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Moving Public Transportation
Into the Future

# Service Routes and Community Transit Hubs: Right Sizing Transit

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# Competing with the Auto

- It is tough to match the convenience and comfort of the auto
- Low density transit services need to be direct, frequent and running throughout the day and weekends
- Need to provide  convenient connections to regional transit
- Community transit, human service transportation and traditional bus transit need to work together

# Drawbacks of Other Traditional Services

- Traditional Fixed Route Bus Service (Limited geographic coverage outside urban areas)
- Advance reservation transportation (limited times and flexibility)
- Taxi Service (Expensive for frequent trips)
- Specialized human service agency transportation (Limited Eligibility)

# The Challenges

- **Geographic Coverage**: Expanding the availability of service
- **Accessibility**: Offering the door to door aspects of taxi service
- **Choice**: Providing the flexibility of a scheduled service headway
- **Convenience**: Able to accommodate spontaneous trips without advance reservation
- **Integrated:** Services provided to general public and provide connections to traditional transit

# The Case for Service Route or Route Deviation Services

- Can work in rural, small urban and urban settings
- Uses smaller buses that can directly serve congregate housing, medical and shopping centers
- Schedules that can be designed on clock headways to facilitate timed transfers
- Design to provide connections to human service transportation and regional transit options
- Can also be a way to right size traditional transit for lower density corridors

# Service Route Elements

- One component of a family of transit services
- Routes travel through residential neighborhoods
- Schedule with fixed trip intervals
- Routes are open to the general public
- Timetables allow extra time for passenger boarding, paying fare, finding a seat
- Provides connections to traditional bus and rail stations
- Uses small, accessible vehicles to navigate local streets

# Service Route Characteristics

- No Registration, No Reservations
- The Curb-to-Curb Advantages of Advance Reservation/Demand Response
- The Fixed Schedule Advantages of Traditional Bus
- Schedule with Built in Extra Recovery Time for Slower Moving Passengers
- Ideally employs low floor ramp buses

# Advantages for Community Transit Operators

- **Increased Trip Productivity** Per Hour
- Reduced Costs From **Fewer Will-Call Return** Trips for Medical Trips
- Advantages of Fixed Route While Employing **Same Drivers, Vehicles Used** for Existing Advance Reservation

# Customer Advantages

- Schedule Design Incorporates **Clock Headway** to Allow Regional Transit Connections with Minimum Wait Time
- Provide **Customer Choice** of Ride Times Not Locked Into a Set Depart/Return Times
- Ideally, Employs **Low Floor Buses** to Speed Passenger Boarding and Disembarking

# Impact on Non-ADA: Middlesex County (Urban) (NJ)

| Year | Service Type | Passenger Trips | Revenue Hours | Trips per Hour |
|---|---|---|---|---|
| 2005 | Demand | 257,474 | 78,291 | 3.3 |
| 2012 | Demand | 158,794 | 60,918 | 2.6 |
| 2005 | Service Route | 25,244 | 5236 | 4.8 |
| 2012 | Service Route | 402,587 | 39,111 | 10.3 |

# Impact on Rural Non-ADA: Warren County (NJ)

| Year | Service Type | Passenger Trips | Revenue Hours | Trips per Hour |
|---|---|---|---|---|
| 1998 | Demand | 98,634 | 35,178 | 2.80 |
| 2015 | Demand | 73,848 | 24,993 | 2.96 |
| 1998 | Service Route | 0.0 | 0.0 | 0.0 |
| 2015 | Service Route | 98,280 | 8456 | 11.62 |

# Impact on ADA Paratransit: San Joaquin (CA) RTD

| Year | Service Type | Passenger Trips | Revenue Hours | Trips per Hour |
|---|---|---|---|---|
| 2010 | Demand | 37,643 | 14,495 | 2.6 |
| 2013 | Demand | 36,534 | 10,524 | 3.5 |
| 2010 | Service Route | 46,013 | 14,075 | 3.3 |
| 2013 | Service Route | 138,142 | 21,106 | 6.5 |

# Creating Hubs for Community Transit

- Enabling community transit buses to have access to traditional transit stations
- Using regional malls as point of interface between community and traditional transit bus lines
- Create transfers at regional transit park-rides
- Designing hubs between human service transportation and community transportation

# Rail Station Access


- **Access:** Provides community transit riders with direct access to rail service
- **Shared Use:** Enable community transit to extend its reach to commuters and local rail users
- **Promote transit:** Introduce traditional community transit customers to rail transit

# Regional Shopping Malls


- **Access:** Provide access for workers and shoppers of all ages
- **Connections:** Provide connections to other destinations and access to regional traditional transit
- **Flexibility:** Provide specialized transportation populations the options for trip chaining by offering shopping and recreational destinations

# Local Park and Rides


- **Local Access:** Provide local community transit access for auto users
- **Regional Access:** Expand community transit market as first/last mile to regional transit

# Human Service Agency Hubs


- **Shared Use: Encourage agency use of community transit for agency customers**
- **Independence:** Encourage travel training through ready access to community transit
- **Rural Service Extension:** Allow riders to make more distant trips to employment and other destinations via timed transfer

# Conclusions

- The demand for transit is growing
- Providing frequency and span of service in low density areas is tough
- Transit transfers can be made acceptable by creating safe waiting areas and minimizing wait time
- Hubs can result in more efficient use of all forms of mobility

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