



Mobility on Demand Pilot Overview

IPTC Board of Directors Update

August 2023

IndyGo Connect

A premium service for a non-premium price that competed with fixed-route service, and an expensive way to buy coverage where there is little demand for mass transit

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Background

Goals

1. Attract New Riders to IndyGo
2. Maximize IndyGo's Fixed Route Service
3. Identify partnership opportunities for alternative mobility that can be sustained over a longer period
4. Improve the customer experience by simplifying the transit mobility experiences
5. Enhance Central Indiana's mobility-on-demand ecosystem
6. Provide a cost-effective service compared to fixed route service

Background

Northwest

- Employment destination
- Too far from fixed-route service to provide effective transfer opportunities
- Limited opportunity to replace fixed-route

Broad Ripple

- Primarily residential area
- Limited opportunity for fixed-route replacement due to high through ridership

465 West Corridor

- Wide land use mix
- Future north/south bus corridor and minor service expansion area
- Less opportunity for fixed-route replacement

Edgewood

- Residential area near major retail centers
- Could serve as first/last mile option to Red Line

Fort Harrison

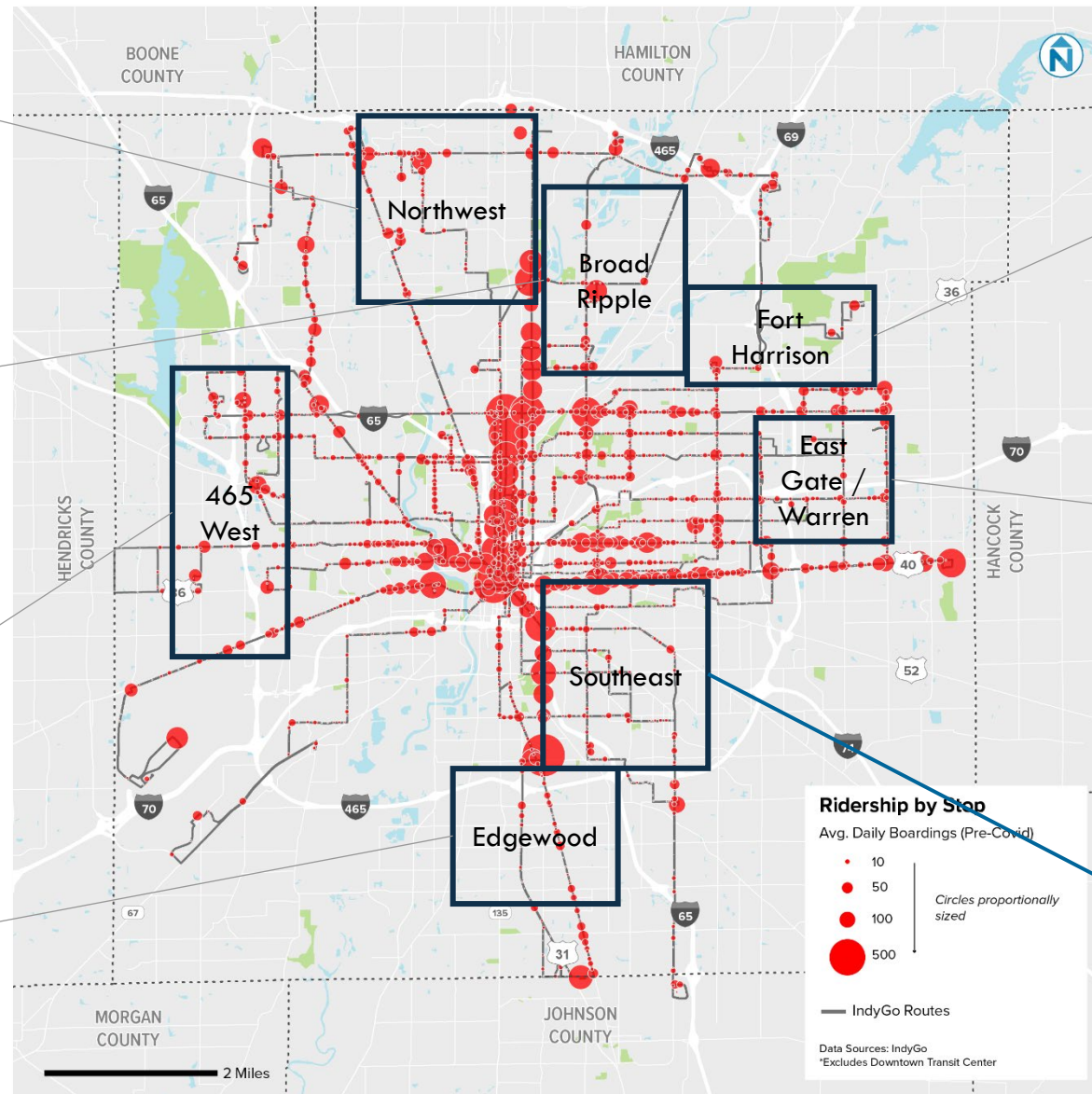
- Dispersed employment area
- Service could provide new access to several mobile home parks

East Gate / Warren

- Mostly residential and logistics
- Access to high frequency transit routes
- Potential for fixed-route reconfiguration
- **Very high transit need**

