



SE 17th Street Origin-Destination (O-D) Analysis

Kittelson & Associates, Inc. for the City of Fort Lauderdale
2018/06/04

Study Background

83

RECOMMENDATIONS

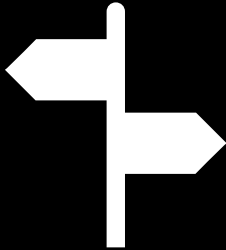


SE 17th Street Mobility Plan

Basic Facts



40K vehicles per day

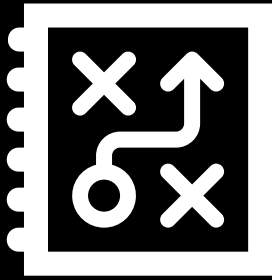


Several major visitor destinations

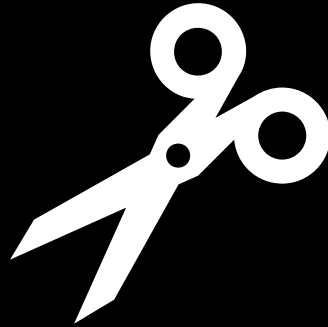


Retail and commercial hub

Key Questions



Circulation



Cut-through



Regional
patterns

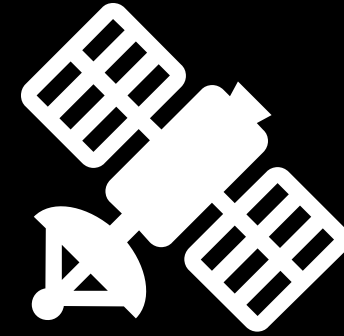
STREETLIGHTDATA



Data Sources

400K

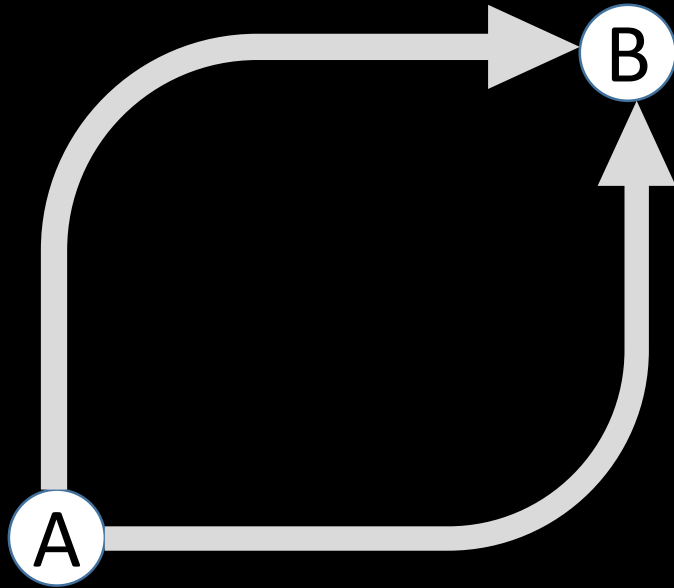
DATA POINTS IN 2017



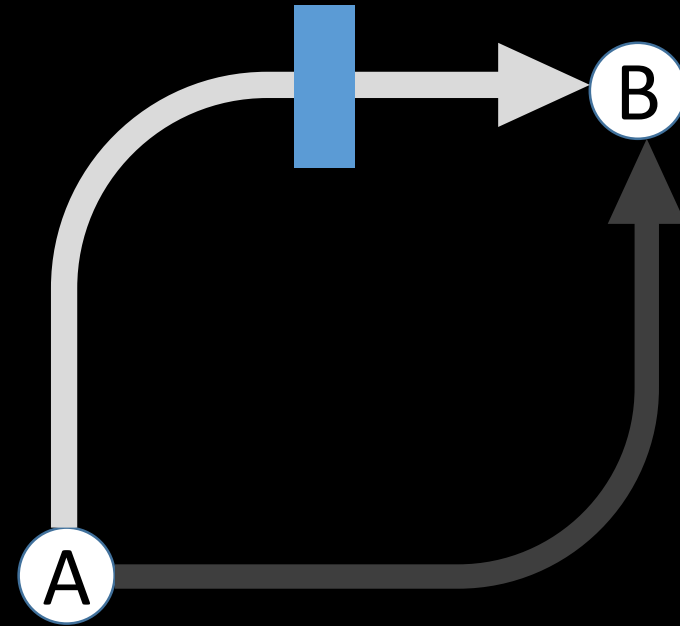
- Smartphones
- Connected cars
- Smart devices

