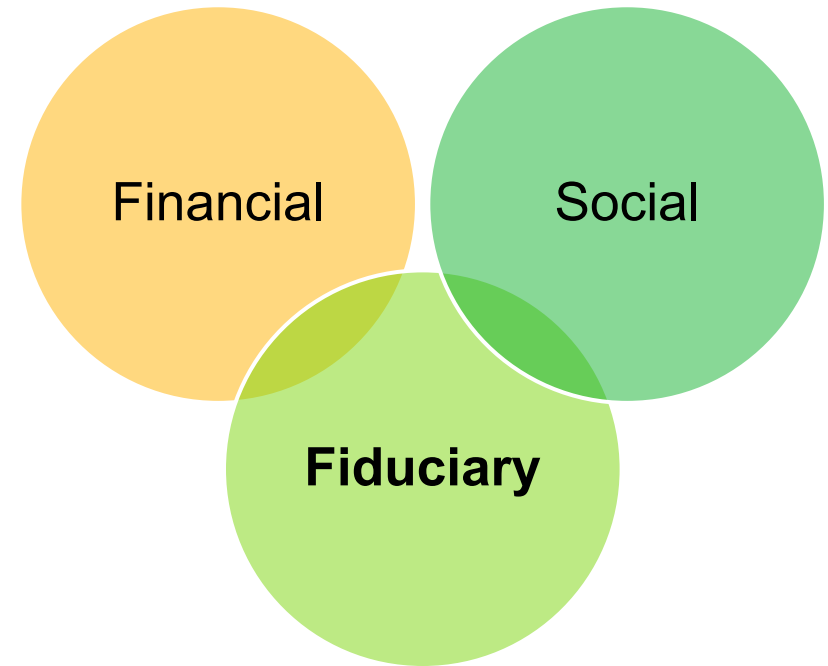
Real Estate Development and Asset Management



MARTA Joint Development Strategic Objectives

- To generate greater transit ridership
- To promote a sustainable, affordable, and growing future for the people of Metro Atlanta
- To generate a return on MARTA's transit investment through enhanced passenger revenue and ground leases

MARTA Board Adopted TOD Guidelines, 2010



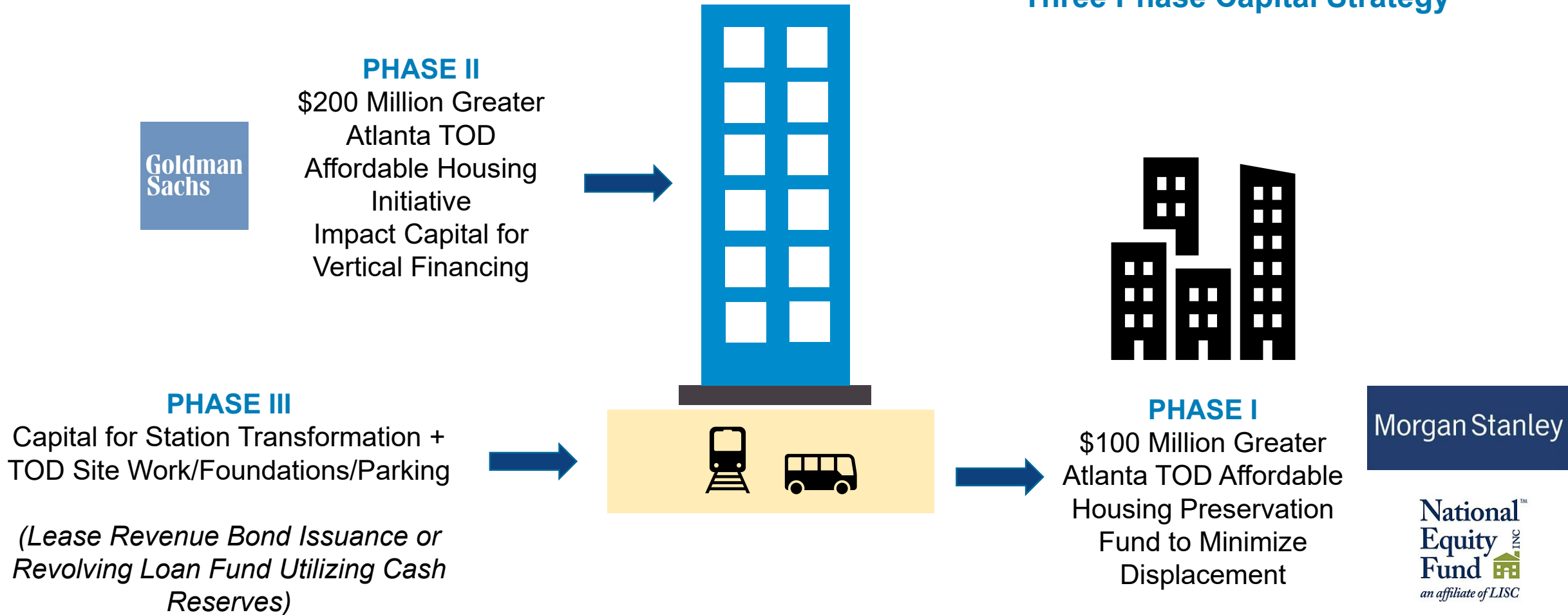
We are impact investment managers, overseeing a land portfolio and partnerships to achieve financial and social outcomes for MARTA and in the communities we serve.

Our objective to deliver mixed income housing TODs in historically under invested communities had many challenges.

- New Investment Could Create Displacement
- Need to Deliver Deeper Levels of Affordability Desired by the Community
- Do Something Now to Help Solve the Housing Crisis, Development takes Too Long
- Ensure Developers would be interested in the TOD RFPs given the policy requirements
- Rising Construction Costs
- Complex and Costly Site Conditions
- Limited Subsidy from Local Jurisdictions for Affordable Units
- Ensure or Increase the Probability the TOD Projects are Financed

What Approach Did We Take?

Three Phase Capital Strategy



Morgan Stanley

National
Equity
Fund 
an affiliate of LISC

\$100 Million Greater Atlanta TOD Affordable Housing Preservation Fund

- MS \$100 Million Commitment
- Flexible (CRA) Debt to Existing Owners and New Mission Oriented Owners/Developers Seeking to Preserve Affordable Units
- NEF is General Partner and Performs Day to Day Operations
- Investments are made consistent with criteria agreed upon by all parties
 - Within ½ mile of rail stations and park and rides
 - No Single Family Homes

**Two investments totaling \$48 million preserved
over 400 homes/units**

Goldman
Sachs

\$200 Million Greater Atlanta TOD Affordable Housing Initiative

- GS \$200 Million Commitment
- Flexible Debt/Equity to Developers building new mixed income housing projects at or within 1 mile of fixed guideway transit
- GS manages initiative and Performs Day to Day Operations
- Investments are made consistent with criteria agreed upon by all parties
 - Minority Sponsors a Priority

**One, \$90 million investment to create 250
affordable units**

AFFORDABLE HOUSING FINANCE

MARTA Announces TOD Preservation Fund's First Transaction

Lincoln Avenue Capital to acquire the 201-unit GE Towers in Atlanta.

