

Managed Lanes and Transit Working Together for a Better Community

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10/31/2018



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Background

- **Why transit is important for an urban community?**
 - ❖ Quality of life largely depends on how conveniently the residents commute to their work place
 - ❖ Urban community faces severe congestion
 - ❖ Urban residents need alternate travel choices other than passenger car
- **How to make transit service more attractive?**
 - ❖ Decision making criteria:
 - ✓ Travel Time
 - ✓ Travel Cost
 - ✓ Frequency of Service
 - ❖ While evaluating travel options, if urban residents find that transit services don't compete with passenger car in any of these criteria, they decided to look backwards from transit services

What are at Stake now?

- There has been a recent speculation that transit ridership has begun to decline after a decent growth over the past two decades (between 1995 and 2015).
- Ridership report of American Public Transportation Association (APTA) also supports the conjecture (i.e. 3% declined in general).
- Therefore, it is not surprising that policy makers will question the investments on public transit, particularly with the emergence of ride sharing (i.e. Uber, Lyft) options as they are perceived to take away passengers from public transit.

Can Managed Lane Help Transit?

- From engineering perspective, managed lane is a traffic operational solution for more reliable and congestion free work trips.
- However, managed lane carrying only passenger car would not provide a sustainable solution to the complex urban traffic problem as it also induces more demand.
- From planning perspective, an ideal sustainable solution would be if transit is incorporated into the managed lane operational policy.
- Transit service operated in managed lanes offers a great potentiality to compete with passenger car, as transit would operate non-stop in a congestion free traffic condition. Thereby, travel time would be competitive without incurring additional cost (transit are usually toll-free).

Study Overview

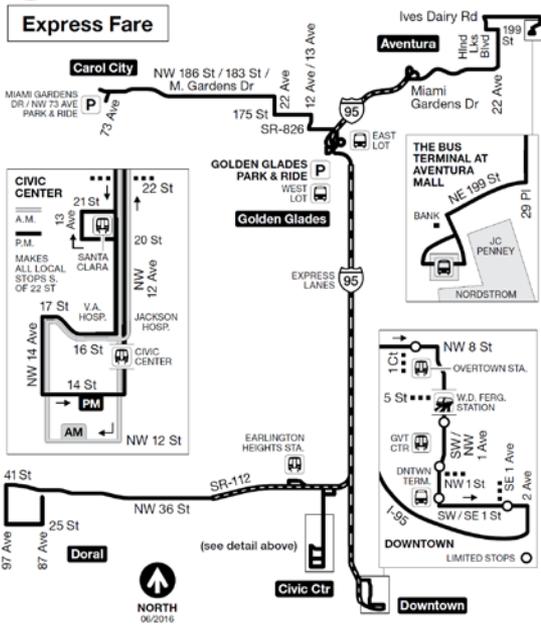
- **Study Objective** : Transit Routes in Managed Lanes are getting more or less attractive?
- **Study Area** : 95-Express Corridor
- **Study Period**: Sept 2015 – August 2018
- **Data Sources**:
 - ❖ Miami Dade Transit
<https://www.miamidade.gov/transit/ridership-technical-reports.asp>
 - ❖ Broward County Transit
<http://www.broward.org/BCT/Pages/Facts.aspx>