Types of Analysis

Origin-Destination

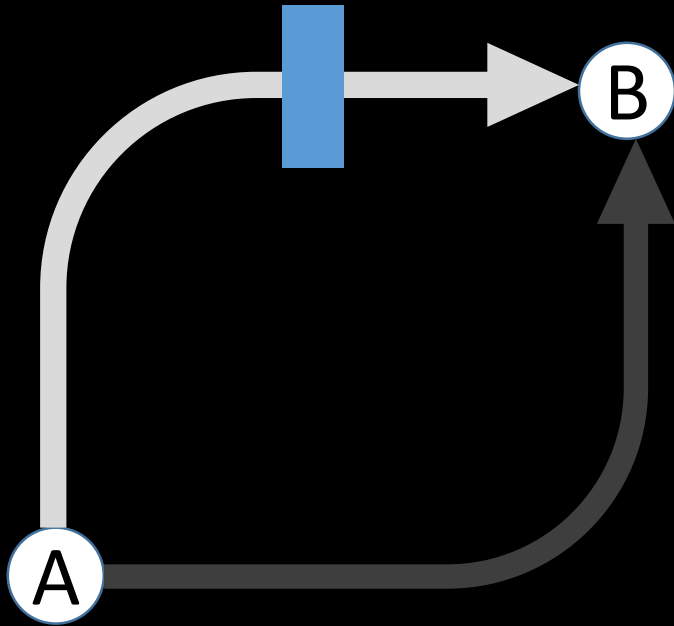


Origin-Destination with Middle Filter

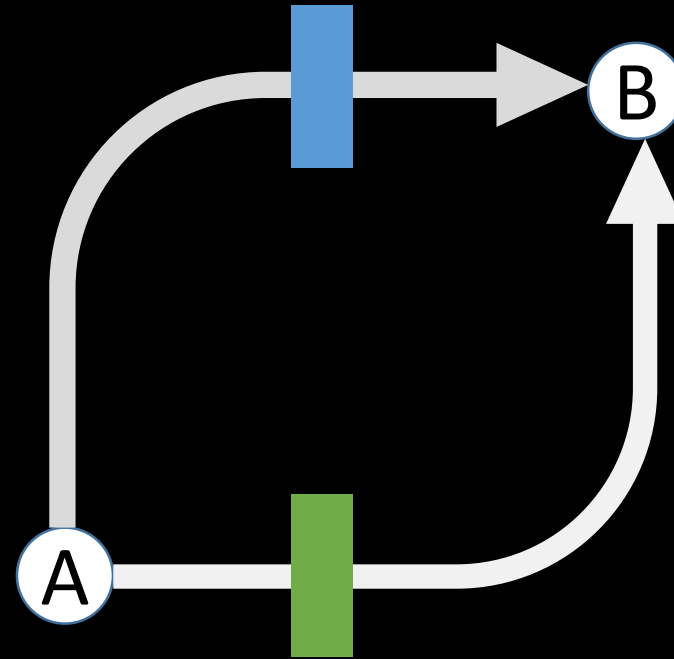


Types of Analysis

Origin-Destination with **Middle Filter**



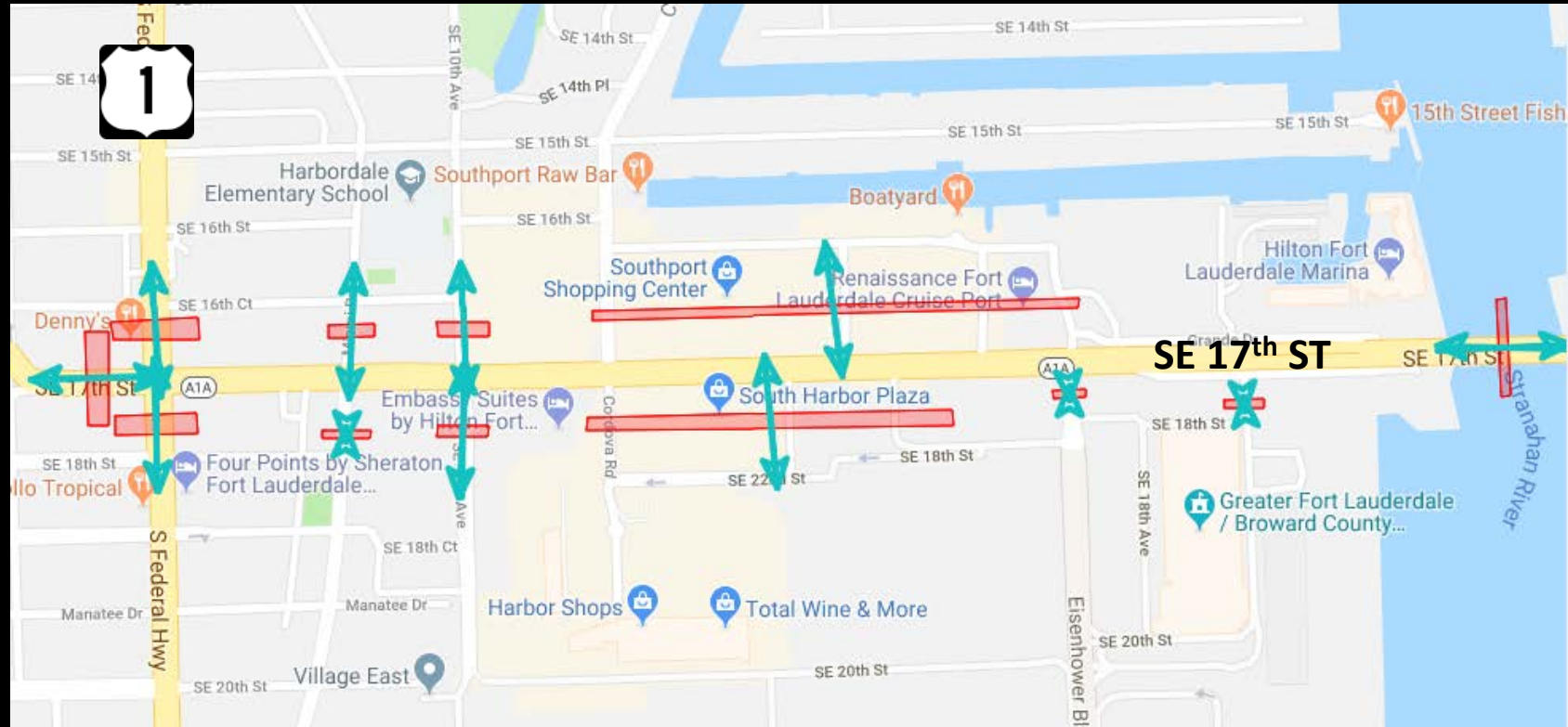
Origin-Destination with
Multiple **Middle Filters**



Analysis Zones

24

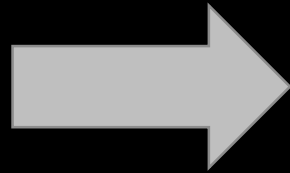
O-D ZONES



Analysis Zones

24

O-D ZONES



300+

O-D PAIRS WITH TRIPS

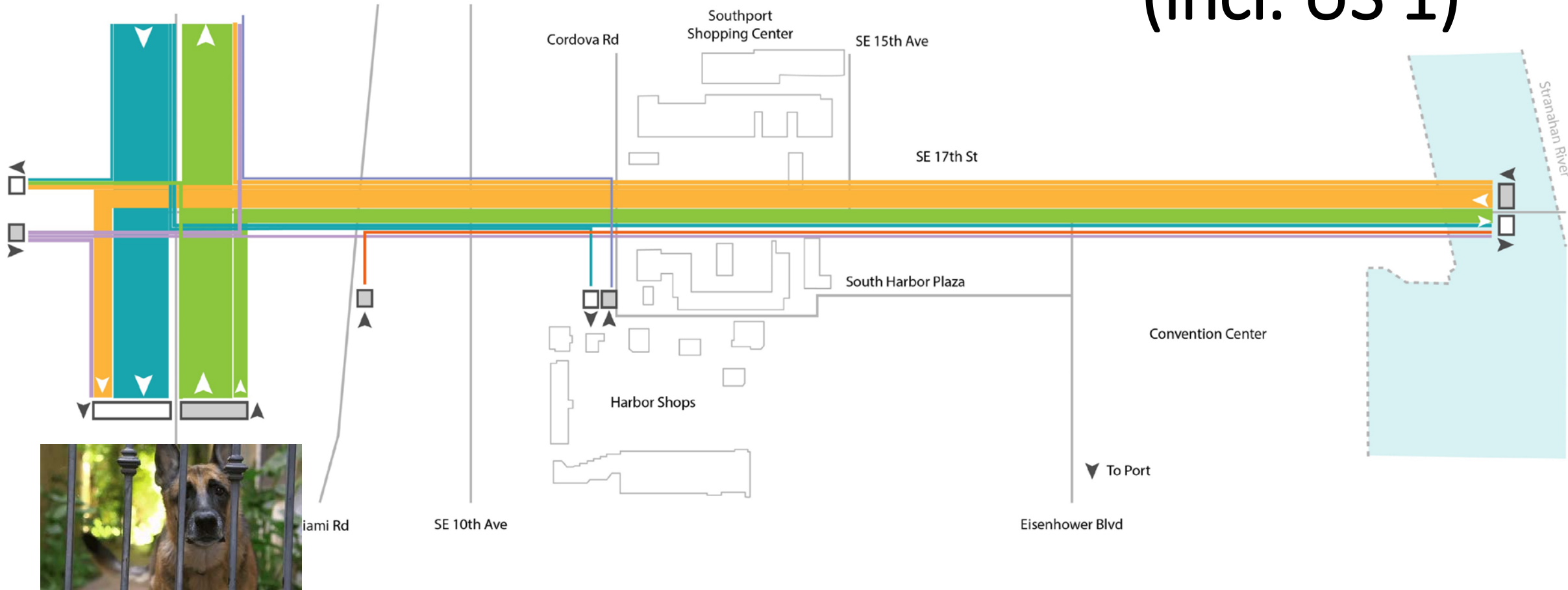


Simplified Circulation

Omitting all movements accounting for less than one percent of total traffic



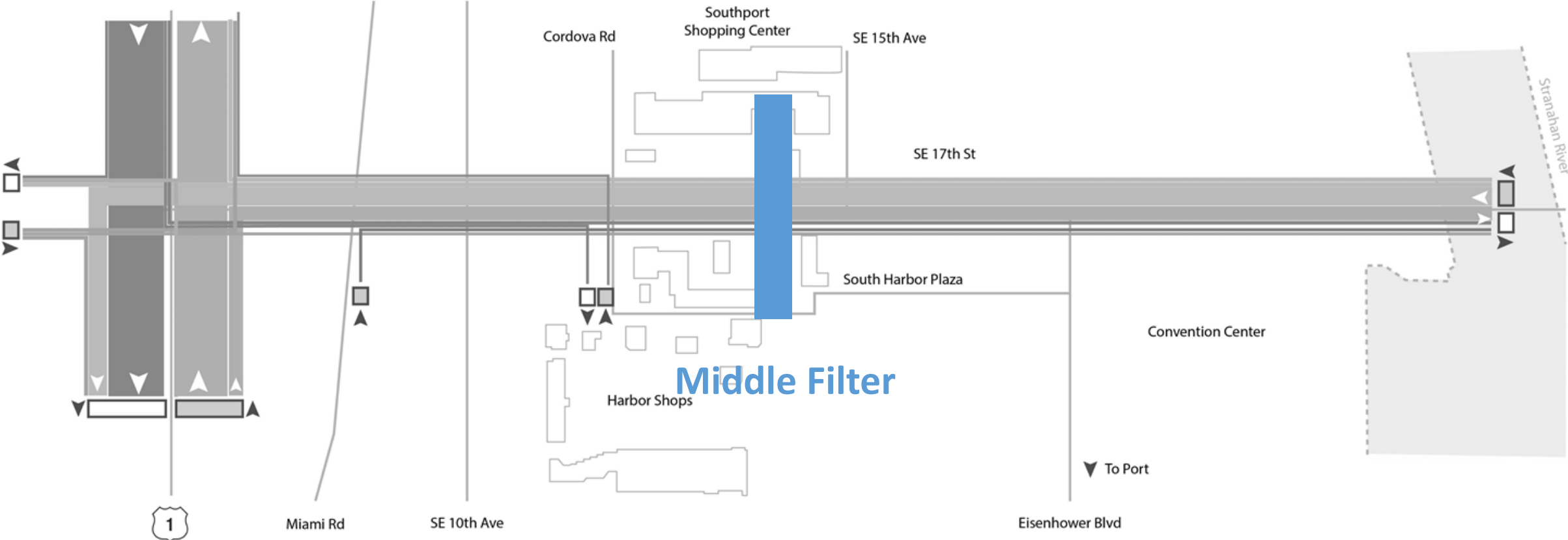
Context (incl. US 1)



