University Drive Mobility Improvements Planning Study

MOVE PEOPLE · CREATE JOBS
STRENGTHEN COMMUNITIES

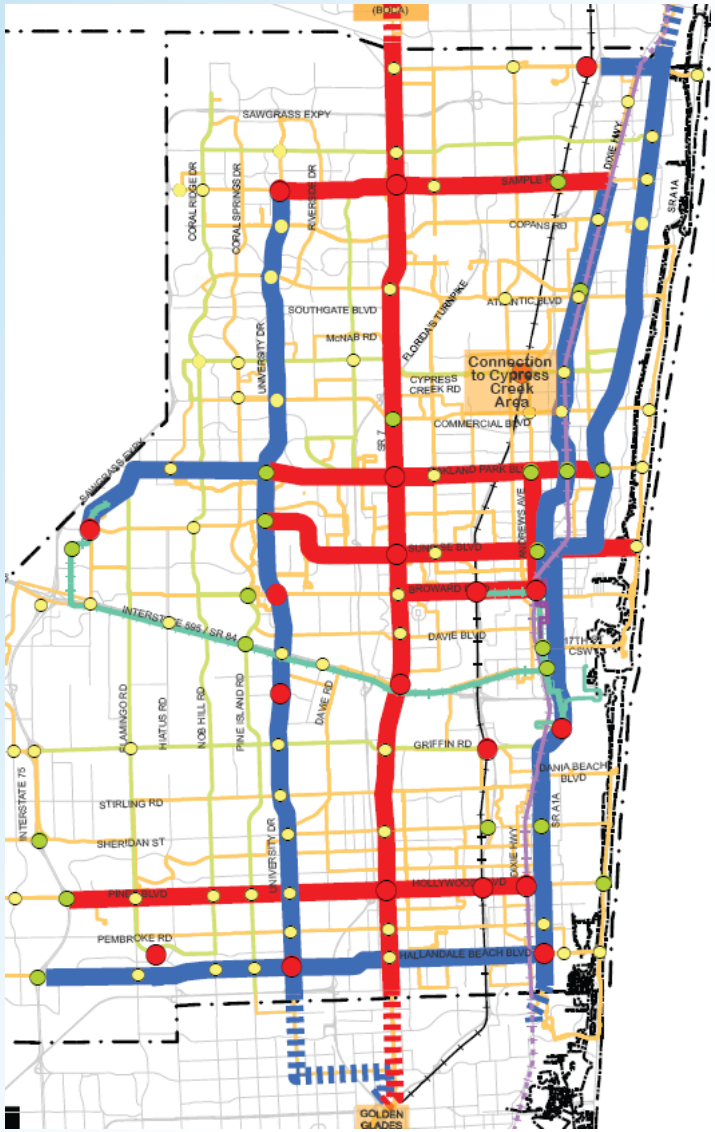
Public Workshop Presentation

June 25, 27 and July 9, 2013

broward MPO
metropolitan planning organization

Why We are Doing This Study

- University Drive has experienced steady growth over last 20+ years
- Identified as Premium Transit Corridor in 2035 Broward Transformation LRTP
- Served by Mobility Hubs identified in 2035 Plan
- Received a Transit Study Grant from the Federal Transit Administration (FTA) in 2011

