

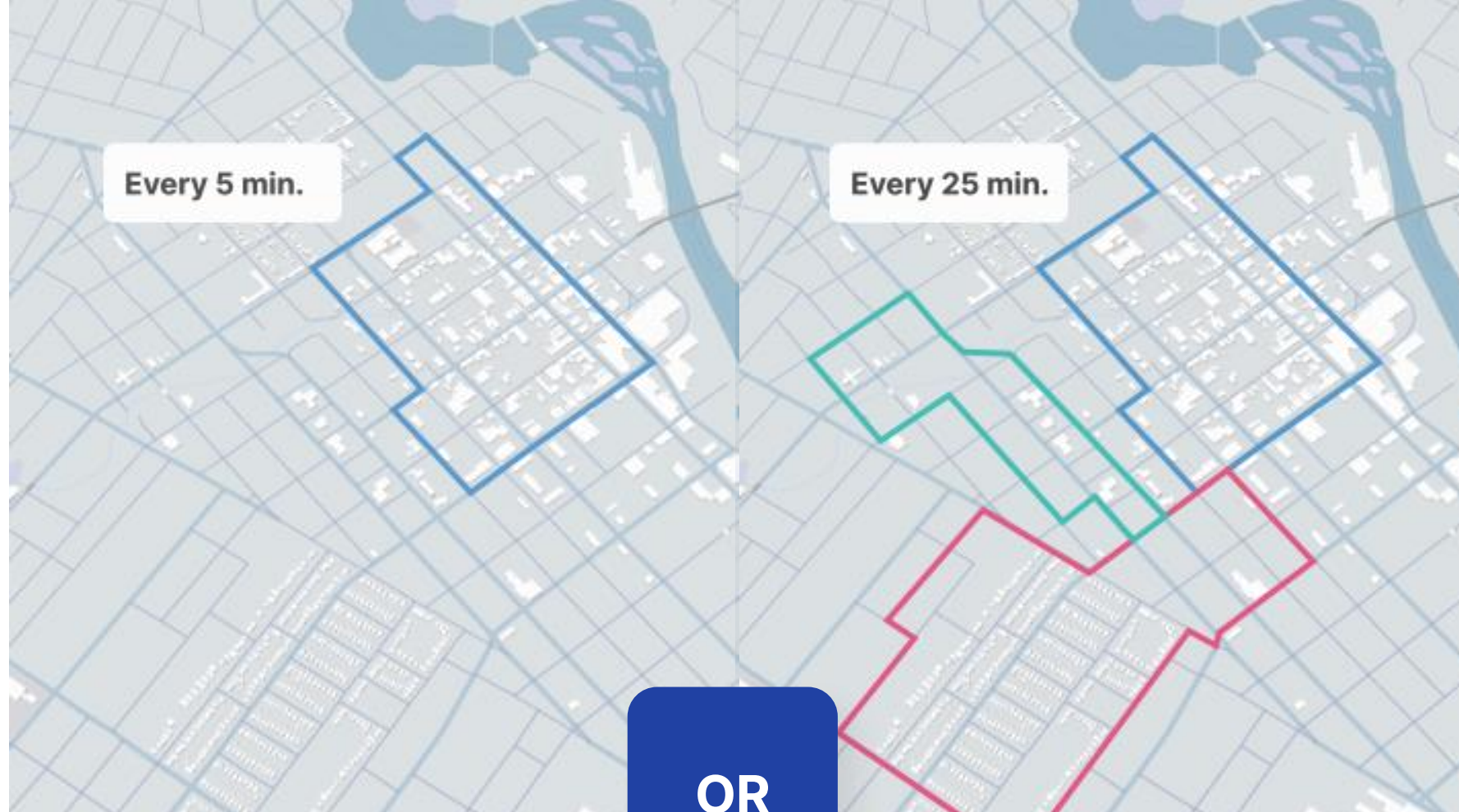


On-Demand Public Transit

Tomorrow's transportation, today



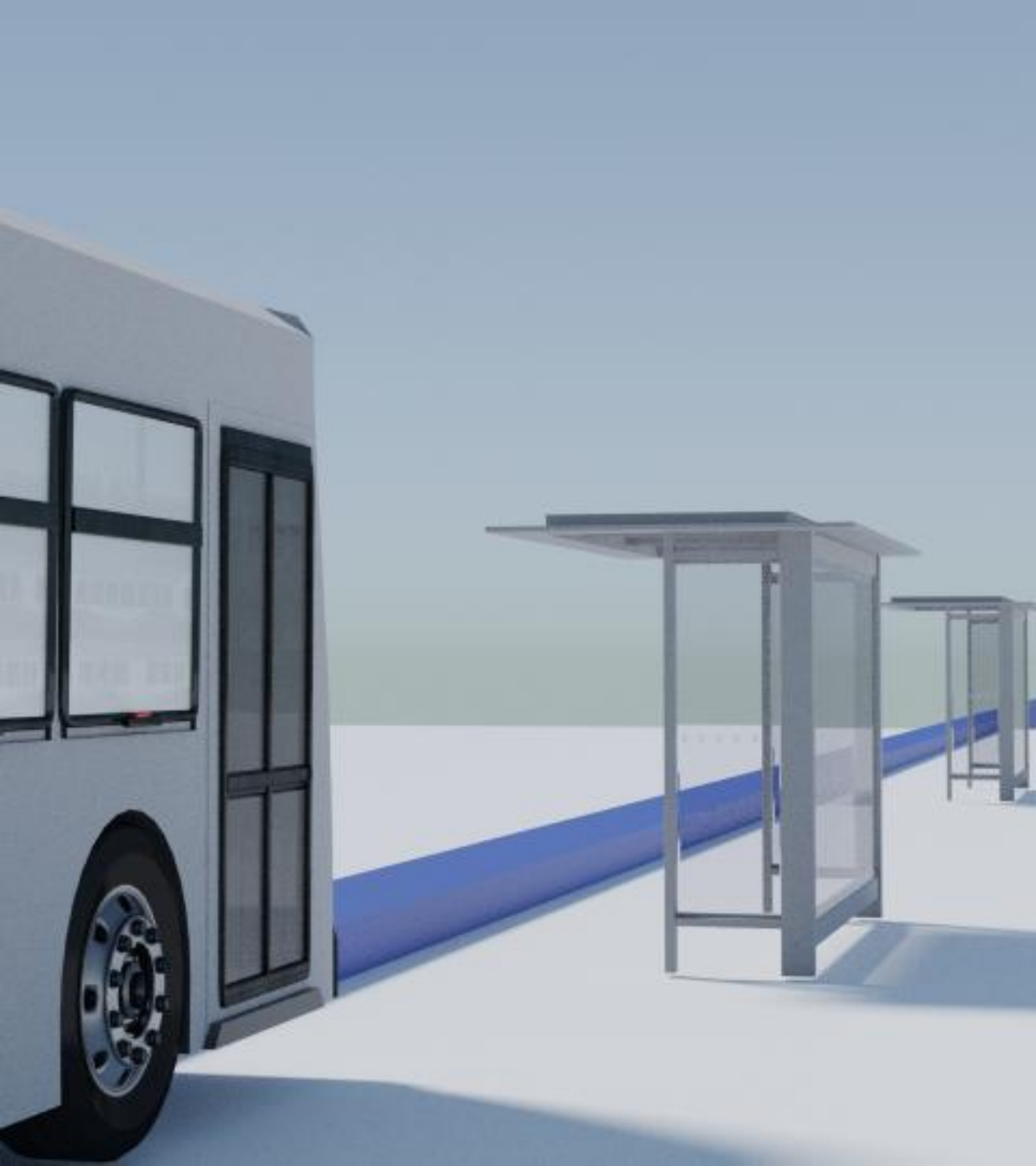
Every transit agency has a **service balance problem.**



OR

**Do we target
Ridership?**
Move the most people

**Target
Coverage?**
Access the most people



The balance
problem means
**Empty buses
driving around
in circles.**

Traditional transit in low density
areas is expensive & inefficient

Solution

On-Demand Buses.