The Greater Atlanta Transit-Oriented Affordable Housing Preservation Fund is providing financing for Lincoln Avenue Capital to acquire GE Towers, a move that aims to preserve 201 affordable housing units within a half mile or 10-minute walk from Metropolitan Atlanta Rapid Transit Authority's (MARTA's) West End rail station. The \$24.7 million loan has been made to an affiliate of Lincoln Avenue Capital.



The historic loft property, named for its location at the site of the former General Electric plant, is located at 490 Glenn St. in the Mechanicsville neighborhood, southwest of downtown.

The Atlanta Journal-Constitution

Local News AJC Videos Access Atlanta EPaper COVID-19 Sports Press On

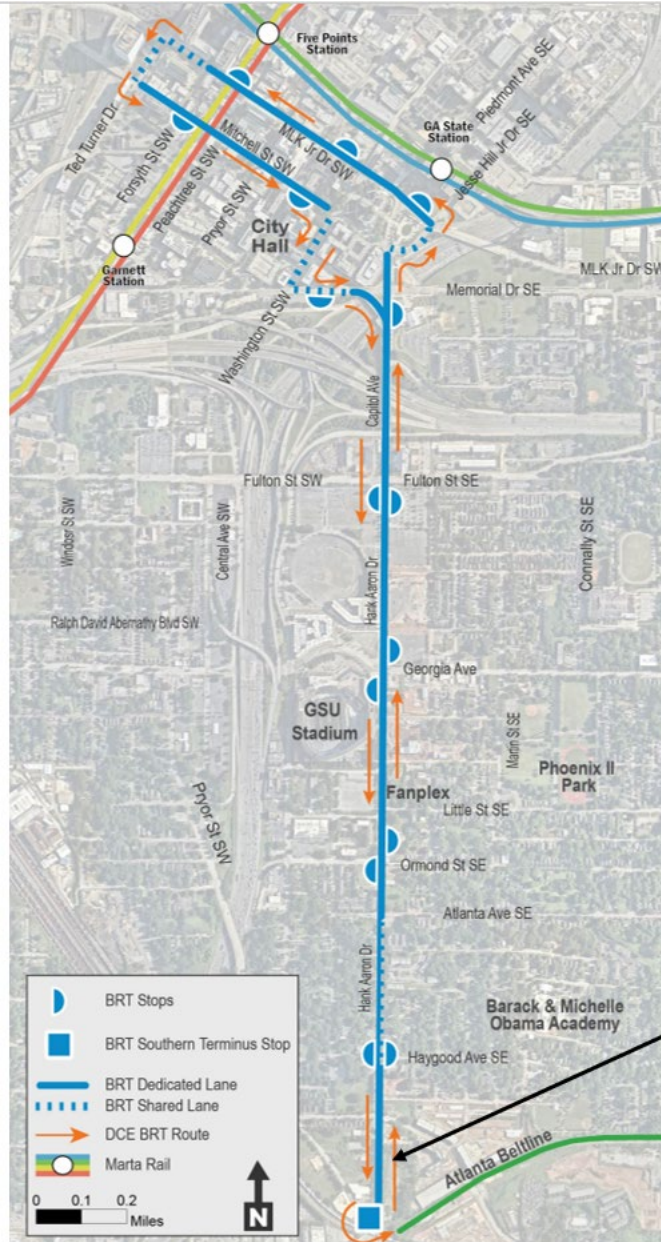
Thank you for subscribing. Choose from a variety of newsletters to stay informed.

With another \$100M, MARTA and Goldman Sachs double affordable housing assist

- Across from southern terminus of planned BRT - early investment ahead of transit
- First transaction of MARTA / Goldman Sachs TOD Affordable Housing Initiative
- \$90 million investment
- 250 affordable units
- Minority developer led Project
- Initiative increased by \$100 million to \$200 million to fund more affordable housing



Summerhill Bus Rapid Transit (BRT)



Rendering from Exact Capital
Skyline Apartments



CASE STUDY

Edgewood Candler Park Station TOD

Recipient of FHWA Surface Transportation Block Grant

Before

Pre-Existing Condition

- Heavy rail station opened in 1979
- Three (3) bus routes served by station
- 463 surface parking spaces
- 20% utilization at time of TOD RFP Release with peak of 35%
- 6.5 acres
- Rapidly improving intown Atlanta neighborhood



After

- One Developer chosen through RFP
- Private senior debt and equity
- Local Econ Dev Agency grants for affordable housing
- MARTA is Ground Lessor
- Completed 2022
- Four (4) development projects
- 432 multifamily housing units
- 25% of the units are affordable at 80% of area median income
- 21,000 SF cultural building + ½ acre park
- 8,000 sf restaurant and creative office
- Artwork in bus wait area
- Bus loop and MARTA replacement parking - \$4.7 million Federal Highway Administration Surface Transportation Block Grant (includes 25 percent local match from MARTA)



Performance Metrics (Financial + Social)

- Three (3) ground leases = approximately \$60 million of cash flow over the term of the leases
- Approximately \$430,000 of annual revenue from ground leases (CY23)
- Approximately \$101,000 of new fare box revenue per annum based on trip estimates
- 75 of affordable housing units
- ½ acre of park space
- 21,000 SF non-profit cultural facility
- Mural
- Job Creation
- Private Investment of \$100 million
- Property Tax Revenue Increase for Local Jurisdiction (previously the land was tax exempt)
- MARTA Financial ROI