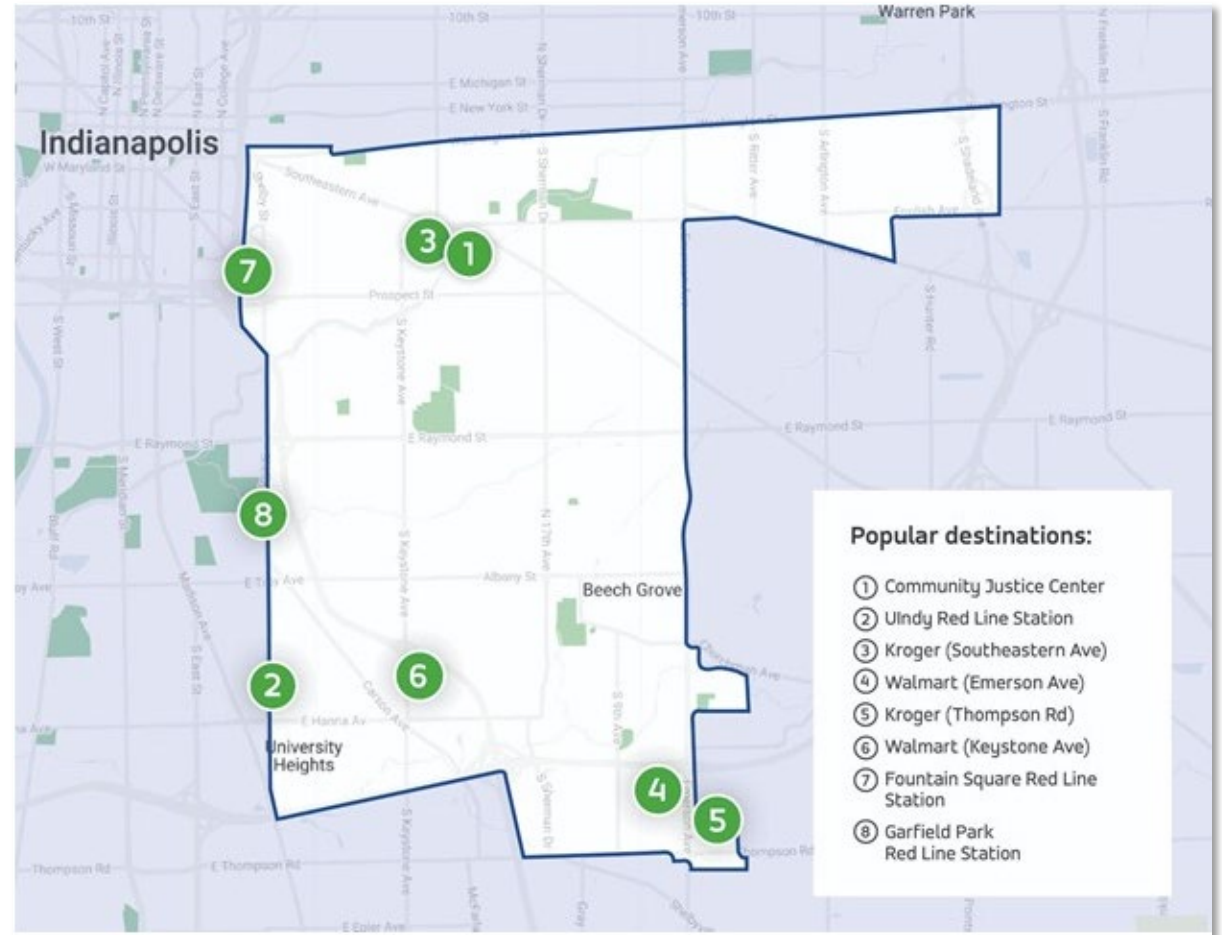
Southeast

- Mostly residential and local retail
- Significant potential for fixed-route replacement
- Access to multiple rapid transit routes
- **Very little demand for transit, which is spread across multiple routes**



Service Area

- Service seven days a week
 - Mon-Sat 6:00 am – 9:00 pm
 - Sunday 7:00 am – 9:00 pm
- Major Destinations
 - Red Line BRT Stations
 - Route 8/Future Blue Line Stops
 - Community Justice Center
 - Fountain Square
 - Garfield Park
- Approx. 18 sq. mile zone



VIA Service Design

Core Service Model Focus

A

Curb-to-Curb

Travel anywhere in the zone with PU & DO at the curb of your choice

- + Highest quality RX
- + Best approach to build rider growth fastest
- + Services all intra-zone ODs
- Least efficient for the service
- Least control over PU/DOs
- Closest experience to rideshare, least comparable to fixed route

Best if you want to compete with rideshare and provide the highest RX possible

B

Corner-to-Corner*

Travel anywhere in the zone with PU & DO at virtual bus stops

- + High quality & adjustable passenger experience (RX)
- + Balances bus experience with microtransit flexibility
- + Services all intra-zone ODs
- Riders will be required to walk to Pickup locations
- Not as efficient as a full point-to-point model

Most common service design for our partners and best to balance efficiency with RX

C

Transit-to-Anywhere

Travel anywhere in the zone as long as your trip starts/ends at a transit stop/station

- + High level of control over types of trips taken
- + Primary focus on connecting to existing bus network
- Removes intra-zone trips not connecting to specific points
- Limited efficiency gains for lower overall ridership

Ideal solution if you want all trips to connect to existing transit with no exceptions

D

Transit-to-Transit

Travel only allowed to and from designated transit stops/stations

- + Highest efficiency model - marginally more efficient
- + High service legibility
- Lowest quality RX
- Lowest potential ridership
- Least rider use cases served due to limited access to in-zone ODs

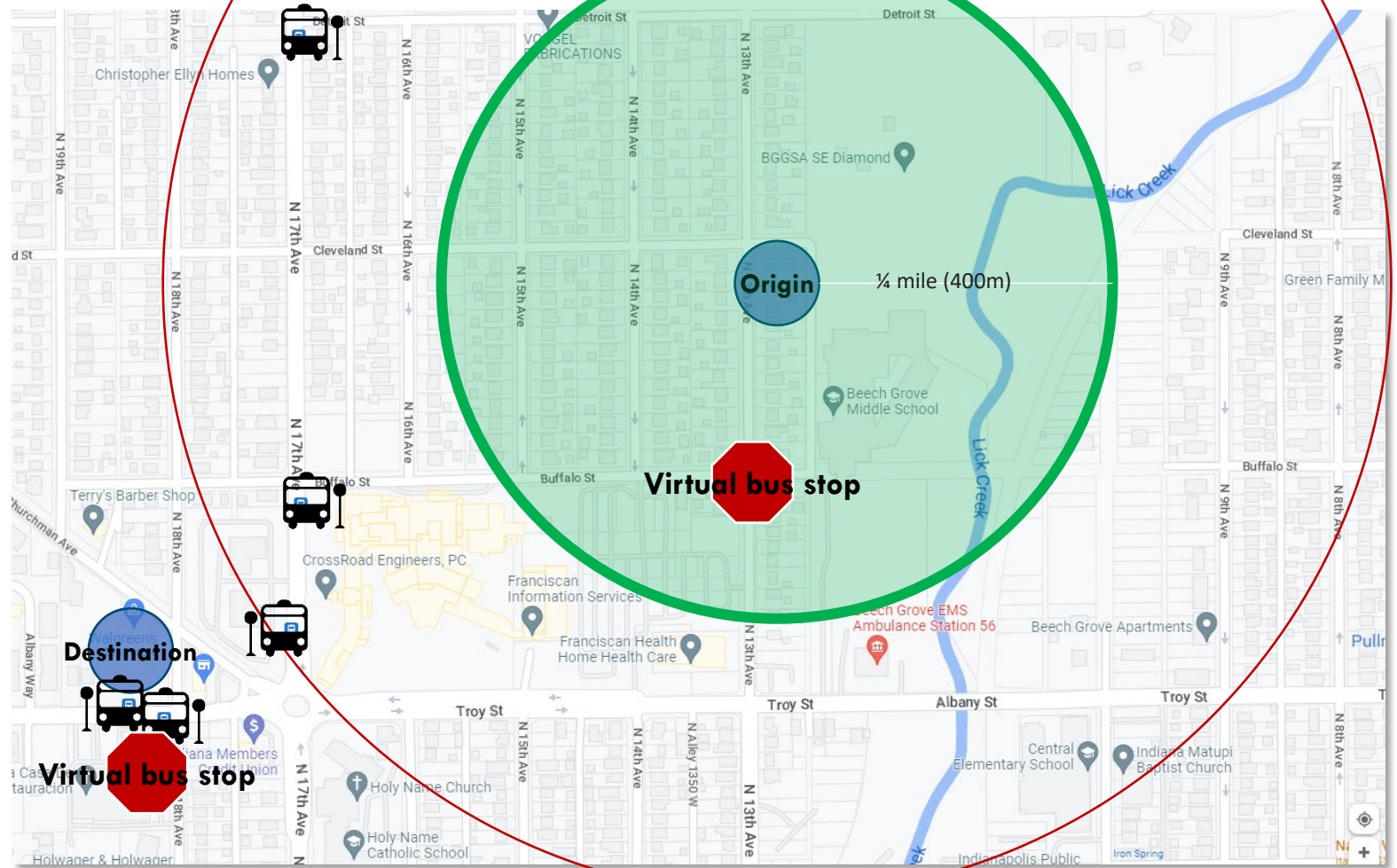
Best solution if you want to only serve trips between specific high demand locations