Take buses off fixed routes, with on-demand transit. Pantonium provides all the tools for agencies to provide optimized, autonomous on-demand service.

Achieve both ridership & coverage.



How it works

1

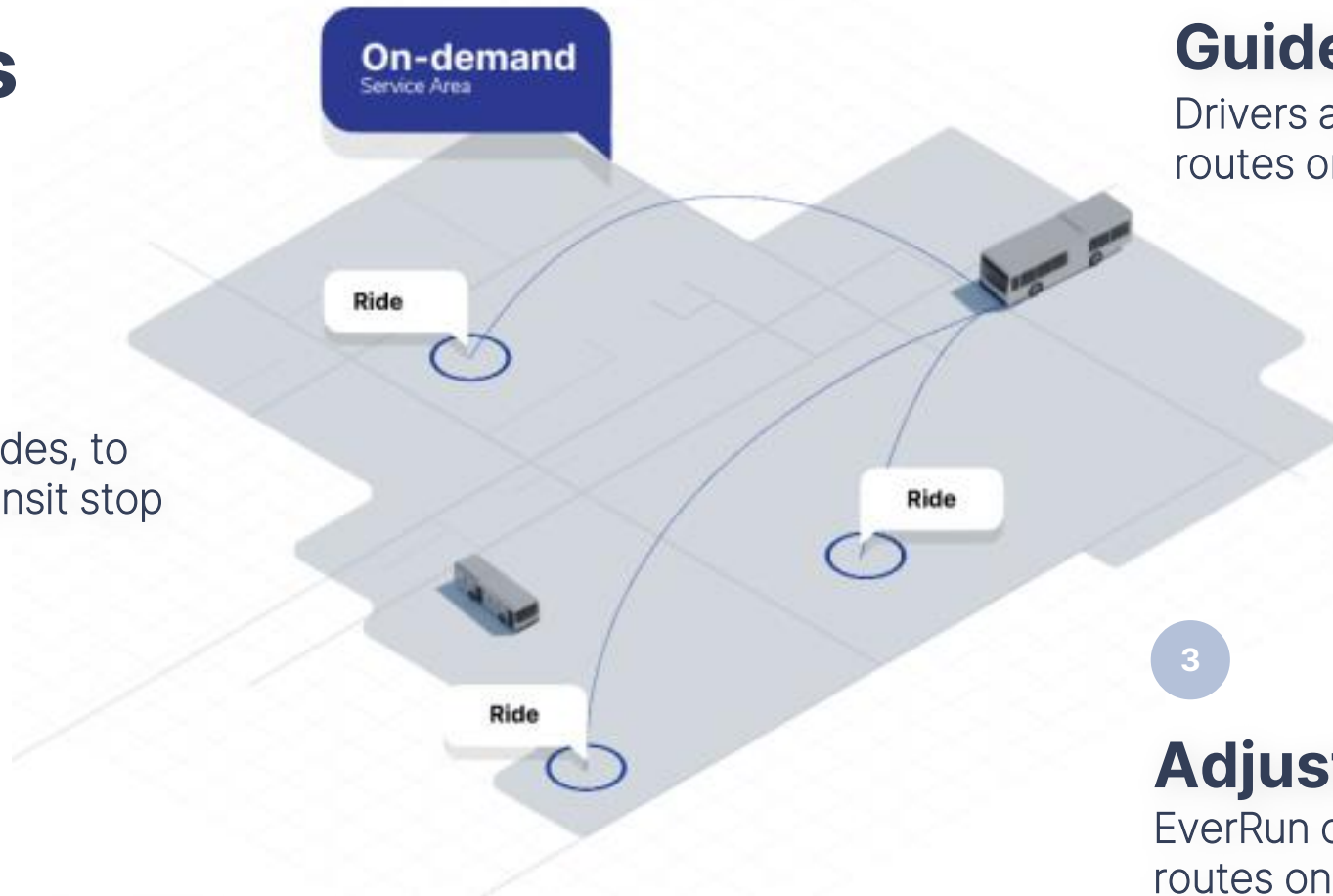
Request

Riders request rides, to and from any transit stop in their area