U.S. Department
of Transportation

**Federal Highway
Administration**

EDC-Value Capture Innovation

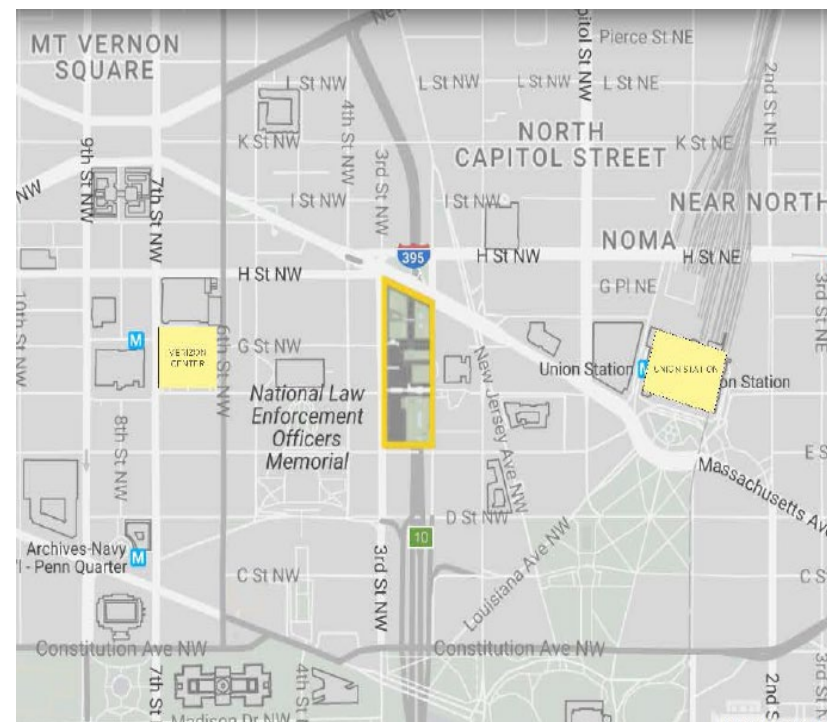


The Washington DC I-395 Capitol Crossing Project



Background: Washington D.C. I-395 Capitol Crossing

- The construction of the I-395 in the late 1960's created divisions between the Capitol Hill and East End Districts.
- The idea of decking over Interstate I-395 dates to 1989
- The area is one of the largest areas remaining undeveloped sites in downtown Washington, DC



Background: Washington D.C. I-395 Capitol Crossing

- In 2012, the District awarded the right to develop to Property Group Partners (PGP)
- The largest air rights project ever undertaken in Washington D.C.
- The Capitol Crossing project broke ground in May 2015. The entire project expected to be completed by 2021



Photo Credit to Property Group Partners

Capitol Crossing - Background

- \$1.3 billion highway, local, street, and real estate development project in Washington, D.C.
- Seven-acre decked development site above I-395
- Located above I-395 between E Street and Massachusetts Ave. and 2nd and 3rd Streets NW
- Five mixed-use buildings with 2.2 million square feet
- Underground parking garage with space for 1,146 cars and 440 bicycles



Photo Credit to Property Group Partners

Development Detail



Photo Credit to Property Group Partners

3rd Street Tunnel Project (Transportation portion of the Capitol Crossing Project)

\$270 million in transportation improvements/costs paid by the private sector real estate developer

- Restoration of the original street grid (F and G Streets, NW)
- Enhanced vehicular, pedestrian and bicycle connections around and across I-395
- Utility relocations
- Reconfiguration of I-395 ramps at 2nd and 3rd Streets, NW

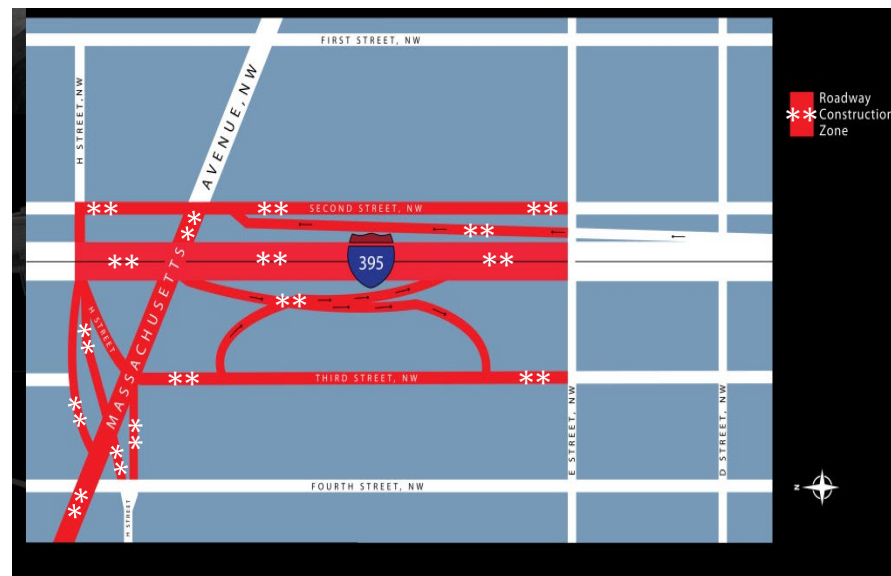
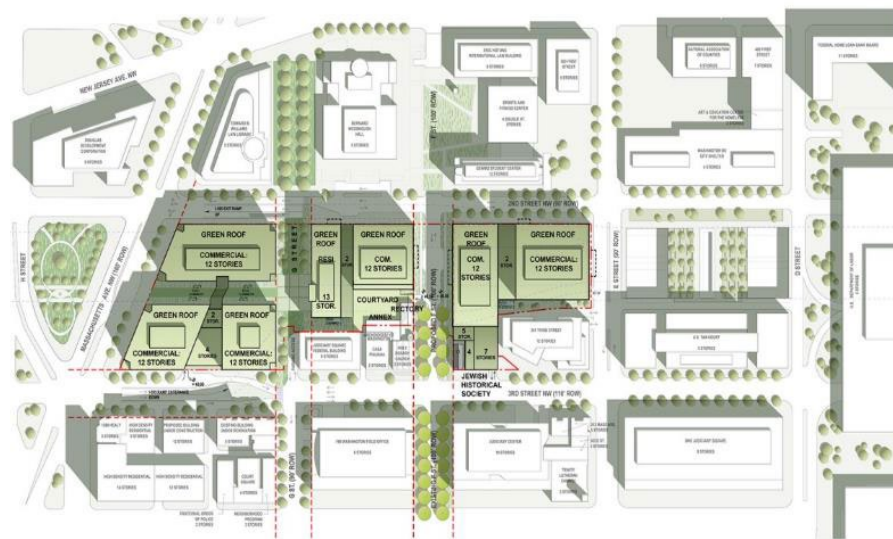


Photo Credit to Property Group Partners

Capitol Crossing Value Capture

- Property Group Partners (PGP) acquired the air rights from the District of Columbia in 2012 for a fee of up to \$120 million
- The completed project will generate an estimated \$40 million in annual new property tax revenue
- PGP will fund the \$270 million Third Street Tunnel Project
- Employment 4,000 construction Jobs & 8,000 permanent jobs



