

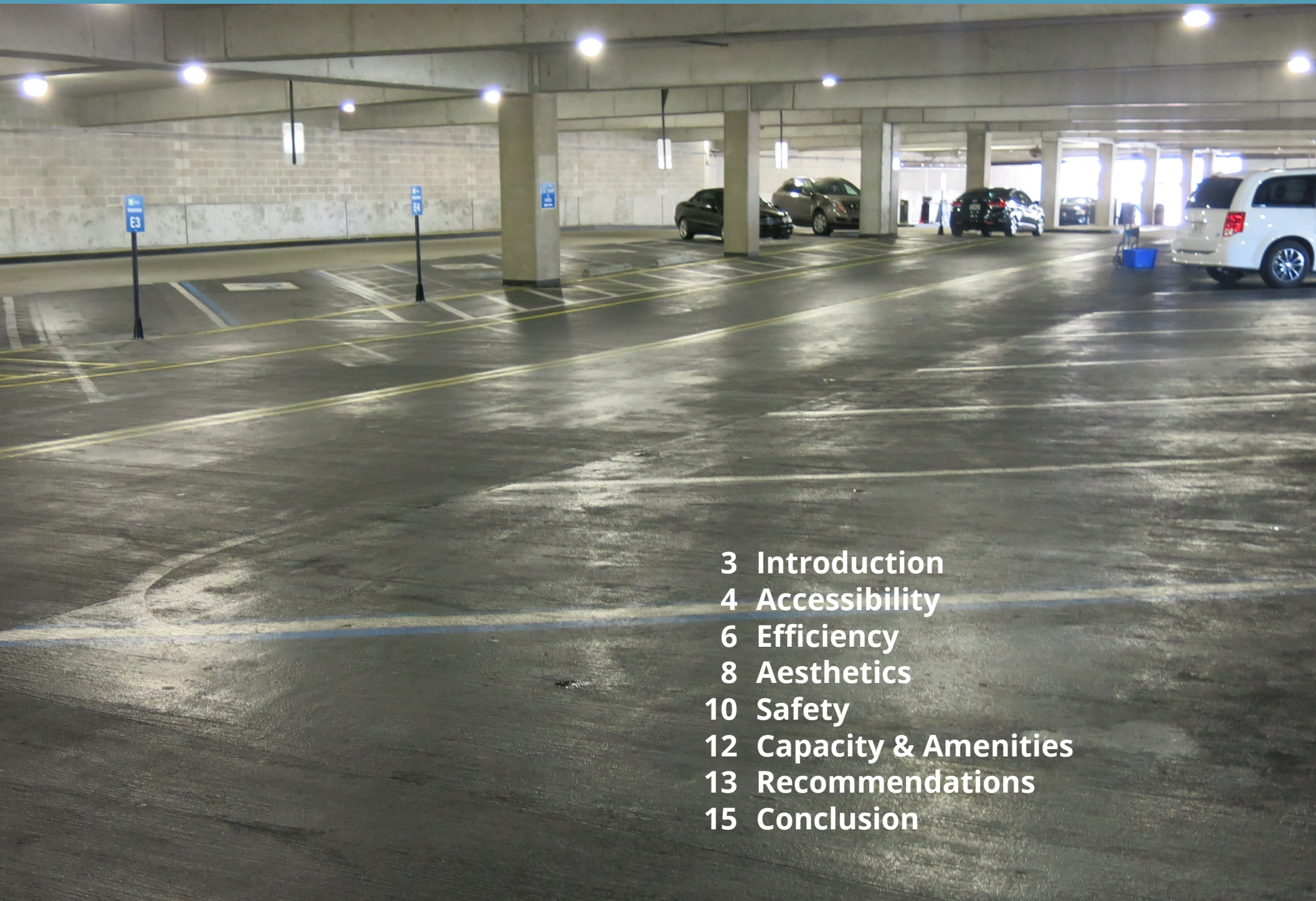


# Downtown Tampa Public Parking Garage Assessment

2017



# Table of Contents



- 3 Introduction**
- 4 Accessibility**
- 6 Efficiency**
- 8 Aesthetics**
- 10 Safety**
- 12 Capacity & Amenities**
- 13 Recommendations**
- 15 Conclusion**

In 2015, students at the University of South Florida School of Public Affairs, in collaboration with Plan Hillsborough (Hillsborough County City-County Planning Commission, Metropolitan Planning Organization, and Hillsborough River Board) and the Downtown Tampa Partnership, developed an extensive research design proposal to address the conditions of Downtown public parking structures. Their research proposal identified four dimensions of parking structures that affect the user experience: accessibility, efficiency, aesthetics, and safety. In early 2017, a parking scorecard to assess these dimensions was developed using variables included in the proposal along with others proposed by members of the Tampa Downtown Partnership. These scorecards were then used to assess the inventory of public parking structures in Downtown Tampa.

