



REINVENTING METRO: The Connected Region

Reinventing Metro Update



November 13, 2018

Outline

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- Reinventing Metro Process
- Regional Bus Network
- Fare Policy and Revenue Allocation
- Access Service
- Economic Impacts
- Discussion

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Reinventing Metro Process

Regional Approach

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- From Local to Regional Connectivity
- In August 2018, AECOM was Tasked with The Following:
 - ▣ Regional Bus Network
 - ▣ Fare Payment Coordination
 - ▣ Access Service
 - ▣ Economic Impacts

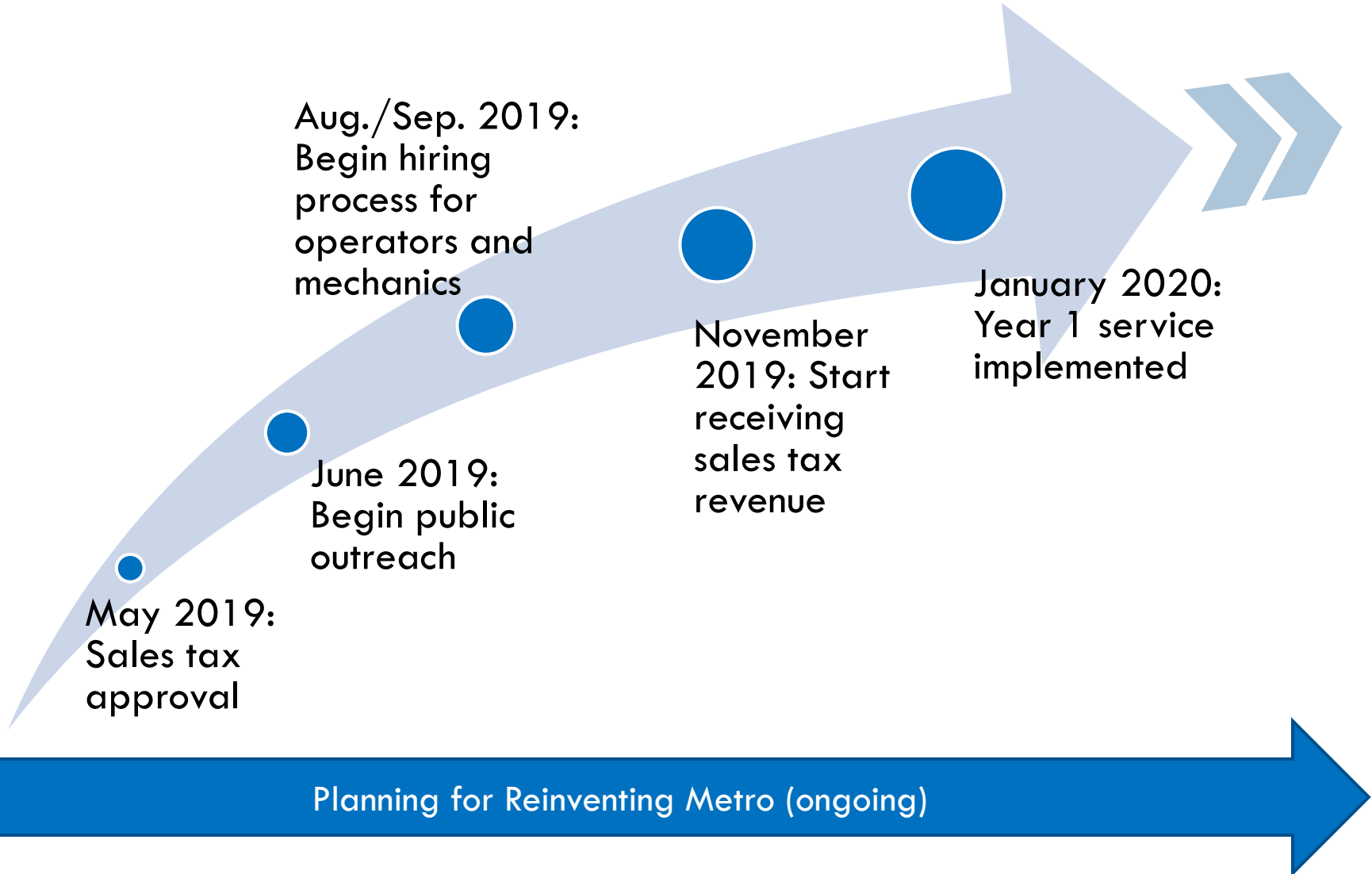
Reinventing Metro: Planning Process

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- Financially constrained
- Limitations that impact implementation
 - ▣ Hiring/training of bus operators/mechanics
 - ▣ Bus procurement
 - ▣ Available revenue
 - ▣ Time
- ADA impacts
- Opportunities to fast-track
 - ▣ Galbraith Crosstown
 - ▣ Extension of service to Blue Ash
 - ▣ New flexible services
 - ▣ Enhanced weekend services

Reinventing Metro Assumptions

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Reinventing Metro Implementation

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1. Sales tax passes in May 2019
2. Planning for new services begins immediately
 - a) Test and finalize routings
 - b) Identify bus stop locations
3. Public outreach process for new services begins immediately
4. Schedules for Year 1 services will be developed in the summer 2019
5. Staff hiring and training begins August 2019
 - a) Operators and mechanics
 - b) Administrative staff
6. Year 1 services to be implemented January 2020