2

Optimize

System continuously optimizes and re-optimizes **entire fleet**, in real-time



3

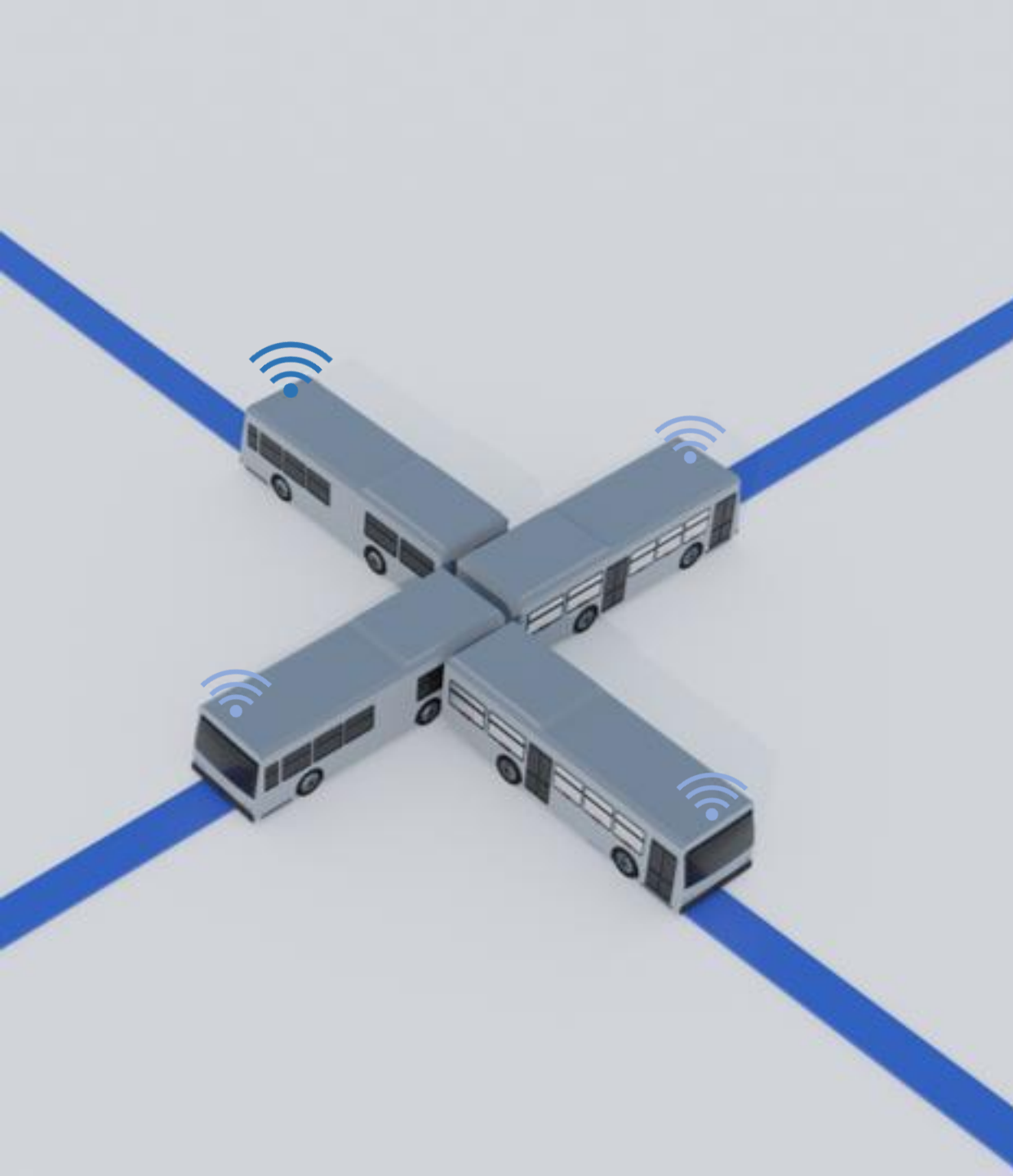
Guide

Drivers are guided through optimal routes one stop at a time

3

Adjust

EverRun continuously re-optimizes routes on the fly to new events, delays, and more