## Methodology

Ratings for the scorecard were developed using an 8-point Likert scale, with 0 denoting “extremely inadequate”, 2 denoting “moderately inadequate”, 4 denoting “adequate”, 6 denoting “good”, and 8 denoting “excellent”. These ratings were adapted from a 2003 study on perceptions of parking facilities that assessed many of the dimensions addressed in this study (Mendat & Wogalter, 2003).

Four dimensions were evaluated. **Accessibility** addresses the ease of entering, exiting and navigating the structure. **Efficiency** addresses how well the structure relays where the user parked and whether the structure gives the user a sense of their location within it. **Aesthetics** addresses the external and internal attractiveness of the structure and whether the structure is well

maintained. **Safety** addresses whether there is sufficient lighting, security, video monitors, and unobstructed spaces in the structure.

Descriptive information was collected as well, such as whether the structure contains bike racks or electric car charging spots, the number of spaces available in the structure and per floor, as well as how full the garage was at the time of visit.

Members of Plan Hillsborough, the Downtown Tampa Partnership, and Jacobs Engineering visited every multilevel public parking structure in the central core of Downtown Tampa. Those structures include:

- Fort Brooke Parking Garage
- Whiting Street Garage
- County Center Garage
- Twiggs Street Garage
- South Regional Garage
- William F. Poe Garage

The first parking structure visits were conducted on January 11, 2017 between the hours of 10:00 AM and 2:00 PM. The second full set of parking structure visits was conducted on January 25, 2017 between the hours of 1:00 PM and 4:00 PM. Two additional William F. Poe Garage visits were conducted on January 31, 2017 between the hours of 6:00 PM and 7:00 PM.

Data collected from this assessment may help facilitate changes to the existing public parking garages related to access and efficiency and improving aesthetics and security functions.



# Parking Accessibility



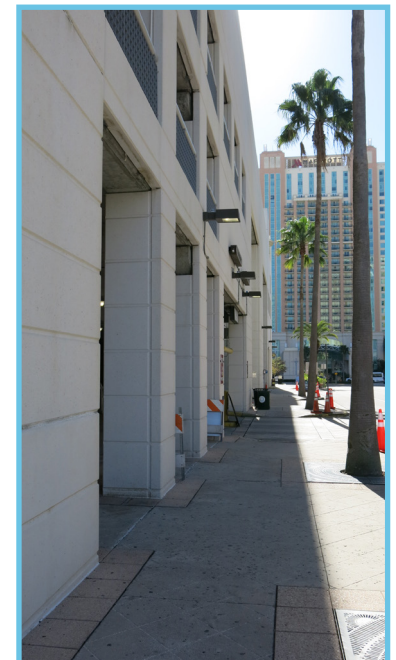
Accessibility refers to the ease of entering and leaving the parking structure by the user. Entrances to parking structures should be located on high-volume streets so that users have direct access. However, entrances should be located away from intersections. More than one entrance is also recommended for convenience and possible access from other streets. This is also an important consideration if one of the entrances is temporarily out of service or not fully functional for a variety of reasons, such as road construction. Exits, on the other hand, should be located on low-volume streets. All access points should be clearly marked with adequate signage so that they are easily identifiable by users. It is also crucial to articulate entrances and exits and have a way to distinguish between the two. Incorporating arches, canopies, marquees, and other elements to the structure can create attention to the access points, especially the entrances. A first impression is also important in creating a positive experience for the user.

It is also important for citizens to feel comfortable leaving the parking garage and upon return. Pedestrian signage, crosswalk inside and outside, and sidewalks outside the parking facility should be incorporated into the overall access design to achieve this level of comfortability. When parking garages are designed to encourage walking, then higher levels of pedestrian travel is typically seen.

On measures of accessibility, Poe received the highest average score of 6.3, with Fort Brooke in second at 5.9. The Whiting Street garage received the lowest average score, at 3.7; all other garages assessed received an average score of at least "adequate".