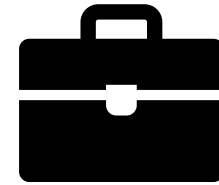
Data Scope:
2017, all days



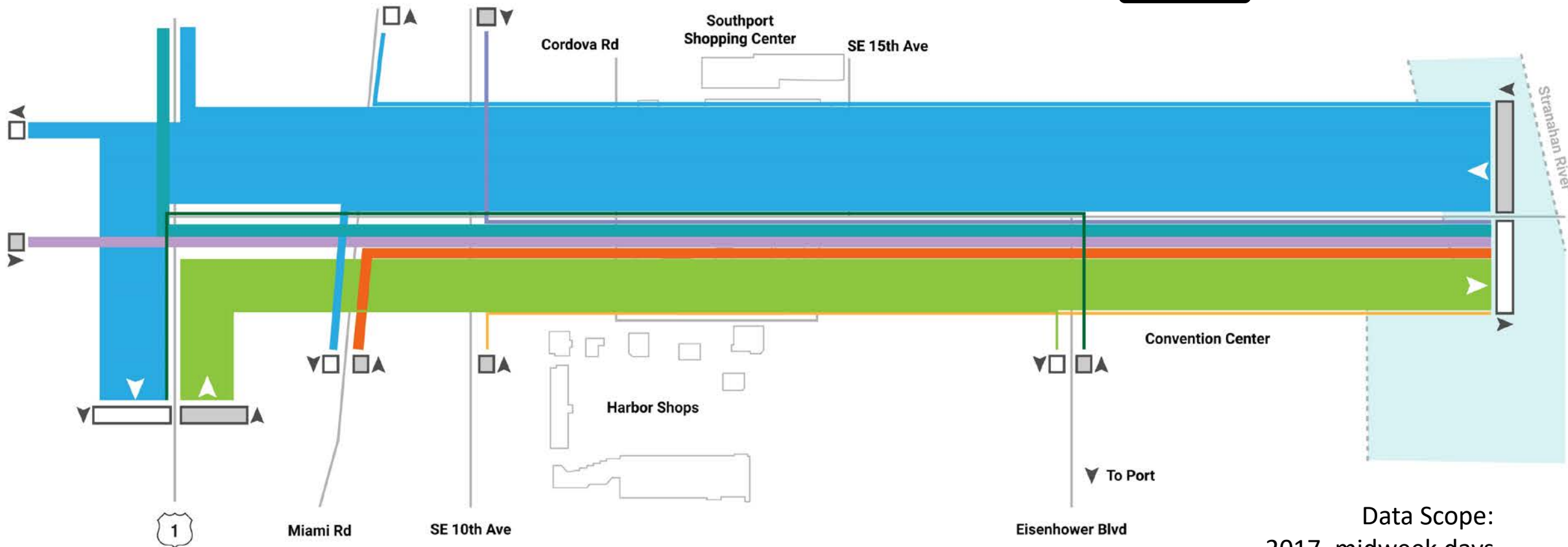
Applied Middle Filter



SE 17th Street



All day



Data Scope:
2017, midweek days

Origin Zone
Destination Zone

SE17th_wo_US1_EB
US1_so_SE17th_NB
US1_no_SE17th_SB

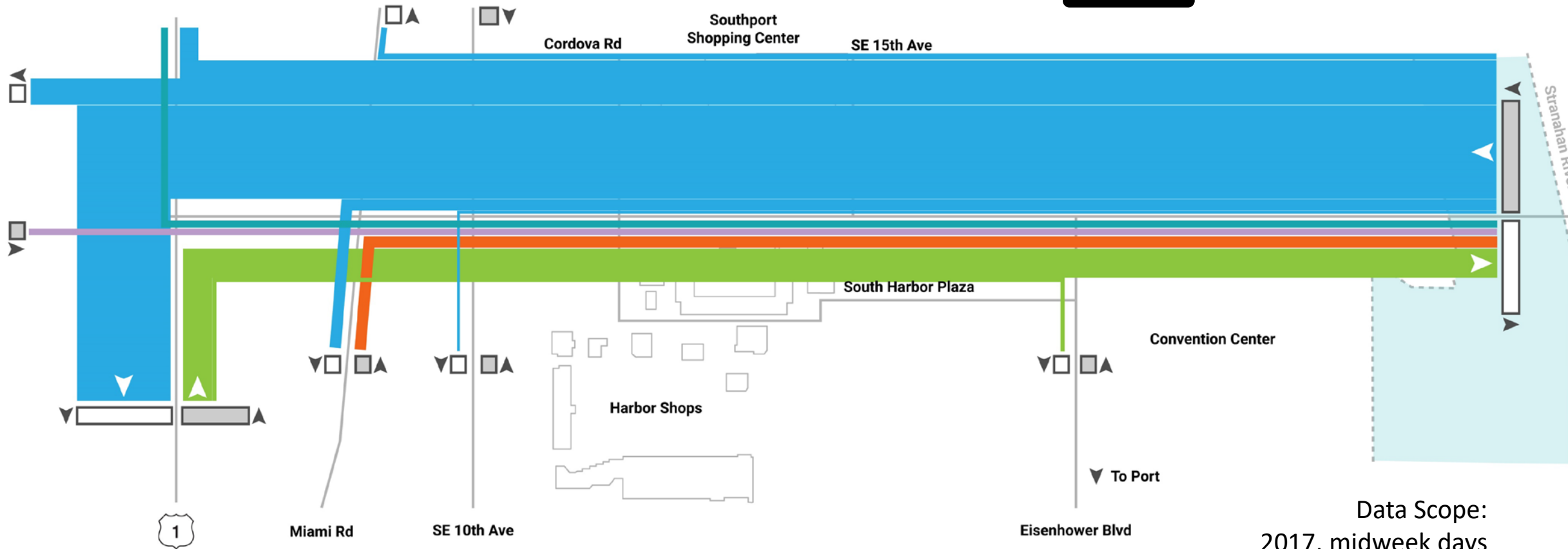
MiamiRd_so_SE17th_NB
SE10Ave_no_SE17th_SB
SE10th_so_SE17th_NB