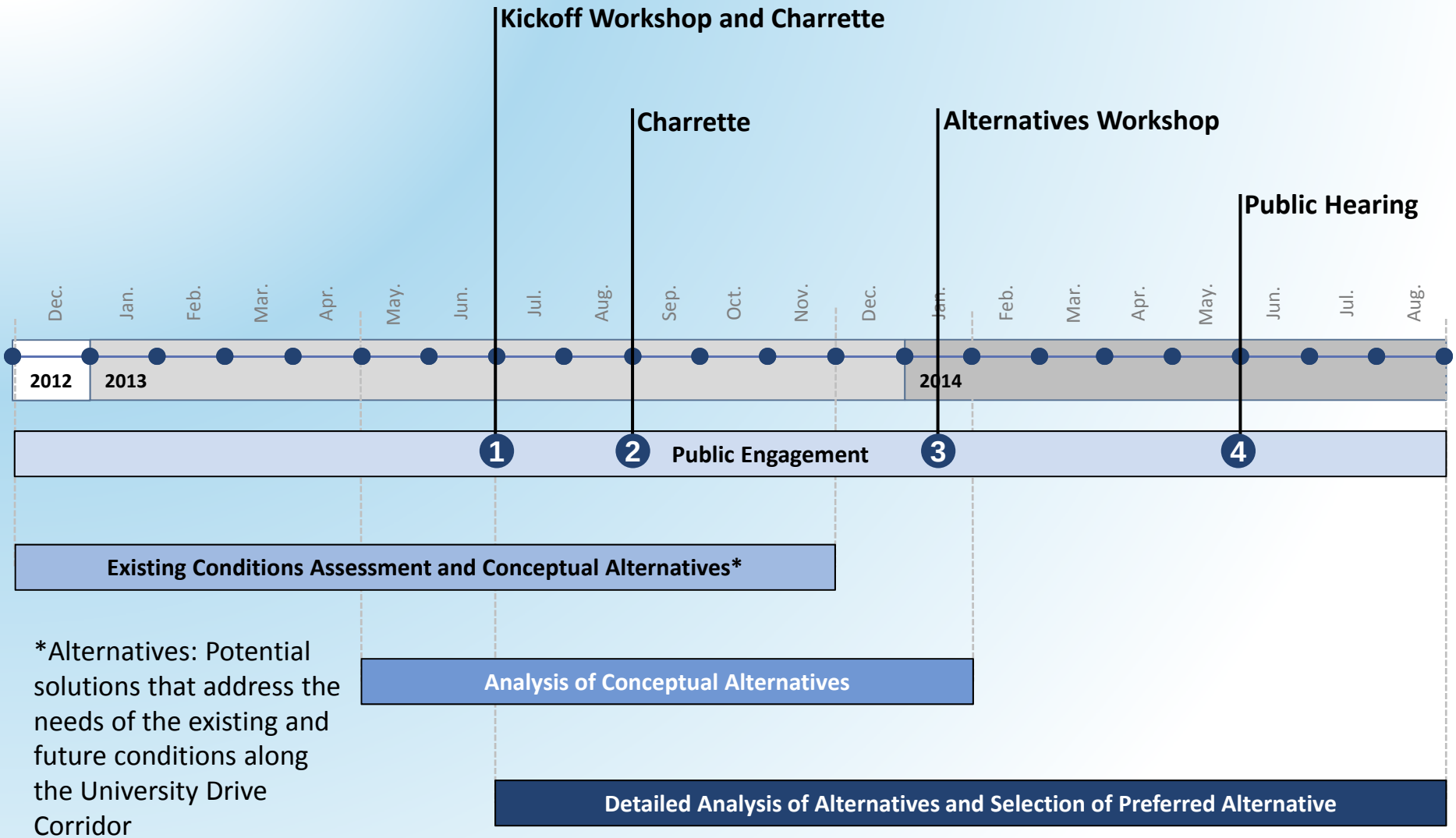


2035 Broward Long Range Transportation Plan

Study Partners

1. Broward Metropolitan Planning Organization
2. Florida Department of Transportation
3. Federal Transit Administration
4. Broward County
5. Broward County Transit
6. Broward County Planning Council
7. South Florida Regional Planning Council
8. Miami-Dade Transit
9. City of Cooper City
10. City of Coral Springs
11. Town of Davie
12. City of Hollywood
13. City of Lauderhill
14. City of Margate
15. City of Miami Gardens
16. City of Miramar
17. City of Parkland
18. City of Pembroke Pines
19. City of Plantation
20. South Florida Education Center Transportation Management Association
21. City of Sunrise
22. City of Tamarac

Study Schedule



*Alternatives: Potential solutions that address the needs of the existing and future conditions along the University Drive Corridor