Fort Brooke received high average scores on visible, identifiable and efficient exits, adequate external sidewalks, and good walkways, although one respondent noted that the structure's four different entrance points can be confusing. Response was mixed on whether the structure contains adequate internal crosswalks, if there is clear signage indicating the presence of public parking, and whether the structure is free from visibility concerns.

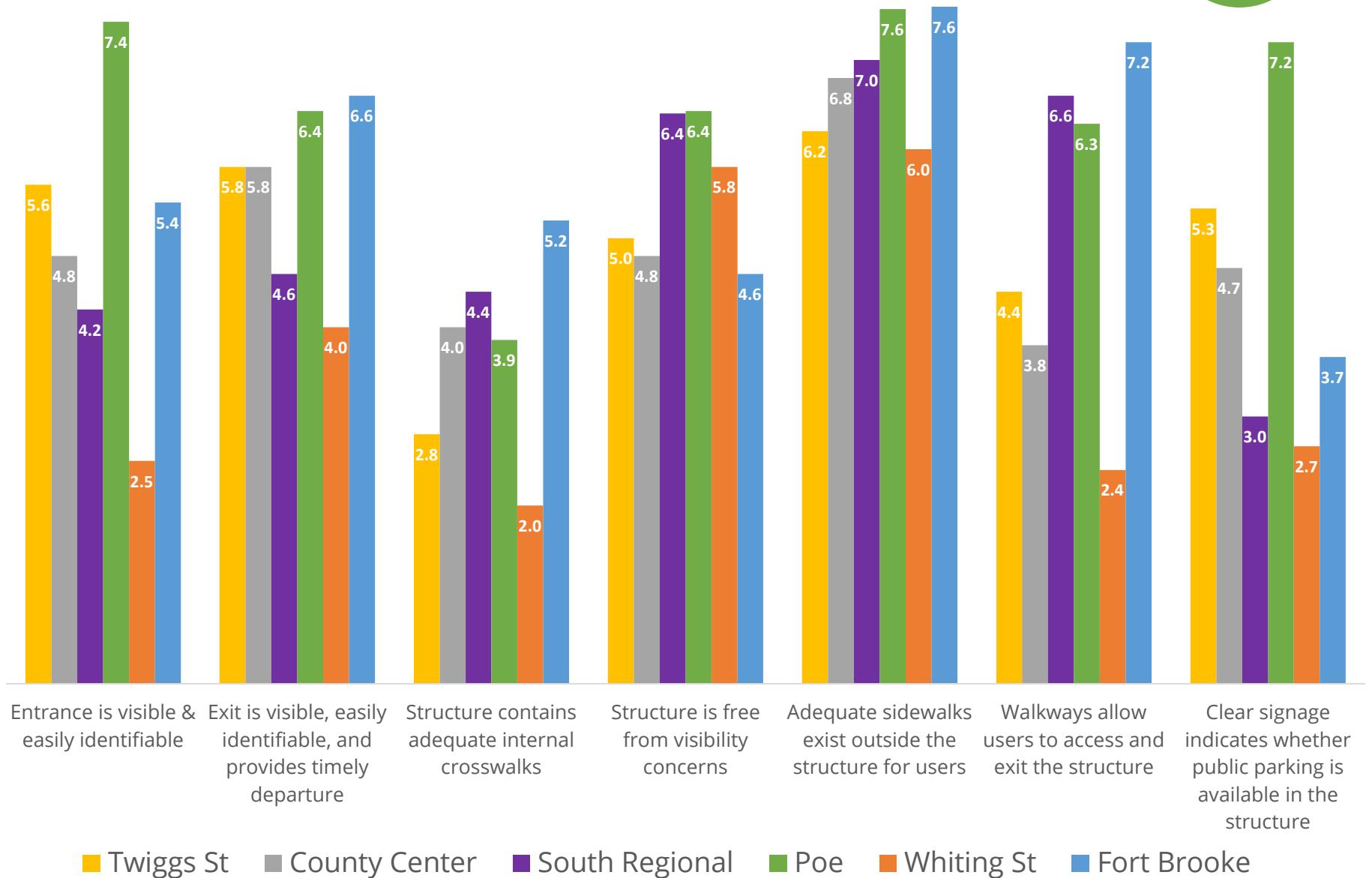
The variation in scores for Poe's accessibility measures were less pronounced, with scores generally consistent for each measure. Poe received high average scores on its sidewalks, walkways, and public parking signage. It was also noted to have a very visible and easily identifiable entrance. However, response was mixed on measures of the adequacy of internal crosswalks. Whiting Street received below adequate average scores on measures of identifiable and visible entrances and exits, walkways, and internal crosswalks. Whiting Street also received poor scores at indicating whether public parking is available in the structure. Respondents were more positive about the garage's lack of visibility concerns and more-than-adequate number of sidewalks located outside.