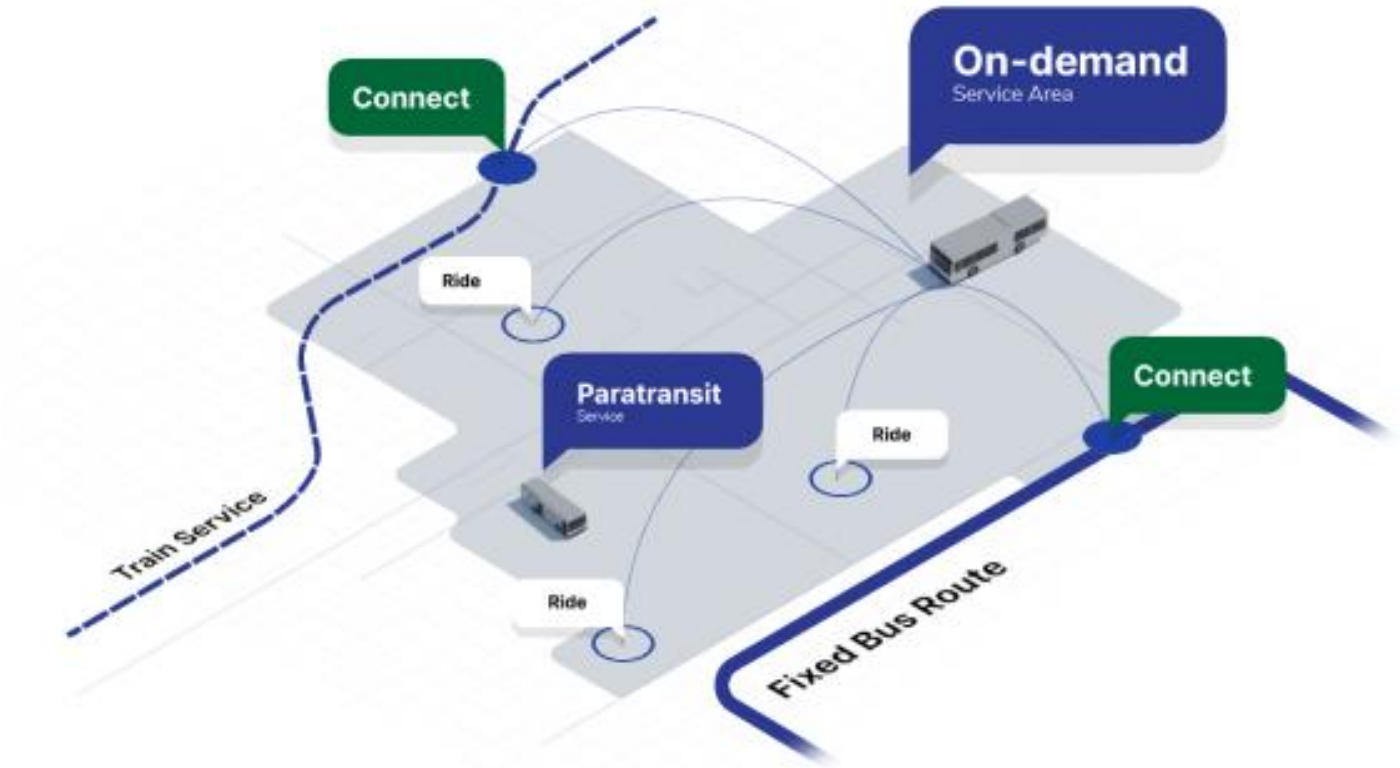


Our difference is
**real-time, global fleet
optimization.**

If we have just 5 vehicles, and we need to pickup 10 people, there are **37 quadrillion** different ways we can do it.

Not Microtransit, Macrotransit.

- Full sized buses
- No new assets/infrastructure required
- Integrate with fixed routes
- Reduced transfers and minimal if any zones limiting bus journeys
- Continuous global optimization
- Coordinate with other services (i.e, metro, train, regional bus)
- Can combine paratransit and regular on-demand on one platform



Other On-Demand Approaches



Ride-hailing Services

Uber Lyft



On-Demand Microtransit

VIA TransLōc®



On-Demand Macrotransit

Pantonium

Other On-Demand Microtransit Pilot Performance

Microtransit & Demand Response

Transit Agency	Contract/ In House	Cost/Vehicle Service Hour	Rides/ Hour	Cost/ Trip
AC Transit	In house	\$214	3	\$71
Cherriots	In house	\$65	3.5	\$18.57
Dallas ART	Contracted	\$46	3.5	\$13.14
Greater Dayton RTA	Both	RTA pays Lyft/Taxi	NA	\$13
Denver RTD	Contracted	\$83	3.8	\$21.84
HART	Contracted	Pay by trip	3.5	\$10
Houston Metro	In house	\$75	2.4	\$31.25
Kitsap Transit	In house	\$130.72	3.66	\$35.68
LYNX	Contracted	\$41.47	3.3	\$12.60
MST	Contracted	\$54.18	4.03	\$13.44
NVTA	Contracted	\$44.48	2.6	\$17.00
NCTD	Contracted	\$97	2.7	\$36
TDU	Contracted	\$34.69	4.7	\$7.34

