December 5, 2023



Dial-A-Ride Expansion Study

Columbus City Council Briefing

Nelson\Nygaard Consulting Associates, Inc.



Additional ¾ Mile Premium Service – 1.5 Miles Total

34 Mile ADA Paratransit (Required)

METRA Fixed Bus Routes

Today's Presentation

- 1 Study Overview
- 2 ADA and Demand-Response Services
- METRA's Dial-A-Ride Service
- 4 Public Input
- **5** Expanded (Premium) Service
- 6 Discussion and Next Steps
- 7 Demand-Response Service







Study Context

- METRA operates Dial-A-Ride complementary paratransit service for eligible riders whose disability prevents them traveling to/from METRA's fixed-route bus service or from riding the bus, a requirement of the Americans with Disabilities Act (ADA).
- The ADA requires that METRA provide "origin-to-destination" service between locations within 0.75 miles of METRA bus routes.
- On August 8, 2023, a Dial-A-Ride rider appeared before the council to have METRA serve an address located outside the current Dial-A-Ride service area.
- Following deliberations, the council voted to expand the Dial-A-Ride service area to
 1.5 miles of fixed-route bus routes, which exceeds the ADA requirements.
- Following the council vote, the City of Columbus engaged Nelson\Nygaard to evaluate the demand for and costs of providing expanded Dial-A-Ride service.



Study Scope

- Evaluate current Dial-A-Ride service
 - Includes assessment of capacity to meet ADA requirements
- Seek public input on where additional service is needed
- Estimate demand and costs for service area expansion
- Recommend ways to deliver expanded or "premium" service and continue to comply with the ADA requirements for Dial-A-Ride service





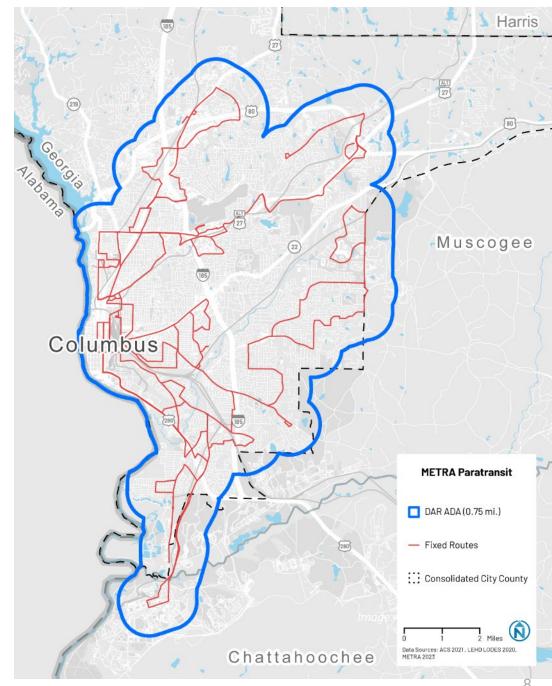
Demand-Response Transportation Explained

- Flexible transportation service that responds to trip requests with variable routes and schedules.
 - Differs from fixed-route bus service (e.g., METRA) operating on the same route and following a published schedule
 - Typically costs more than fixed-route bus service
- Customers request trips by calling or using a website/smartphone application.
- Types of demand-response transportation include:
 - For-hire vehicles (taxicabs, limousines, Lyft, Uber, etc.)
 - Shuttles, including microtransit (discussed later)
 - Complementary or ADA paratransit (Dial-A-Ride)
 - Premium paratransit



Complementary **Paratransit: A Safety Net**

- Complementary paratransit is a "safety net" for those whose functional disability prevents them from riding fixed-route service or traveling to/from bus stops.
- To use Dial-A-Ride service, one must apply to METRA and be determined "ADA paratransit eligible."
- Eligible riders may be picked up or dropped off anywhere within 0.75 miles of METRA bus routes.





Key Complementary Paratransit Requirements

- To travel, eligible riders must contact METRA to reserve travel a least one day before a trip (no same-day service).
- METRA may negotiate the pickup time (within limits) but must accommodate all next-day trip requests.
- Dial-A-Ride is an origin-to-destination service and is either curb-to-curb or door-todoor depending on assistance needed
- Capacity constraints are prohibited.
- Service that operates outside of the 0.75-mile minimum required service area is known as a form of premium service.