Eisenhower_so_SE17th_NB
SE17th_Causeway_WB

SE 17th Street



6-10 AM



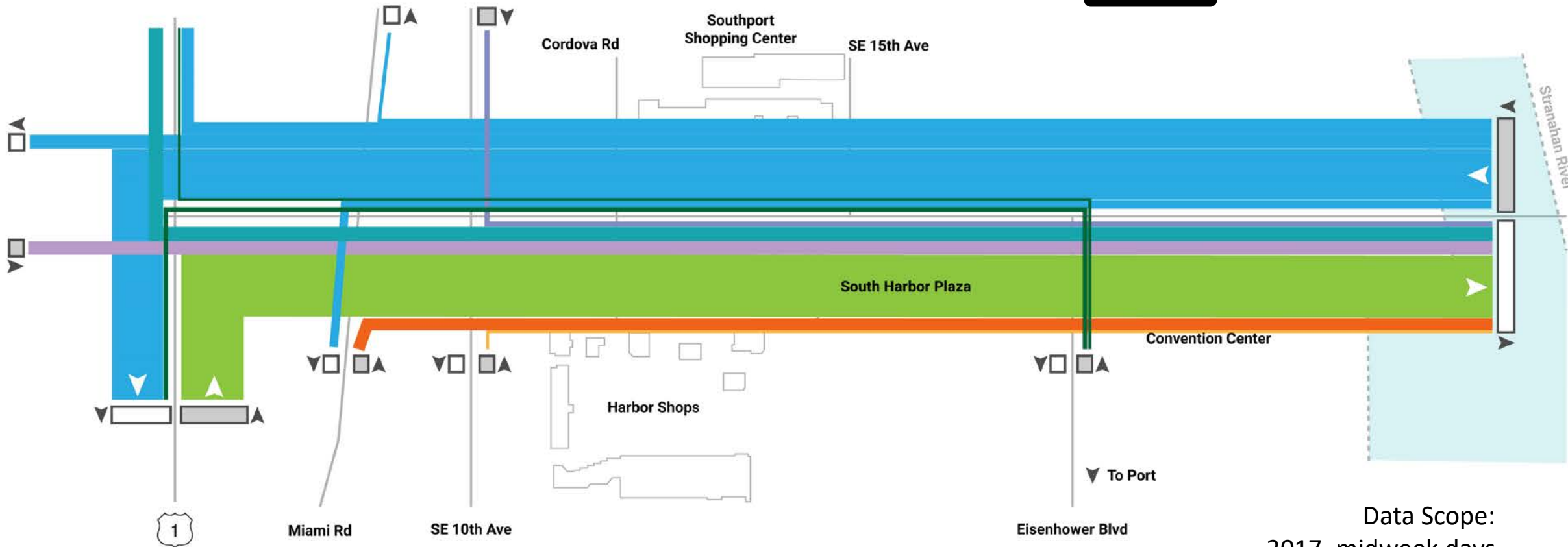
Data Scope:
2017, midweek days

- Origin Zone
- Destination Zone
- SE17th_wo_US1_EB
- US1_so_SE17th_NB
- US1_no_SE17th_SB
- MiamiRd_so_SE17th_NB
- SE10Ave_no_SE17th_SB
- SE10th_so_SE17th_NB
- Eisenhower_so_SE17th_NB
- SE17th_Causeway_WB

SE 17th Street



3-7 PM



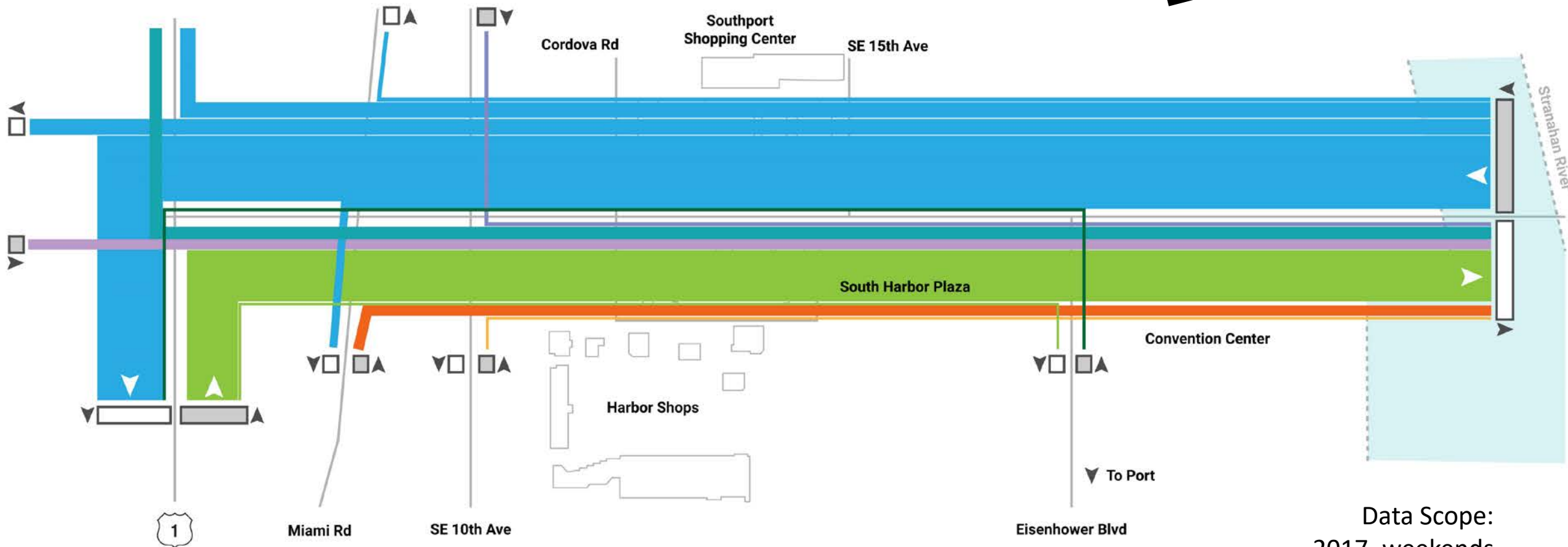
Data Scope:
2017, midweek days

- Origin Zone
- Destination Zone
- SE17th_wo_US1_EB
- MiamiRd_so_SE17th_NB
- Eisenhower_so_SE17th_NB
- US1_so_SE17th_NB
- SE10Ave_no_SE17th_SB
- SE17th_Causeway_WB
- US1_no_SE17th_SB
- SE10th_so_SE17th_NB

SE 17th Street



All Day



Data Scope:
2017, weekends

Circulation Highlights

- Dominant movement is going THROUGH 17th Street
- Dominant flow is between the beach area (east of the Causeway) and US 1, south of 17th Street