Corner-to-Corner Service Model

Virtual bus stop = most efficient
Pickup/Dropoff location within
the green circle

Most efficient = Pickup/Dropoff point is the one that minimizes how many times the vehicle needs to detour to pick up other passengers or to reach the riders final destination

A riders Pickup/Dropoff locations can change regularly





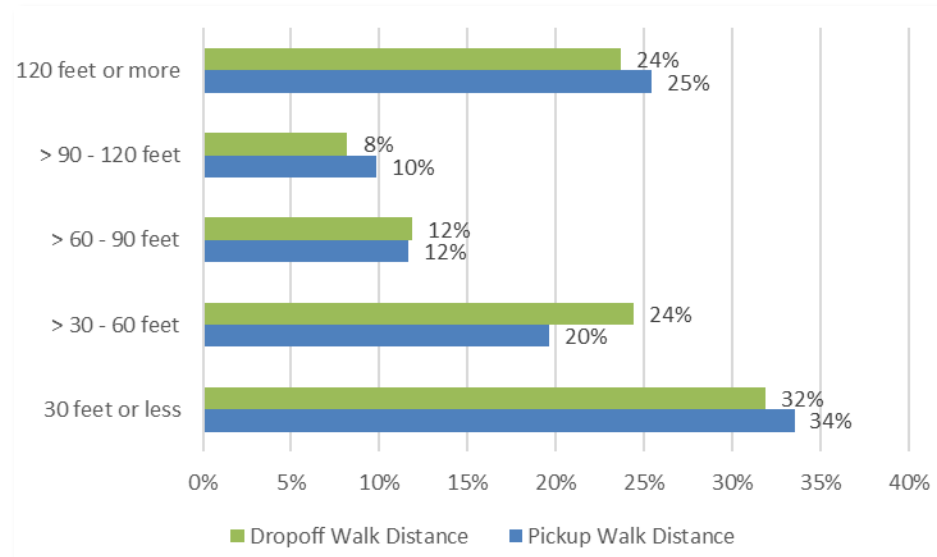
Performance

Rider Metrics

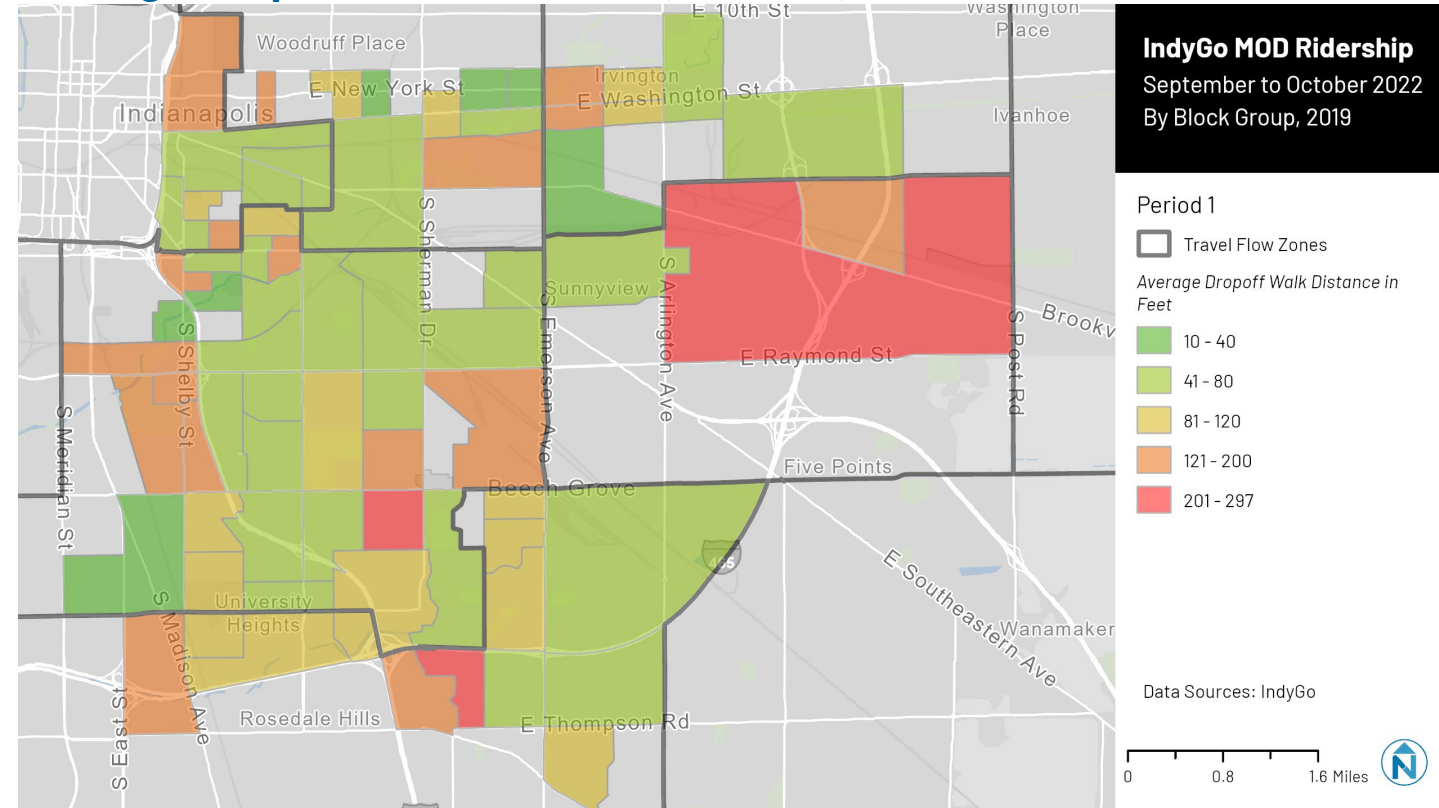
Walk Distance

- Nearly 2/3 of riders walk 90 feet (0.14 miles) or less
- Riders walk further on the edge of the service zone

Pickup and Dropoff Walk Distance (Period 1)



Average Dropoff Walk Distance (Period 1)



What did the typical IndyGo rider experience during the same period of time?