Bus Services Operated along I-95 Managed Lanes

95-Express Bus Service						
Route #	Route Description	Destination: Miami Downtown (Y/N)	Weekday vs. Weekend	Hours of Operation: Peak vs. Off-Peak	Frequency	
Miami-Dade Transit	95	Golden Galdes Park & Ride /Downtown Miami	Yes	Weekday Only	Peak Hour only NB: AM Peak (05:50 AM - 10:12 AM), PM Peak (03:27 PM - 07:56 PM) SB: AM Peak (05:28 AM - 09:50 AM), PM Peak (02:23 PM - 06:35 PM)	
	195	Broward Blvd. /Downtown Miami	Yes	Weekday Only	Peak Hour only NB: AM Peak (06:17 AM - 08:21 AM), PM Peak (03:45 PM - 07:52 PM) SB: AM Peak (05:45 AM - 09:28 AM), PM Peak (04:37 PM - 06:27 PM)	NB: 15 minutes SB: 15 minutes
	196	Sheridan St. /Downtown Miami	Yes	Weekday Only	Peak Hour only NB: AM Peak (06:28 AM - 08:28 AM), PM Peak (03:35 PM - 07:28 PM) SB: AM Peak (05:45 AM - 09:19 AM), PM Peak (04:18 PM - 06:14 PM)	NB: 15 minutes SB: 15 minutes
	295	Broward Blvd. /Miami Civil Center	No	Weekday Only	Peak Hour only NB: AM Peak (05:57 AM - 08:32 AM), PM Peak (03:05 PM - 08:49 PM) SB: AM Peak (05:30 AM - 09:40 AM), PM Peak (04:07 PM - 07:45 PM)	NB: 30 minutes SB: 30 minutes
	296	Broward Blvd. /Miami Civil Center	No	Weekday Only	Peak Hour only NB: AM Peak (06:10 AM - 08:12 AM), PM Peak (03:10 PM - 08:55 PM) SB: AM Peak (05:20 AM - 09:27 AM), PM Peak (04:24 PM - 07:55 PM)	NB: 30 minutes SB: 30 minutes
Broward County Transit	106	Miramar Regional Park/Miami Civic Center	No	Weekday Only	Peak Hour only NB: AM Peak (05:53 AM - 07:47 AM), PM Peak (03:10 PM - 08:58 PM) SB: AM Peak (05:10 AM - 09:28 AM), PM Peak (04:26 PM - 07:48 PM)	NB: 15~30 minutes SB: 15~30 minutes
	107	University Dr. & Pines Blvd. / Miami Civic Center & Downtown Miami	Yes	Weekday Only	Peak Hour only NB: AM Peak (06:17 AM - 07:55 AM), PM Peak (03:40 PM - 08:05 PM) SB: AM Peak (05:15 AM - 09:42 AM), PM Peak (05:21 PM - 06:31 PM)	NB: 30~35 minutes SB: 30~35 minutes
	108	North Perry Airport/Miami Civic Center	No	Weekday Only	Peak Hour only NB: AM Peak (06:04 AM - 07:24 AM), PM Peak (03:05 PM - 08:41 PM) SB: AM Peak (05:35 AM - 08:49 AM), PM Peak (04:05 PM - 07:41 PM)	NB: 15~30 minutes SB: 15~30 minutes
	109	CB Smith Park & Ansin Sports Complex/Downtown Miami	Yes	Weekday Only	Peak Hour only NB: AM Peak (06:37 AM - 07:57 AM), PM Peak (03:20 PM - 08:01 PM) SB: AM Peak (05:35 AM - 09:49 AM), PM Peak (05:00 PM - 06:20 PM)	NB: 15~30 minutes SB: 15~30 minutes

Transit Ridership – Route 95 (Miami-Dade)