## Parking Accessibility

Poe received the highest average score

6.3



# Parking Efficiency



Efficiency is defined as the optimal use of existing space to accommodate the most possible parkers in a safe and effective manner. Smart technology has been implemented by many cities so that users are aware of parking spots available and although it may address some of the challenges that parking facilities and users face, it does not necessarily address other concerns such as overcrowding and confusing to maneuver.

Signage can help remedy confusion of users when it comes to finding their way around the parking facility and when trying to relocate their vehicles. Large graphics in the stairs and elevators as well as themes such as colors and symbols can aid in remembering floor levels. Using elevators and stairs as identifiable landmarks helps both drivers and pedestrians find their way.



On average, all but the two top city garages fared more poorly on measures of efficiency than accessibility. Poe received the highest average score, at 6.8, with Fort Brooke a close 6.1. Whiting Street was the lowest with a 1.2 average of efficiency measures, while Twiggs Street also received a low average score of 2.5. Fort Brooke and Poe were rated highly on measures of effective signage communication and theme, but response was mixed on whether Fort Brooke served as a landmark and gave its users a sense of location.

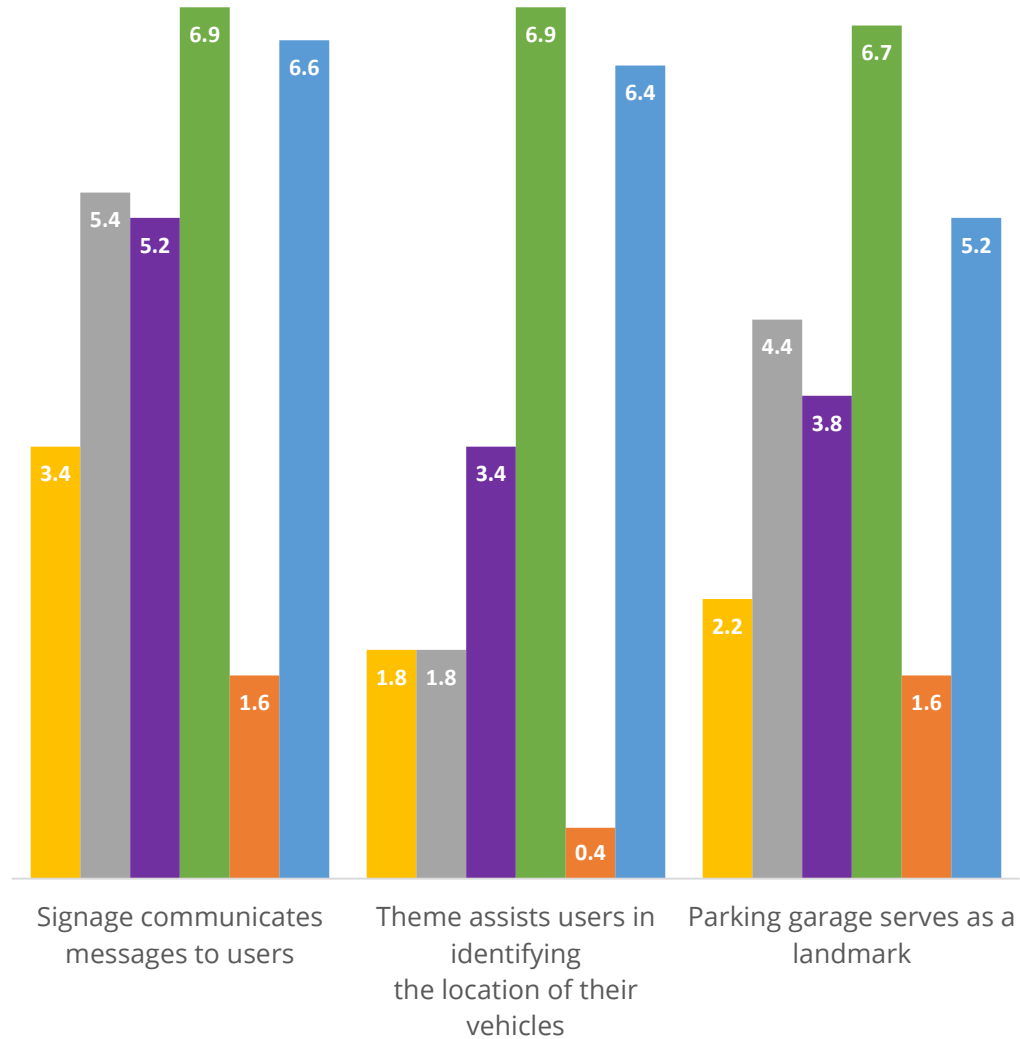
Poe scored highly among all respondents on the landmark measure. Whiting Street was criticized for its poor theme in particular, although two respondents noted that as the garage does not offer routine public parking the theme's importance would only apply for special events. Whiting Street also received below-adequate scores on the signage and landmark measures. Response to Twiggs Street's signage was mixed, with two respondents rating it better-than-adequate and three rating it below-adequate. Reaction to the garage's theme and landmark measures was consistently negative.