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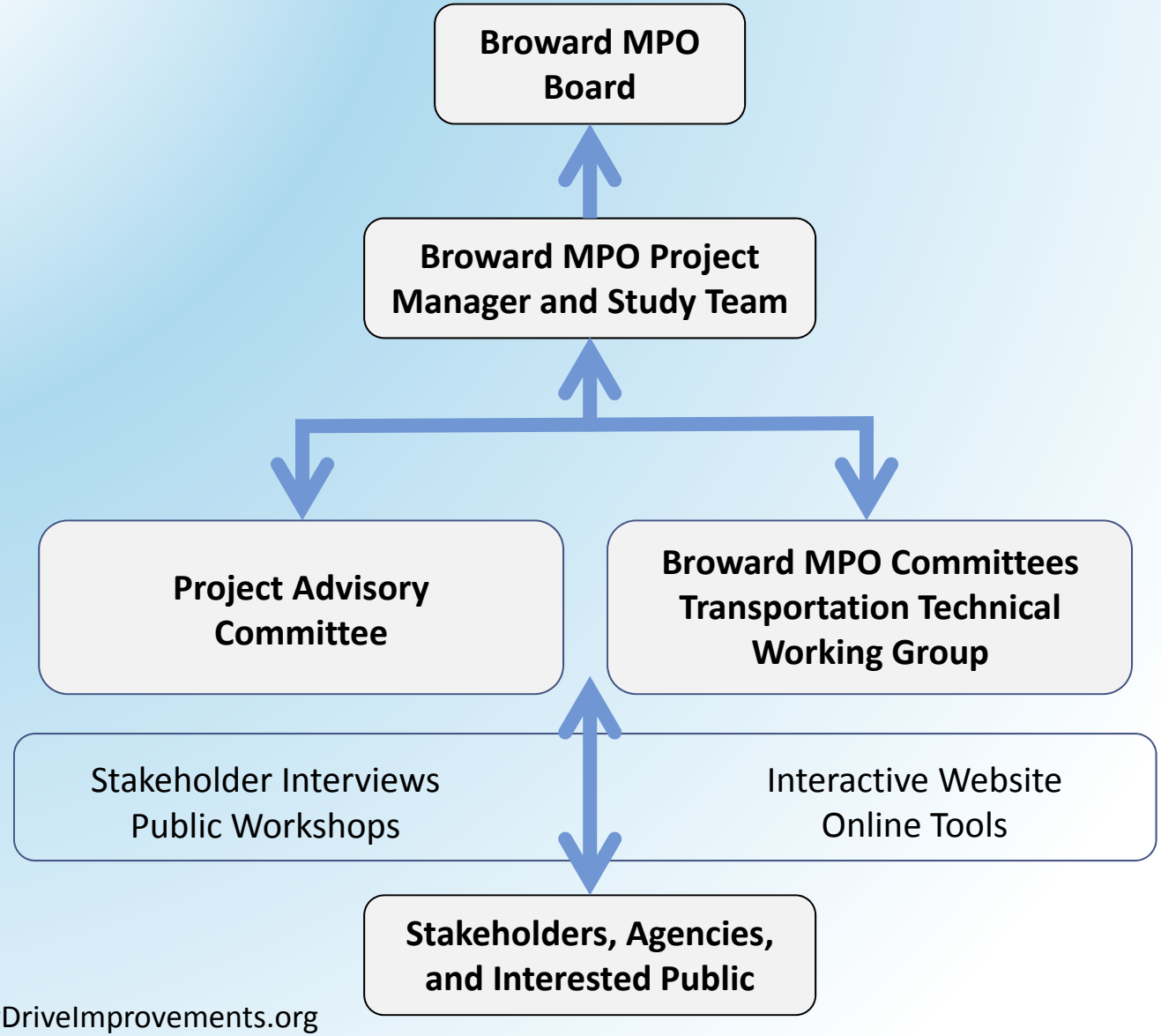