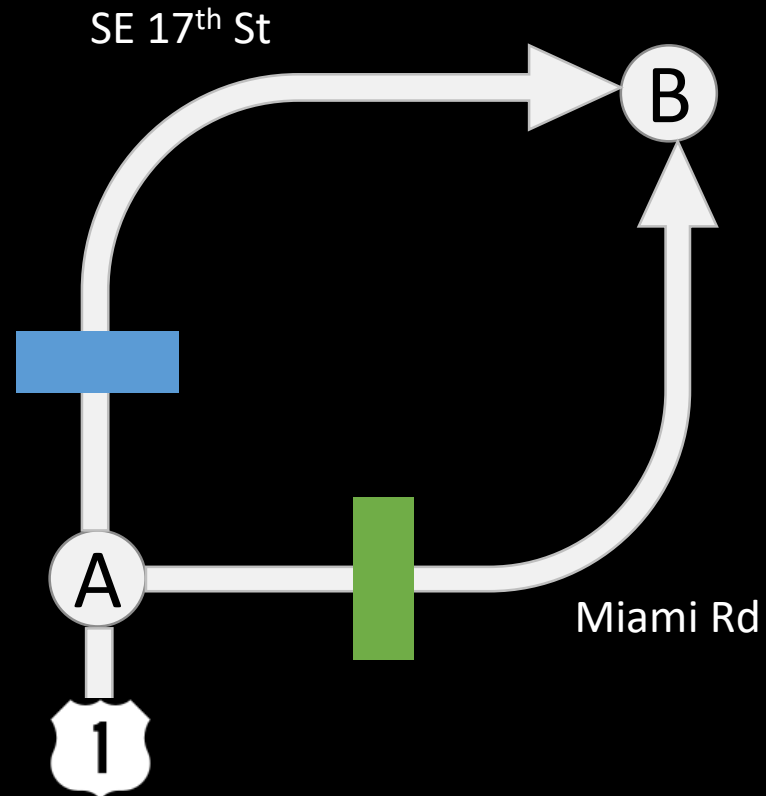
Cut-through Activity

On Miami Road and SE 15th Street



Cut-through Activity Analysis Example

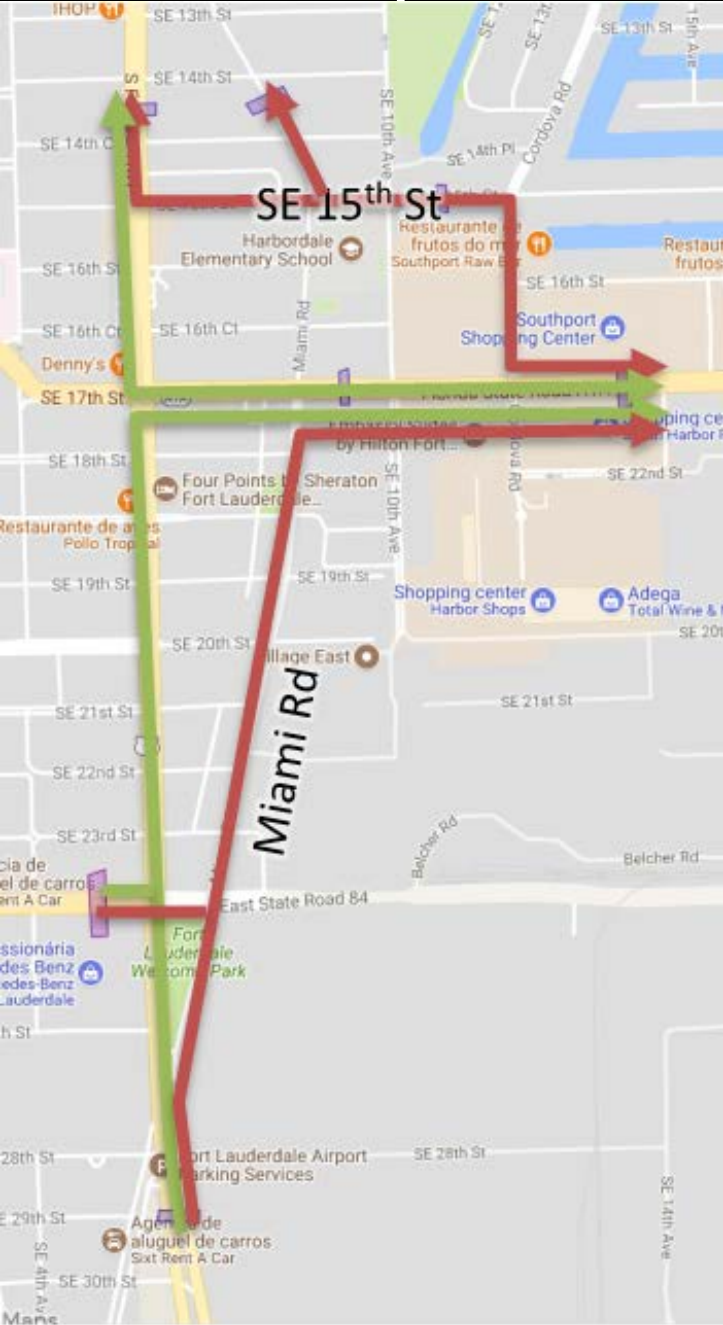
Origin-Destination with Many Middle Filters



All time periods

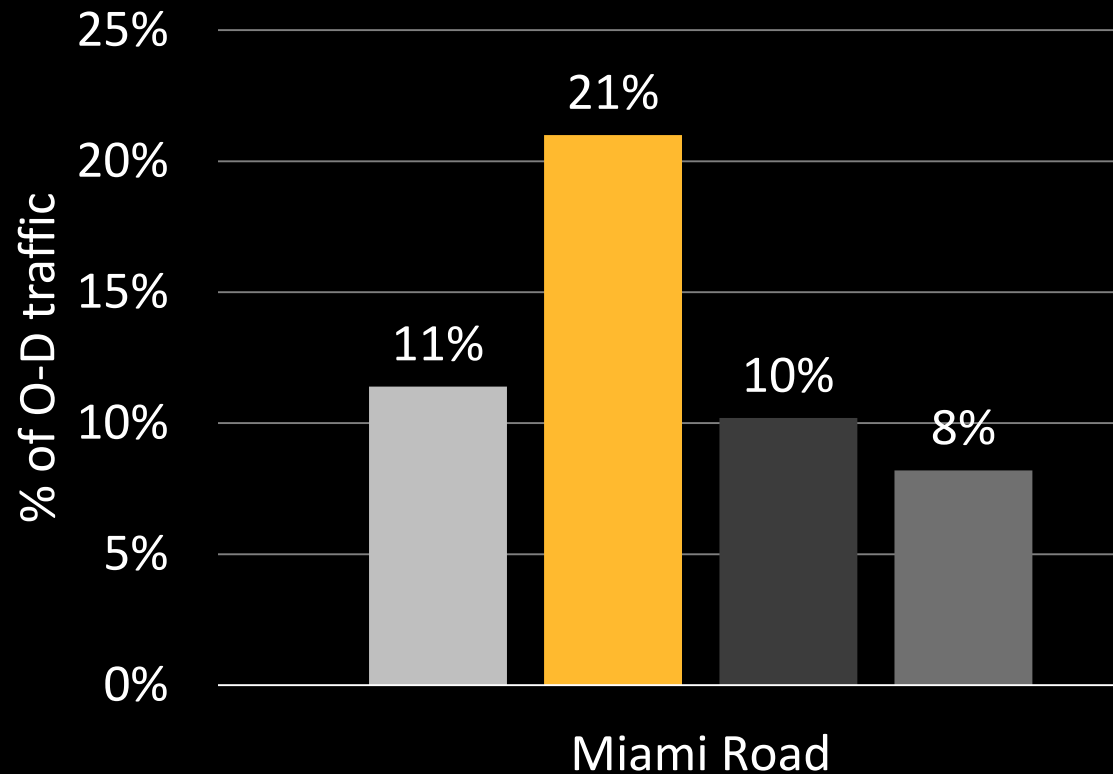
Cut-through Activity

- 10% of US 1 NB to SE 17th St EB traffic uses Miami Road Cut-Through
- 3% of SE 17th St traffic from/to US 1 uses SE 15th Street as cut-through



Cut-through Activity

As a % of traffic between US 1 and SE 17th Street (“O-D traffic”)