Sustainability

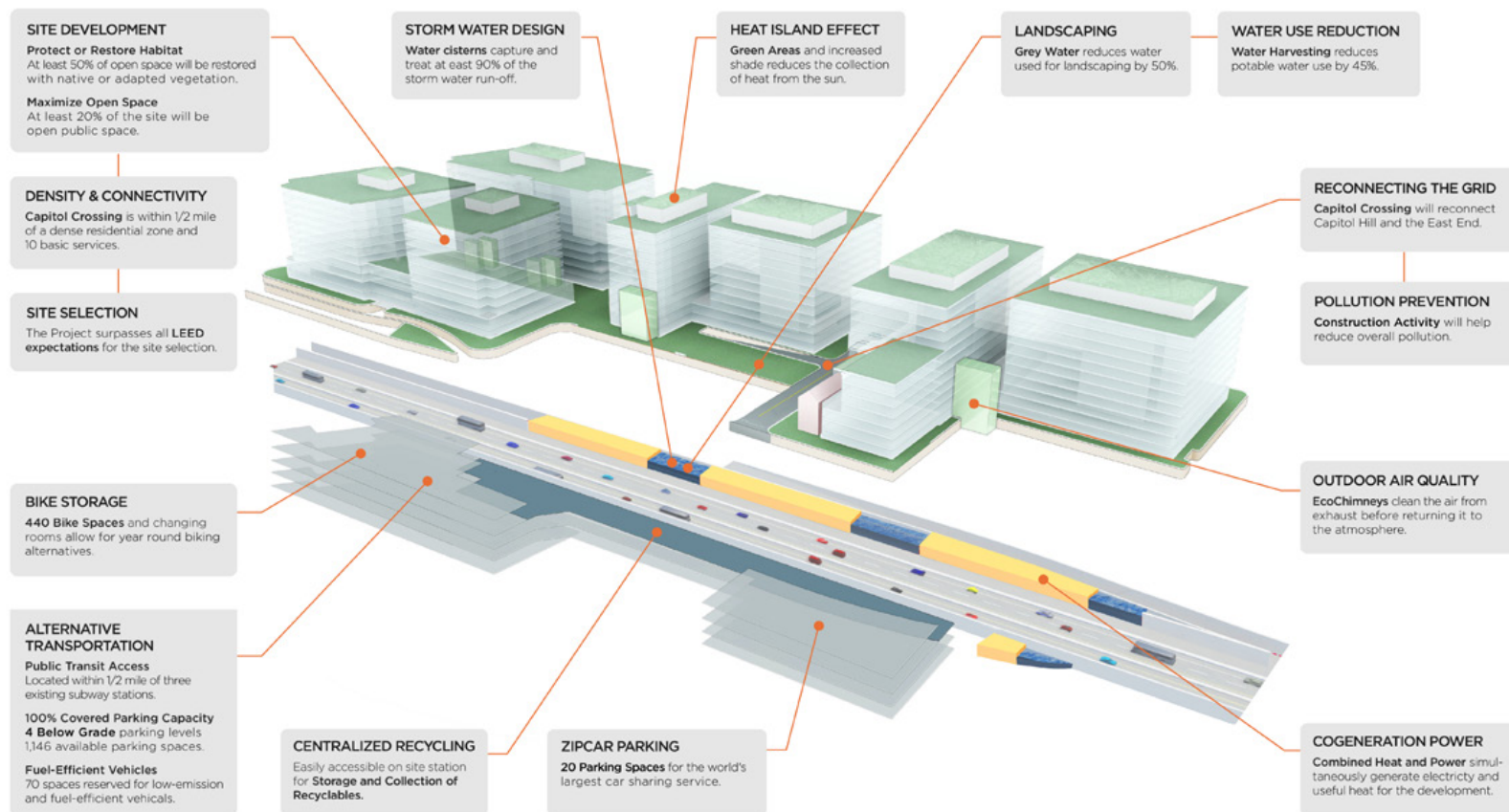


Photo Credit to Property Group Partners

Keys Successes

- Clear objectives, reconnect the two long divided neighborhoods & redevelopment
- Strong coordination & partnerships of community leaders, district planners, district government, FHWA, and district residents
- Implementation considerations
- Market considerations
- Funding and financing plan considerations

Examples of Value Capture used in Highway System

Right of Way Use Agreements, Air Right Development

- I-395 Air Rights Development/Capital Crossing
- Massachusetts Turnpike Air Right Parcels 23 and 15 (I-90)
- The Cap at Union Station - Columbus, Ohio

Right of Way Use Agreements, Below Grade

- City of Santa Monica, Fiber Optic
- KentuckyWired - Kentucky (statewide)
- Big Cottonwood Canyon Fiber Optic Deployment - Salt Lake County, Utah

Right of Way Use Agreements, At Grade

- Baldock Solar Station - Clackamas County, Oregon
- Veterans' Glass City Skyway Solar Array - Toledo, Ohio

Examples of Value Capture used in Public Transportation System

Above Grade, Air Right Development

- Hudson Yard and Farley Station in NY
- MARTA Finance Center above the Buckhead Station
- South Station Air Rights Development Project - Boston, MA

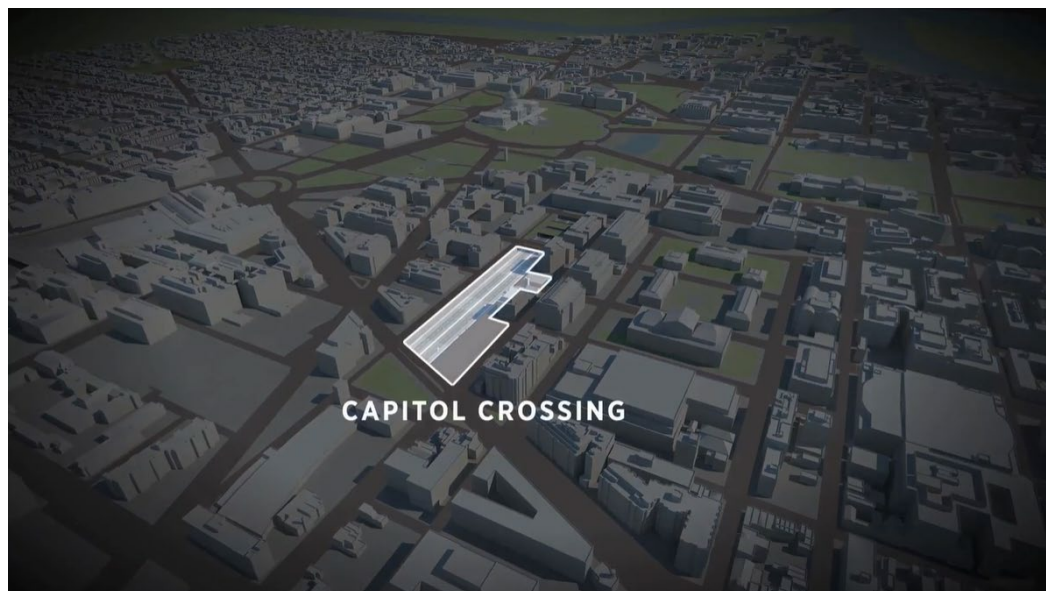
At Grade/Adjacent Joint Development

- MARTA Lindberg Station Joint Development
- Airport Max Red Line, Oregon
- Moynihan Train Hall
- Transbay Transit Center- (transit tower JD adjacent to the transit center)