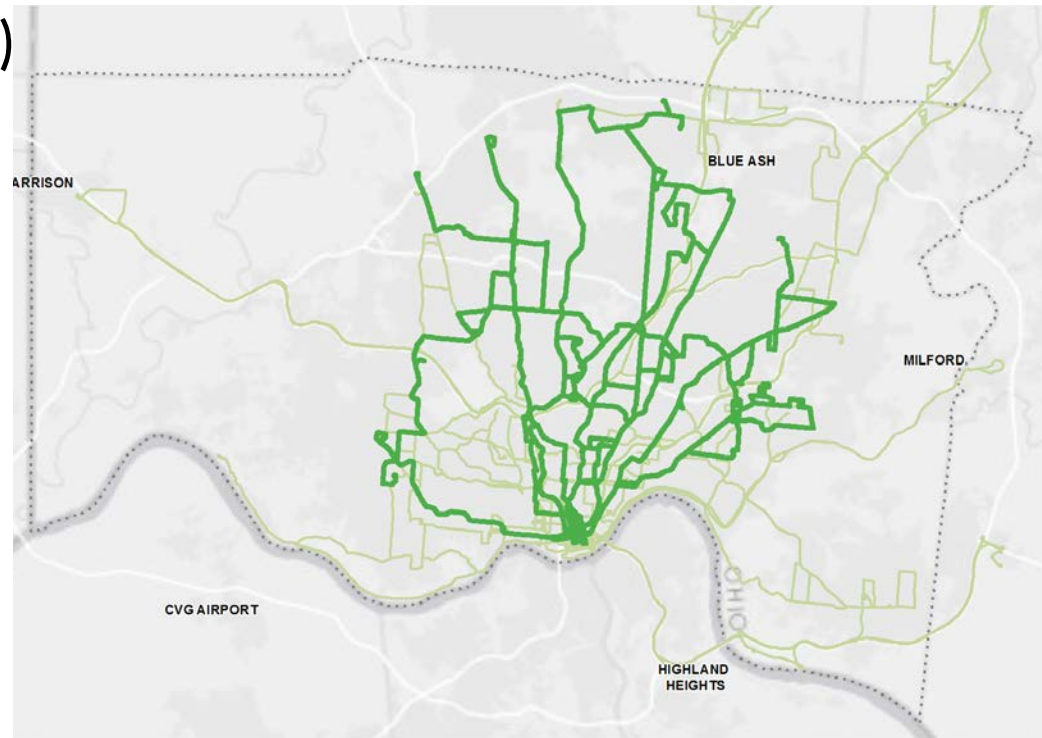
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Regional Bus Network

Reinventing Metro - 2020: Major Local Corridor Improvements

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- Later & earlier service (9 Rts)
 - ▣ 24-hour service (6 Rts)
- More frequent service (6 Rts)
- New weekend service
 - ▣ More service (7 Rts)
 - ▣ New service (2 Rts)



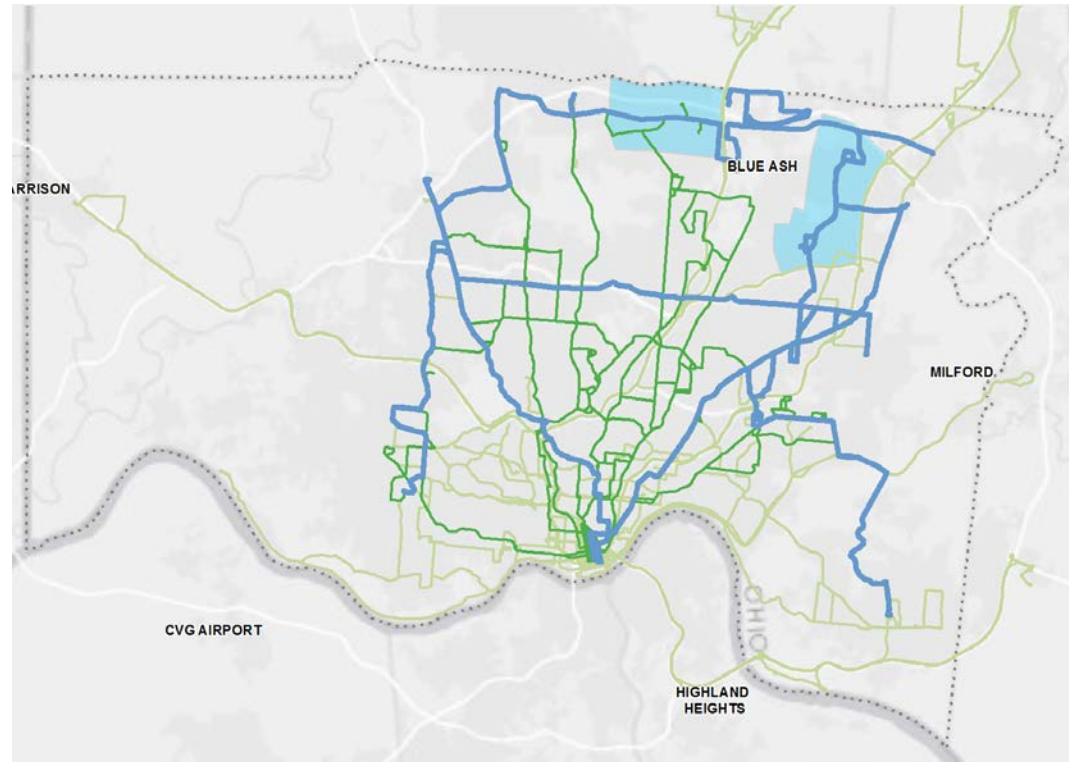
Additional buses – 0 buses

Additional staff – 40 transit operations/maintenance/administration

Reinventing Metro - 2021: Crosstowns

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- More frequent service (2 Rts)
- Longer service hours (2 Rts)
- New crosstown routes and flex services (5 Rts)
- New services to emerging job centers (3 Rts)
- Service area expansion (6 Rts)