Dial-A-Ride Service Structure

- Total Dial-A-Ride service costs were approximately \$1.165 million in FY 23.
- Dial-A-Ride vehicles and operators (drivers) are separate from fixed route.
- Road supervision, vehicle maintenance, safety/training, and administration/management resources are shared with fixed route.
- While current staffing levels appear adequate to meet current demand, daily or hourly surges can present staffing challenges.



Dial-A-Ride Staffing Considerations

- One Dial-A-Ride vehicle operator handles reservations and scheduling
 - This reduces the available operator workforce
- To address surges or staffing shortages, supervisors and managers drive vehicles, operating in "firefighter mode"
- Relying on supervisors and managers to cover trips comes at a cost:
 - Other tasks cannot be completed, such as detailed data analysis, trend reporting, etc.
 - Too much time in "firefighter mode" increases stress on personnel
- Current staffing levels are not sufficient to accommodate growth.



Demand for Dial-A-Ride is Growing

- More people are applying for ADA paratransit eligibility
 - Less than 30 applications per year pre-COVID
 - 32 new applications received in calendar year 2022
 - 72 new applications received in first 10 months of 2023
- Current daily ridership is about 18 passengers per route, which is manageable, but before COVID, daily ridership often exceeded 20 passengers per route.
- More staffing will be needed as growth continues, even without expanding the service area.



Impacts of Growth in Demand

- As demand grows and riders request more trips, more resources will be needed.
- If additional resources are not provided or if pre-COVID ridership levels return:
 - On-time performance is likely to decline
 - Trip lengths (time on board the vehicle) are likely to increase
 - Overall service quality is likely to diminish
 - Employee quality of life will likely be affected



Fleet Challenges and Considerations

- Like other transit agencies, METRA faces challenges in replacing vehicles when they approach the end of their useful life (five years and 150,000 miles).
- Keeping older vehicles longer is permissible with a waiver, but maintenance costs increase.
- METRA has been unable to maintain mechanic staffing levels and has five vacancies.



Main Takeaways from Current Dial-A-Ride Service

- Dial-A-Ride applications are growing
- Staffing is not sufficient to accommodate increased demand even without service expansion
- Better data are needed to track and report trends
- Keeping vehicle fleet longer will require more maintenance resources

