Exercise 1: DRAFT Purpose and Need Statement

Purpose:

Provide a safe and efficient transportation facility throughout the Florida Avenue and Tampa Street/Highland Avenue corridor (the Corridor) that complements the character of the surrounding communities, balances local and regional travel needs, and provides mobility options for all modes and users.

Notes:

Needs:

1. Safety – As is common with older roadways, elements of the Corridor do not meet modern minimum design standards or employ current best practices for enhancing the safety of non-motorized road users. Because traffic volumes (except during the morning and afternoon rush-hours) are relatively low, speed management is an issue.

- Improve overall safety with a focus on enhancing safety for non-motorized road users and reducing the most severe automobile crash types along the corridor.

Notes:

2. Pedestrian and Bicycle Mobility – Currently, some parts of the Corridor lack adequate sidewalk and bicycle facilities and those bicycle facilities present may not be adequate for less experienced/confident cyclists. The limited number of signalized intersections and marked crosswalks in the Corridor limit pedestrian mobility.

- Improve sidewalks, bicycle facilities, and the ability of non-motorized users to safely cross major roadways in order to enhance connections between neighborhoods and businesses and provide mobility options along the Corridor.

Notes:

3. Transit Access and Quality of Service – HART Route 1 travels along the Corridor providing north-south mobility and access to intersecting east-west routes. Several routes also overlay one another along the southern portion of the corridor to access and depart from the Marion Transit Center/Downtown. However, most bus stops lack amenities and buses move slowly during rush-hour because they are impacted by congestion on the Corridor.

- Improve access to transit stops, stop quality, and transit service along the corridor to enhance the quality of service for existing transit users and the attractiveness of transit as a mobility option within the Corridor. Transit service improvements may include but are not limited to increased transit service (frequency/span-of-service) and improvements to transit travel time and reliability.

Notes:

4. Community-wide Mobility Needs – The Corridor serves as a "Main Street" for the Tampa Heights and Seminole Heights neighborhoods, but also connects these neighborhoods and several neighborhoods to the north of the Hillsborough River with Downtown Tampa.

- Mobility solutions for the Corridor should consider the diverse trip-making that occurs along the Corridor today and should seek to accommodate existing and future travel, considering the use of parallel roadway facilities and alternative travel modes.

Notes:

5. Economic Growth and Livability – Florida Avenue and the southern portion of Tampa Street have a commercial character with a diverse mix of businesses including "business-highway" uses (car dealerships and repair shops); neighborhood-serving and specialty retail; restaurants, pubs, and cafes; and other professional services and light-industrial uses. In some cases these businesses are constrained by issues such as lack of parking and traffic circulation/access issues. In other cases, business activities encroach on the public right-of-way and contribute to safety and mobility issues along the Corridor.

- Mobility solutions for the Corridor should consider the needs of businesses along the corridor including parking, access/circulation, and public realm/streetscape improvements that can help to enhance the Corridor for existing businesses and help foster infill and redevelopment consistent with the community's vision and the City's Comprehensive Plan.

Notes:

Exercise 2: Preliminary Performance Measures

Definitions:

1. Compliance with Design Standards – The Florida Design Manual (FDM) incorporates minimum standards for roadway design for different context areas with the primary intent of providing for a safe and context-sensitive roadway system. Specific examples of design elements related to safety include:

- procedures for establishing speed limits and design speeds
- minimum widths for automobile, transit, and bicycle lanes
- minimum width for sidewalks and shared-use (bike and pedestrian) pathways
- sight triangles at intersections (seeing around buildings and other obstructions) and clear zones (proximity of roadside hazards to automobile travel lanes)
- compliance with the ADA (accessible design for persons with disabilities)

2. Expected Crash Rates – Different roadway and intersection types have different expected number and severity of crashes per vehicle mile traveled. Factors like number of lanes, presence or absence of medians, adjacent land use, and intersection traffic control can increase or decrease crashes. Data collected across Florida and the U.S. can be used to estimate how different alternatives will influence safety performance. Similar calculations can be done at individual locations to show how existing crash patterns are likely to be modified by specific design and operational decisions.

3. "Free-flow" Travel Speeds – This refers to how fast cars travel between signals in relatively un-congested conditions and considers both the average motorist and those exceeding the average speed. Managing travel speeds is more a function of how a roadway is designed and operated than of the posted speed limit and different roadway cross-sections will have different impacts on how fast drivers feel comfortable travelling during peak and off-peak conditions.

4. Pedestrian Crossing Difficulty – Many factors influence the ability of pedestrians (and bicyclists acting as pedestrians) to cross arterial roadways. These include:

- the number of travel lanes
- presence of median or intersection refuge islands and the geometric design of intersections
- distance between traffic signals or marked crosswalks (with appropriate supplemental devices)
- traffic speed and volume
- "platooning" – whether cars travelling along the roadway are grouped into clusters, leaving space to cross in between, or scattered along the corridor without gaps for people to cross

5. Availability of Premium Sidewalks – The FDM requires that sidewalk along the Corridor be a minimum of 6ft wide (and meet ADA accessibility requirements). "Premium" sidewalks, therefore, would be wider than 6ft and could either include a wider paved surface for walking and/or could include space between the sidewalk and the roadway lanes for landscaping and/or street furniture. For reference, the sidewalks on Florida Avenue south of Palm (vicinity of Metropolitan Ministries) are approximately 7ft wide and the new sidewalk in front of Tripp's Diner north of Hanna Avenue is 8ft wide.