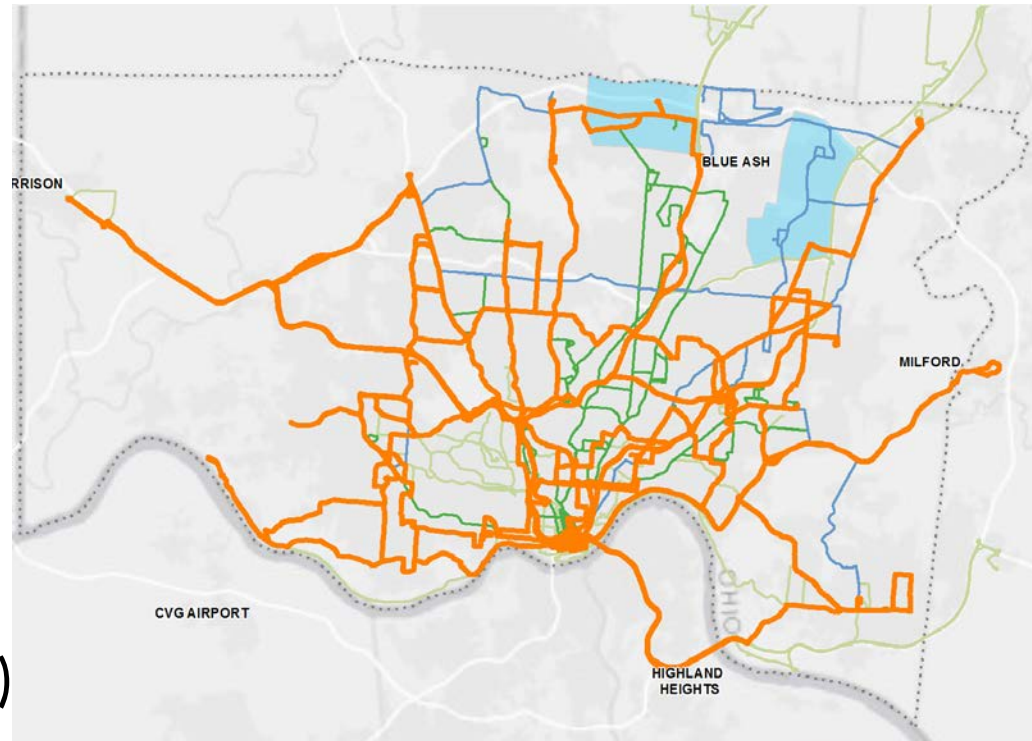
Additional buses – 30 buses

Additional staff – 65 transit operations/maintenance

Reinventing Metro - 2022: Express Services

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- Express routes
 - ▣ Earlier & later service (13 Rts)
 - ▣ More frequent (7 Rts)
 - ▣ Extension to Uptown (3 Rts)
- More frequent local services (5 Rts)
 - ▣ Crosstown (3 Rts)
 - ▣ Local routes (2 Rts)
- New circulator services (3 Rts)



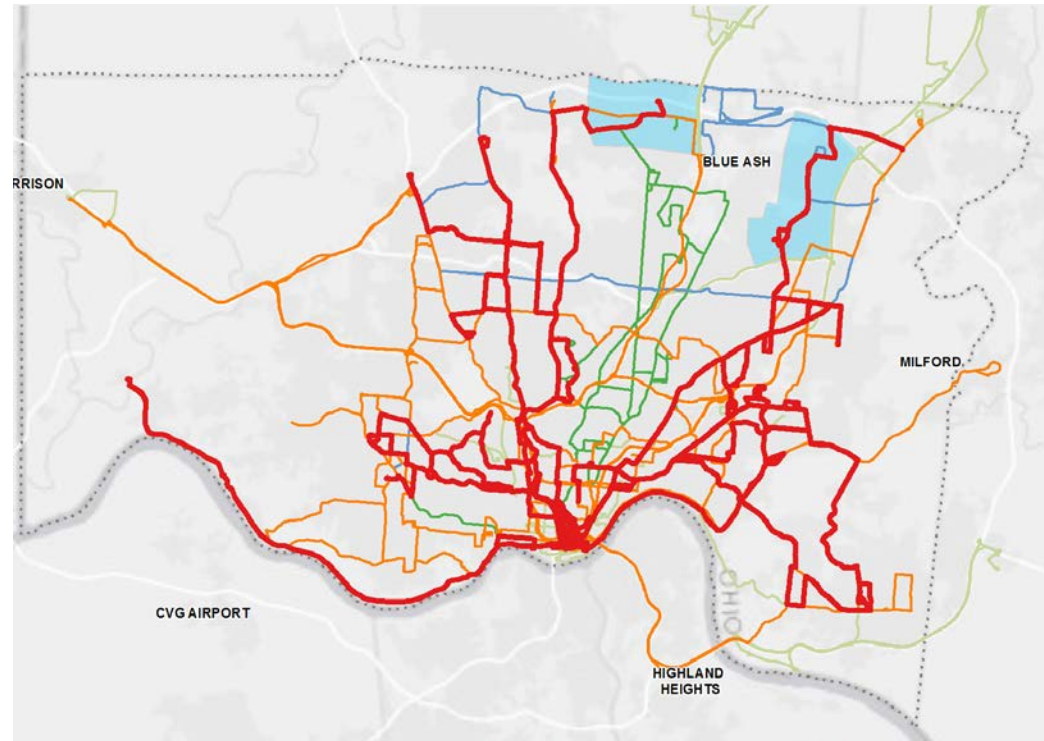
Additional buses – 41 buses

Additional staff – 88 transit operations/maintenance

Reinventing Metro - 2023: Secondary Corridors

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- More frequent service along major corridor routes (3 Rts))
- Improvements to select secondary corridor routes
 - ▣ More frequent service (8 Rts)
 - ▣ Later & earlier service (4 Rts)
 - ▣ New weekend service (2 Rts)
- Service extended to North Bend
- Modified service along Route 24