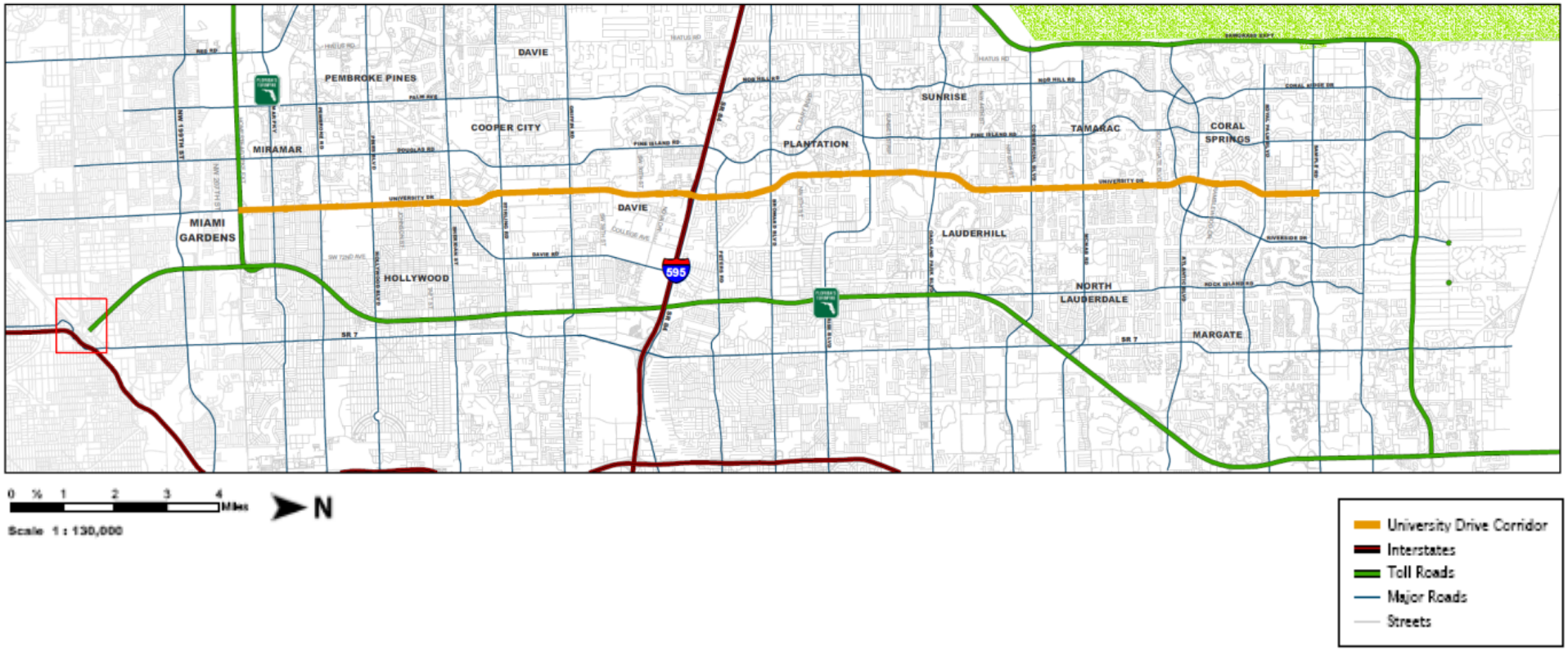
Study Decision-Making Framework