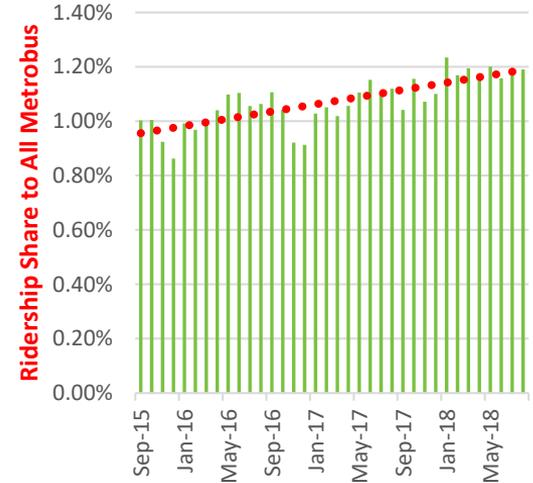


Ridership Trend - Route 95



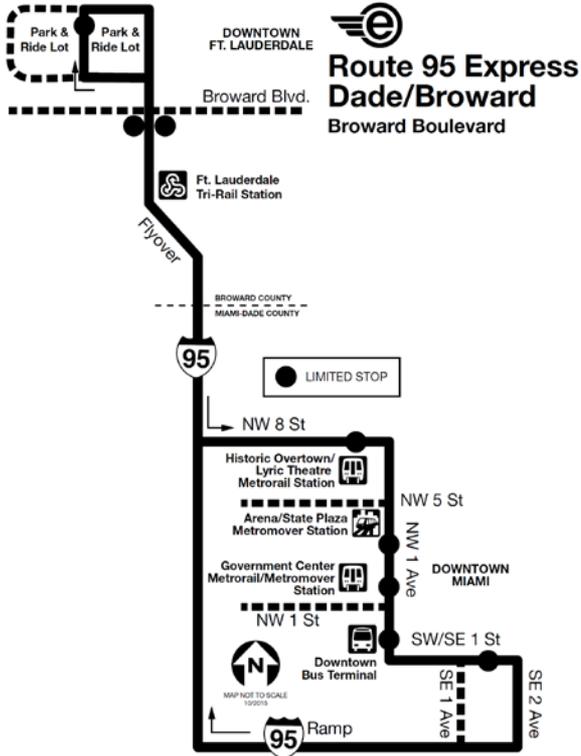
Ridership Trend: Decreasing

Ridership Share - Route 95

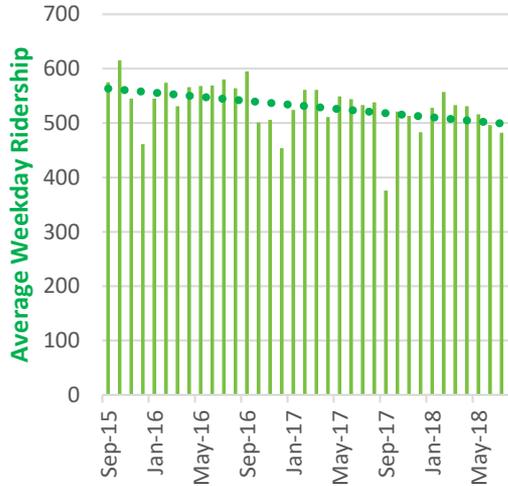


Ridership Share: Increasing

Transit Ridership – Route 195 (Miami-Dade)

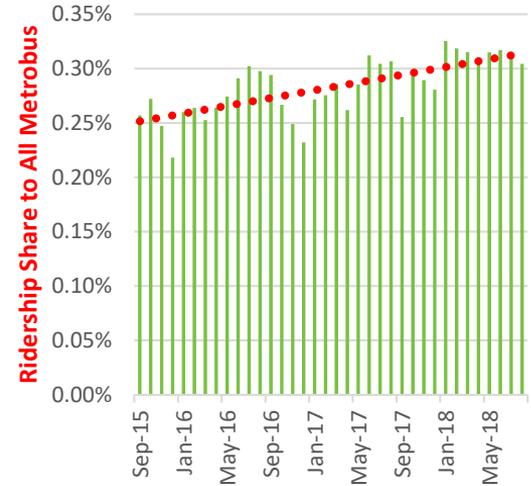


Ridership Trend - Route 195



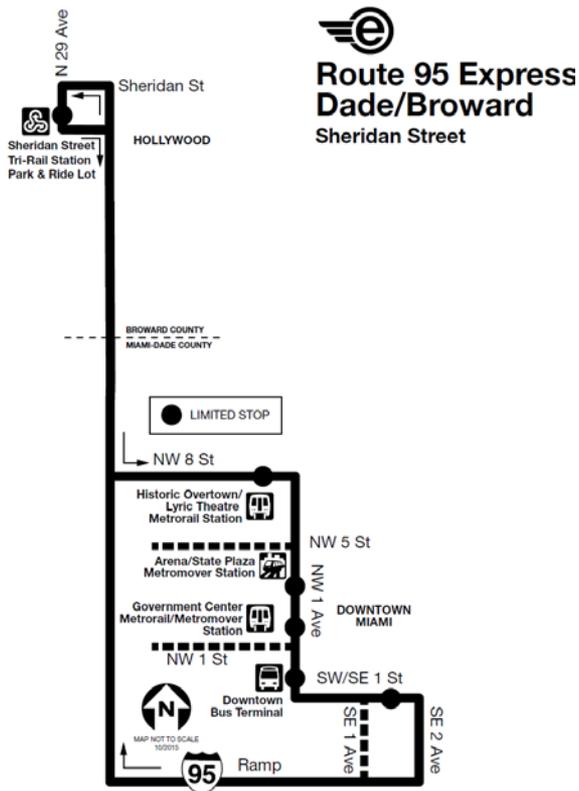
Ridership Trend: Decreasing

Ridership Share - Route 195



Ridership Share: Increasing

Transit Ridership – Route 196 (Miami-Dade)