Additional buses – 28 buses

Additional staff – 60 transit operations/maintenance

Reinventing Metro: Beyond 2023

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- Reinventing Metro
 - ▣ Monitor all bus services
 - ▣ Modify schedules based on demand and travel times
- Bus Rapid Transit
 - ▣ Planning and engineering
 - ▣ Construction and implementation
- Regional Transit Network
 - ▣ Continue to identify opportunities
 - ▣ As funding allows – implement regional services

Reinventing Metro Benefits – Supports Non-Traditional Work Hours

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- More frequent service
 - ▣ More convenient for riders
 - ▣ Reduced transfer times
- Later service
 - ▣ Service available for multiple job shifts
 - ▣ Allows for entertainment after hours
- New service
 - ▣ New generators
 - ▣ New connection types
 - ▣ Increased area coverage
- Improved weekend service
 - ▣ Allows for weekend mobility
 - ▣ Jobs and entertainment

Bus Rapid Transit Implementation

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2019-2023

Project Development

- Environmental review
- Funding commitments
- Engineering and design

2019 –
Sales tax
approved

2023 -
Small
starts
agreement

2024 –
Construction
begins

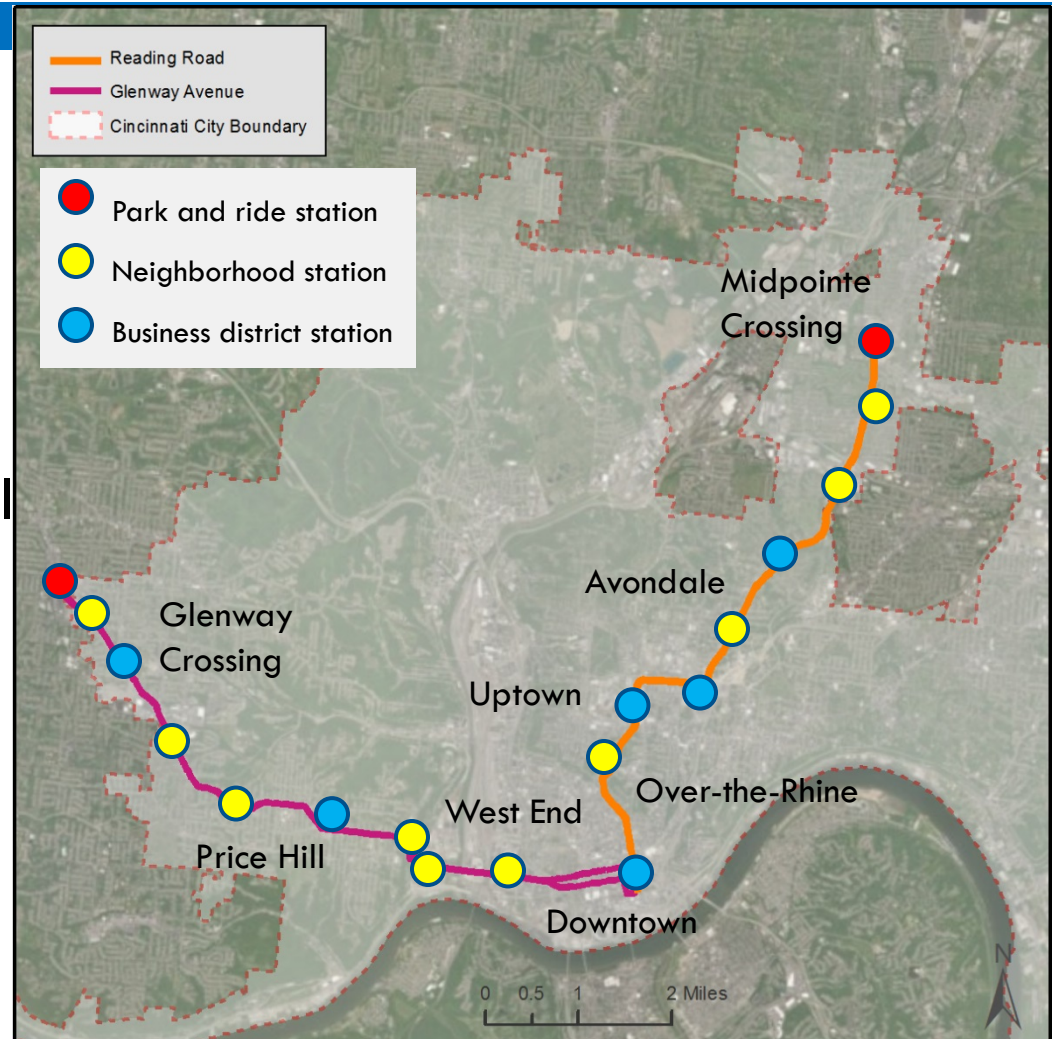
2026 –
Bus Rapid
Transit
service
begins

Note: Current Federal transportation bill expires in 2020

BRT Station Types

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- Park and Ride stations
 - ▣ Large Park and Ride lot
 - ▣ Primarily terminal stations
- Neighborhood walk up stations
 - ▣ Located around residential areas
 - ▣ Drop-off areas
- Business district stations
 - ▣ Located in commercial areas
 - ▣ Larger waiting areas