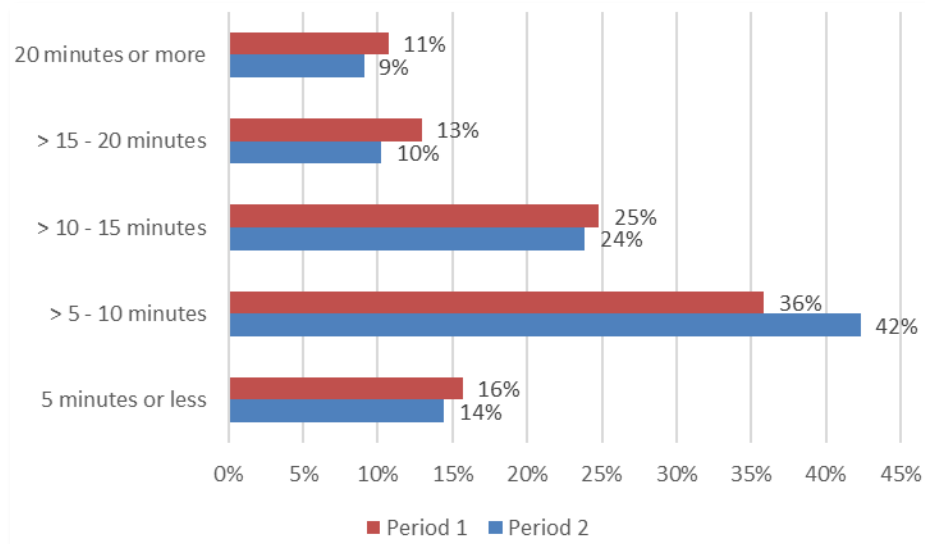
- 70% of IndyGo riders walked less than 0.5 miles
- IPS Walk Zones: K-6 students 1 mile or less; 7-8 1.25 miles; and 9-12 1.5 miles

Rider Metrics

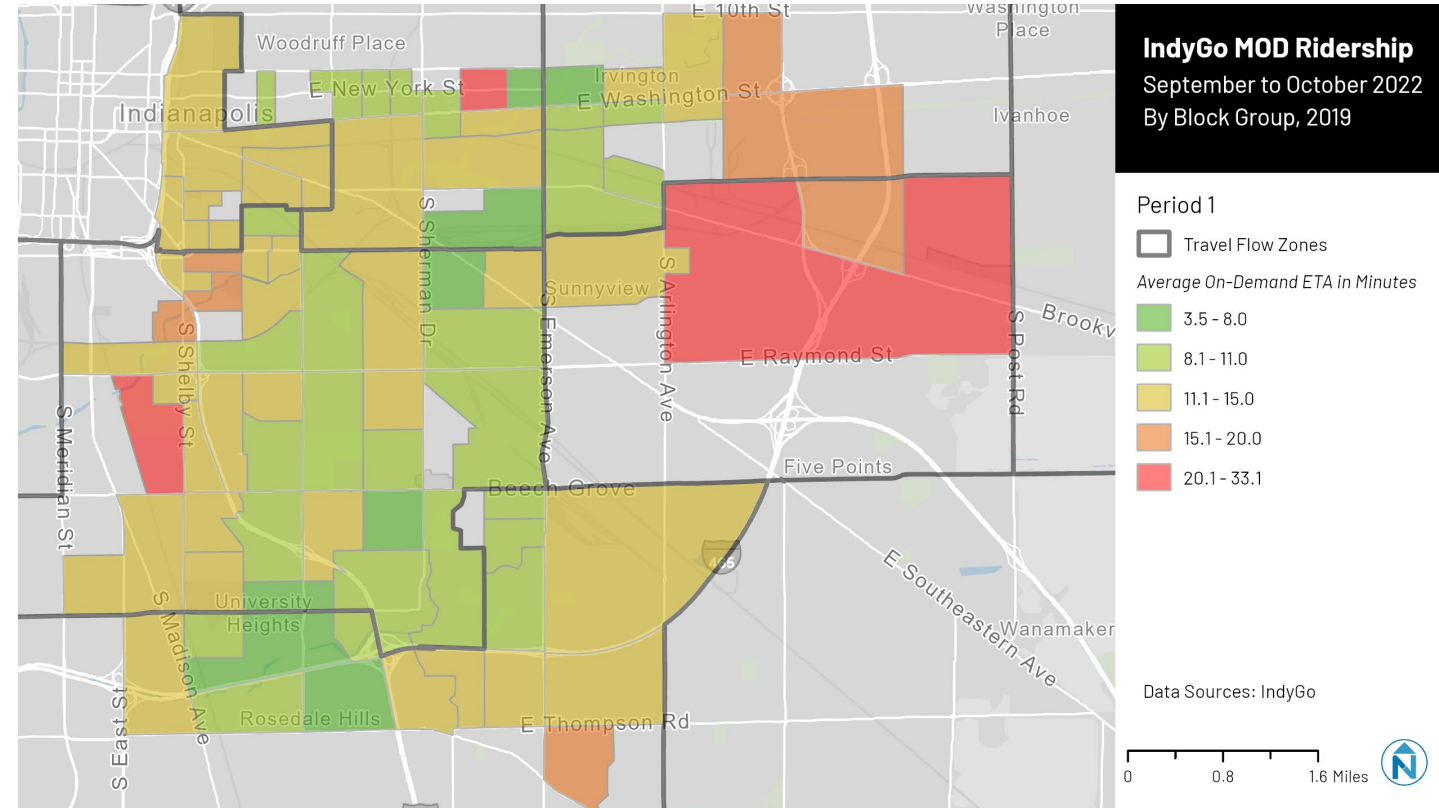
Response (Wait) Time

- Majority of riders picked up in 15 minutes or less
- Only about 10% wait longer than 20 minutes

Estimated Time of Arrival (Periods 1 and 2)



Estimated Time of Arrival (Period 1)



What did the typical IndyGo rider experience during the same period of time?

