Moving from Demand Response to Deviated Fixed Route Service

April 18, 2018, 2:00-3:30 PM ET
Panelists

- Julie Schafer – RLS and Associates
  Senior Associate

- Angie Peters – Union County Public Transit
  Transit Manager

- Frank Thomas – Region V Coordinator
  Rail and Public Transit
  Oregon DOT
Living Well In Wabash Service Planning

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APRIL 18, 2018
Project Overview

♦ Living Well in Wabash County Council on Aging
  ○ Wabash County Rural Transportation
    ▪ Population 32,138
    ▪ Wabash Population 10,253
    ▪ North Manchester 5,907

♦ Goal: More Effective and Efficient Transportation
Wabash County Transportation

- 40,420 Trips to 29,932 Trips Over Last 3 Years
- 9 Vehicles Peak Fleet
- 112 Unduplicated Customers
- 1.75 Trips Per Service Hour
Planning Considerations

♦ Existing Conditions

  ○ Economic/Demographic Status
    ▪ Population Trends
    ▪ Population by Age
    ▪ Employment and Income
      • Density of Households Below Income
      • Zero Vehicle Households
      • Industry and Labor Force

  ○ Transit Propensity
Transit Propensity was calculated at the Block group level using Population Age 65+, Poverty, and Zero Vehicle Households.
Planning Considerations

♦ Don’t Change Service for the Sake of Change
Trip Data

Exhibit: June 2015 Trips

Wabash County
Public
Transportation
Service Evaluation

Legend:
- June 2015 Dropoffs
- June 2015 Pickups
- June 2015 Trend Lines
- Interstate
- Highway
- Major Road
- Local Road
- Minor Road
- Cities/Towns
- Counties
Trip Generators

- Trip Generators Almost Exclusively in Wabash and North Manchester
  - Medical Facilities
  - Stores
  - Human Service Agencies
  - Recreational Activities
  - Employment Centers
Service Area Environment

- Service Area Size
- Roadway Network
- Population Density
- Land Use Patterns
- Travel Constraints
  - Bridges
  - Railroad Crossing
  - Mountains
Increased Efficiency and Effectiveness Goals

♦ Increased Performance
  ○ 1.75 Trips Per Service Hour to 4.5 (estimated)
  ○ Reduced Impact of No Shows
  ○ Improved On-Time Performance
  ○ Reduction in Revenue Miles
  ○ Reduction in Fleet to Serve Area
    ■ Excess Fleet Assigned to Expanding Countywide and/or Out of County Service
Key Considerations

♦ Planning and Data Analysis

♦ Community Involvement for Development
  ○ Survey With Clear Definitions of Service

♦ Route Design Considerations and Time Tests
  ○ Can NOT be Driven by Business or Political Influence
  ○ MUST be Driven by Trip Data and Research
Marketing

♦ The Community Must Know the Service Exists

  o Market in Conjunction with Community Involvement Process
  o Market Prior to System Start-Up
  o Market – Grand Opening
  o On-Going Marketing
Evaluation

♦ Set Performance Goals
  ○ Realistic and Achievable
  ○ Evolving Goals

♦ Allow for Modifications
  ○ Give the System Time to Work but Don’t be Afraid to Make Modifications Based on New Data
Preserving existing ridership on Fixed Route at risk of losing transportation due to high system costs to maintain staff for Paratransit Services that were not being utilized often.
- Setting a scheduling window: we used our paratransit day-in-advance parameters.
- Establishing timeliness expectations: making sure passengers are aware of lack of dwell time for this service mode.
- Establishing the service area: we chose to meet the ¾ mile paratransit radius, but reserved the right to send an accessible mini-van for anything beyond ¼ from the route line for timeliness.
- Ensuring the parameters are understood: mileage determined by point-to-point travel, not as the crow flies.
- Reassuring existing riders of their services: such as clarifying that flag stops will still be permitted.

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**Example of short deviation**

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**DEVIATED ROUTE POLICIES**
After noticing a trend of overall increasing ridership for deviated route, but not an increase in riders who were requesting deviations we opted to advertise on multiple platforms to the public that deviations were available, how they worked, and that anyone can request a deviation. Our requests for deviations have doubled since that, but none of the requests have caused the bus to run late, or prompted the need to send an accessible mini-van in order to keep the main bus on time for the rest of the route.
Rural Route Deviation

Quick Case Studies from Oregon
City of Pendleton

Population: 16,500
Presently Served By: Tribal Routes, Taxi Voucher Program, Nonprofits / NEMT
Annual Rides: 68,000 to 100,000
Largest Challenge: Demand exceeds capacity
Other Challenges: First Mile / Last Mile
City of Pendleton

* First draft of a first formal transit system
* Using the rider data it has to anticipate demand
* Assumes coverage is a top priority
* Stops likely to consolidate with experience
City of John Day

Population: 1,744
Presently Served By: Demand Response
Intercity Lines

Annual Rides: 30,000 to 35,000
Largest Challenge: Demand exceeds capacity
Other Challenges: Connecting nearby communities
City of John Day

48.81 miles
1 vehicle
$131.2k / year
Within 0.5 mi of stops:
171 population
74 jobs
City of John Day

* Example of more advanced planning
* Utilizes known patterns and travel sheds
* Prioritizes frequency and trip density
* Flexibly connects nearby communities
* Incorporates lessons from 2017 eclipse
City of Burns-Hines

Population: 2,806
Presently Served By: Demand Response Intercity Lines
Annual Rides: 40,000 - 45,000
Largest Challenge: Demand exceeds capacity
Other Challenges: Shoestring budget
City of Burns-Hines

* Most advanced, tested concept route
* Uses known travel patterns and connections
* Prioritizes service preservation
* Seeks to build upon a "transit culture"
* Great example of Tribal partnership
Common Takeaways

* Urban efficiency of scale on a rural budget
* Cost effective and passenger friendly
* Recycles a lot of adopted planning and policy
* Shortest route isn't always straightest
* Requires short term care and feeding

* ADA doesn't take a vacation!!
* NTD reporting is tricky
Resources:

Remix catalog of these concept routes
https://platform.remix.com/map/7616e6e?latlng=43.5784,-119.03013,z14

Contact Me!
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Shameless Plug:
All images and graphics in this presentation can be found in the National RTAP Marketing Toolkit at:
http://nationalrtap.org/marketingtoolkit/Marketing-Tools
Thank You

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Recording will be posted at nationalrtap.org/webinars within one week. Transcripts can be made available upon request.