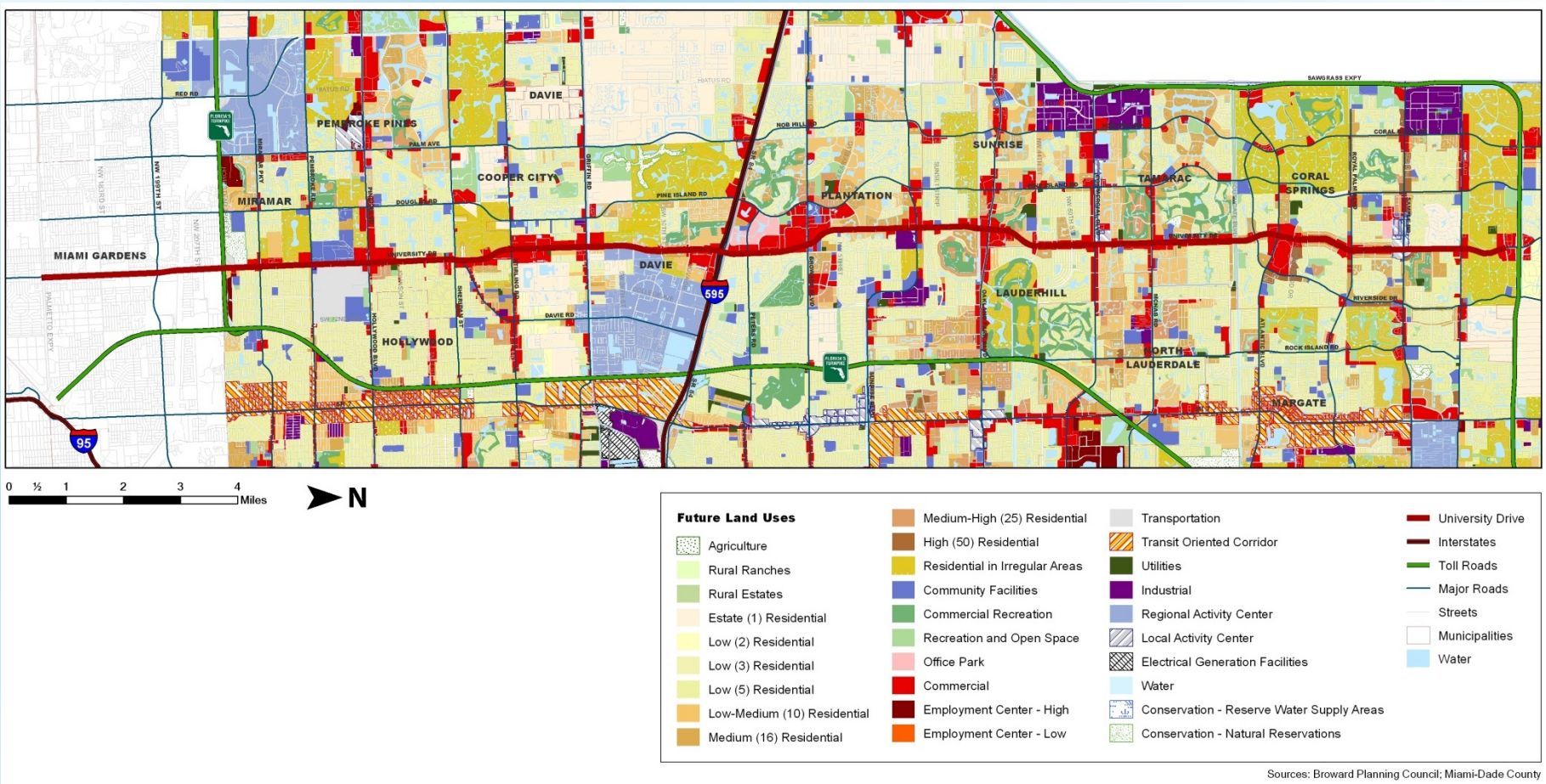
Study Evaluation Framework

1. Starting with all transit mode options, identify the most feasible premium transit modes for the corridor
2. Identify potential short-term Congestion Management Strategies and potential transit supportive areas / mobility hubs
3. Compare the Premium Transit Alternatives (No build and up to 3 Build Alternatives)
4. Select the Locally Preferred Alternative

Study Area

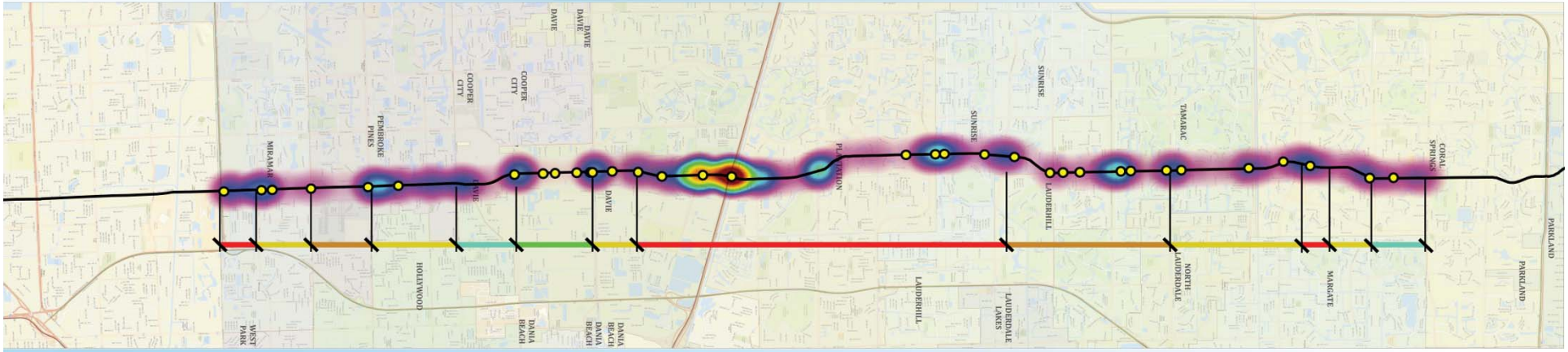

DAVIE
PEMBROKE PINES
COOPER CITY
MIRAMAR
MIAMI GARDENS
HOLLYWOOD
DAVIE
PLANTATION
SUNRISE
TAMARAC
CORAL SPRINGS
LAUDERHILL
NORTH LAUDERDALE
MARGATE
595
0 ½ 1 2 3 4 Miles
Scale 1 : 130,000
N
University Drive Corridor
Interstates
Toll Roads
Major Roads
Streets

Corridor Conditions – Land Use



Sources: Broward Planning Council; Miami-Dade County

Delay and Crash Synthesis



0 ½ 1 2 3 4 Miles

N

Crash Frequency (Total Crashes, 2007-2011)

Value

High

Low

Fatalities

Ranges of Delay (i.e. LOS)