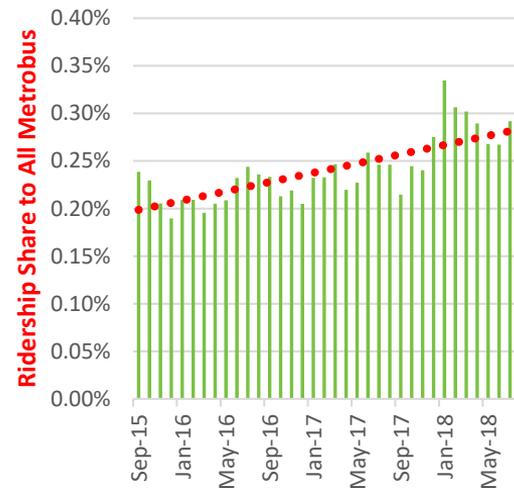


Ridership Trend - Route 196



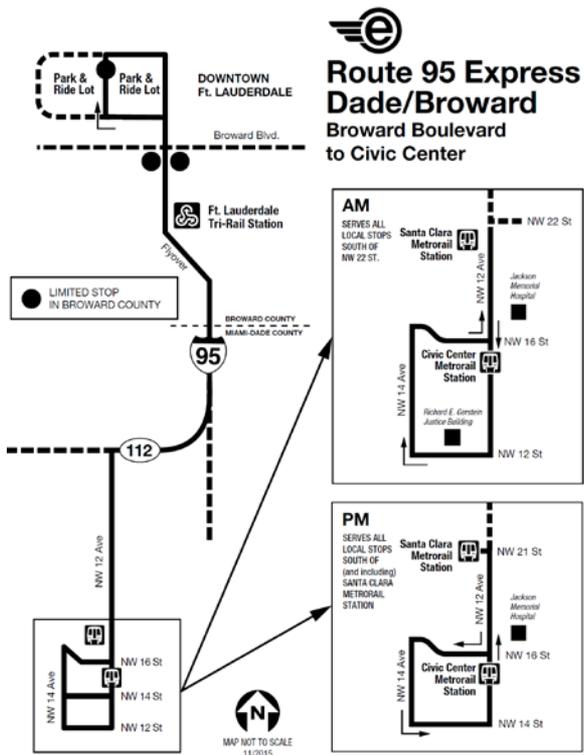
Ridership Trend: Constant

Ridership Share - Route 196

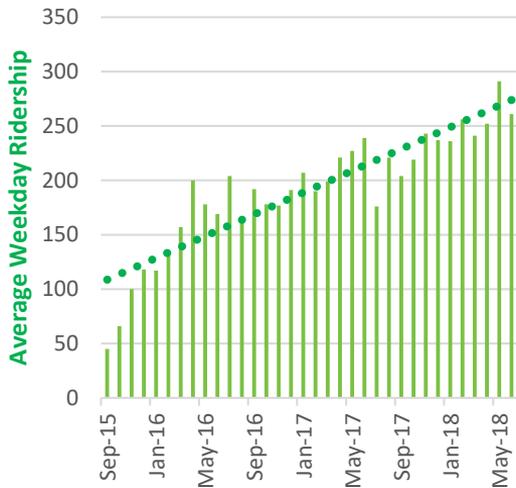


Ridership Share: Increasing

Transit Ridership – Route 295 (Miami-Dade)