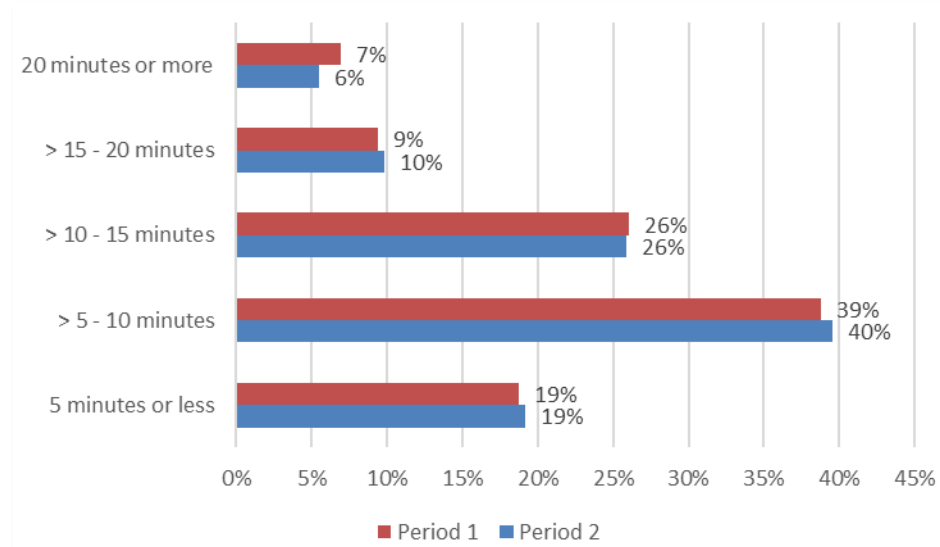
- Median Wait Time for the Bus = 24.8 minutes or less when following the bus schedule

Rider Metrics

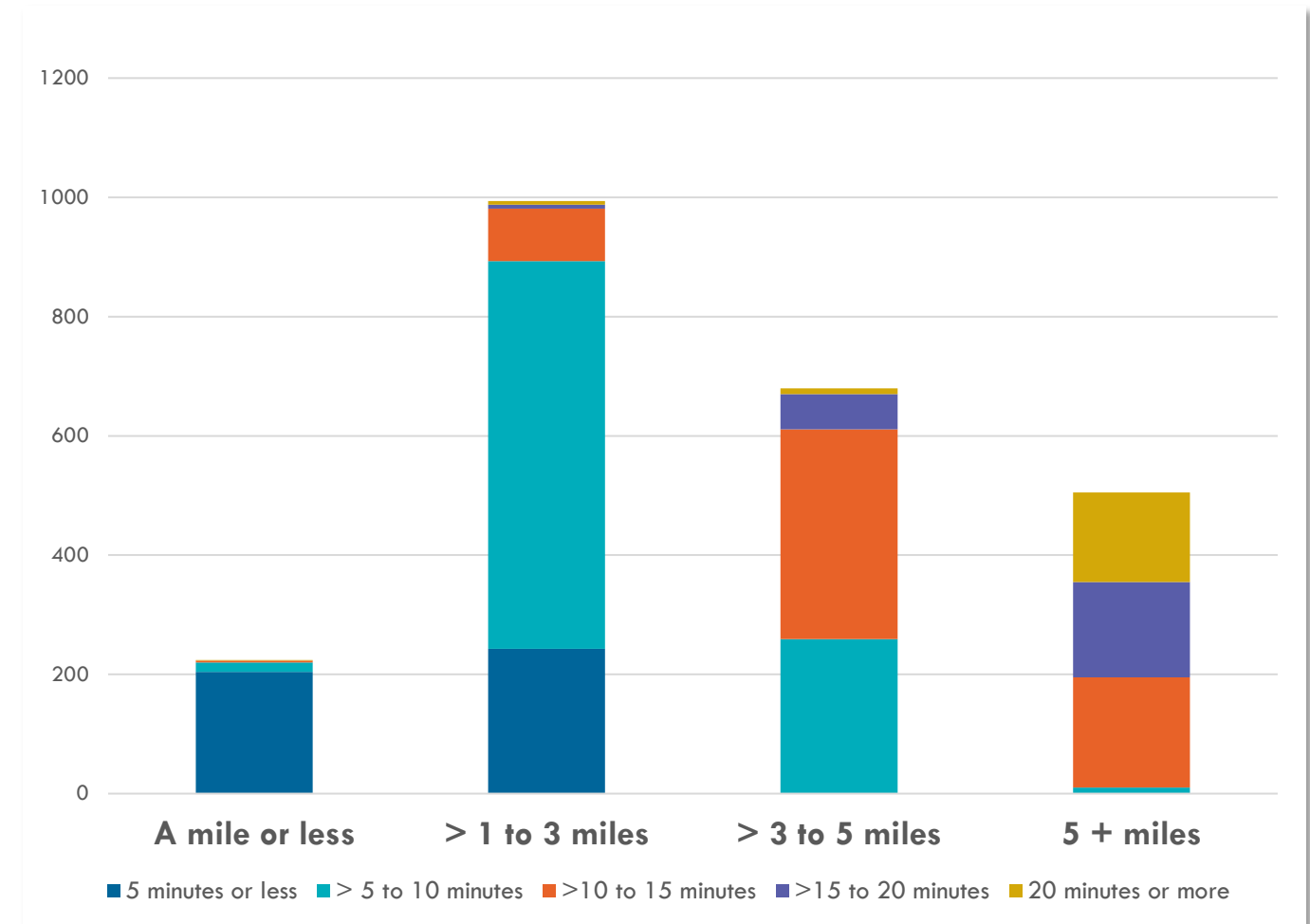
Trip Duration and Distance

- About half of trips took less than 10 minutes to complete, and covered just a short distance (under 3 miles)

Trip Duration (Periods 1 and 2)



Trip Distance by Trip Duration (Period 1)



What did the typical IndyGo rider experience during the same period of time?