6. Availability of Premium Bike Facilities – The FDM requires 7ft-wide buffered bike lanes along the Corridor but will allow the existing 5ft bike lanes (south of Violet Street) if 7ft bike lanes cannot fit. For the purposes of this project, "Premium" Bike Facilities are those facilities that can be used comfortably by a wide range of cyclists and include the following:

- Protected bike lanes/cycle track – bike lanes along a roadway that are separated from automobile traffic by a physical barrier such as a raised curb or row of on-street parking.
- Shared use paths – unobstructed pathways next to a roadway that are wide enough to be used by cyclists and pedestrians (minimum 8ft, preferred 12ft)
- Bike boulevards – local streets that are designed to serve as bicycle thoroughfares. They include traffic calming features and signals or crosswalks to help cyclists cross major intersecting streets.

7. Quality of Transit Stops – To what extent do higher-ridership transit stops have features such as shelters, garbage cans, bike racks, benches, and security lighting, to make them more comfortable and appealing.

8. Quantity of Transit Service – Currently Route 1 operates along the Corridor on weekdays from 4:00 AM to midnight running every 15 minutes from 5:30 AM to 6:30 PM and every 30 minutes for the remainder of the day. Increased transit service would mean more frequent service (especially during peak travel periods) or possibly extended service during weekdays or weekends, when the route operates from 6:00 AM to 10:00 PM.

9. Transit travel time and reliability – Currently, transit in the Corridor operates in the same lanes (and congestion) as automobile traffic. This means that the transit vehicles do not travel very fast during rush-hour and may have difficulty maintaining their schedules—making transfers challenging. Transit operating in a dedicated lane could move swiftly and reliably throughout the day making it a more attractive choice for commuters and other travelers. This may also have economic development implications along the Corridor.

10. "Peak-hour" travel speed/time – This is the amount of time and average speed necessary to travel between two points during the AM or PM "rush-hour." This measure incorporates the capacity of the roadway (usually expressed as number of travel lanes) and the frequency and operation of the traffic signals (which have to balance demand for intersecting streets as well as left-turn movements). Traffic engineers can measure this in real life by driving along a roadway keeping pace with the traffic stream. This measure can also be predicted by collecting traffic data and inputting it into various computer models that simulate traffic flow and intersection operations. These simulation models are then used to compare real and imagined roadways.

11. Impact on Other Thoroughfares – In addition to how quickly/efficiently traffic moves along the Corridor, the performance of parallel and intersecting major roadways may be impacted by decisions about the Corridor. Examples could include changes in delay for east-west streets due to alternative intersection designs/operations or changes in traffic volume on major parallel roadways such as I-275, Nebraska Avenue, North Boulevard, or Central Avenue.

12. Impact on Local Streets – Changes to the Corridor may also alter traffic patterns/volumes on local streets. Typically, this is thought of as "cut-through" traffic and is considered to be a negative impact of congestion, but the use of local streets to absorb peak hour traffic "overflow" is also a feature of urban grid networks and may allow for more balanced design of thoroughfare streets—especially if local streets include speed management features and sidewalks to safely accommodate the traffic.

13. Business Access – Travelling out of the way to reach a destination is sometimes perceived as an inconvenience even if the most direct route takes longer. Currently, the one-way pair street system along the southern part of the Corridor requires drivers to "circle the block" if they are accessing a destination along Florida Avenue from the north or a destination along Tampa Street/Highland Avenue from the south. This may have adverse impacts on certain types of businesses. Likewise corridor alternatives that result in more peak-hour traffic being diverted to other parallel routes may also result in "out-of-direction" travel which may similarly be perceived as an inconvenience and may also have business impacts. Business access can also be impacted by changes to how a roadway operates in terms of whether drivers are allowed to make left turns to and from the major roadway.

14. Provision of On-Street Parking – Different alternatives may incorporate permanent of "off-peak" on-street parking. "Off-peak" parking means allowing drivers to park in a travel lane in the evenings and possibly during the middle of the day when there is less traffic. Permanent on-street parking can be incorporated into "premium" sidewalk features by creating curb extension at intersections and between parking bays to provide space for shade trees, street furniture, and other features.

Instructions:

For each Performance Measure mark the Primary need it addresses with "**P**" and any Secondary needs with an "**S**." Leave others blank. Then mark the **FIVE** most important performance measures. Add measures to the bottom if necessary and use the space at right to make notes.

Top 5	Preliminary Performance Measure	Safety	Pedestrian & Bicycle Mobility	Transit Access & Quality of Service	Community-wide Mobility Needs	Economic Growth & Livability	NOTES
	1. (increase) Compliance with minimum design standards						
	2. (reduce) Expected crash rates						
	3. (manage) "Free-flow" travel speeds						
	4. (reduce) Pedestrian crossing difficulty						
	5. (increase) Availability of "premium" sidewalks						
	6. (increase) Availability of "premium" bike facilities						
	7. (improve) Quality of transit stops						
	8. (increase) Quantity of transit service (frequency)						
	9. (improve) Transit travel time and reliability						
	10. (maintain) "Peak-hour" travel speeds/time						
	11. (minimize) Impact on other thoroughfares						
	12. (manage) Impact on local streets						
	13. (enhance) Business access						
	14. (increase) Provision of on-street parking						
	15						
	16						
	17						