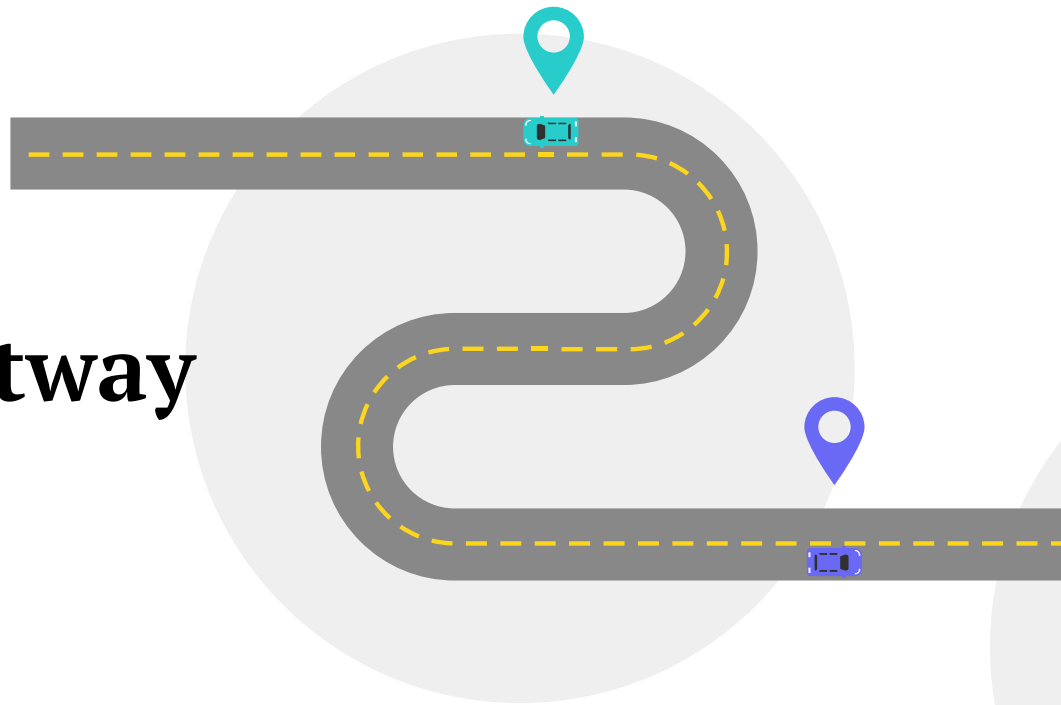


# Strategies for Promoting Rider Connections to Suburban Transitway Stations

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The background features stylized road segments with dashed yellow lines on a gray base, arranged in a circular pattern. Large, light gray circles are also visible, partially cut off by the edges of the frame.

# Strategies for Investigation

# General Strategies

**Improve bike  
and pedestrian  
networks**

**Density,  
diversity, and  
design**



**Improve  
perceived and  
real safety**

**Find a niche,  
know your  
market**

# Deviated Route Service

Transit that operates along a fixed route but which can deviate from the route to pick up or drop off passengers.

It blends elements of conventional transit and demand-responsive services.

Vehicles are typically allowed to deviate from the established route by a specific distance, generally one mile or less.

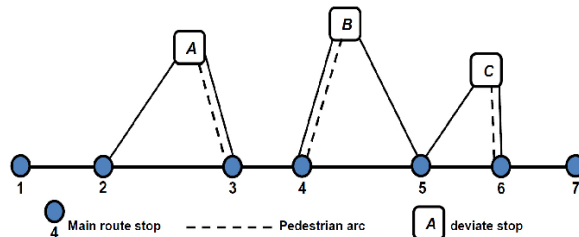


Figure 2. Basic graph layout of a route deviation bus line [4].

Pros:

- Combine regularity of conventional transit with the flexibility of demand-responsive services
- Can help increase ridership in less-dense areas
- Can serve the role of complementary paratransit required by ADA

Cons:

- Greater operating expense
  - Paratransit may require special training and/or infrastructure investments.
- Longer travel times
- More susceptible to delays

# Microtransit

Microtransit refers to demand-driven transit enhanced with technology, typically involving real-time dynamic routing.

Examples include:

- Autonomous vehicles
- Paratransit
- Ride-hailing
- Minibuses



Pros:

- Door-to-door service
- Improved passenger satisfaction
- Potential to serve intra-suburban trips
- Potential to enhance conventional transit service

Cons:

- Higher cost
- Reduced regularity
- Less efficient compared with conventional transit

# Micromobility

Micromobility refers to lightweight vehicles, commonly bicycles or scooters, that are operated by a single person and meant for travel over short distances.

Examples of micromobility include:

- Pedal-assist electric bikes
- Docked bikeshare
- Dockless bikeshare
- Electric scooters



Pros:

- Inexpensive solution to short-distance trips
- Modal shift from personal vehicle use
- Can be used to supplement conventional transit
- Flexible, door-to-door service

Cons:

- Ridership greatly contingent on weather, other factors
- Suitable only for short-distance trips
- Safety concerns
- Exclusive

# Park-and-Ride

In suburban areas, increased distances and decreased safety and comfort for pedestrians put transit services out of reach for many residents.

Park-and-rides offer a politically palatable solution to common urban problems such as road congestion, airborne pollutants, and low transit ridership.



## Pros:

- Increased rider cost and time savings
- Reduced roadway congestion
- Reduced air pollution
- Better land use in urban centers
- Modal shift from personal vehicle use

## Cons:

- Rates of park-and-ride use have declined significantly since COVID-19 pandemic
  - Usage contingent on suburban-urban commuters
- Ineffective land use in suburban areas

# Land Use

Ridership declines over the past 50 years can be attributed to, at least in part, the lack of transit systems appropriately connecting dispersed employment and commercial centers with populations.

Transit-Oriented-Development (TOD):  
Development designed mainly to encourage the use of public transit and create a pedestrian-friendly urban environment.



## Pros:

- Can promote transit ridership, walking, biking.
  - Modal shift from personal vehicle use
- Associated with positive environmental and health benefits

## Cons:

- Expensive
- Politically contentious
- Requires considerable time to implement properly



# Multidestination Network Design

Traditional fixed route services linked radially to downtowns are ill-suited for lateral suburb-to-suburb journeys, the most rapidly growing travel market.

Transit service strategy that focuses only on the central business district (CBD) will capture only a portion of potential transit riders.



Pros:

- Greater flexibility
- Greater accessibility
- Greater destination options

Cons:

- Greater complexity
- Higher operational costs
- Reduced capacity to core areas



# Next Steps

The next steps of our work involve gathering further data on strategies, case studies, and route-specific transit data.



## Future Research Avenues

- Pedestrian and bike improvements
- TNC-supported transit connections
- Transit bike storage
- Employer bike lending programs
- Communication with transit agencies
- Route-specific ridership data
- Identification of additional relevant case studies
  - Case study SWOT analysis