

*IndyGo*SM

Transit Signal Priority

Local (Non-BRT) Route Implementation Plan

Board of Directors Update – August 2024

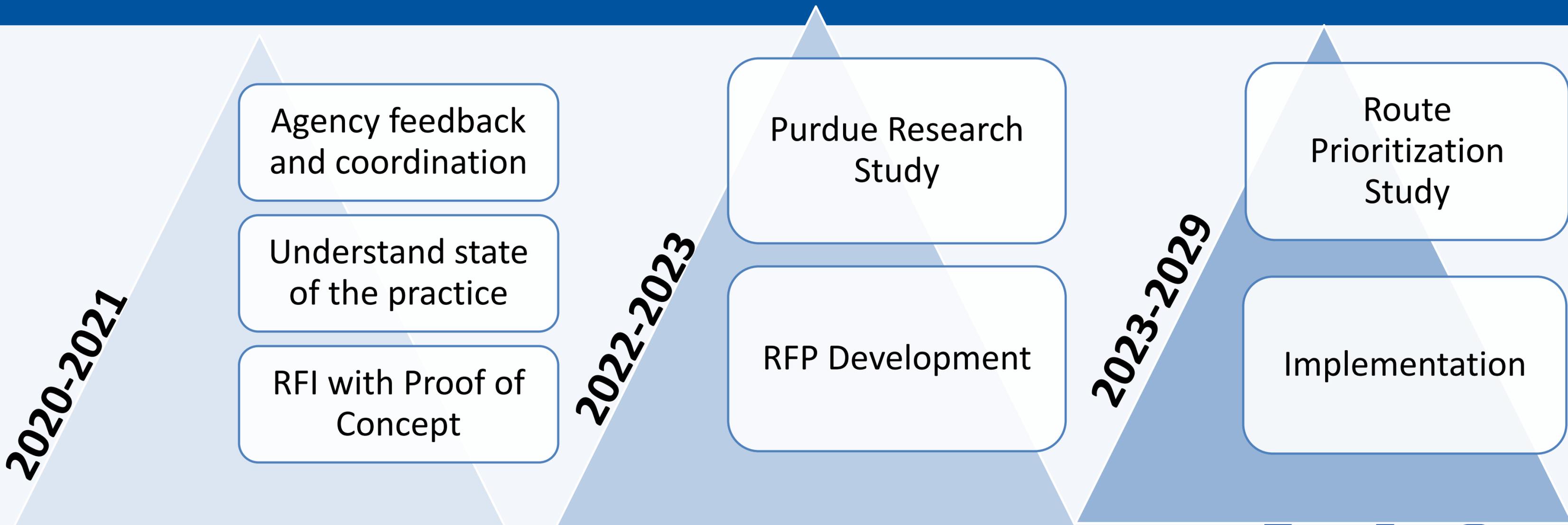


Presentation Overview

- Local Route TSP Prioritization Study
- Future TSP System + Implementations

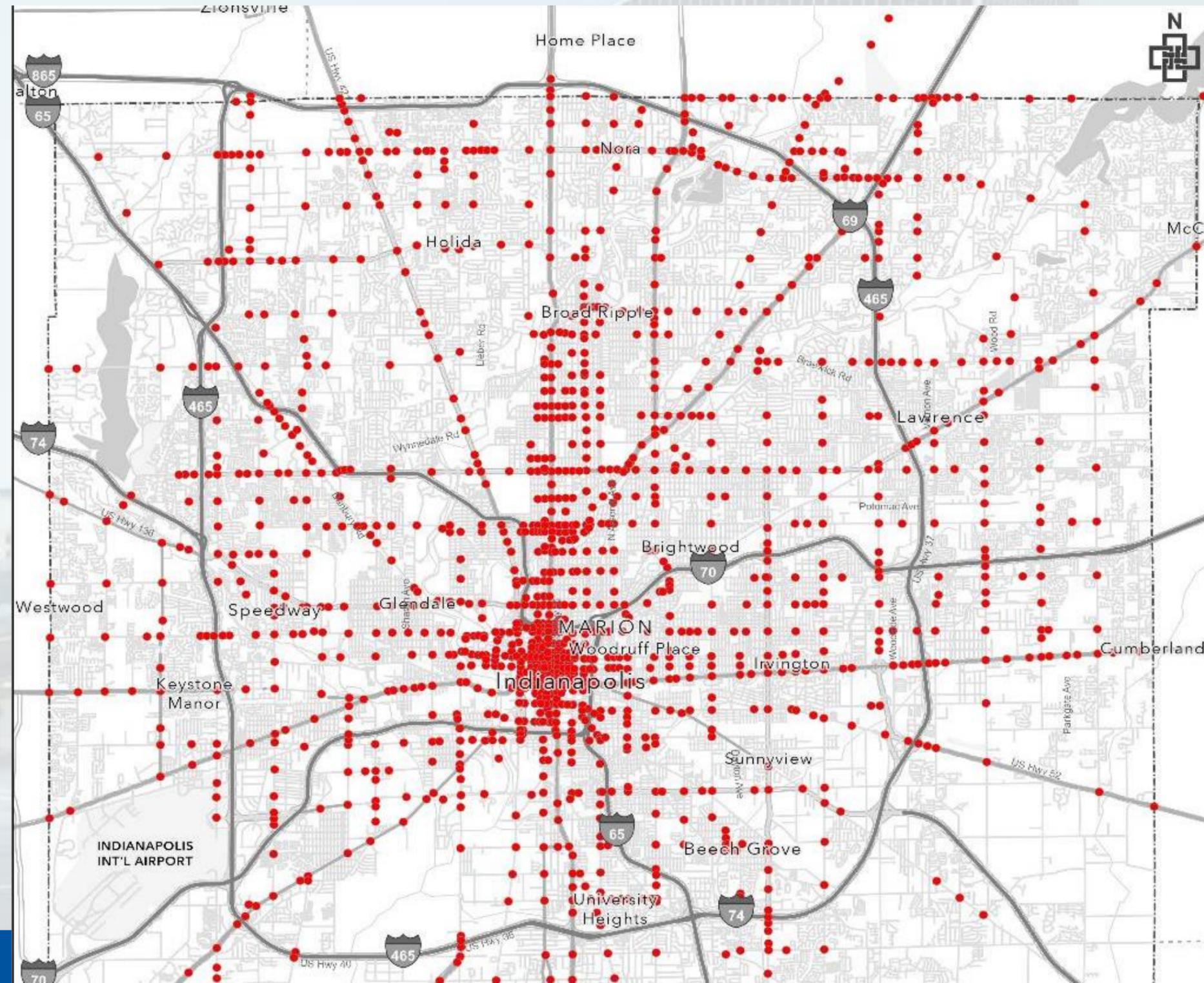


What's Been Going on?



Local Route Prioritization

1,300+ signals in
Indianapolis and IndyGo
traverses 800+!



Local Route Prioritization

NEED

Runtime COV

- Std. Dev. / Mean
- **Assesses how variable runtimes are**

Peak Speeds (excl. dwell time)

- Bus speeds with dwell time excluded
- **Assesses bus speeds being delayed by signals**

On-Time Performance

- Relates to Runtime COV
- Can identify poorly schedule routes OR **routes that are difficult to schedule due to runtime variability**