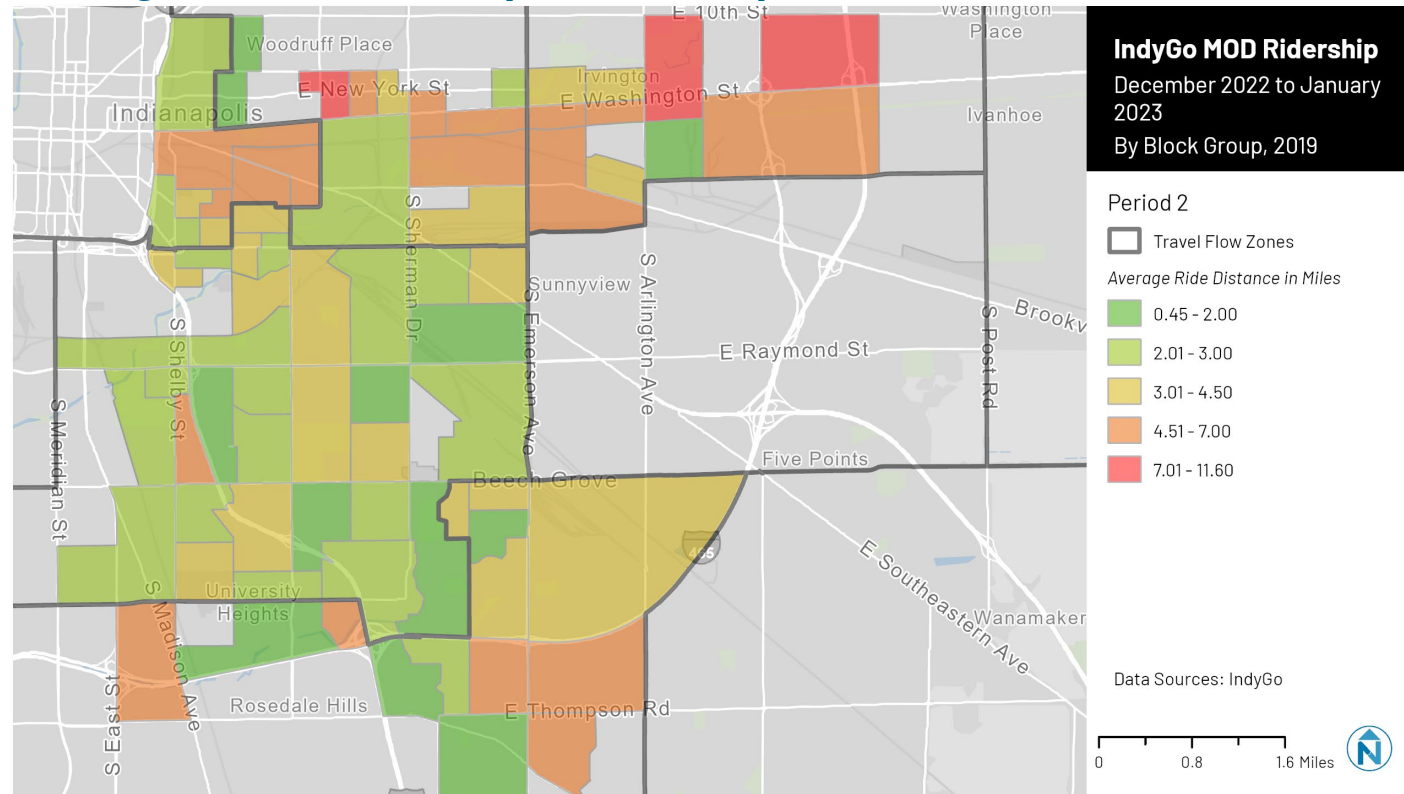
- Median Travel Duration = 37.1 minutes

Rider Metrics

Trip Duration and Distance

- Longer trips (5+ miles and taking longer than 15 minutes) were mostly along the Washington Street corridor, where IndyGo already offers 15-minute peak weekday service via Route 8.

Average Ride Distance by Block Group (Period 2)



Rider/Service Metrics

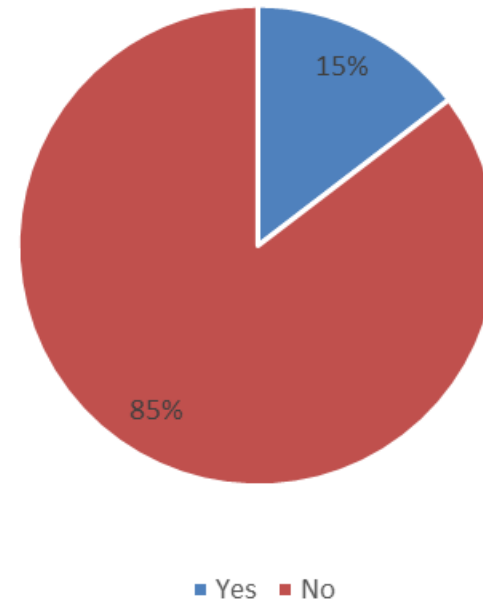
Shared Rides

- Most trips on IndyGo Connect were not shared (between 15-18%)
- Shared rides marginally improved between period 1 and 2

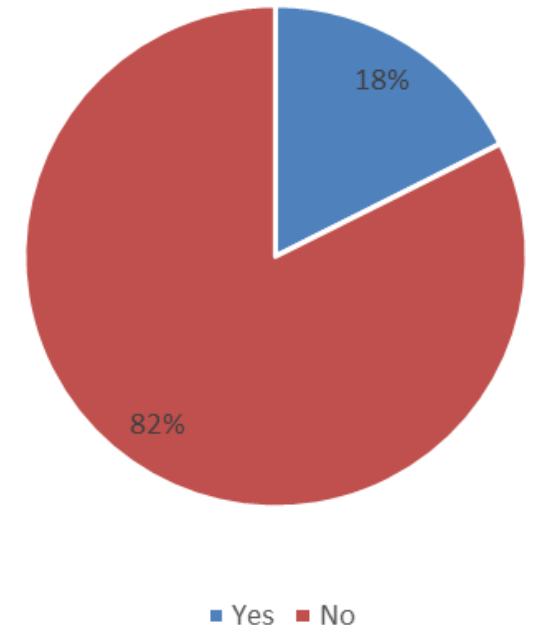
Customer Satisfaction

- Most riders did not respond to prompts to rate service performance
- Of those that did (8%), most gave the highest rating

Shared Trips (Period 1)



Shared Trips (Period 2)