Conceptual Regional Network

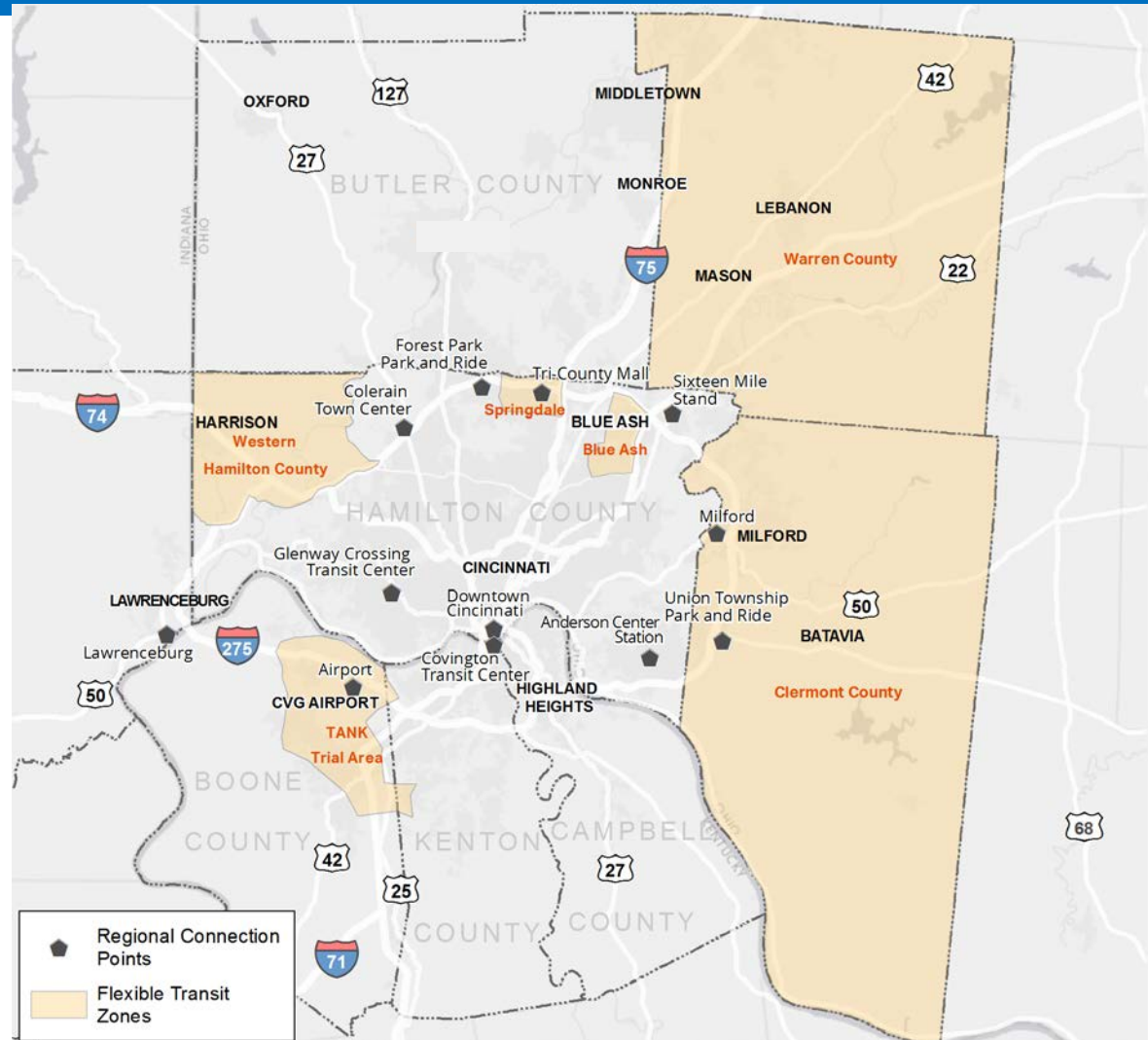
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- Based on travel desire and demographics
- Currently unfunded
- Provided a mix of SORTA and regional partners
- New routes and expansion of current routes
- Benefits
 - ▣ Improved regional mobility
 - ▣ Improved access to jobs
 - ▣ Allows for reverse commute
 - ▣ Improved coordination amongst regional partners