DEMAND

Passenger Throughput

- Passengers per hour passing through the stop
- **Measures demand**

Frequency

- Buses per hour passing through stop
- **Measures demand**

EQUITY

Minority

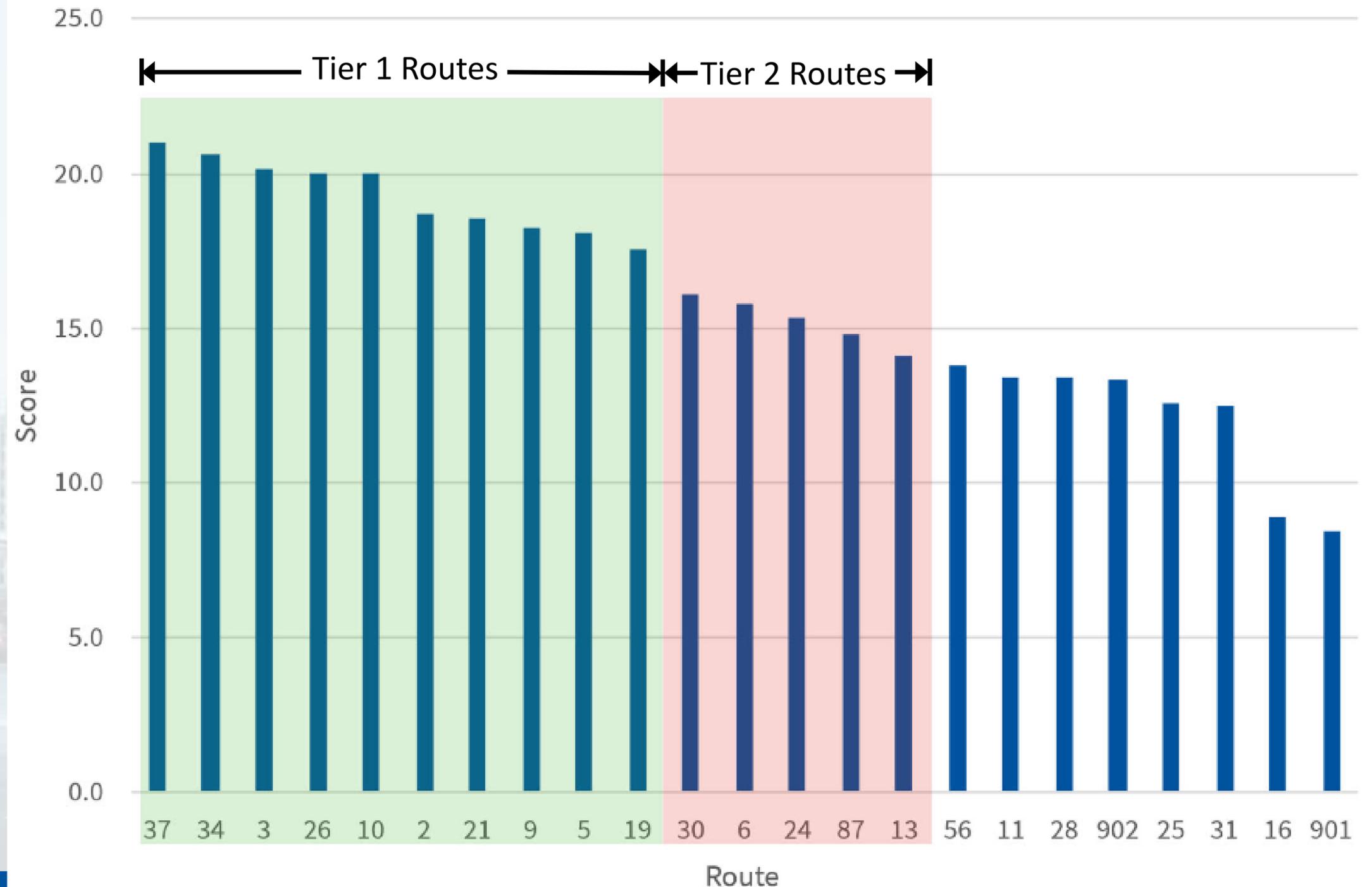
- Non-white population within ½ mile of stops on each route
- Non-white riders that rides each route from survey