## Parking Efficiency

Poe received the highest average score

6.8



■ Twiggs St ■ County Center ■ South Regional ■ Poe ■ Whiting St ■ Fort Brooke

# Parking Aesthetics

Aesthetics constitute an appealing environment of parking structures, thus allowing for a more welcoming atmosphere. Environmental aspects such as landscape, layout, and appearance of parking structures can impact the behavior of users. A community with an attractive system of parking lots and garages can attract retail establishments and office buildings. Such a community will also attract visitors who find that they can shop conveniently in its business center. Enhancing the appearance of parking garages can make the overall visit to Downtown more enjoyable.

Poe ranked first in ratings of aesthetics with a 6.5 average, while South Regional received an average score on this dimension of 5.6. Whiting was again last with 2.4, while Twiggs Street received a 3.0. Respondents felt positively about Poe's landscape, design, maintenance and cleanliness, although some respondents noted that exterior lighting was difficult to assess as the visits were made during the day. Response to South Regional's maintenance and cleanliness was positive, while landscape and design was mixed but averaged positive. Whiting Street received a high average score on cleanliness and an average score of adequate on its maintenance, but scored very low on measures of landscape and design. Twiggs Street was also considered to be adequately maintained by respondents, but received low ratings on landscaping and design.



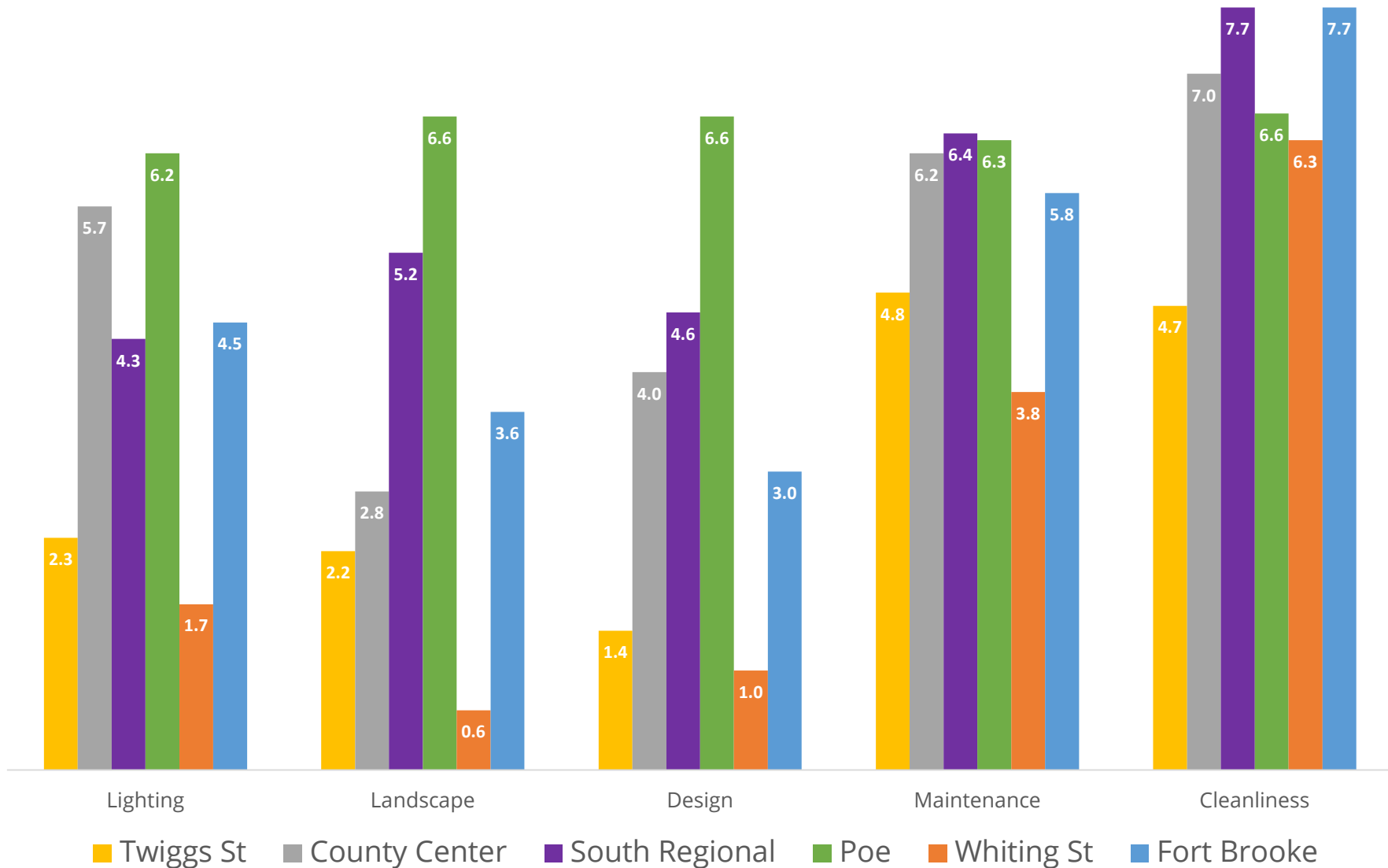


# Downtown Tampa Public Parking Garage Assessment

## Parking Aesthetics

Poe received the highest average score