Flexible Transit

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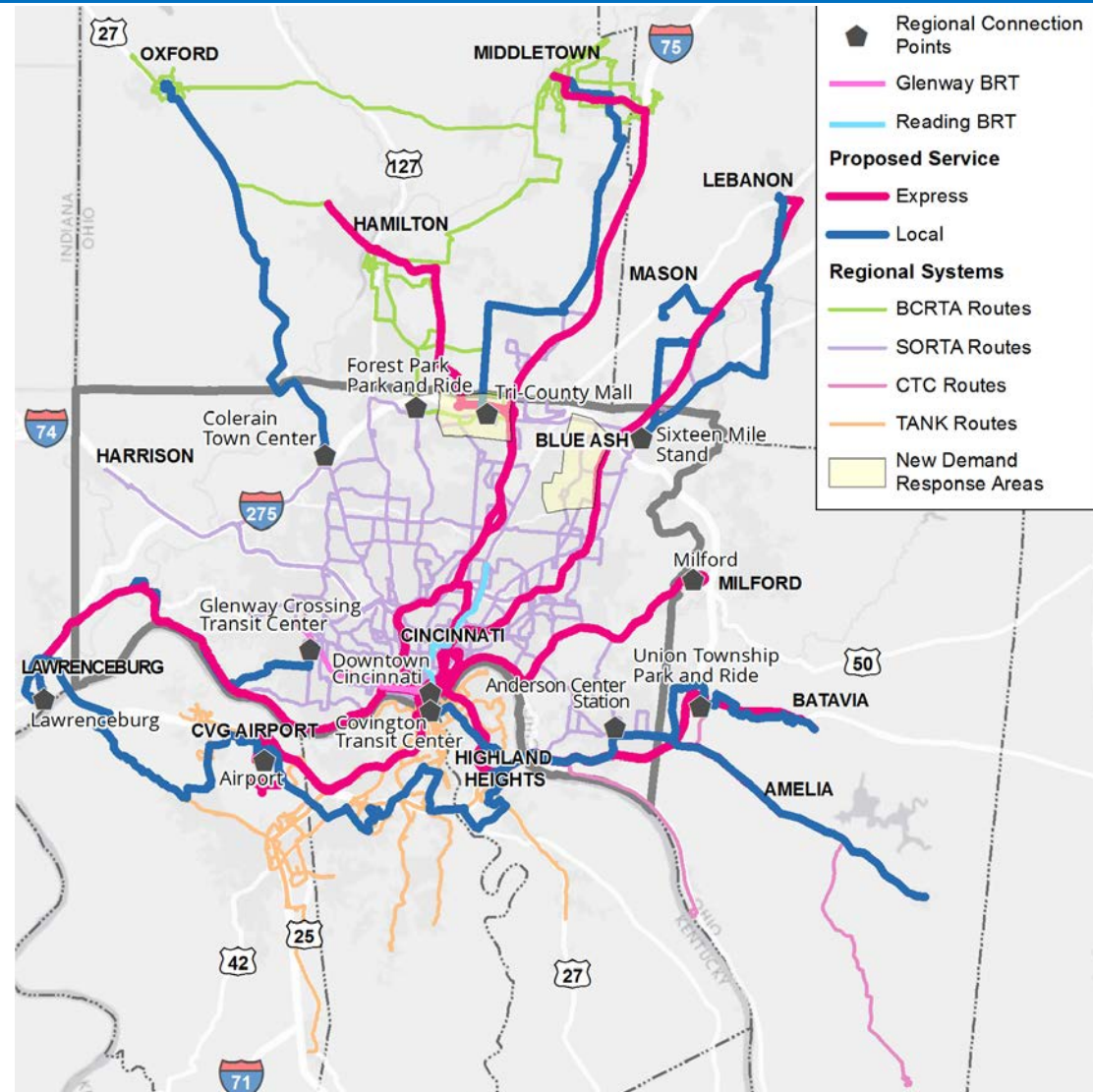
- Current
 - ▣ Clermont County
 - ▣ Warren County
- Reinventing Metro
 - ▣ Blue Ash
 - ▣ Springdale
- TANK trial
- Western Hamilton County
- National examples
 - ▣ Jacksonville
 - ▣ Victor Valley, CA



Conceptual Regional Bus Network

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- Cooperative approach to regional transit
- Maintain current & planned fixed routes
- Extensions & improvements to existing & planned routes
- Operator to be determined



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Fare Policy and Revenue Allocation

Dallas Metro Area Transit Fare Coordination

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- Regional Passes (Day/Monthly/Annual) with unlimited rides on all major transit operators in the region:
 - DART
 - Trinity Metro
 - Denton County Transit
- Each system keeps the revenue generated from regional passes sold in their respective service areas
- New regional fare payment system, GoPass, that comes in two forms:
 - Mobile app
 - Physical card

San Francisco Bay Area Transit Fare Coordination

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- Each transit operator sets its own fare policy
- Bilateral fare coordination
 - ▣ Inter-agency transfer discounts (e.g. \$.50 discount when a rider transfers from Golden Gate Transit to Muni)
 - ▣ Joint-system monthly passes (e.g. “A” Pass: Muni and BART within San Francisco)
- Regional fare payment card system
 - ▣ MTC, the region’s MPO, manages and maintains the fare payment system through a private contractor
 - ▣ Regional fare media operating costs and interest earnings are split among participating operators

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Access Service



Regional Access Options: Regionalize Access

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Function	Hamilton (SORTA)	N. KY (TANK)	Butler	Clermont	Dearborn	Warren
Set Policy (Eligibility, fare, coverage)						
Determine Eligibility						
Receive Reservations						
Schedule Manifests						
Manage Vehicles						
Dispatch Operators						
Supervise Road Ops						
Resolve Requests						
Complete Billing						

Regional Paratransit Coordination – Policy Decisions

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- Recognition of Cross jurisdictional ADA eligibility
- Common fare payment system and transfers
- Inter-jurisdiction operation versus transfers
- Consideration of any regional joint operation