Low Income

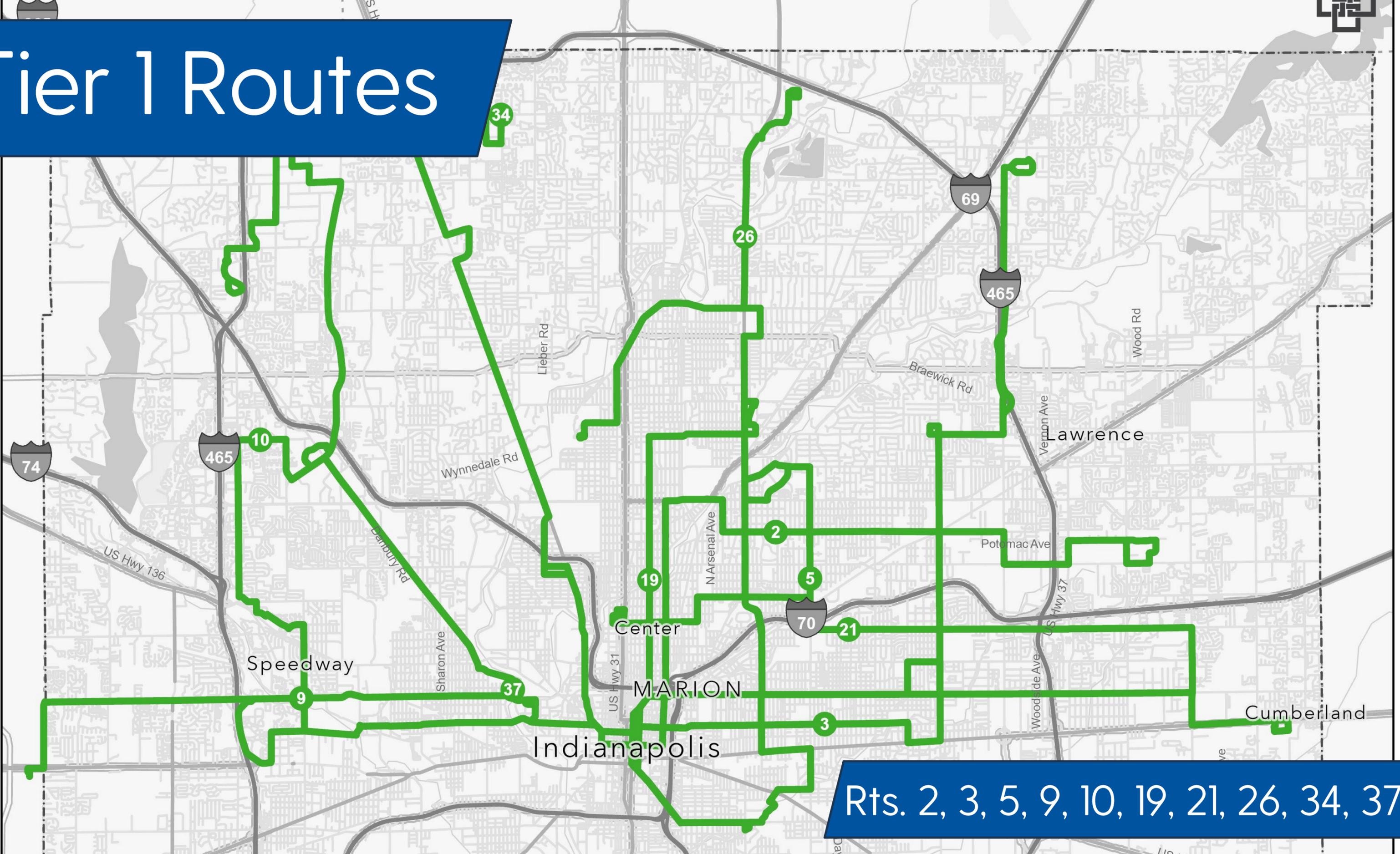
- Households with income <\$40,000 within ½ mile of stops on each route
- Riders with household income <\$40,000 on each route from survey

Local Route Prioritization

- High scoring routes align with highest ridership and frequency
- Sensitivity analysis yielded similar results in Top 10
 - Equity
 - Peak hours
- Routes divided into two Tiers