Below Grade/Utility Joint Development

- Atlanta Beltline Fiber Broadband

More Information on Capitol Crossing



Videos:

- [Capital Crossing Overview](#) (YouTube, WTOP News, provided by Capital Crossing Property Group Partners)
- [Capitol Crossing Construction Phases](#) (YouTube, WTOP News, provided by Capital Crossing Property Group Partners)
- [Time Lapse Video of Capitol Crossing Construction](#) (YouTube, WTOP News, courtesy of OxBlue)

Value Capture Resources

- Value Capture Website:
https://www.fhwa.dot.gov/ipd/value_capture/defined/
- Value Capture Implementation Guides
https://www.fhwa.dot.gov/ipd/value_capture/resources/value_capture_resources/value_capture_implementation_manual/
- Value Capture FAQs
https://www.fhwa.dot.gov/ipd/value_capture/faq/
- Project Profiles:
https://www.fhwa.dot.gov/ipd/project_profiles/
- Factsheets: https://www.fhwa.dot.gov/ipd/fact_sheets/
- Value Capture Resources:
https://www.fhwa.dot.gov/ipd/value_capture/resources/value_capture_resources/default.aspx

Capitol Crossing – Questions?



Photo Credit to Property Group Partners

Thay Bishop: Thay.Bishop@dot.gov or ValueCapture@dot.gov
Tel: 404-562-3695

UTDOT



Keeping Utah Moving

FHWA Webinar Value Capture & Joint Development

Lynne Yocom
UDOT Fiber Optics Director

July 19th, 2023



Swift Effect on Transportation



Definition of a Highway

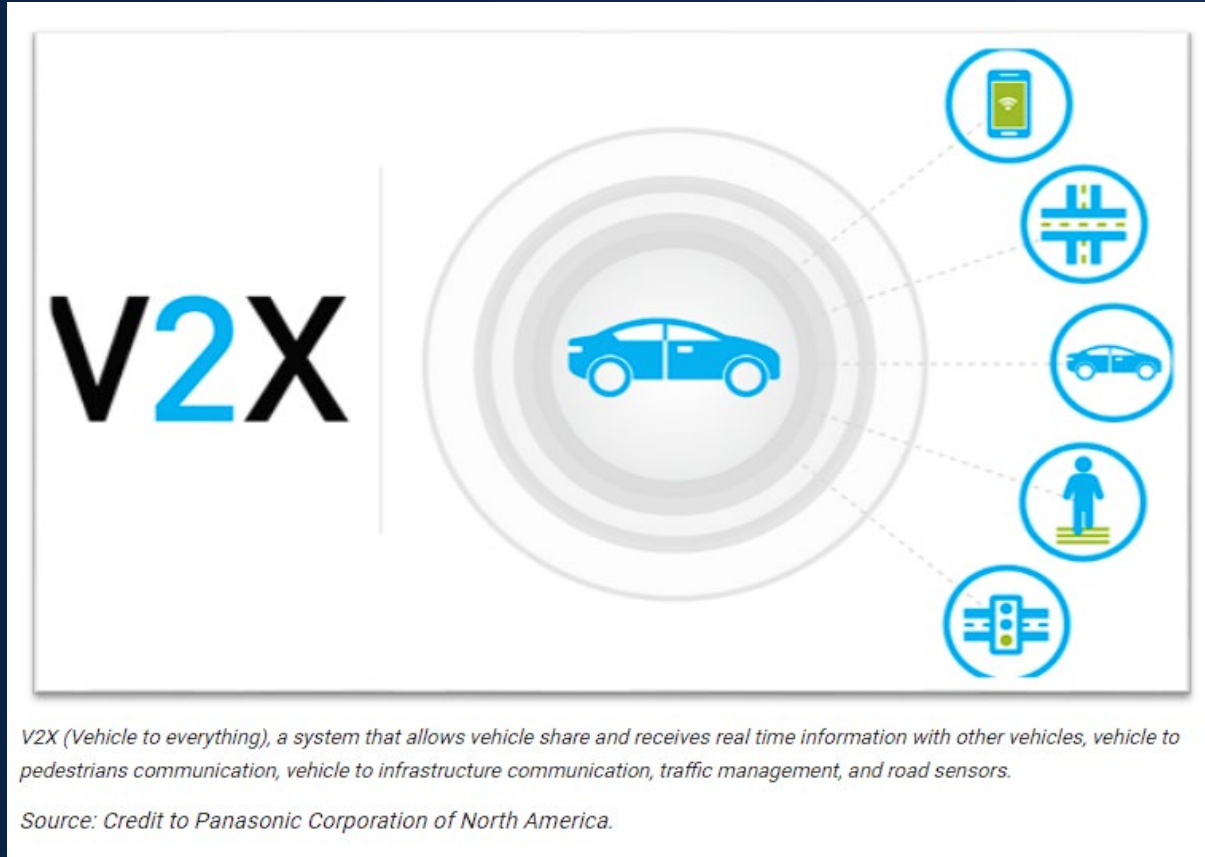
A main road; thoroughfare, specif. one maintained by a state or federal government and designed to accommodate a heavy traffic flow.

Any main route by land or water.

A direct way to some objective

Webster's New World

Definition of a Smart Highway



Building virtual and real capacity for communities by maximizing available funding opportunities.



Partners Public and Private

State Agencies

DTS – Division of Technology Services

- IT services for all executive branch employees.
 - Separate network from ITS network.
 - Share fiber and hub locations
 - Support public Wi-Fi locations at all the maintenance sheds

UETN – Utah Education and Telehealth Network

- Connects schools, medical facilities, Libraries
 - UDOT Traffic Signals and Redundant Connections

GOEO – Governors Office of Economic Opportunity

- State Broadband Office
 - Broadband Commission

Other Government Agencies

- Counties
- Cities
- Tribal

Public Partners



Private Partners

Telecom Companies

- Dig Once
 - 5-year STIP Planning on projects
 - Grant Funding
 - Support for free public Wi-Fi

Power Companies

- Dig Once
 - Cost sharing on open trenches

UCA – Utah Communications Authority

- Public Safety
 - Push to Talk
 - First Net
 - Public Safety 4.9

GOEO – Governors Office of Economic Opportunity

- State Broadband Office
 - Broadband Commission

Private Partners



Canyons

Cottonwood

DAS - Cellular

American Fork, Ogden
Water

Logan

Power, Last Mile



Cottonwood Canyon Stakeholders




Brighton
UTAH



Solitude
MOUNTAIN RESORT



An aerial photograph of a winding asphalt road with yellow center and edge lines, set against a backdrop of dense green trees and a rocky hillside. Numerous cars of various colors are parked along the roadside and on a small loop of the road. A semi-transparent white text box is located in the upper right corner of the image.