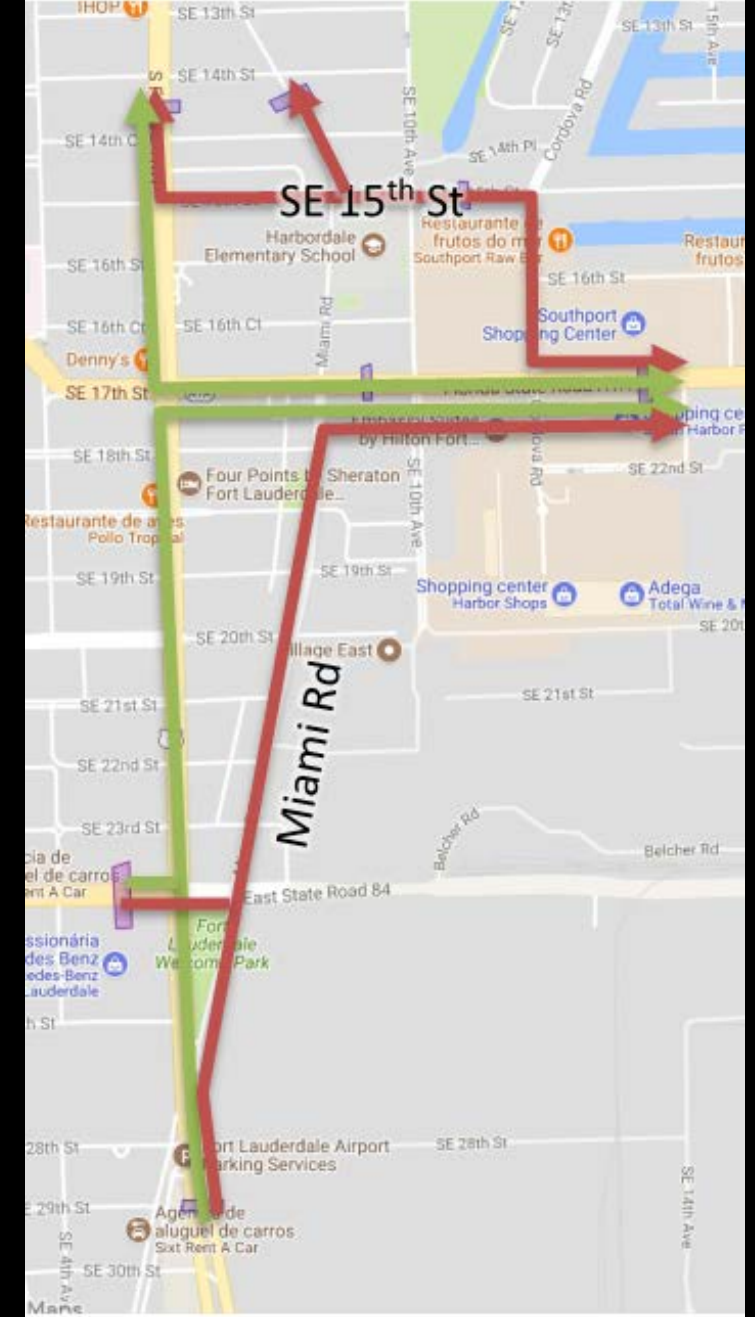
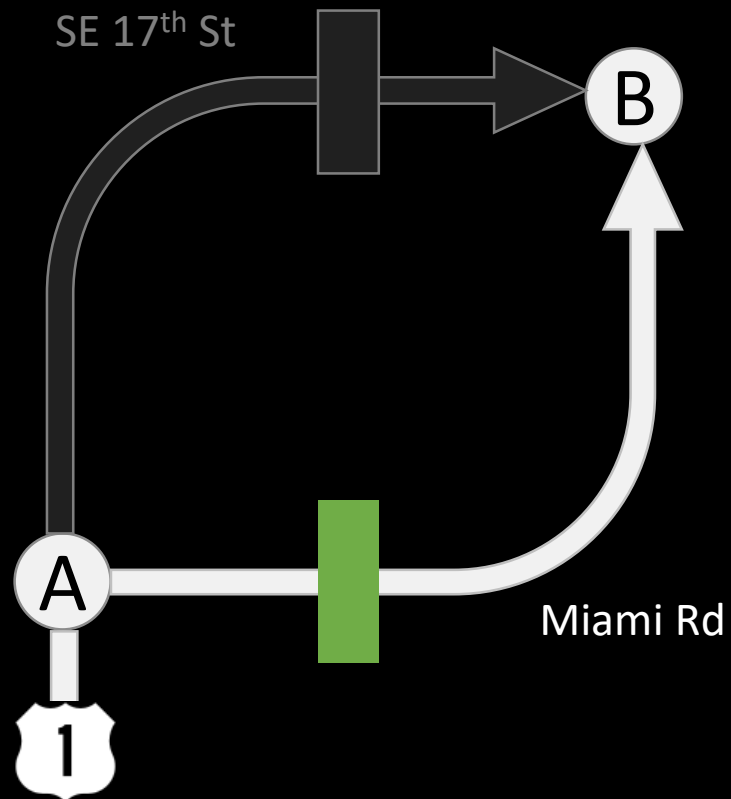


■ Weekday All Day ■ Weekday Morning Peak ■ Weekday Evening Peak ■ Weekend All Day



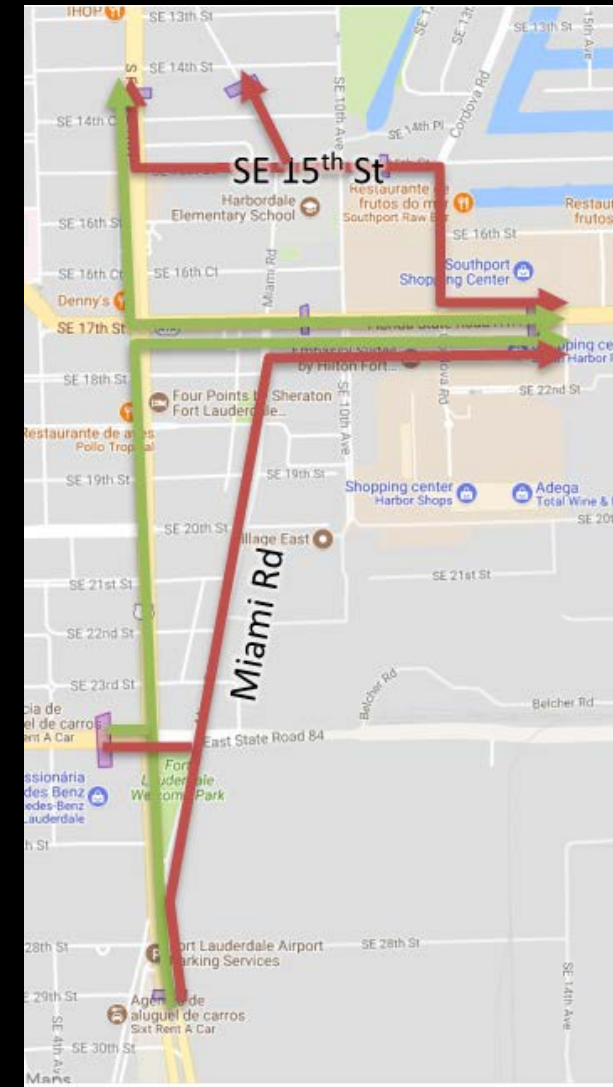
Cut-through Activity

Origin-Destination with **Middle Filter**



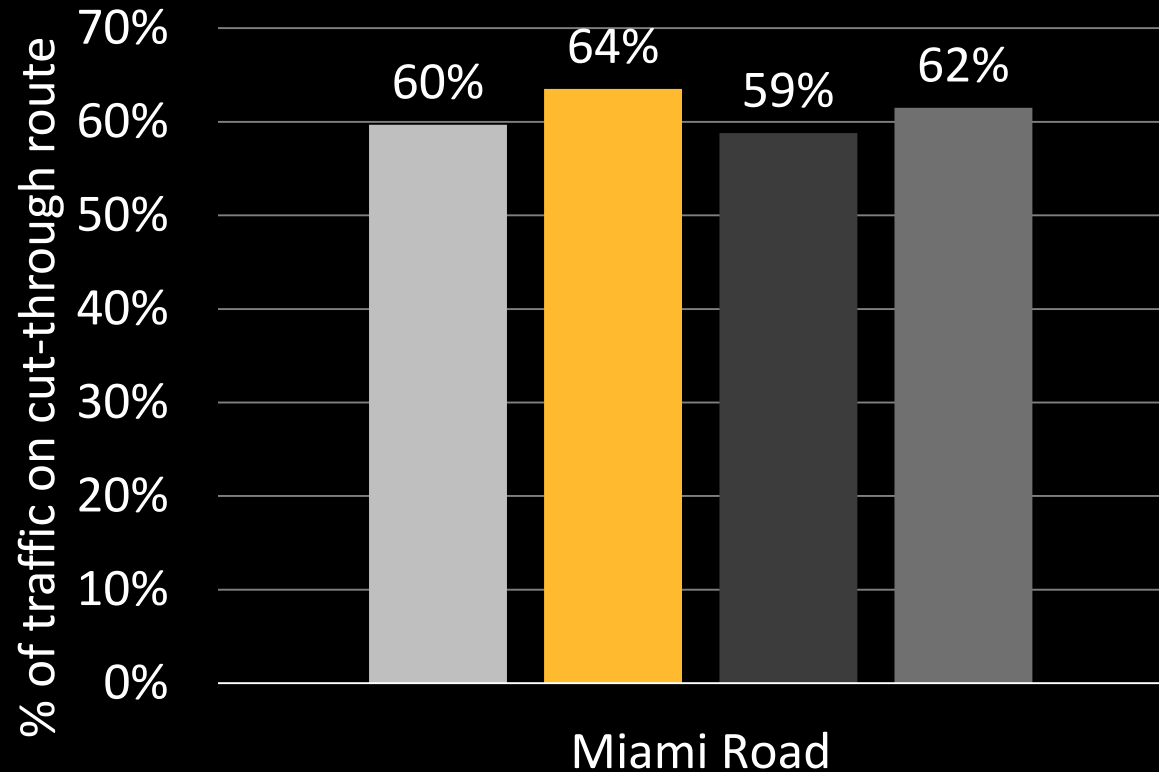
Cut-through Activity

- 59% of northbound traffic on Miami Road is cut-through traffic
- 3% of traffic on SE 15th Street is cut-through traffic