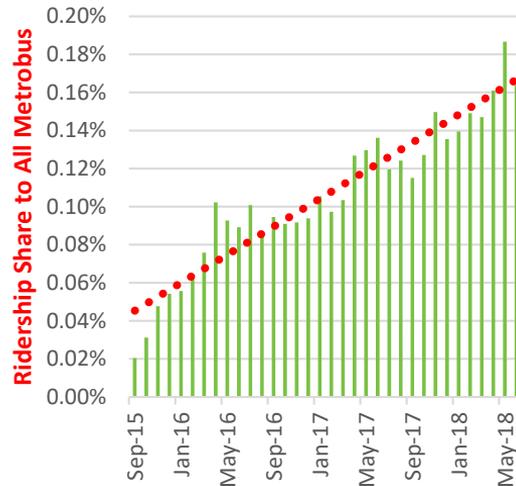


Ridership Trend - Route 295



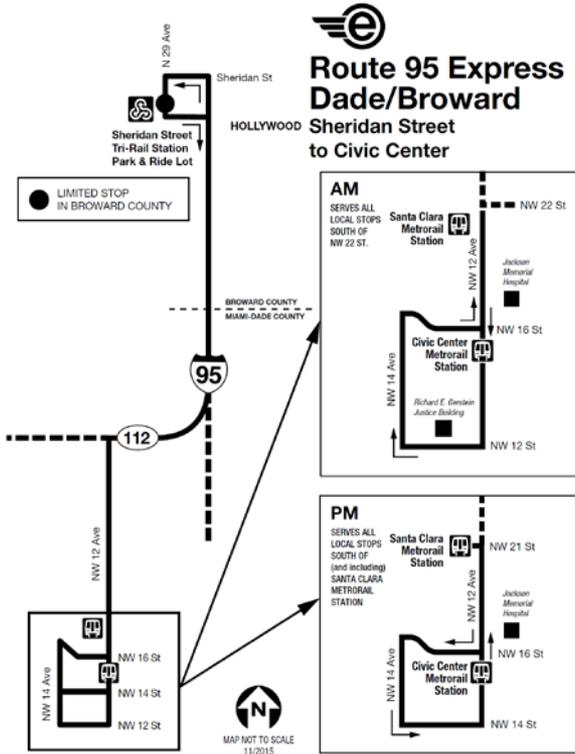
Ridership Trend: Increasing

Ridership Share - Route 295

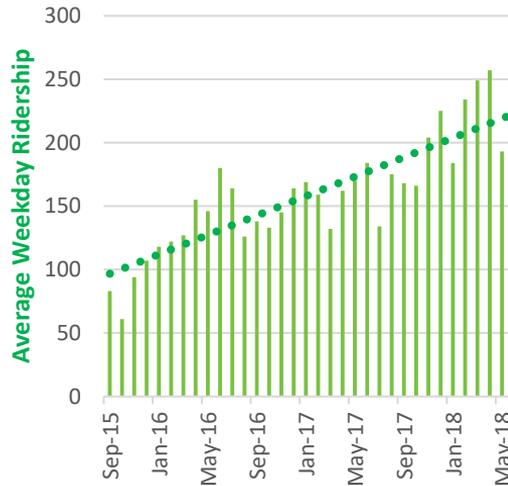


Ridership Share: Increasing

Transit Ridership – Route 296 (Miami-Dade)