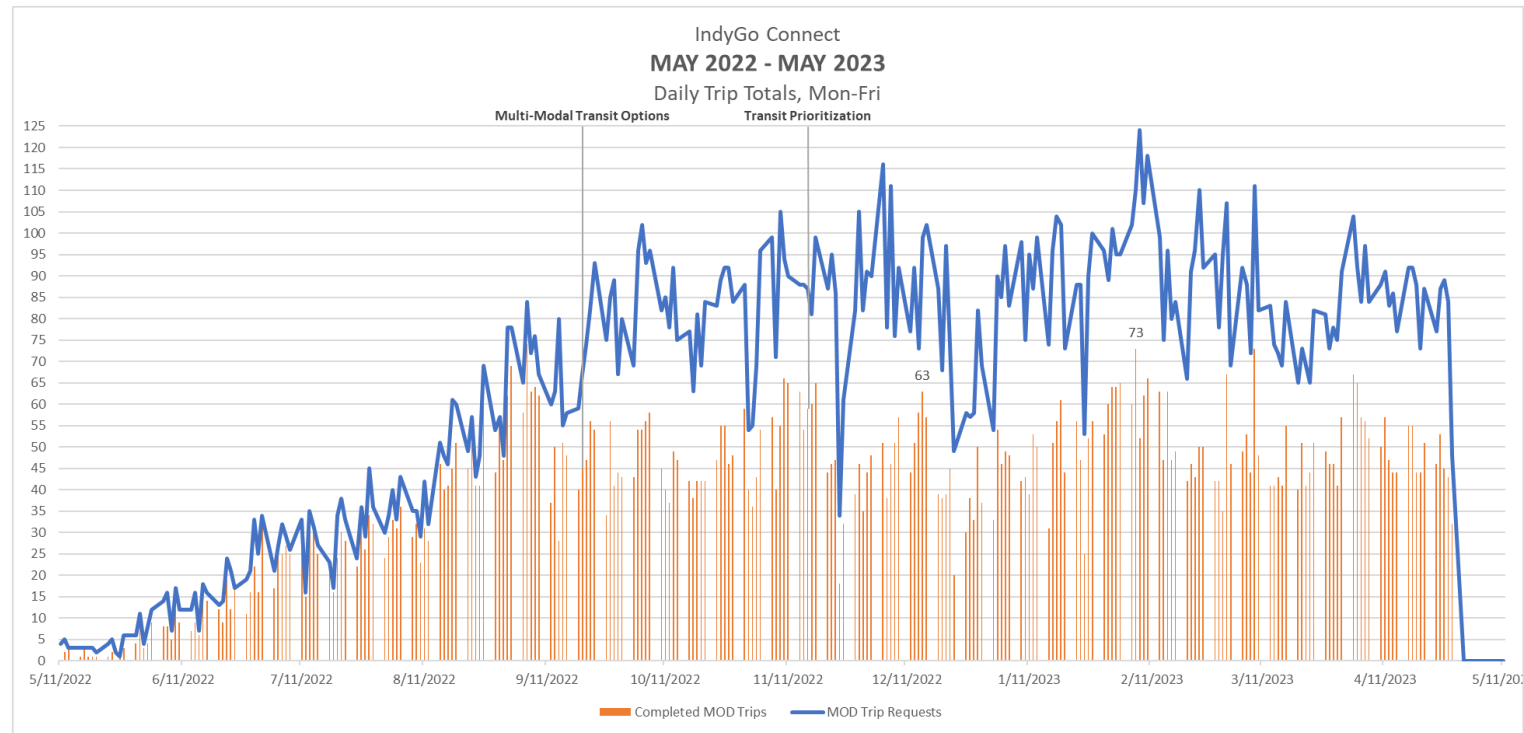
Service Metrics

Ridership Growth

- Total Ridership
~10,500 completed trips in 12mo
- Ridership Stabilization
~1,400 trips/month, Sept 2022

22
Riders
>50%
All Rides

IndyGo Connect Requested Versus Completed Trips

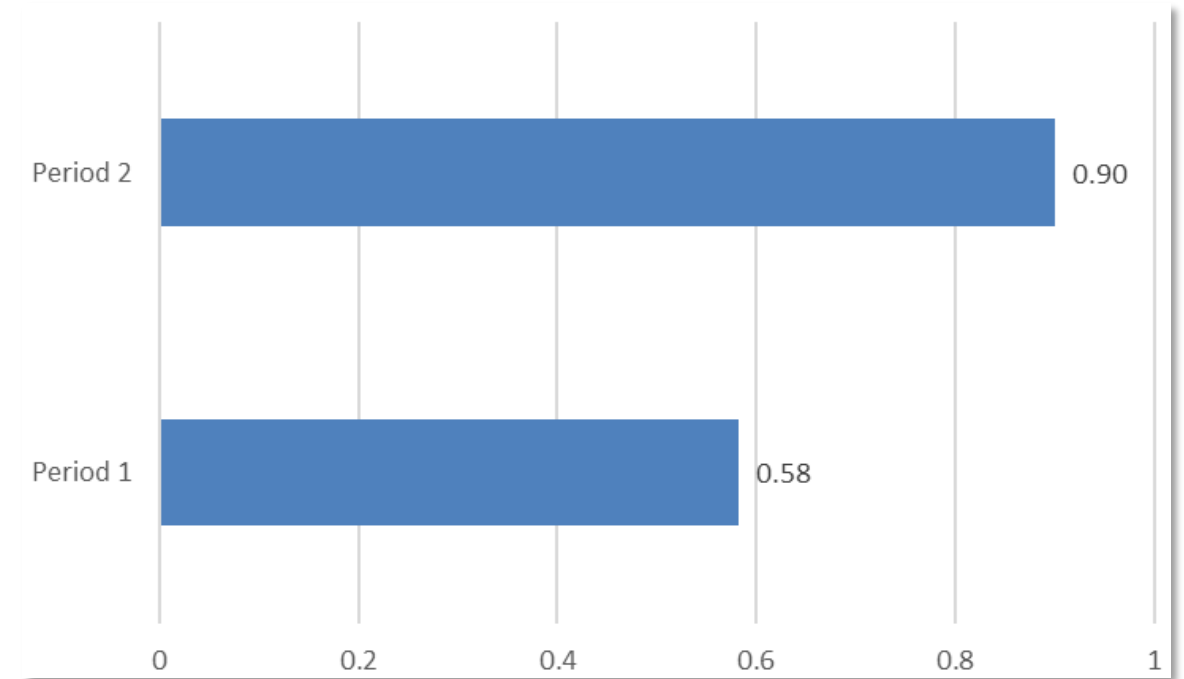


Service Metrics

“Productivity” Assessment

- The service became more productive between periods 1 and 2
- For comparisons purposes, Passengers/VRH on IndyGo Access (2021) = **1.9**

Passenger Trips Per Revenue Hour (Periods 1 and 2)



Service Metrics

Customer Convenience

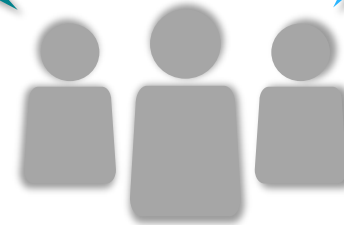
- 78% of survey respondents said that they would be “very disappointed” if they could no longer use the service
- About 70% said they had reduced commute times, and 39% said they were commuting more because of IndyGo Connect

Sample open-ended user responses:

“I really love this service. There are parts of the year where my household is a one car household, and this has helped make that more convenient.”

“I would not be able to get to my job on time without this service.”

“I love how cost effective and simple this service is! It allows me to utilize public transportation in a way I feel is safe as an immunocompromised individual.”