6.5



# Parking Safety



Safety can be defined as the condition or perception of being free from harm or danger. Physical characteristics of the design elements in a parking garage greatly impact the perception and sense of security. Sense of security also comes into play when choosing to park in certain garages as visitors evaluate whether they might be harmed.

Steps can be taken to help users feel safer and more comfortable through passive security. A well-lit parking garage

is not only more attractive, but also provides a better sense of security. People were also more apt to recognize a parking structure when it was lit up at night. An open floor plan eliminates hidden spaces and allows for a presence of adequate lighting while glass walls on stairs elevators allow for greater visibility. In addition, video monitors for surveillance and exposed exterior spaces are shown to provide a greater sense of security.

All garages received above-adequate average scores on measures of safety. Poe ranked first with an average of 5.7, and South Regional came in second with 5.5. Poe ranked highly on measures of unobstructed spaces, stairwell visibility, inner-structure illumination and the safety of outside terrain. South Regional ranked highly on the same measures, with a slightly lower score on stairwell visibility but a much higher score on presence of video monitors. Twiggs Street was the only garage noted to have security guards present throughout the structure during a visit, although Poe had police positioned near the entrance during the January 11 visit. All garages received above-adequate average scores on stairwell visibility, safety of outside terrain, and unobstructed spaces.