B - Least Delay

C

D

E

F - Greatest Delay

Source: FDOT Crash Analysis Reporting System

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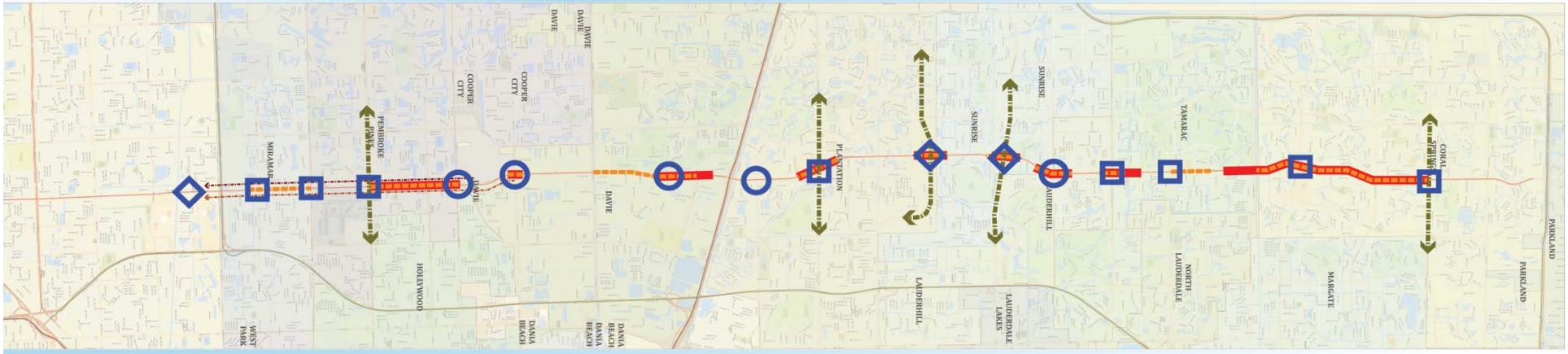
Bike / Pedestrian / Transit Synthesis



0 ½ 1 2 3 4 Miles

N

Pedestrian Crash Cluster

Missing Sidewalks

Bike Crash Cluster

Missing Bike Lanes

Highest Bus Transfer Activity

Very High Transit Ridership

High Transit Ridership

Moderate Transit Ridership

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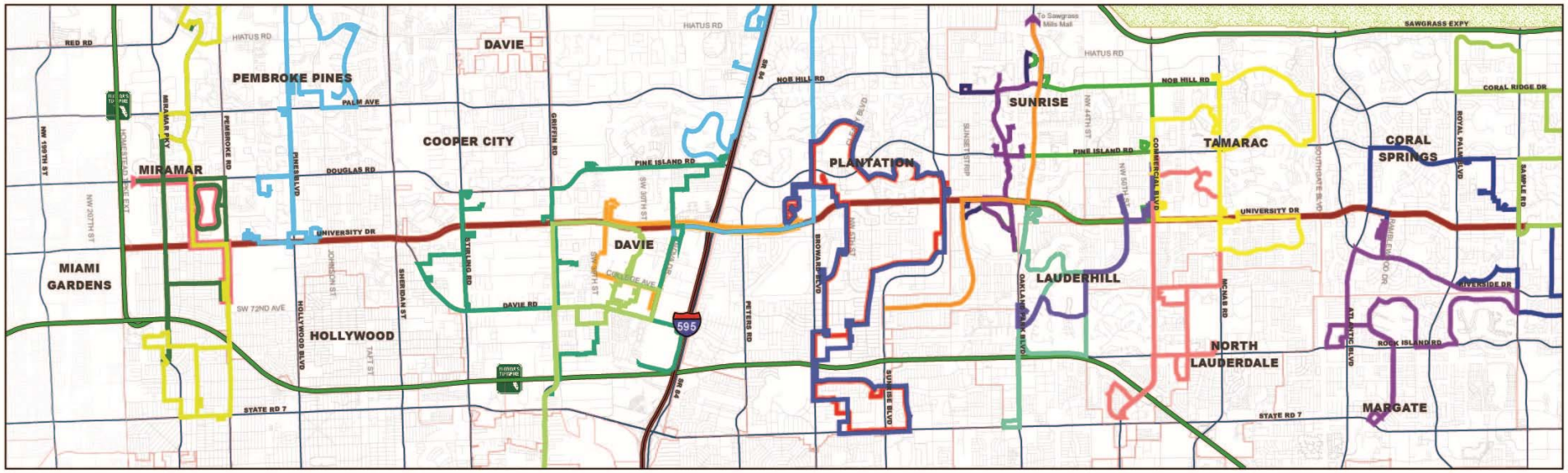
Community Shuttles