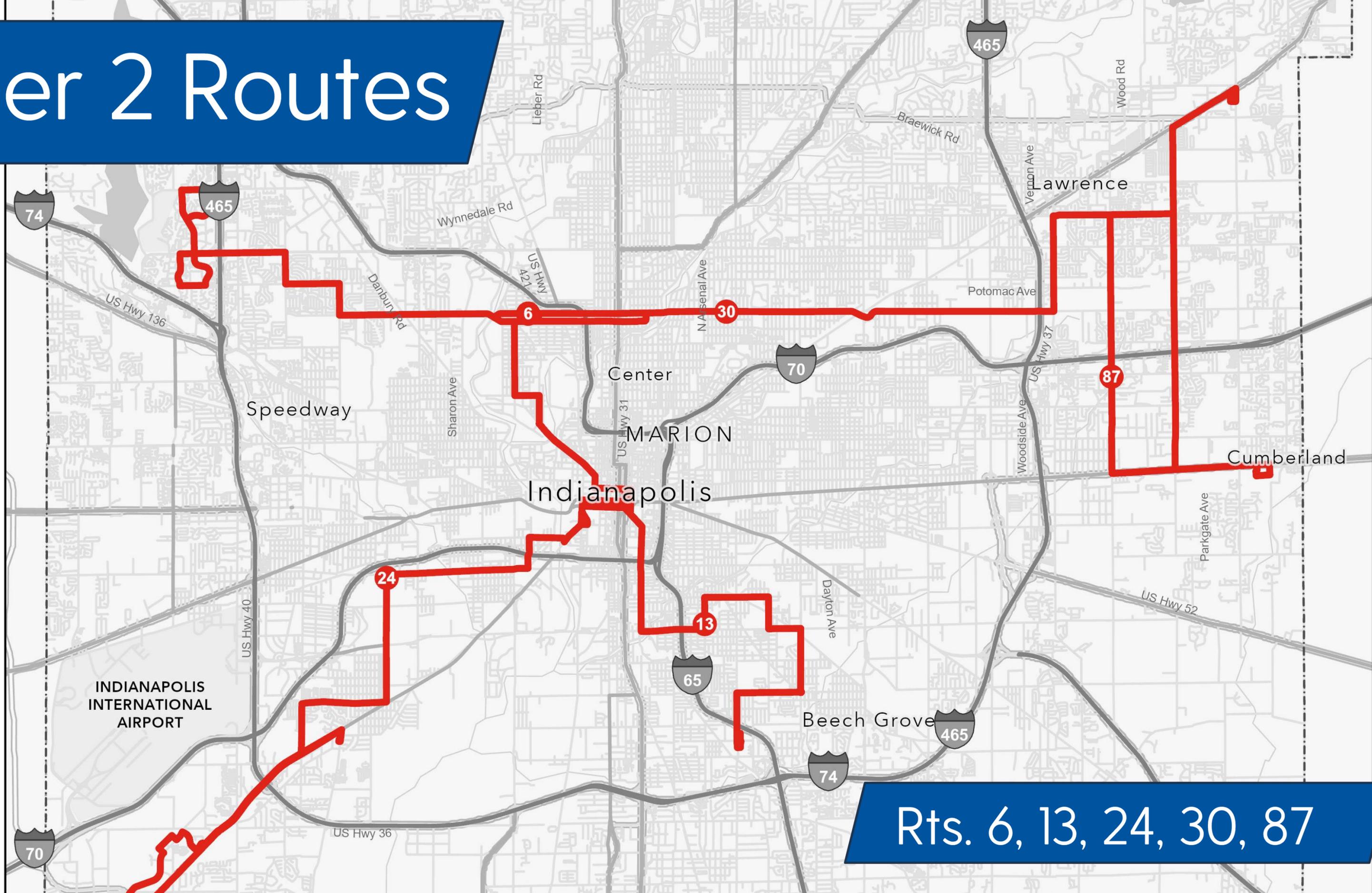


Tier 1 Routes



Rts. 2, 3, 5, 9, 10, 19, 21, 26, 34, 37

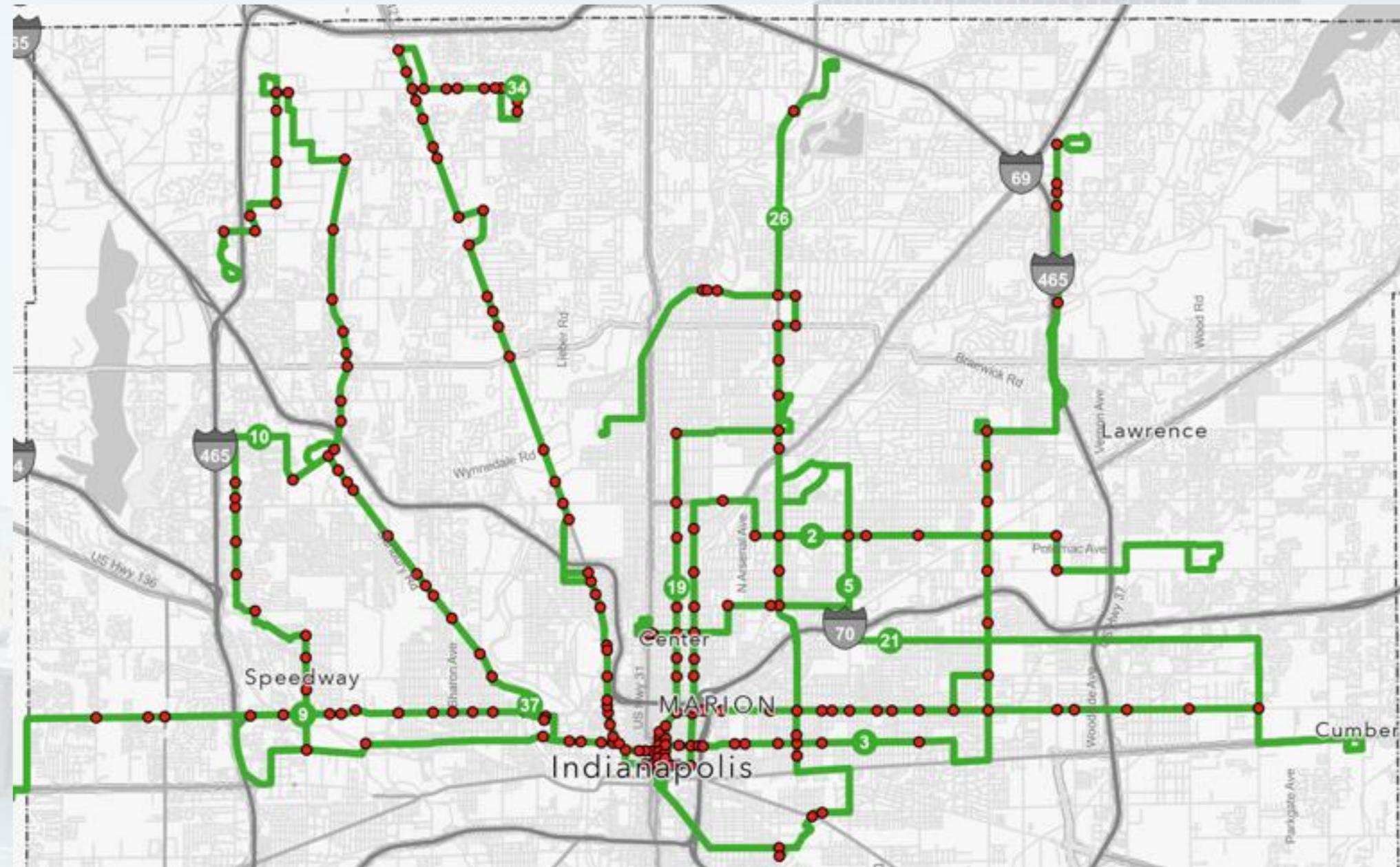
Tier 2 Routes



Rts. 6, 13, 24, 30, 87

Intersection Prioritization

- Intersections scored and ranked with the same methodology
- Prioritized 215 unique intersections along Tier 1 routes
- Conducted field visits for each intersection



Tier 1 Implementation Plan

- Consistent implementations over 5-year buildout.
- Capital costs
 - Intersection signal timings
 - Cell modems + controllers
 - System
- Operating costs

Implementation Year	Route(s)	Total Priority Intersections
Year 1	37	43
Year 2	34	39
Year 3	3, 26	45
Year 4	10	46
Year 5	2, 5, 9, 19, 21	42

Future TSP System

- Web-based (hardware-lite), cloud-hosted TSP solution
- Leverages existing AVL feed (Swiftly)
- Online dashboard to view signal status, real time vehicle location, KPI's, etc.
- Corridor-based ETA



TSP Implementations



20 Intersections (2024)



25 Intersections (2024)



200+ Tier 1 Intersections (2025 – 2029)*



70 Intersections (2027)

*depends on funding/grant availability

Assessment/Evaluation

- Intersection and route-level metrics
- Intersection-specific that are continually evaluated
- Align schedule with system performance

“If you can’t measure it,

you can’t manage it.”

– Former NYC Mayor Mike Bloomberg

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THANK YOU
QUESTIONS?