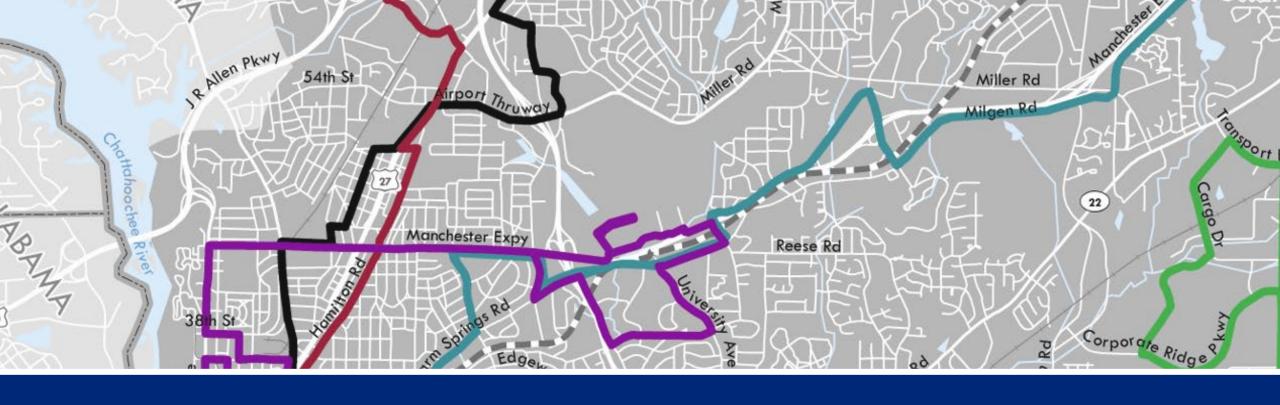




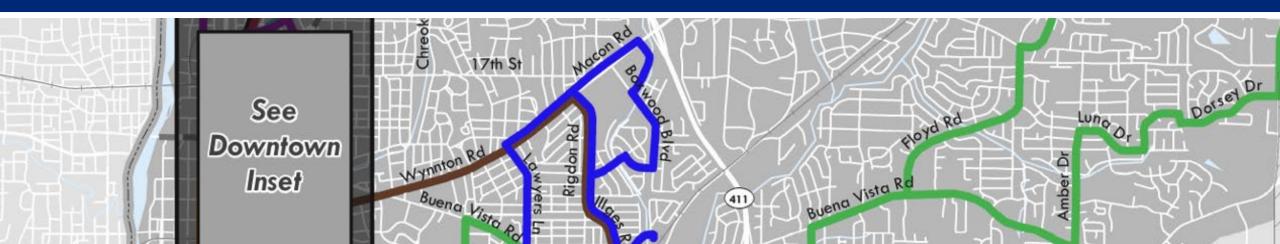
Meetings Held October 3rd and 5th

- Participants asked questions and provided input on locations that premium service should serve, times that service should be provided, and other topics, including:
 - Serve the Brookstone area (neighborhood)
 - Provide direct access to the VA Clinic
 - Serve the **Georgia Department of Driver Services** for those who need to obtain an ID card
 - Provide service from the YMCA after 8 p.m.
 - Serve areas of new development to the north
 - Add kiosks to obtain fare cards at Walmart, Publix, etc.





Premium Service Proposal and Considerations



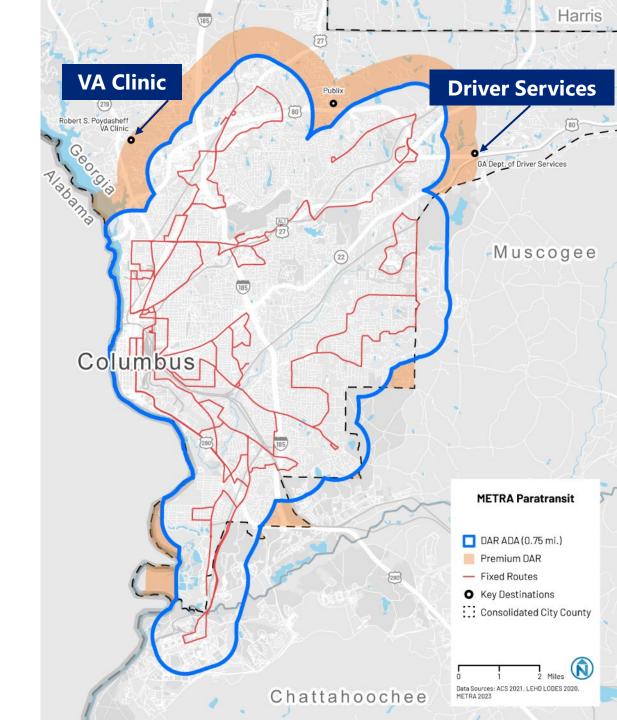
Regulatory Context

- Per ADA, the current Dial-A-Ride complementary paratransit service area includes pickup and drop-off locations 0.75 miles on either side of METRA bus routes.
- Transit agencies may offer premium service beyond 0.75 miles but must still ensure the required complementary paratransit has no capacity constraints and continues to meet all ADA requirements.



Recommended Premium Service Area

- The recommended premium service area includes locations within the consolidated city/county boundary but no more than 1.5 miles from METRA bus routes.
- Two locations are included that extend beyond 1.5 miles:
 - GA Department of Driver Services
 - VA Clinic
- The additional premium service area adds 13.17 square miles to the Dial-A-Ride service area.