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Economic Impacts



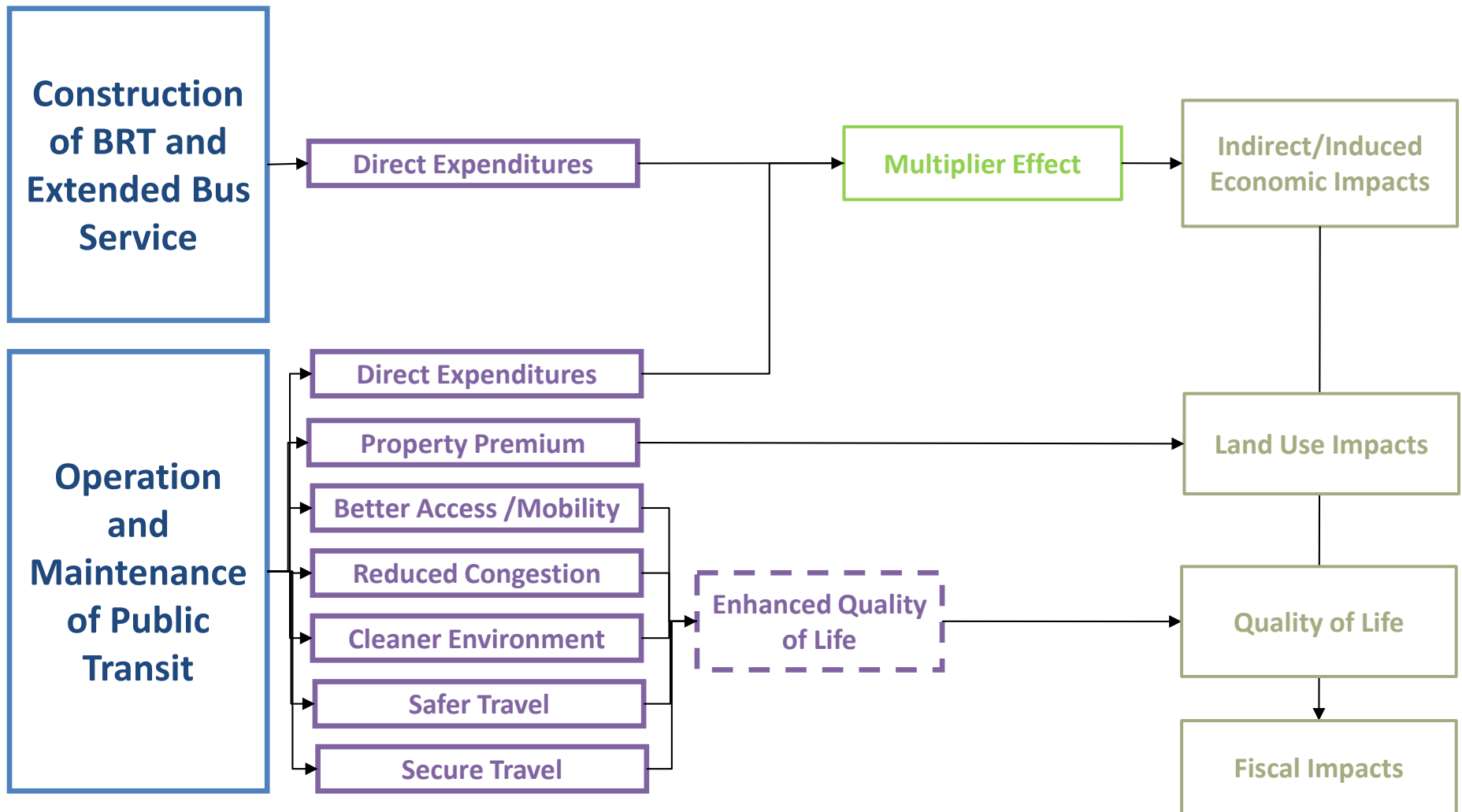
Three Rounds of Economic Impacts

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- 1. Construction Impacts:** Supports the economy for the duration of the construction period.
- 2. Operating Impacts:** Recurring support for the economy as the system is operated.
- 3. Market Response:** Economic change as Cincinnati's firms and workers take advantage of the expanded transit service.

Generation of Impacts

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Over 1,300 Job Years Supported During Construction Period

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Temporary Impacts (Construction)					
Capital Expenditure Impact (schedule)	Average Annual Job Years over Construction Period	Total Job Years	Average Annual Earnings (2018\$)	Total Earnings (2018\$)	NPV Total Earnings @4.5% (2018\$)
O&M Facility Expansion (2020-2021)	312	624	\$14,796,000	\$29,592,000	\$26,514,825
BRT System (2023-2024)	1,058	2,116	\$50,192,500	\$100,385,000	\$78,819,631

- The Program will hire construction workers and purchase supplies and materials as the O&M and BRT facilities are built.
- A lot of this spending will occur in the regional economy. Large purchases such as buses that will be manufactured elsewhere are excluded from the estimate.
- Estimate is in job years. A job year is a job for one person for one year. Two people who work at the construction site for 1/2 each represent one job year.

Over 900 Job Years Annually at Full Build Out

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Recurring Impacts - O&M (10-year Analysis Period)					
O&M Impact (schedule)	Average Annual Job Years	Total Job Years (over 10-year period)	Average Annual Earnings (2018\$)	10-Year Total Earnings (2018\$)	NPV 10-Year Total Earnings @4.5% (\$2018)
Service Expansion (2020-2029)	851	8,506	\$22,622,233	\$226,222,331	\$164,881,928
BRT System (2025-2034)	86	859	\$2,285,327	\$22,853,271	\$13,537,463

Note: NPV means net-present value at 4.5 percent.
Dollar values rounded to nearest \$1,000.

- The Program will hire workers and purchase supplies and materials to operate the expanded system.
- This represents ongoing support for the regional economy.

A More Competitive Economy

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Enhanced Mobility for Existing Riders

- ❑ \$15.7 million in value of time saved **annually** by transit riders*
- ❑ \$157 million in savings over 10 years