Highest Rides/Hour: **4.7**

Lowest Rides/Hour: **2.4**



Belleville, ON **Results**

30

Passengers/Service Hour

300%

Increased Ridership

70%

Increased Service Area

30%

Reduced Mileage/Passenger

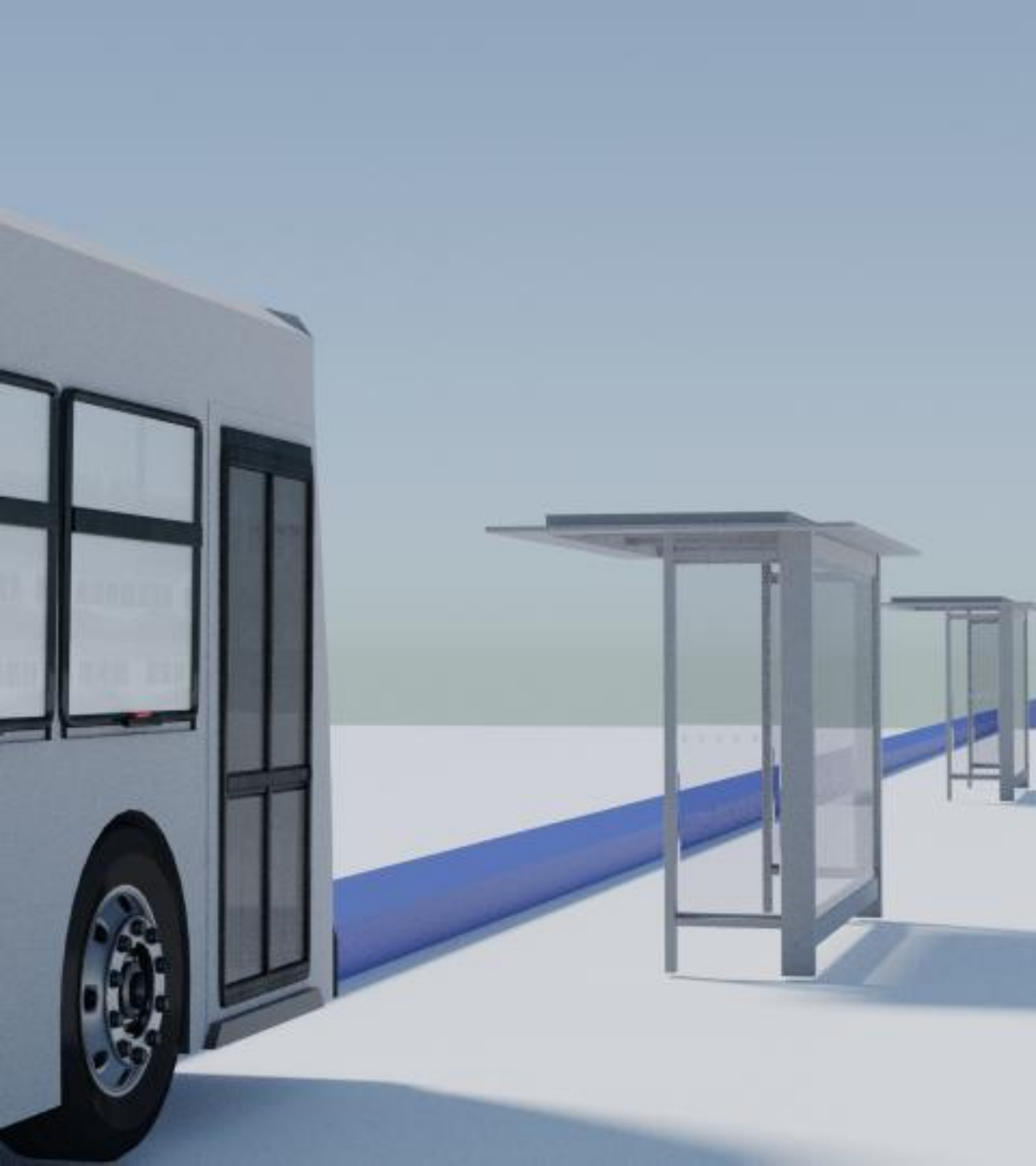
Why is Belleville's
On-Demand **Successful?**

Increased Demand with **New Transit Ridership.**

Providing convenience, large service area (70% larger)

Minimizing or eliminating transfers and zones





Reduced **Costs.**

Use existing infrastructure, vehicles and drivers

Stop based, not door to door

Using global optimization enabling a higher service capacity

Reduced cost per rider kilometer

Reduced wear and tear on vehicles and roads

Value for **Rural Areas**

Offer conventional AND paratransit service, under the same roof

No need to drive vehicles to stops where no one is present

Provide major service coverage at no additional cost, scale effectively into mid-size

Value for **Mid-Size Areas**

Transit service can adjust to irregular demand common in mid-size areas effectively

Offer new service at off-peak times (night, weekends)

Gather data on system growth, ridership patterns

Value for **Urban Areas**

Extend service to underserved areas, un-served times, transit deserts

If subway/metro exists, what happens when the subway isn't running? Coverage area perfect for on-demand.



Public Transit for **Public Good.**

Access

Employment, school, healthcare,
social activities and more

Reduce

Congestion, parking needs, road
maintenance

103 Kilotons

Approx. carbon reduction for small
town switching to on-demand

\$9,641

Saved annually by using transit
per rider

Thank you



Remi Desa