Premium Service Demand

- Current Dial-A-Ride service area has just under 160,000 residents
- Just under 14,000 people reside in the premium service area (U.S. Census)
- Introducing premium service is projected to add approximately 2,500 trips per year
- Delivering premium service will increase the number of **vehicle hours** that Dial-A-Ride is provided and will increase the number of **miles** Dial-A-Ride vehicles are driven

Area	Residents	Comment
Current service area	159,493	0.75 miles of METRA bus routes
Within premium service area	13,718	Within City/County boundary

Premium Service Costs and Recommendations

 To meet additional demand, the following additional operating resources are recommended:

Item	Cost
Vehicle operators (3)	\$159,300
Scheduler (1)	\$53,100
Fuel and maintenance	\$35,800
Other administrative costs	\$22,000
Total estimated additional costs per year	\$270,200

- These yearly costs will increase with inflation.
- The current fleet size is likely sufficient in the short term, but it is recommended that the Dial-A-Ride fleet be expanded in FY 2025.



Recommended Operating Policies: Premium Service Startup

- To continue to meet the ADA requirements for Dial-A-Ride, the following premium service policies are recommended:
 - Riders can request premium trips no more than one day prior to travel
 - In responding to premium trip requests, pickup times offered would be based on capacity available
 - If no space is available, premium trips may need to be added to a waiting list
 - Fares would be the same as for current Dial-A-Ride service
- The team recommends that the Columbus Council formally adopt premium service policies that should be published in the rider guide and METRA's website.



Premium Service Considerations

- Expanding the service area may result in immediate rider growth but trips would begin to increase.
- Better data is needed and should be compiled to show trends in demand, costs, and challenges and additional administrative staffing may be needed for this purpose.
- Future premium service policy revisions may be needed once demand is better understood.



Premium Service Summary

- Expand the service area up to 1.5 miles of bus routes within consolidated city/county boundary and include Driver Services and VA Clinic.
- Prioritize delivering required Dial-A-Ride within ADA service area without capacity constraints.
- Adopt premium service policies that ensure compliance with ADA.
- Increase Dial-A-Ride funding by at least \$270,200 to add 3 operators and 1 scheduler, and cover fuel, maintenance, and related expenses.
- Plan to add two new vehicles to the Dial-A-Ride fleet in FY 2025.
- Collect data and monitor demand to ensure resources are adequate and adjust policies and funding accordingly.





Next Steps

- Virtual public meetings on Zoom
 - Monday December 11, 2023, 12-1:30 p.m.
 - Tuesday December 12, 2023, 6-7:30 p.m.
- Draft report by end of December
- Final report by January 19, 2024





Demand-Response Transportation Options

- Demand-response services include
 - For-hire vehicles (taxicabs, Lyft, Uber, etc.)
 - Shuttle services, including microtransit (next slide)
 - Complementary paratransit (Dial-A-Ride)
 - Other paratransit, including premium Dial-A-Ride
- The "response" part of demand-response service varies from booking multiple days in advance to receiving a trip within xx minutes.



Microtransit

- Microtransit has exploded due to growth of smartphone applications, transforming demand-response marketplace
 - Most trips provided via smartphone, but call-in option is still needed
- Can be delivered as on-demand or reservations-based
 - In most cases, trips are provided with a relatively short wait time
- Operates within a defined area or zone





Fixed-Route Connection

- Bring riders to and from other transit services or major centers of activity
- Sometimes called first-mile/last-mile (FM/LM) service
- Operates during the same hours as fixed route and integrates schedules to arrive at bus stops or transfer locations to minimize rider wait times.
- Requires frequent bus service to be viable.
- Example: Seattle, Washington

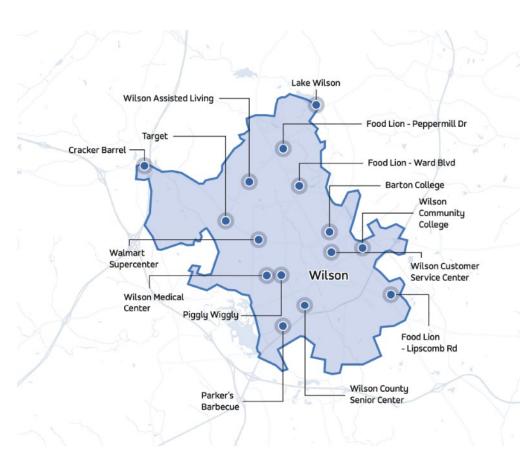






Replacement for Fixed-Route

- Full replacement of fixed-route service with ondemand service.
- Covers more geography but requires more vehicles.
- Work better in zones with activity throughout the day (school, work, medical, retail)
- Integrated road network required to minimize travel times
- Can have much higher operating costs as service becomes more popular.
- Example: Wilson, North Carolina