Cut-through Activity

As a % of traffic on Miami Road and SE 15th Street



■ Weekday All Day ■ Weekday Morning Peak ■ Weekday Evening Peak ■ Weekend All Day



Cut-through Activity Highlights

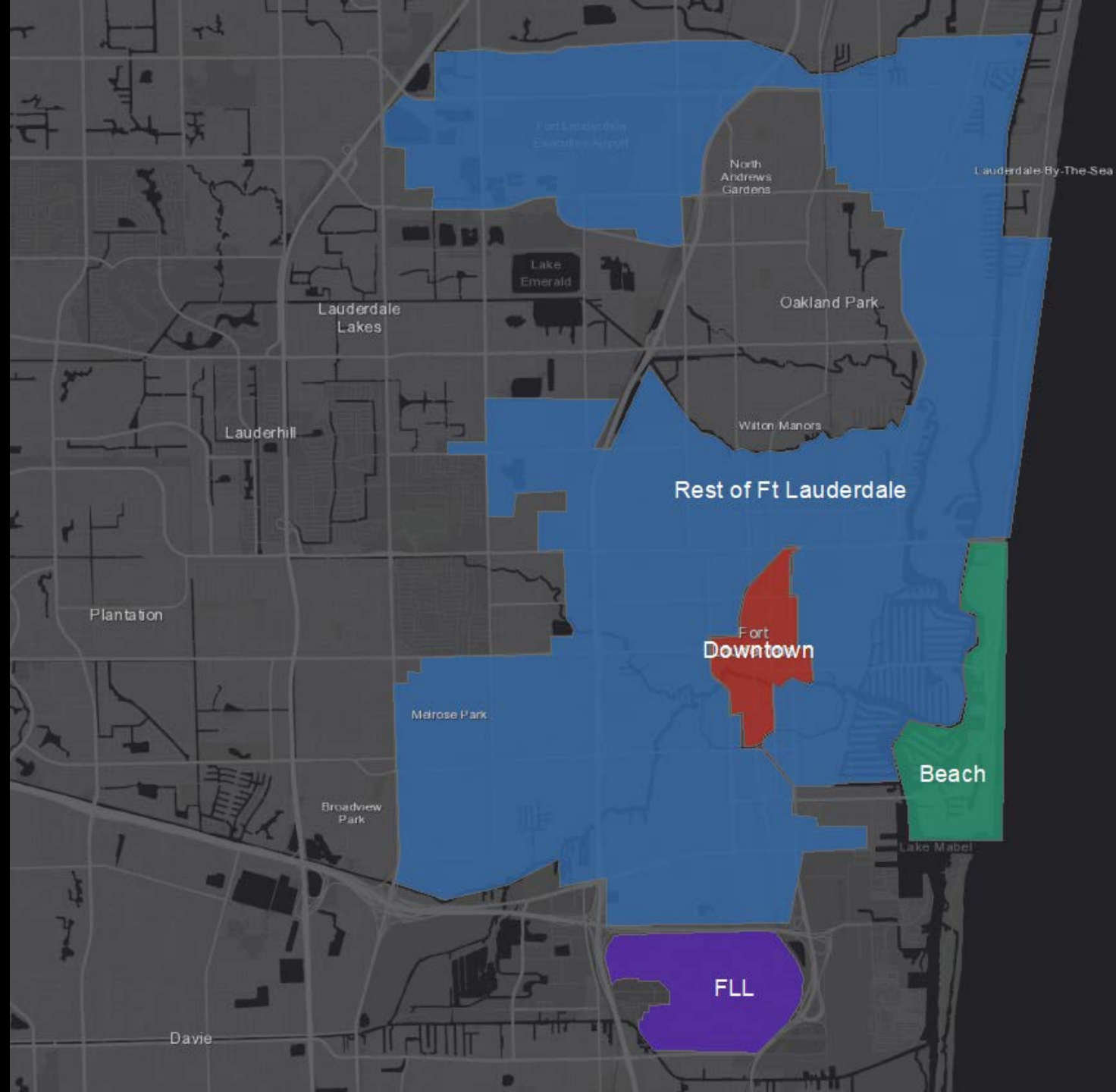
- High level of cut-through activity occurring on Miami Road
 - Especially prevalent in AM peak hours

Regional Analysis (In-Process)

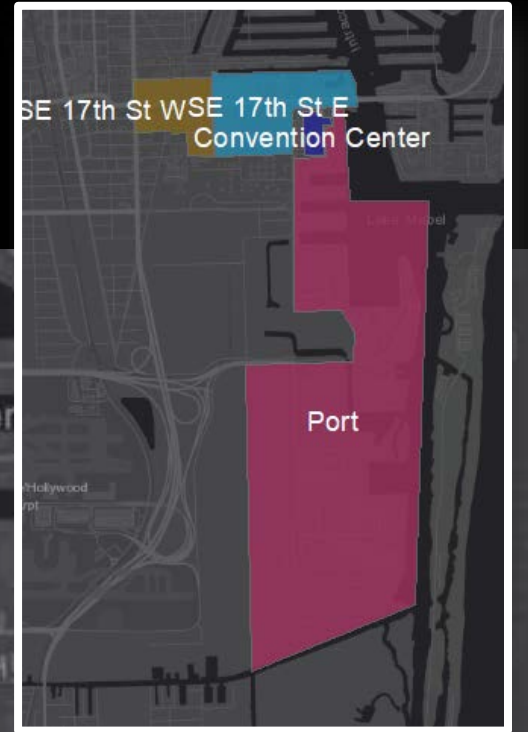
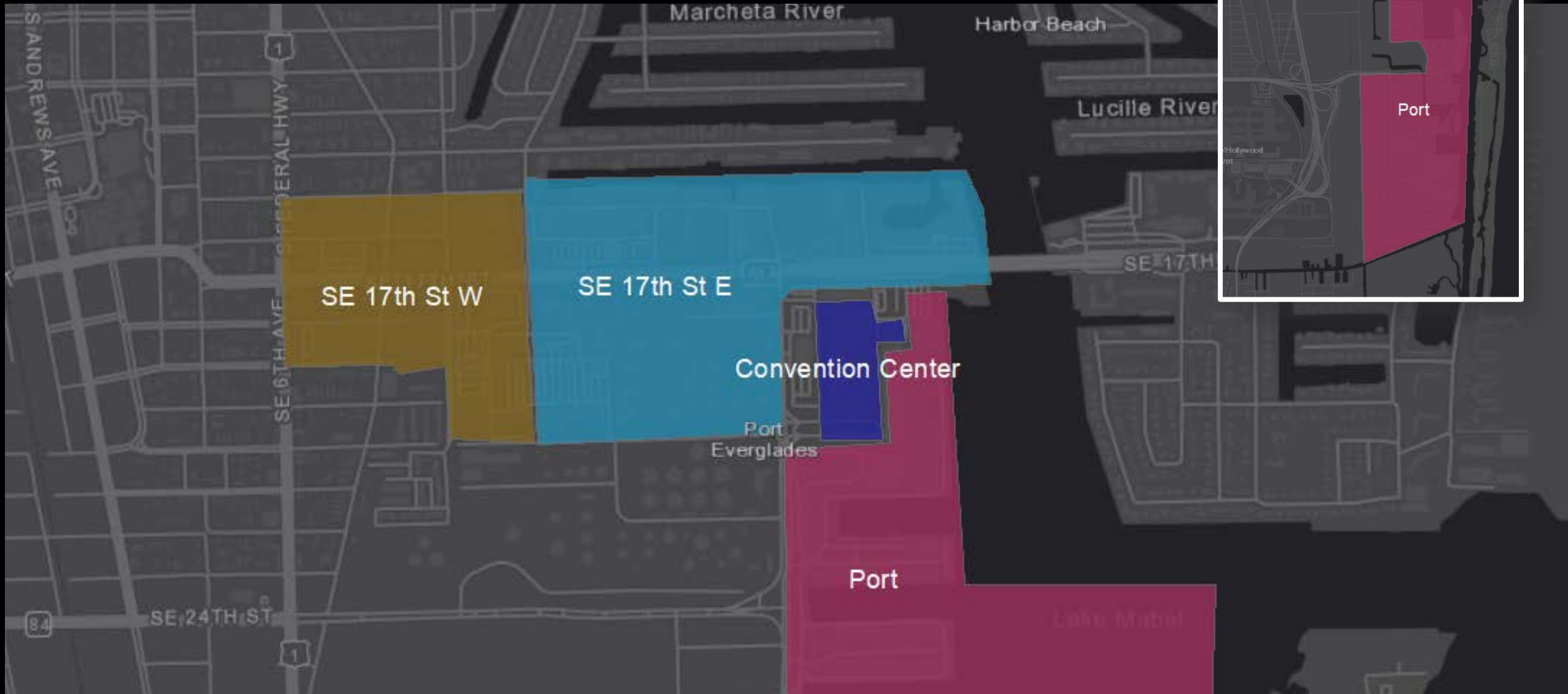
Contribution to traffic on SE 17th Street