Non-Riders Benefit Too

- ❑ Fewer cars on the road reduces congestion
- ❑ Cleaner air

*Value of delay uses USDOT Guidance for Economic Assessment

Market Response: Developers in Cincinnati

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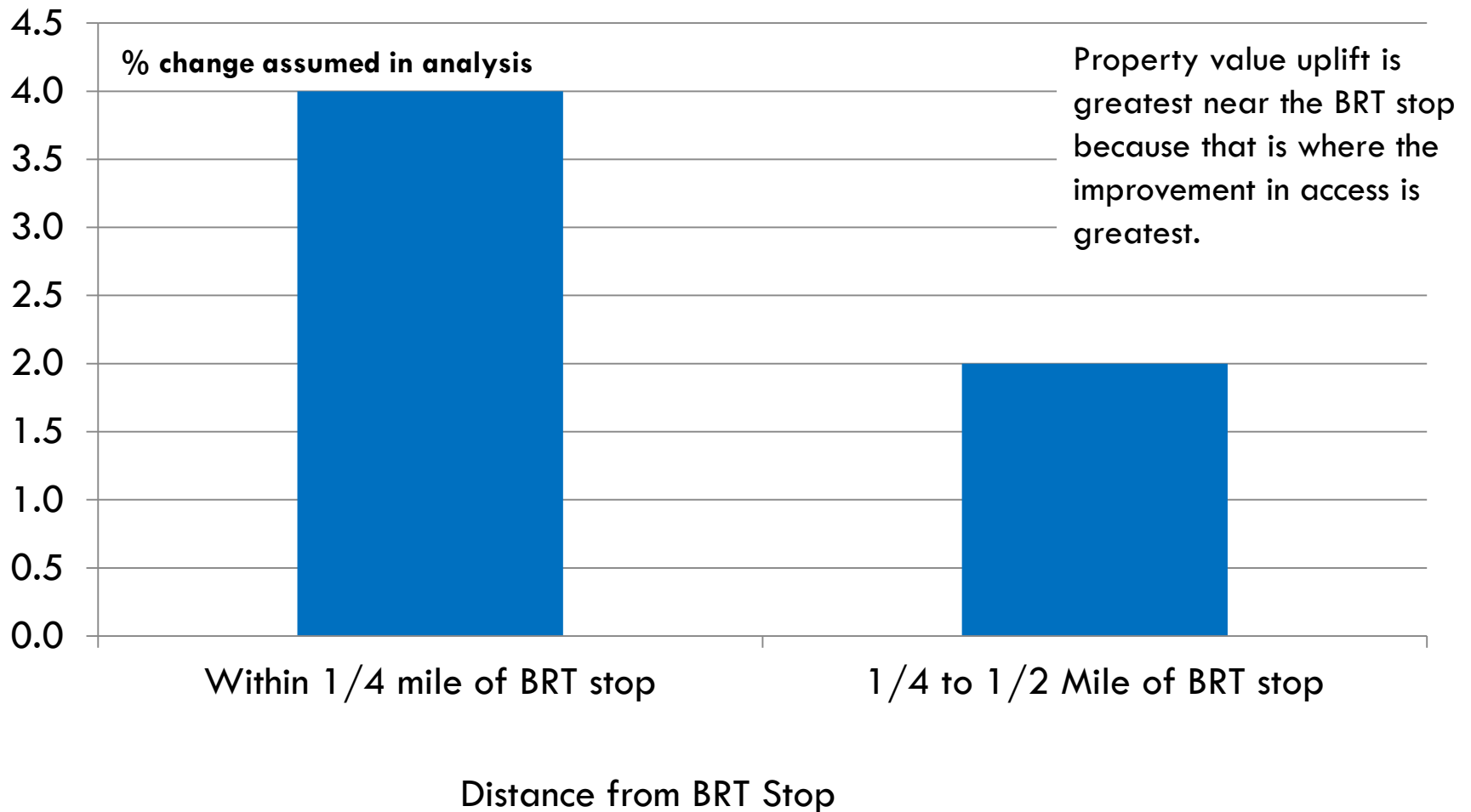
To ground the property value assumptions, commercial and residential developers knowledgeable of the Cincinnati market have been informally surveyed, revealing that:

- Offering a new BRT system would have a significant effect to residential property value of existing parcels.
- Residential development projects would be accelerated, scalable and mixed if a new BRT route is a certainty.
- Residential and commercial developers agree that access to bus transportation is at least somewhat important for their projects.

Land Market Responds to Improved Access

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Property Value Uplift



Market Response: \$55 M Over 10 Years

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Distance to BRT Stop	Value of Property (\$ 2018 M)	Value of Premium (\$ 2018 M)	Annual Tax Revenue (2018 \$M)
1/4 mile of BRT stop	\$6,754	\$270	\$4.5
1/4 to 1/2 mile of BRT stop	\$3,532	\$71	\$1.0
Total	\$10,286	\$341	\$5.5

Note: Results based on latest available assessment data, assumed to be in 2018 dollars. Values rounded to nearest \$1 million.

Improved access increases value at system stops.

Assumed percentages are conservative relative to literature and developer feedback.

Recurring impact: \$55 million over 10 years.

Construction Activity Supports Tax Revenues

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Fiscal Impacts (Construction)			
Income and Sales Taxes	Average Annual Impact (2018\$)	Total Revenue Yield (2018\$)	NPV Total Revenue Yield @4.5% (2018\$)
<i>Temporary Impacts</i>			
O&M Facility Expansion (2020-2021)	\$1,304,000	\$2,608,000	\$2,337,000
BRT System (2023-2024)	\$4,424,000	\$8,849,000	\$6,948,000

Note: NPV means net-present value at 4.5 percent.

Dollar values rounded to nearest \$1,000.

- The earnings supported through the building activity are taxable, returning revenue to government coffers.
- As workers spend their wages, many of these purchases are taxable, providing additional revenue back to government coffers.
- Tax revenue estimates are across all jurisdictions in the metropolitan economy.

At Full Buildout, \$69M Over 10 Years

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Income and Sales Taxes	Average Annual Impact (2018\$)	Total Revenue Yield (2018\$)	NPV Total Revenue Yield @4.5% (2018\$)
<i>Recurring Impacts, Incl. O&M Cost & Property Premium* (10-Year Analysis Period)</i>			
Service Expansion (2020-2029)	\$1,219,000	\$12,186,000	\$8,882,000
BRT System (2025-2034)	\$123,000	\$1,231,000	\$729,000
Property Premium (2024-2033)	\$5,549,000	\$55,491,000	\$35,234,000
Total Recurring Impacts (assuming average year)	\$6,891,000	\$68,908,000	

Note: NPV means net-present value at 4.5 percent.

Dollar values rounded to nearest \$1,000.

- The earnings supported through transit operations are taxable, returning revenue to government coffers.
- Service expansion and BRT occur at different times, but once all are in operation, average annual return is \$6.9 million.

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Discussion