Roadside units will detect if
airbags suddenly deploy and
speeds rapidly decrease,
indicating a crash.

—Aerial photograph by Dan Krauss for The Wall Street Journal

Alerts can be sent to vehicles so drivers can alter their route or delay heading up or down the canyon.

To Salt Lake City

Park City

Big Cottonwood Canyon Rd

190

Cottonwood Heights

190

Utah's Department of Transportation says it will be able to flash a message to cars specifying the problem and the exact location.

Salt Lake City

Area of detail

UTAH

2 miles

2 km





Monday March 27, 2023 Timpanogos avalanche



@utahavalanchecenter Subscribed



Timpanogos





SnowBrains
@SnowBrains

Alta Ski Area, UT, Has the Most Snow of Any Ski
Resort on Earth

ift.tt/IRbpaYj

7:49 AM · Jan 9, 2023 · 41.9K Views

Project Summary

- Projects Estimate: \$5 Million
- 35 poles
- 24.5 Miles fiber optics
- 7200 Volt Electrical Systems
- 12 new cameras - 8 Road Weather Systems - 15 chain-up signs
- Improved communications for All Users
- Avalanche Operations Center
- Future ITS expansion (dms, etc.)







Broadband to Underserved Areas Not for Transportation Only





Public Involvement

- Introduction
- Messaging
- Stakeholders
- Media Outreach
- Public Wi-Fi hot spots
- Social media









LAST CHARGE
FOR 50 MILES



Stacking Funds

Federal – IIJA, CPF, E-Rate, USDA, RDOF

State – Transportation, State Appropriation

Tribal Example

Monument Valley SR-163

ROW - Interpretation

Original Highway Purpose

ROW Modification

Tribal Chapter Resolutions

UDOT Mighty 5 Middle Mile

UDOT Mighty 5 Middle Mile



Existing UDOT Fiber Optics



Kaibab Nation Grant Request



Telecom Planned Construction



Garkane Electric Existing Fiber Lines



Telecom Existing Fiber Lines



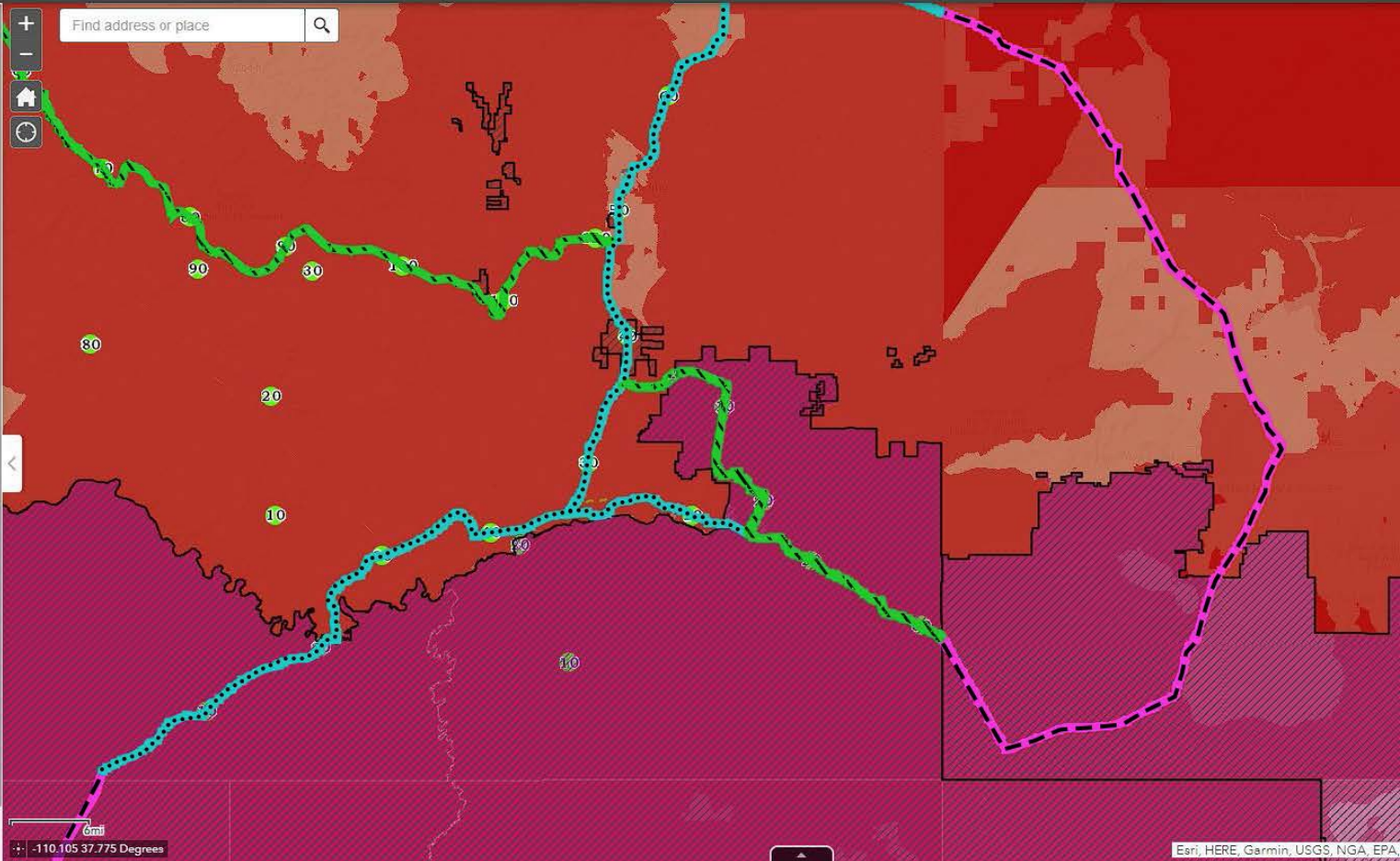
MSIs - Institutions

- AANAPISI
- ANNH
- HBCU
- HSI
- NASNTI
- PBI
- TCU

Tribal Lands (Census AIANNH)



ACSHighPovertyCommunitiesTracts - American Community Survey - High Poverty Communities 20% or More of Households Below Poverty Level (Census Tract Level)