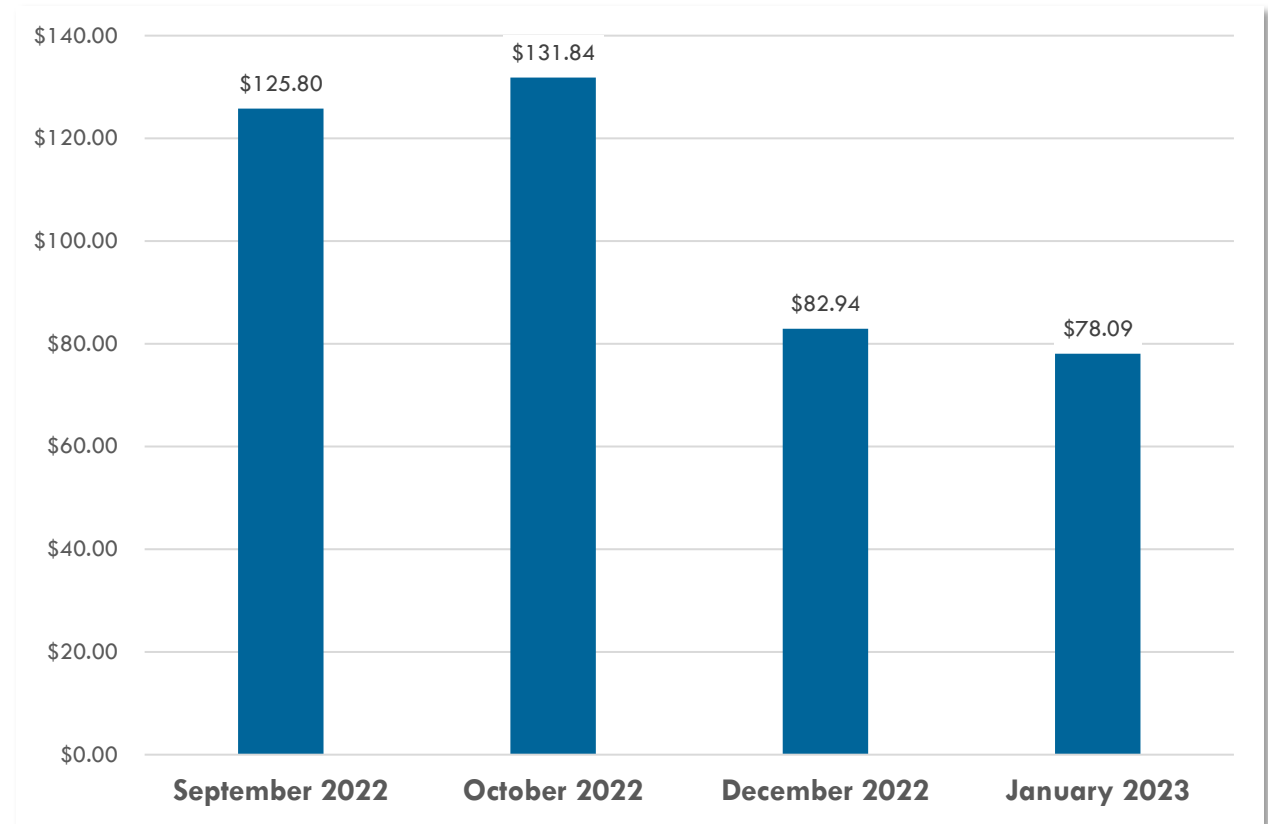
Evaluation

Service Metrics

Cost per Passenger Trip

- Assessment of cost efficiency
- By design, the service became more efficient between periods 1 and 2
- Operating expense per passenger trip on fixed route was significantly lower (2021 data):
 - \$20.14 for regular fixed route
 - \$10.25 for BRT
 - \$60.10 for IndyGo Access

Operating Cost per Passenger Trip



Service Metrics



Rider Characteristics



Employed Full or Part Time

56% 72%



No Access to a Car

75% 57%



Household Income Under \$25K

28% 57%

Men



28%



40%

Women



64%



57%

Black/African American



36%



55%

White/Caucasian



53%



34%



IndyGo Connect Riders

All IndyGo Riders




Rider Characteristics cont.

75%  No Access to a car **57%**

33%  Commuting to work **27%**

59% Can get a ride from a friend or a ride-hailing company **27%**

8% Wouldn't have made the trip 
86%/67% Looking to save time and/or money

 IndyGo Connect Riders

All IndyGo Riders 

Service Metrics

Increase in Residents/Target Populations Access to Transit

- A. IndyGo Connect provides general public service to about 18,000 more people within the service zone
- B. Expands access by about 28% to households without access a car, low-income households, and people who identify as Black/African American

Variable	IndyGo Connect Service Zone Demographics	* Zone Demographics within ¼-mile of bus stop 250 feet of Zone	* Zone Demographics NOT within ¼-mile of bus stop 250 feet of Zone
Total Households	24,803	17,750	7,053
Total Population	62,589	44,792	17,797
No Access to a Car	2,744	1,964	780
Household Income Under \$25K	7,186	5,143	2,043
Men	30,654	21,938	8,716
Women	31,935	22,854	9,081
Black/African American	9,105	6,516	2,589
White/Caucasian	44,323	31,720	12,603
Total Workers	41,305	29,560	11,745
Area (Square Miles)	17.2	12.3	4.9

Evaluation Matrix

-  **Goal 1: Attract New Riders to IndyGo**
 - Partially met goal with attractive customer performance metrics
-  **Goal 2: Maximize IndyGo's Fixed Route Service**
 - Failed to meet goal by competing with fixed-route bus service
-  **Goal 3: Identify Partnership Opportunities for Alternative Mobility**
 - Met goal by enhancing IndyGo's understanding of the partner landscape
-  **Goal 4: Improve the Customer Experience**
 - Partially met goal by providing riders a low cost, convenient travel option
-  **Goal 5: Enhance Central Indiana's Mobility on Demand Ecosystem**
 - Partially met goal by temporarily standing up a new service delivery model, and obtaining lessons learned for future iterations
-  **Goal 6: Provide a Cost-Effective Service Compared to Fixed Route**
 - Failed to meet goal because it did not effectively produce shared rides and could not be sustained over many years

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Key Takeaways

What's Next?

Southeast Indy Fixed-Route Restructuring

- Continue to monitor the performance of the local bus network in the area southeast of Downtown Indy now that it has been restructure to better connect the places where people want to go.

Status Update: This restructuring occurred as part of the major service changes that took place in June 2023. As a reminder, this package of changes included:

- Route 12/13
- Route 16
- Route 26
- Route 55
- Route 56

Upcoming Payment Integration Demonstration Pilot

- Move forward with the upcoming payment integration pilot – to make it possible for MyKey users who ride IndyGo bus and IndyGo Access to use a single method of payment to use both services. Possibly CIRT Workforce Connectors and Access Johnson County too!

Status Update: Contract negotiation phase with Flowbird to purchase new handheld, fare validation devices and to make the necessary software upgrades using IndyGo's remaining AIM Challenge Grant dollars.

What's Next?

Partnership

- IndyGo staff remain available to both the MLK Center and Pathway Resource Center as subject matter experts in support of their community-based mobility-on-demand services.

Status Update: Through an established lease agreement, IndyGo continues to supply the MLK Center with its vehicles. In return, IndyGo is able to report the ridership generated by the Midtown Get Around service. In addition to serving as subject matter experts, several IndyGo staff members serve on Pathway Resource Center's Driven2Success Advisory Committee.

Strategize & Innovate

- Continue to research the state of the industry and industry best practices to find sustainable options for right-sizing IndyGo's services

Status Update: In addition to reading industry publications, staff regularly attends webinars and conferences to learn what peer agencies are doing.

Questions?