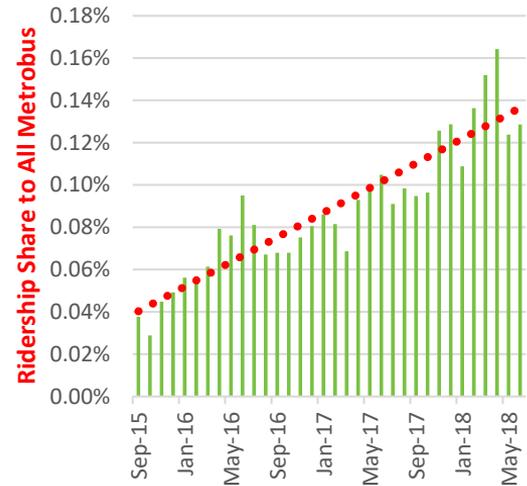


Ridership Trend - Route 296



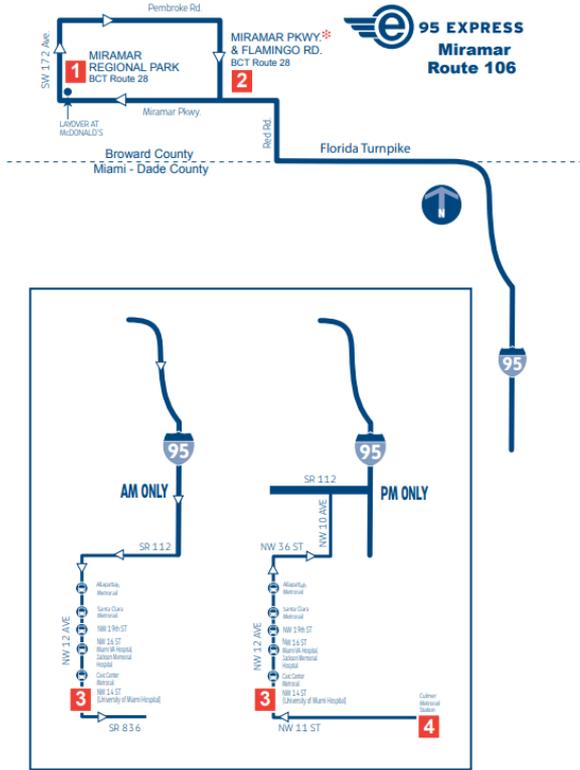
Ridership Trend: Increasing

Ridership Share - Route 296

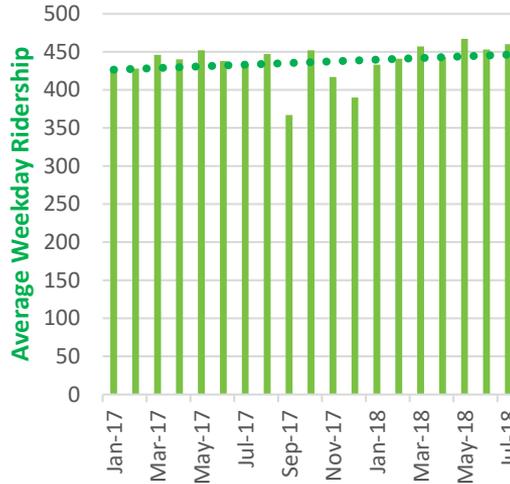


Ridership Share: Increasing

Transit Ridership – Route 106 (Broward)

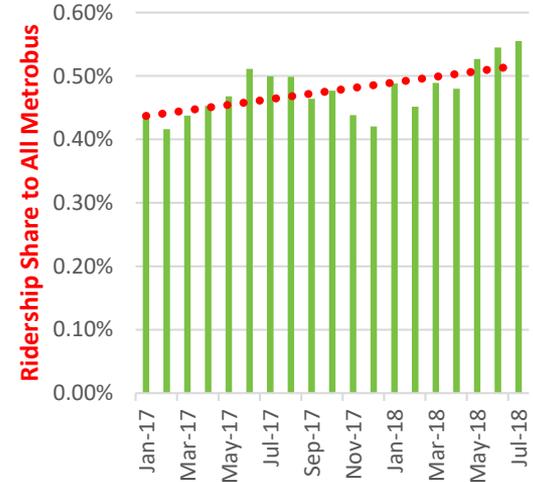


Ridership Trend - Route 106



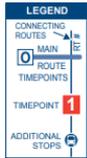
Ridership Trend: Constant

Ridership Share – Route 106

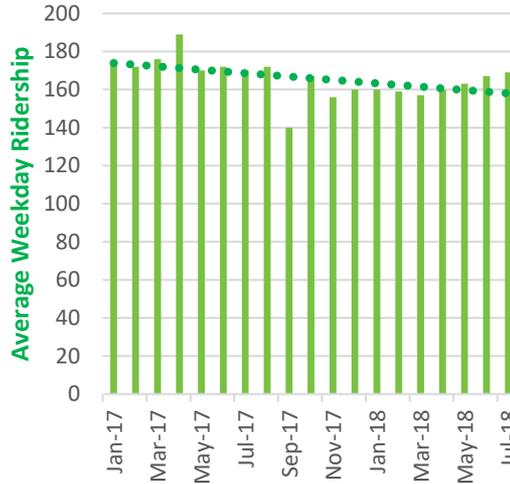


Ridership Share: Increasing

Transit Ridership – Route 107 (Broward)