0 ½ 1 2 3 Miles

Scale 1 : 100,000

N

Community Shuttle Routes

- Coral Springs Blue (CS1B)
- Coral Springs Green (CS1G)
- Davie Blue (DVB)
- Davie Green (DVG)
- SFEC/Tri-Rail Express (DVTR)
- Lauderhill 3 (LH3)
- Lauderhill 4 (LH4)
- Margate C (MG1C)
- Miramar Red (MM1R)
- Miramar Green-East (MMGE)
- Miramar Yellow (MMY)
- NSU Shuttle
- Plantation A (PLA)
- Plantation B (PLB)
- Pembroke Pines Blue-East (PPBE)
- Sunrise Rte 6 (SUN6)
- Sunrise Rte 7 (SUN7)
- Sunrise Rte 3 & 4 (SUN34)
- Sunrise Rte 6 - Waterbridge (SUN6W)
- Tamarac Red (TMR1)
- Tamarac Yellow (TMY1)
- University Drive

Sources: Broward County Transit; Nova Southeastern University

Purpose and Need

Purpose: Provide more and better travel choices and encourage walkable and transit-supportive development along the University Drive corridor.

Needs:

- Improve Transit Travel
  - Improve Level of Service
  - Increase Reliability
  - Improve Connectivity/Transfers
- Improve Pedestrian Travel
  - Provide a Complete Sidewalk Network Along and Immediately Parallel & Perpendicular to University Drive
  - Improve the Pedestrian Environment
- Improve Bicycle Travel
  - Provide a Complete Bicycle Network Along and Immediately Parallel to University Drive
  - Improve the Bicycling Environment

Purpose and Need

Purpose: Provide more and better travel choices and encourage walkable and transit-supportive development along the University Drive corridor.

Needs:

- Improve Automobile Travel
  - Improve Level of Service
  - Increase Reliability
- Improve Safety for All Users
  - Decrease Pedestrian Crashes
  - Decrease Bicycle Crashes
  - Decrease Auto Crashes
- Encourage Walkable and Transit-Supportive Development
  - Strengthen Economic Vitality

Step 1 Evaluation

- Identify a range of viable modal alternatives that will best meet the mobility needs and overall objectives of the University Drive Corridor

- Focus on near to mid-term solutions (10 years)









Local/City Bus

Link 30

- 40 to 75 passengers per vehicle
- Fixed-route and fixed schedule
- Stops every 500 feet to 1 mile, most common spacing is 1,000 to 1,200 feet
- Generally a mix of federal and local funding

Broward County Transit

Enhanced Bus

Albuquerque Rapid Ride Red Line

- Branded Service
- Up to 120 passengers per vehicle
- Runs in mixed-traffic
- Fewer stops; farther apart
- Longer routes, connecting city centers to smaller suburban centers
- May have enhanced stations
- May have transit signal priority
- Typically have strong branding and image
- Regular buses or larger buses
- Peak periods or all-day service

Bus Rapid Transit

- Some portion in exclusive lanes and some in mixed traffic
- Station spacing dependent on land use
- Enhanced stations
- Enhanced ticketing
- Transit signal priority
- Modern vehicle design, but rubber tire vehicles
- Route length varies

Modern Street Car

Ft Lauderdale Wave Streetcar

Portland Streetcar

- Exclusive Lanes or mixed traffic
- Runs on embedded steel rail tracks
- Typical station spacing is between ½ mile to 1 mile
- Historic trolleys or modern street car
- Short segments, typically less than 5 miles within urban core and neighborhoods
- Typically slower in speeds than LRT, but Modern Streetcars are faster than historic streetcar

Screening Matrix

Step 1 Screening Criteria	Evaluation Rating	Local/ City Bus	Enhanced Bus	Bus Rapid Transit	Modern Streetcar
Population and Employment Density[1]	Density to support transit mode (Yes/No)	Yes	Yes	Yes	No
Average Trip Length	Does mode serve trip length (Yes/No)	Yes	Yes	Yes	Yes
Peak Hour Ridership[1]	Ridership supports mode (Yes/No)	Yes	Yes	Yes	Yes
Capital Costs	Low (less than $5m/mi) Medium ($5-25m/mi) High (greater than $25m/mi)	Low	Low	Medium	Medium
Operating Costs	Low (less than $10/rev-mi) Medium ($10-20/rev-mi) High (greater than $20/rev-mi)	Low	Low	Medium	Medium/ High
Right-of-Way Impacts	Need for additional right-of-way (low, medium, high)	Low	Low	Medium	Medium
Potential Economic Development Impact	Potential to enhance economic activity (low, medium, high)	Low	Low	Medium	Medium
Potential Environmental Impacts	Anticipated environmental impacts (low, medium, high)	Low	Low	Medium	Medium
Requirement to be Elevated	Does the mode need to be elevated (Yes/No)	No	No	No	No
Screening Results		Yes	Yes	Yes	Yes