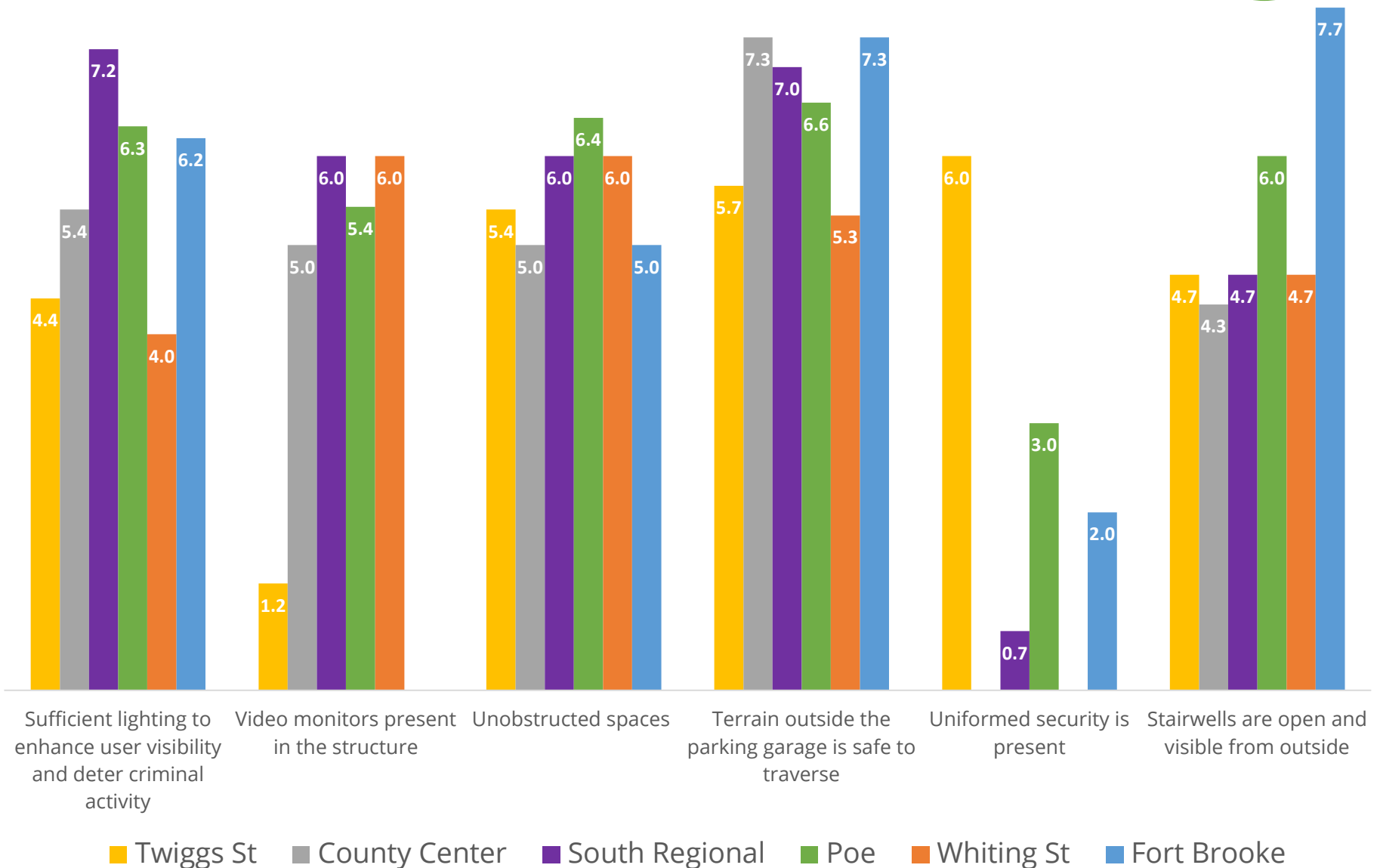


# Downtown Tampa Public Parking Garage Assessment

## Parking Safety

Poe received the highest average score

5.7



# Parking Capacity



South Regional was utilizing less than 75% of its total parking capacity at 11:45 AM on January 11th, while all five of the other structures were utilizing more than 75%. Fort Brooke was nearly filled to capacity at 10:45 AM on January 11th, with only scattered spots available on the top level of the structure. The County Center Garage was also full on every floor except for the top level, where about 50% of spaces were being utilized at 11:45 AM on January 11th.

# Parking Amenities

County Center, Fort Brooke, Poe and South Regional offer designated motorcycle parking, while painted space was being utilized for motorcycle parking in Twiggs Street but not officially designated. Only County Center and Fort Brooke were noted to have a bicycle rack inside their structure, while County Center and Twiggs Street were the only structures to offer electric car charging spots. County Center and Poe were the two garages noted to have compact spaces available.

Human cashiers were available at the County Center, Fort Brooke, South Regional and Twiggs Street garages. Cash, credit and debit were accepted at each structure except for Whiting Street, which offers only monthly parking options.



# Parking Recommendations

## Twiggs Street Garage



Internal wall painting with various colors can better assist users find their vehicles.

More vegetation and painting can assist with some of the external aesthetic shortcomings of the structure. Replacing the planters along the outside

sidewalk with more unusual vegetation or painting the structure in a unique way can help give the structure a theme.

While uniformed security was present, more noticeable video cameras and better lighting could help deter illicit activity.

## South Regional Garage



Signage issues can be resolved with larger, permanent installations of external signs indicating that public parking is available.

Painting internal walls by floor can assist with helping users identify their vehicles.

More personnel spread out throughout the structure can raise this garage's security score.

## County Center Garage



Even though County Center Garage has floor numbers painted on the wall of every floor, the colors surrounding these numbers are identical. Painting the walls of each floor a specific color and placing the floor number on the elevator doors can help users remember their vehicle's location.