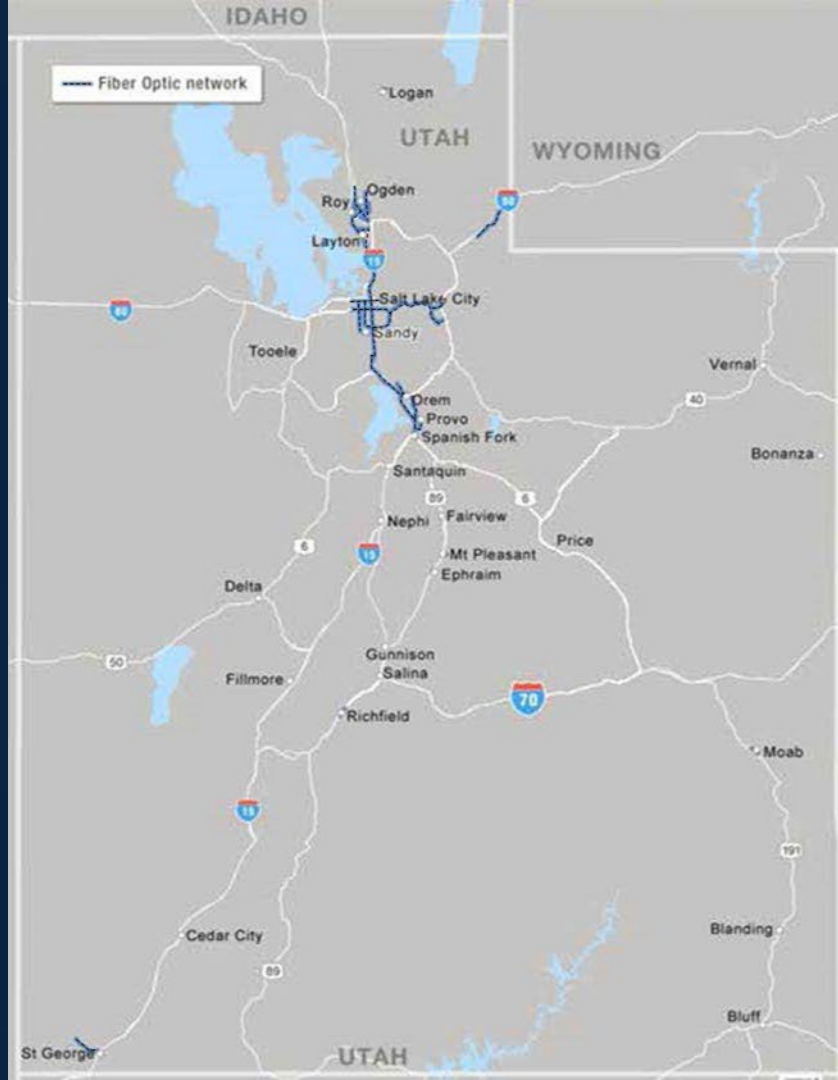




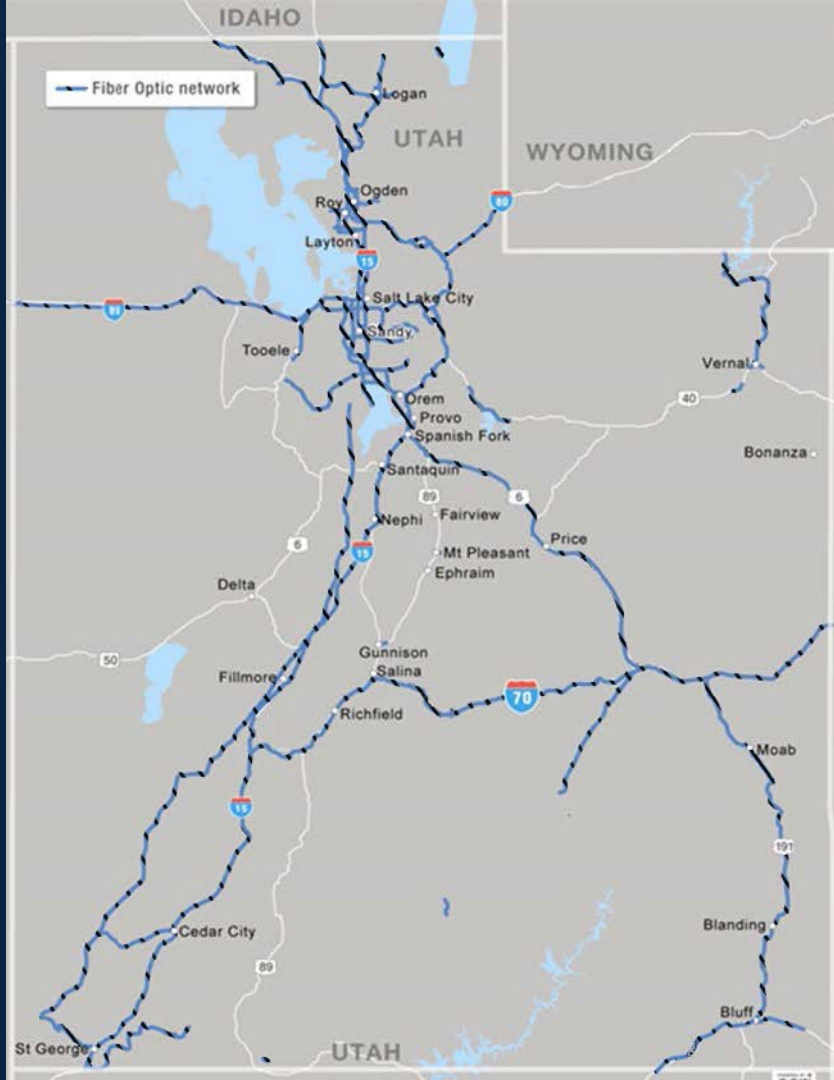




UDOT Fiber Map 2006



UDOT Fiber Map 2023



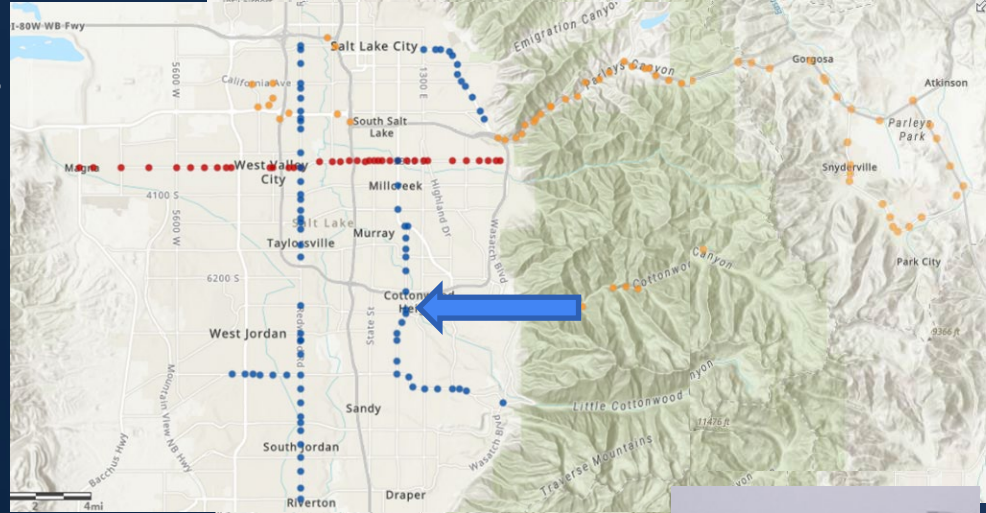
Connected Vehicle Deployments

Current Deployment:

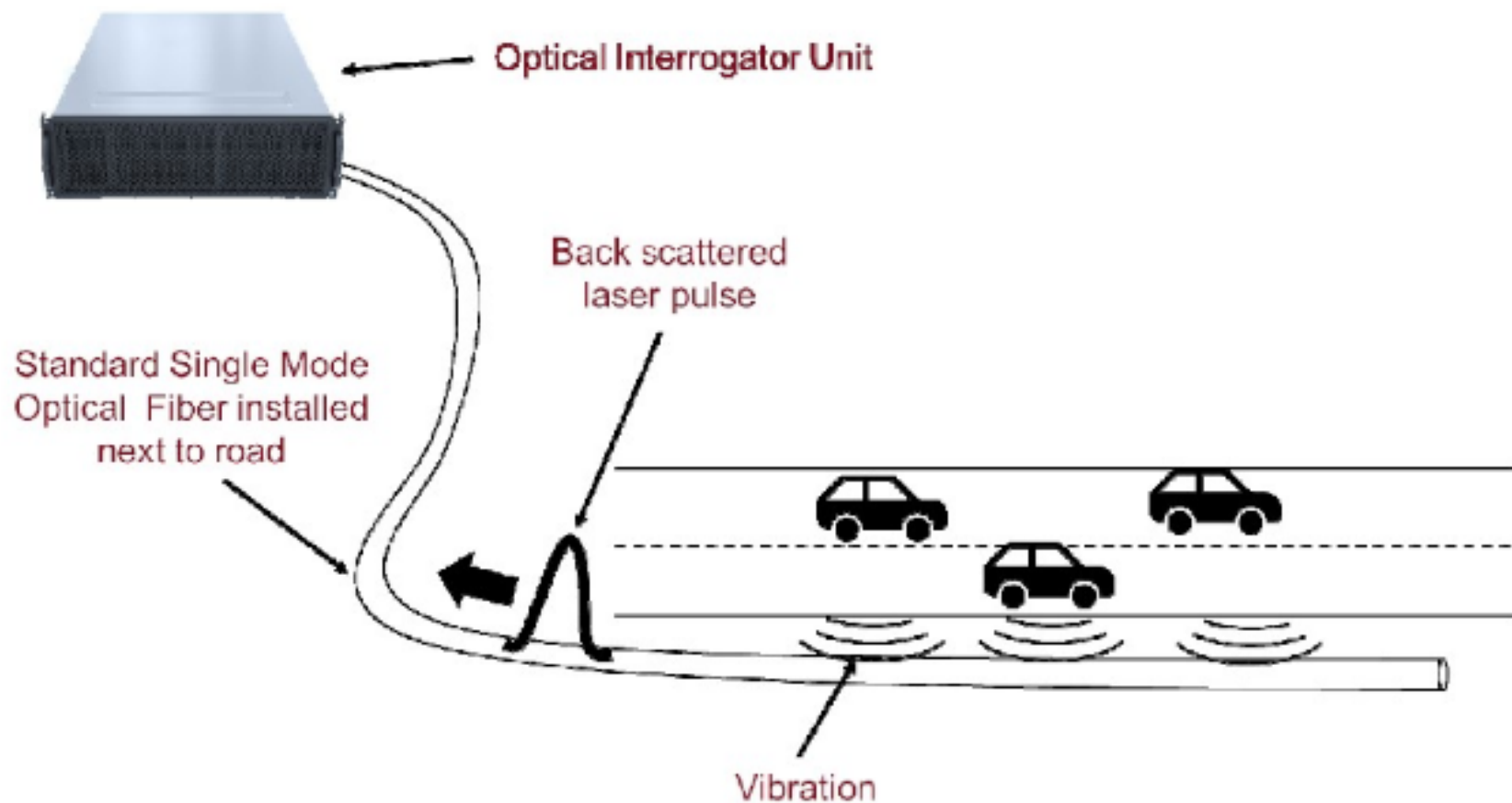
- 338 Roadside Units
- 271 Equipped Vehicles

Applications:

- Transit Signal Priority
- Snowplow / Emergency Vehicle Preemption
- Vehicle Insights (weather / crash)
- Spot Weather Impact Warning
- Curve Speed Warning









Cepton's lidar solutions have been deployed in Texas and Utah to help improve traffic safety for all road users. Image courtesy: Utah DoT.

Housing and Transit Reinvestment Zone Act

Objective

Create a new development tool (HTRZ) to help address Utah's housing crisis by facilitating mixed-use, multi-family and affordable housing development within a 1/3-mile radius of fixed commuter rail stations (FrontRunner).

*There are currently 15 (16) FrontRunner stations along the Wasatch Front

Links

- Utah Code 72-7-108 - <https://le.utah.gov/xcode/Title72/Chapter7/72-7-S108.html>
- R907-64 – <https://rules.utah.gov/publicat/code/r907/r907-064.htm>
- R907 – 65 – <https://rules.utah.gov/publicat/code/r907/r907-065.htm>
- R930 – <https://rules.utah.gov/publicat/code/r930/r930-007.htm>
- Fiber Map -
<https://horrocks.maps.arcgis.com/apps/webappviewer/index.html?id=096d0a7dd31a4be289b9623935308fc9>
- Infrastructure and Broadband Coordination – Governor’s Office of Economic Development
<https://law.justia.com/codes/utah/2019/title-63n/chapter-3/part-5/section-501/>
- Fun Video Links –
 - Americom - <https://www.youtube.com/watch?v=DxSaeDUhP2E>
 - Fox - <https://www.fox13now.com/news/local-news/win-win-fiber-optics-lines-make-utah-roads-safer-and-help-rural-utahns-connect>
 - Micro Trench - <https://www.youtube.com/watch?v=8p4xHlwuMhI>
 - CARES Projects YouTube
 - https://www.youtube.com/watch?v=FIC_nw88Kaw
 - https://www.youtube.com/watch?v=nF_uWyVLeEg



UTDOT



Keeping Utah Moving