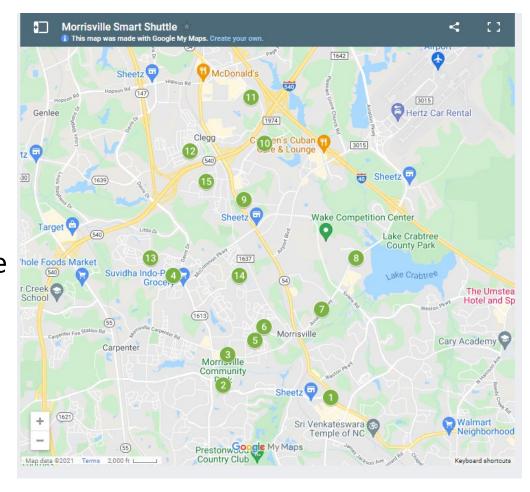






Node-Based Service

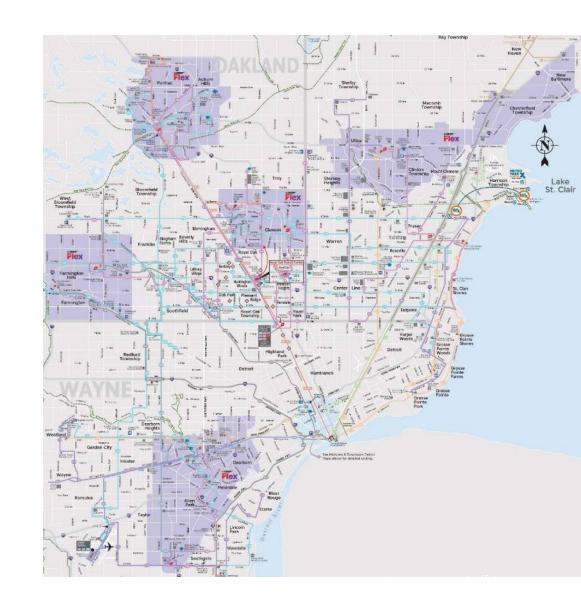
- Connects predetermined pickup and drop-off locations
- Offers on-demand connections between any two nodes
- If no demand at certain zones, riders receive more direct trips (i.e., vehicle skips intervening stop
- Can have very high operating costs
- Example: Morrisville, North Carolina





Zone Coverage

- Service operates only within designated zones
- May connect with fixed route and limit microtransit trips when fixed route service is available
- Requires at least two vehicles per zone to operate "on demand"
- Recommended zone size 6 square miles or less
- Example: Suburban Detroit, Michigan





Demand-Response/Microtransit Considerations

- Service does not need to be on-demand to be responsive.
 - Tailor service to the market, which can vary within a region.
 - A guaranteed trip is preferable to one that is not on time or cannot be confirmed.
 - Using multiple providers may be preferable (taxis, Uber/Lyft, microtransit vendor, METRA).
- Service cannot discriminate against people with disabilities.
 - ADA requirements apply, meaning those who need to ride in a wheelchair accessible vehicle (WAV) must not receive a lower quality of service.
- While intended as a shared ride service, actual ridesharing is sometimes hard to achieve.
 - The level of sharing depends on the types of trips and time of day.



Demand-Response/Microtransit Considerations

- New service should not cannibalize fixed-route service.
 - Offering microtransit in fixed-route areas with faster connections will draw some bus riders
 - Fare policy is a key consideration
- Delivery costs vary according to the demand, but certain costs are fixed.
- Service sustainability is an important consideration.
 - A focused market and financial analysis is needed.
- When designing new demand-response services, a recommended rule of thumb is to "under-promise and over-deliver."





Thank you!



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