Regional Zones

- Downtown
- FLL Airport
- Beach Area
- Rest of Fort Lauderdale
- Other*



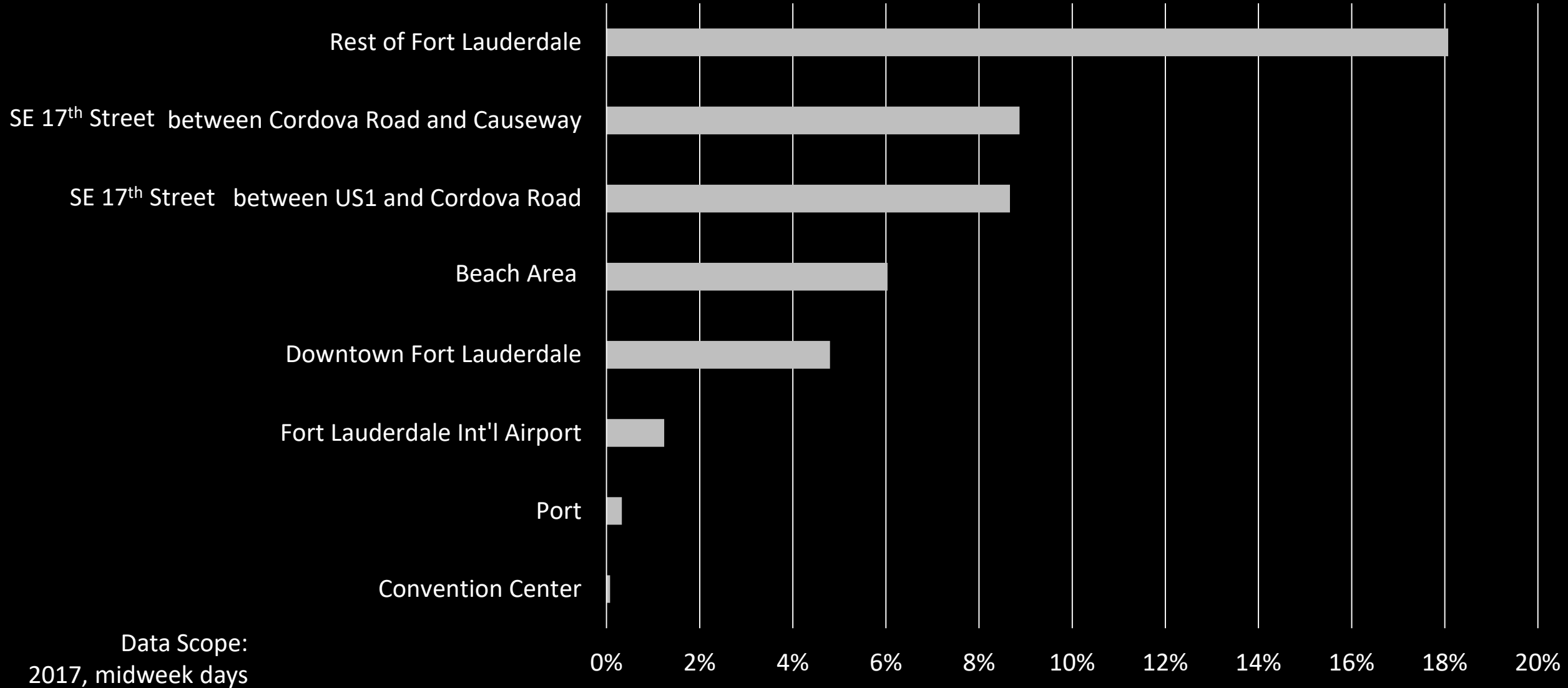
Corridor Zones



SE 17th Street



All day

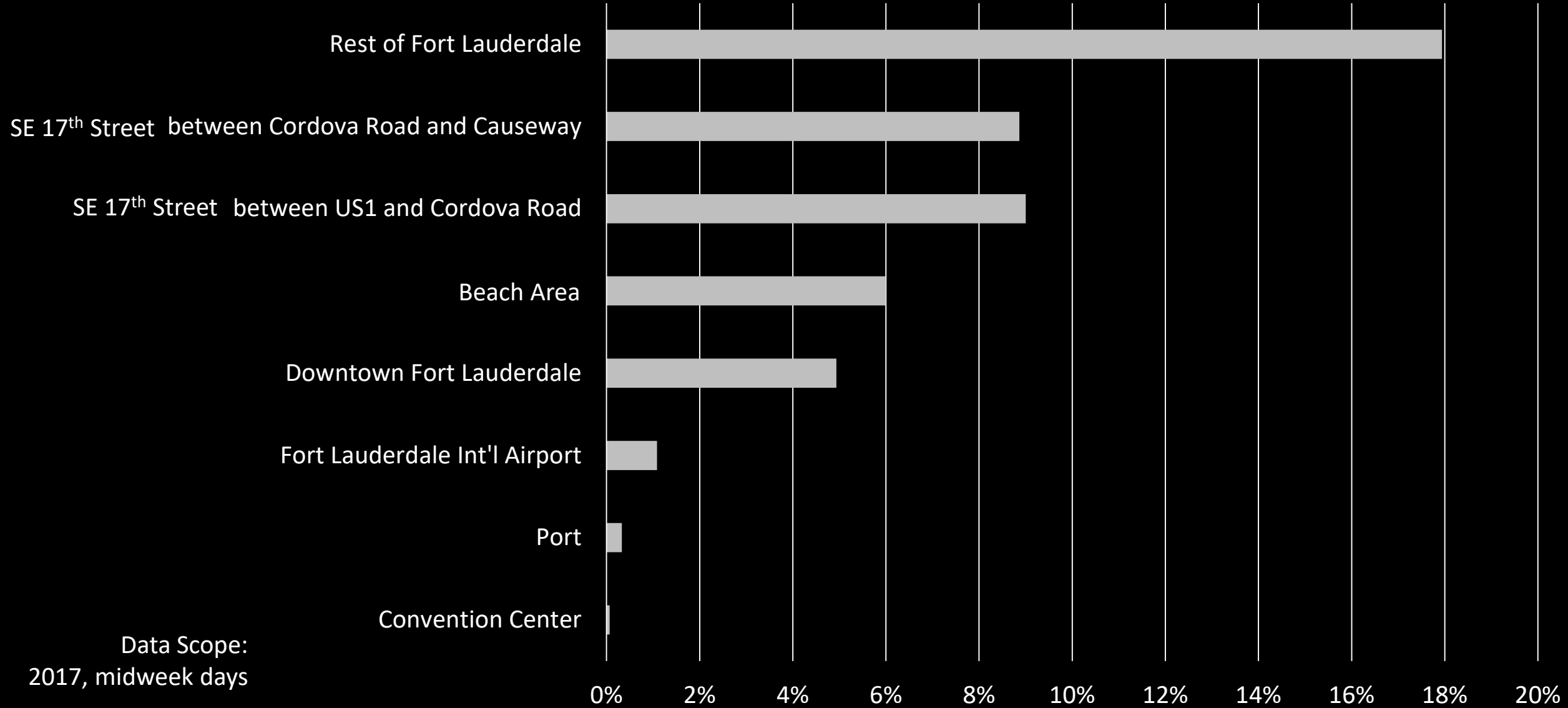


Data Scope:
2017, midweek days

SE 17th Street



3-7 PM



Data Scope:
2017, midweek days

Next Steps

- Drill down into seasonal and time-of-day factors
- Document analysis
- Submit to Working Group for comments





Questions?

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2018/06/04