Existing Conditions Presentation
March 2018

Tulsa Transit

INCOC, Community Service Council, CTG Transportation Group
AERO BRT is coming. But how do we support the rest of the network?
Study Overview

Connecting Progress is an operations analysis to maximize transit service.

Potential outcomes:
• Route connections
• Frequency
• Service span
• Trip speed
Before we spill a drop of digital ink on a revised system we must understand the system inside and out.
Market Analysis

Transit Ridership Indicators:

- Population density
- Employment density
- Household Income
- Unemployment status
- Car Ownership

- Under 25
- Over 65
- Minority status
- Limited English Proficiency (LEP)

Economic

Demographic
Employment Density - Scores

Study area median employment score: 0.06

Market Analysis

Households - Density per Acre

Study area median household density: 2.05 HH/acre
Market Analysis

Study area median percentage with household income under $30,000: 28.7%

Study area median percent unemployment: 6.1%
Market Analysis

Study area median percentage zero vehicle households: 4.9%
Market Analysis

Over 65 Population - Density per Acre

Under 25 Population - Density per Acre

Study area median over 65 density: 0.60 persons/acre

Study area median under 25 density: 1.44 persons/acre
Market Analysis

Study area median Minority/Hispanic density: 1.59 persons/acre

Study area median LEP HH density: 0.01 HH/acre
The Transit Propensity Index shows potential transit ridership based on demographics. The higher the index (and darker the color), the more likely transit riders are located in the area. Demographic data in this map is from the American Community Survey 5-year Estimates (2012-16) provided by the United States Census Bureau, the most recent available at the time of analysis. The geography is Census Block Group.
Trip Patterns

• Used INCOG regional travel model trip tables (data for all trips, not just transit)
• Downtown travel accounts for 9% of trips in Tulsa Transit service area
• Top 10 trip pairs clustered in east and southeast Tulsa
Peer Analysis

- Five peers selected in the middle part of the US
- All peers within 500 miles of Tulsa
- Data is FY2015 submittal to the National Transit Database
Peer Analysis - Service Statistics

Peer Analysis - FY15 Revenue Hours

Peer Analysis - FY15 Revenue Miles

Peer Analysis - FY15 Passenger Trips
Peer Analysis - Service Productivity
Peer Analysis - Financial Productivity
System Level Evaluation

• System structure and frequency
• Stop level activity
• Segment productivity
System Frequency
System Frequency
Stop Activity
Stop Activity
Flag Stops

Flag Stop Heat Map Analysis

Legend
Flag Stops
250 Feet Radius
- 1 - 10
- 11 - 50
- 51 - 100
- 101 - 200
- 201 - 373

Tulsa International Airport
County Boundaries
Parks

The Heat Map assesses the prevalence of flag stop activity throughout the system, and consists of over 14,000 stops over a two-week period in December 2017. The darker the color, the greater the number of flag stops in the area. This map is divided into cells where the values represent the number of times a flag stop occurred in that cell.

Note: Downtown Flag stops were excluded

Scale: 0 1 2 3 4 Miles
Route Level Evaluation

Routes evaluated on multiple measures

• Service productivity
• Economic productivity
• Financial productivity
Daytime Route Evaluation

Best performing daytime routes (green)
• 105 – Peoria
• 100 – Admiral
• 221 – 21st Street
• 101 – Suburban Acres
• 111 – 11th Street

Worst performing daytime routes (red)
• 508 – Broken Arrow Connection
• 418 – West Connector
• 306 – Southeast Industrial
• 471 – 71st Street
• 251 – Fast Track

Note: Routes are listed in rank order
Night/Sunday Route Evaluation

Best performing daytime routes (green)
• 860 – East Nightline
• 870 – South Nightline

Worst performing daytime routes (red)
• 890 – West Nightline
• 850 – Northeast Nightline

Note: Routes are listed in rank order
Conclusions
1. Transit propensity shows downtown scores highly, as does a ring of zones 5-7 miles away from downtown.

2. Midtown transit propensity is lower due to income, low unemployment, and demographics.
1. AERO BRT generally follows the most productive transit corridors in the city.

2. Lowest productivity in the far south where there are important destinations but sprawl in between.
THANK YOU!

Additional Information can be found at https://www.facebook.com/groups/Connectingprogresstulsatransit

Contact Information:
Liann Alfaro
info@tulsa transit.org