Note: *Light Rail, Commuter Rail, Heavy Rail, Monorail / People Mover, and High Speed Rail Transit Modes were deleted due to low population and employment densities, high capital costs, high operating costs, and high ROW impacts.* *1. Considers existing and potential future conditions*

Step 1 Recommendation

Based on existing and anticipated future conditions, the **most viable transit modes recommended for further study** include:

- Local/City Bus
- Enhanced Bus
- Bus Rapid Transit
- Modern Streetcar





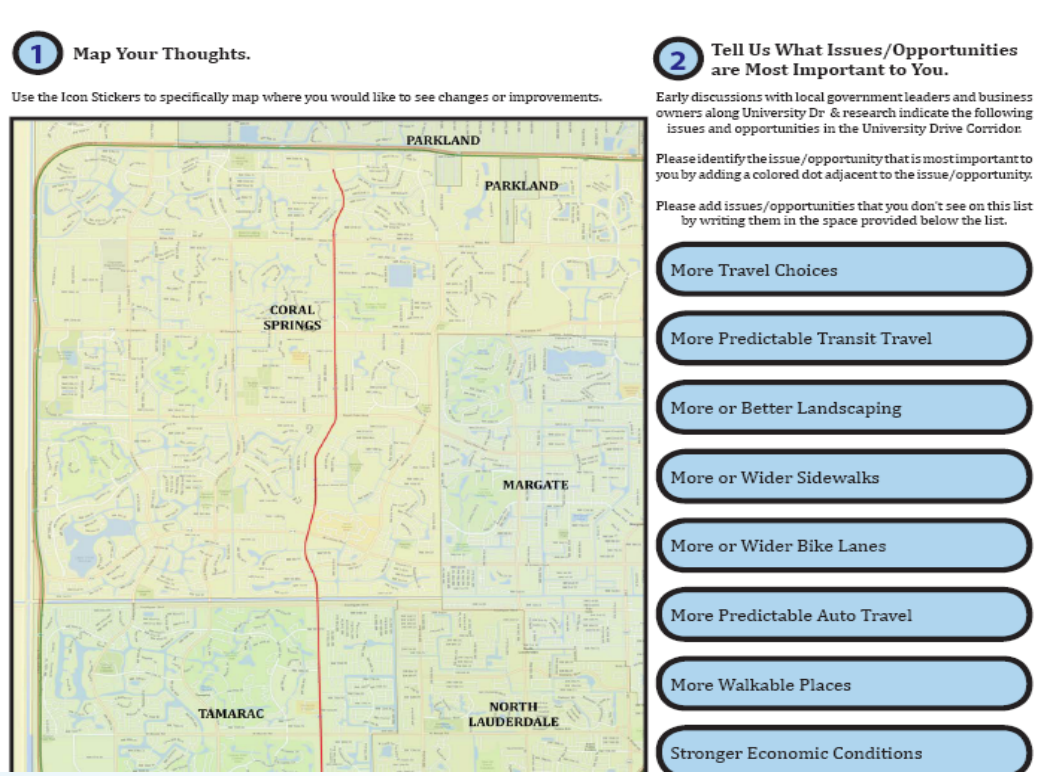




Questions?

Please Tell Us What You Think

1. At Table Sessions
2. Online at the Stations
3. On Comment Forms



1 Map Your Thoughts.

Use the Icon Stickers to specifically map where you would like to see changes or improvements.

2 Tell Us What Issues/Opportunities are Most Important to You.

Early discussions with local government leaders and business owners along University Dr & research indicate the following issues and opportunities in the University Drive Corridor.

Please identify the issue/opportunity that is most important to you by adding a colored dot adjacent to the issue/opportunity.

Please add issues/opportunities that you don't see on this list by writing them in the space provided below the list.

- More Travel Choices
- More Predictable Transit Travel
- More or Better Landscaping
- More or Wider Sidewalks
- More or Wider Bike Lanes
- More Predictable Auto Travel
- More Walkable Places
- Stronger Economic Conditions

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