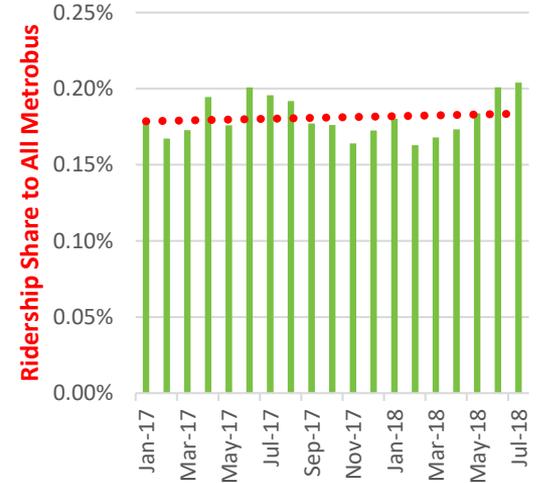


Ridership Trend - Route 107



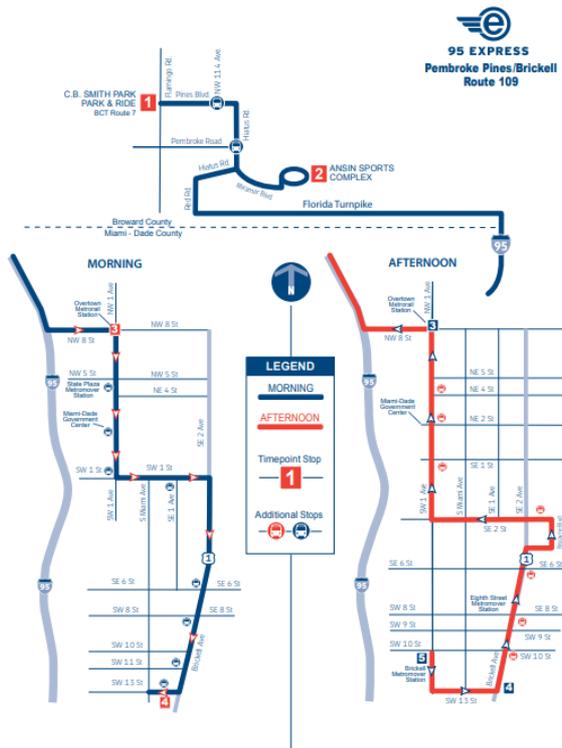
Ridership Trend: Decreasing

Ridership Share – Route 107



Ridership Share: Constant

Transit Ridership – Route 109 (Broward)

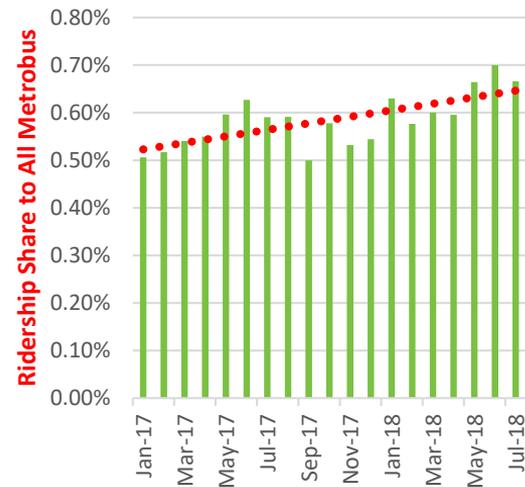


Ridership Trend - Route 109



Ridership Trend: Increasing

Ridership Share – Route 109



Ridership Share: Increasing

Ridership Summary

Bus Route	County	Ridership Trend	Ridership Share
Route 95	Miami-Dade	Decreasing	Increasing
Route 195	Miami-Dade	Decreasing	Increasing
Route 196	Miami-Dade	Constant	Increasing
Route 295	Miami-Dade	Increasing	Increasing
Route 296	Miami-Dade	Increasing	Increasing
Route 106	Broward	Constant	Increasing
Route 107	Broward	Decreasing	Constant
Route 108	Broward	Constant	Increasing
Route 109	Broward	Increasing	Increasing

Study Summary

- The study found that transit ridership is declining in the Miami-Dade and Broward County in general, as suggested by the American Public Transportation Association (APTA).
- However, it would be misleading to ascribe the declined ridership trend to all bus routes.
- Overall attractiveness of transit services that are operated in managed lanes improved even though the trend suggests otherwise.
- This study could be useful to identify the contributing factors behind success of transit routes in managed lanes or failure of transit routes in urban streets.

Questions/Answers

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