While County Center garage's paint scheme sets it apart from surrounding buildings, the use of similar street art installations to surrounding corners could help users identify their garage from a distance.

## Poe Garage



Painting internal crosswalks that mirror commonly-followed footpaths can assist with resolving the issue of below-adequate internal crosswalks.

# Parking Recommendations

## Whiting Street Garage



Increase the number of internal crosswalks, possibly linking them to new exit points from the structure could provide better pedestrian access.

Place overhang signs or additional sandwich board-style signs to indicate that the

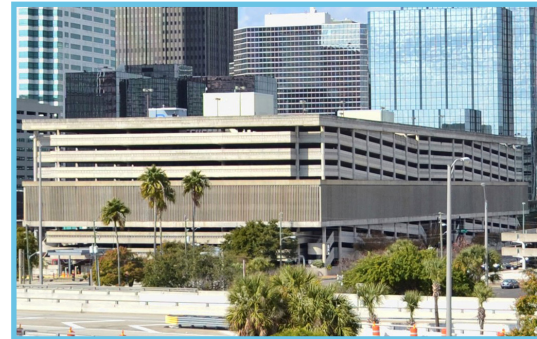
structure is for monthly parking only.

Paint interior and exterior walls to beautify the structure and the surrounding area. Simple interior painting to indicate the floor of the vehicle can not only help users better find their cars, but can help beautify the structure.

Add paving or vegetation to distinguish from the similarly-themed Fort Brooke garage across the street will also beautify the structure.

While Whiting Street scored highly on most measures of safety, more wall lighting could assist with more internal illumination of the structure.

## Fort Brooke Garage



Clear signage distinguishing monthly and hourly parking from surrounding collector streets could help resolve some of the ambiguity about which entrance daily and hourly parkers can use.

Fort Brooke currently has underutilized planters running along the perimeter of the structure. Installing rich vegetation in these areas can assist with some of the below adequate aesthetic scores.

More video monitors and/or uniformed security could assist with the safety measures Fort Brooke was lacking.



Garages that performed highly on one set of metrics tended to perform highly on others. Poe was the top-rated garage on all four dimensions, with Fort Brooke and South Regional alternating between dimensions for the second and third spot. Whiting Street consistently ranked the lowest on all factors, while County Center and Twiggs Street tended to receive middle-range scores of 'adequate'.

Future iterations of this assessment might benefit from forthcoming studies that determine the impact of parking structure design decisions on the user experience. Furthermore, conducting this study with additional respondents may allow for a more thorough determination of reliability than this study was able to provide.

Nonetheless, Downtown Tampa public parking structures in this study performed fairly well across the variables and dimension categories assessed. Of the 24 total dimensions analyzed, only six below-adequate scores were observed. Whiting Street, the only routinely-monthly parking garage analyzed in this study, was responsible for three of those six below-adequate scores. Inexpensive changes, like painting internal crosswalks or garage walls for better user floor identification, can help remediate the few consistent shortcomings of Tampa's Downtown publicly-owned parking structures.

In order to increase economic prosperity and enhance the quality of life for Downtown Tampa, it might be beneficial to invest in increasing the curb appeal of current parking garages by improving the lighting and by embellishing the structural aesthetics. Improved lighting will have the added advantage of creating a safer environment for pedestrians and structural embellishments may prove to drive more traffic to local businesses as people venture Downtown to park in novelty garages. In addition, these distinctive parking garages would have the extra benefit of helping individuals easily locate available parking garages.



## Credits

### Report prepared by:

Tony LaColla, AICP, Principal Planner, Hillsborough County City-County Planning Commission

Vanko Antonov, University of South Florida Graduate Fellow, Hillsborough County City-County Planning Commission

Brandon Berry, University of South Florida Graduate Fellow, Metropolitan Planning Organization

### Project Team:

Vanko Antonov, USF Graduate Fellow, Hillsborough County City-County Planning Commission

Brandon Berry, USF Graduate Fellow, Metropolitan Planning Organization

Karen Kress, AICP, Director of Transportation Planning, Tampa Downtown Partnership

Tony LaColla, AICP, Principal Planner, Hillsborough County City-County Planning Commission

Brandie Miklus, AICP, Transportation Planner, JACOBS

Jeffrey Zampitella, President, SkyPoint Condominium Association, Inc.



Plan  
Hillsborough



813-272-5940



[www.planhillsborough.org](http://www.planhillsborough.org)



601 E. Kennedy Blvd. 18th Floor  
Tampa, FL 33602