



Downtown St Petersburg
MOBILITY STUDY

FINAL *Study Report*

JUNE 2022



CONTENTS

1/ EXECUTIVE SUMMARY	1	PROJECT PERFORMANCE SUMMARY: I-375 Partial Removal & 4th/5th Ave N Two-Way Conversion	56
Study Overview	1	PROJECT PERFORMANCE SUMMARY: I-175 Removal, New Full Interchange at 5th Ave S & 4th/5th Ave S Two-Way Conversion	58
Study Process	4		
Study Recommendations	5		
2/ UNDERSTANDING CONTEXT & VISION	7	5/ PROJECT PRIORITIES & ACTION PLAN	60
Mobility Context & Vision	7	Prioritization Process	60
NEEDS, CHALLENGES & Opportunities	8	Summary of Recommendations	60
DTSP Mobility Vision	17	Projects Previously Identified For Implementation	61
Outreach Process & Summary of Input	18	Priority One Project: 8th/Dr. MLK, Jr. St Two-Way Conversion and Lane Reallocation Study	63
3/ OPTIONS TO ACHIEVE THE VISION	24	Priority One Project: 3rd/4th St Two-Way Conversion and Lane Reallocation Study	64
Two-Way Conversion	25	Priority One Project: I-175 Corridor Modifications	65
Interstate Spur Changes	30	Priority One Projects: Transit & Traffic Projects	68
Multimodal Improvements	34	Priority One Projects: Safety Projects	68
Emerging Trends & Related Improvements	40	Priority Two Project: Mobility Study Update	68
4/ TESTING & EVALUATING OPTIONS	42	Priority Two Project: I-375 Corridor Modifications	69
Evaluation Overview	42		
Traffic Analysis & Evaluation Results	43	APPENDIX A: EXISTING CONDITIONS & NEEDS ASSESSMENT	
PROJECT PERFORMANCE SUMMARY: 8th St/Dr. MLK, Jr. St Two-Way Conversion	50	APPENDIX B: NETWORK TRAFFIC ANALYSIS	
PROJECT PERFORMANCE SUMMARY: 3rd St/4th St Two-Way Conversion	52		

1/EXECUTIVE SUMMARY

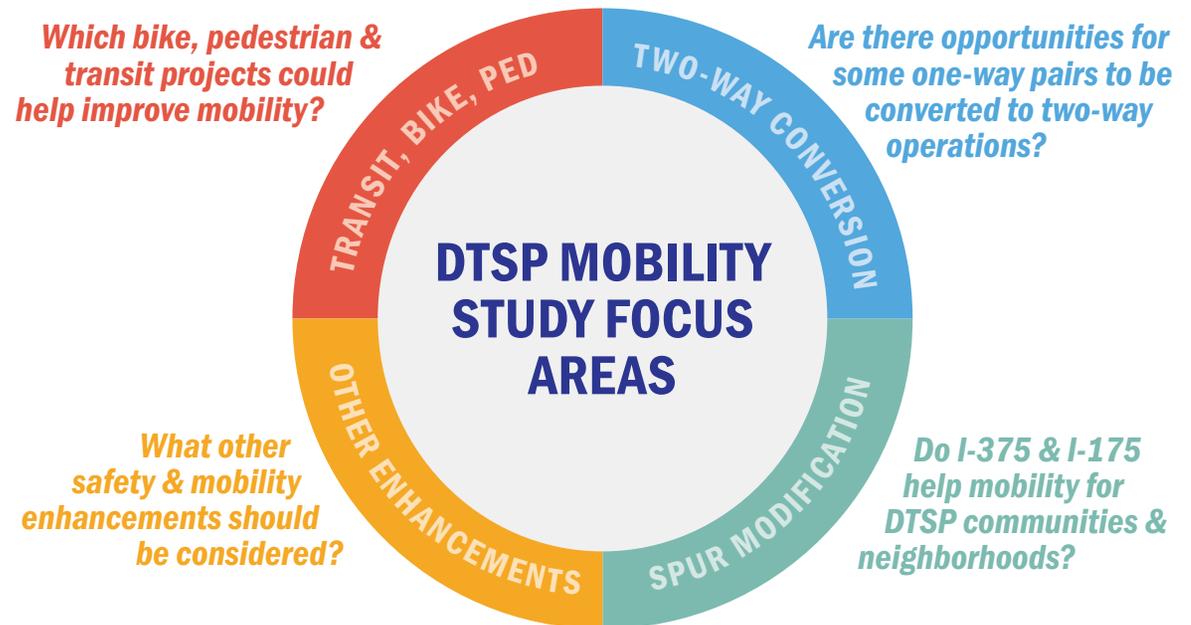
Study Overview

As one of Florida’s most unique and vibrant communities, demand for office, housing and services in downtown St. Petersburg, or DTSP, continues to grow. At the same time, people are looking for more ways to travel in and around the community in a safe and efficient manner. To ensure inclusive economic growth and opportunity, and sustain downtown’s mix of institutions, jobs, services, and arts and culture, it’s critical to understand the ways in which the transportation network can help meet the area’s needs for improved access, connectivity, and mobility.

Through this joint effort between Forward Pinellas, City of St. Petersburg, and the Florida Department of Transportation, the focus of the Downtown St. Petersburg (DTSP) Mobility Study is to understand the context and vision for multimodal mobility in DTSP, conduct conceptual planning and evaluation of multimodal improvement options, and prioritize short- and long-term projects.

The study is focusing on defining and evaluating improvement projects that affect the overall network in DTSP, including potential projects that affect roadway capacity, operations, safety, and connectivity for pedestrians, bicyclists, transit users, and drivers. The intent of the study

is to answer four primary questions related to two-way street conversions, redesign of the interstate spurs, transit, bicycle and pedestrian infrastructure improvements, and other safety and mobility enhancements.



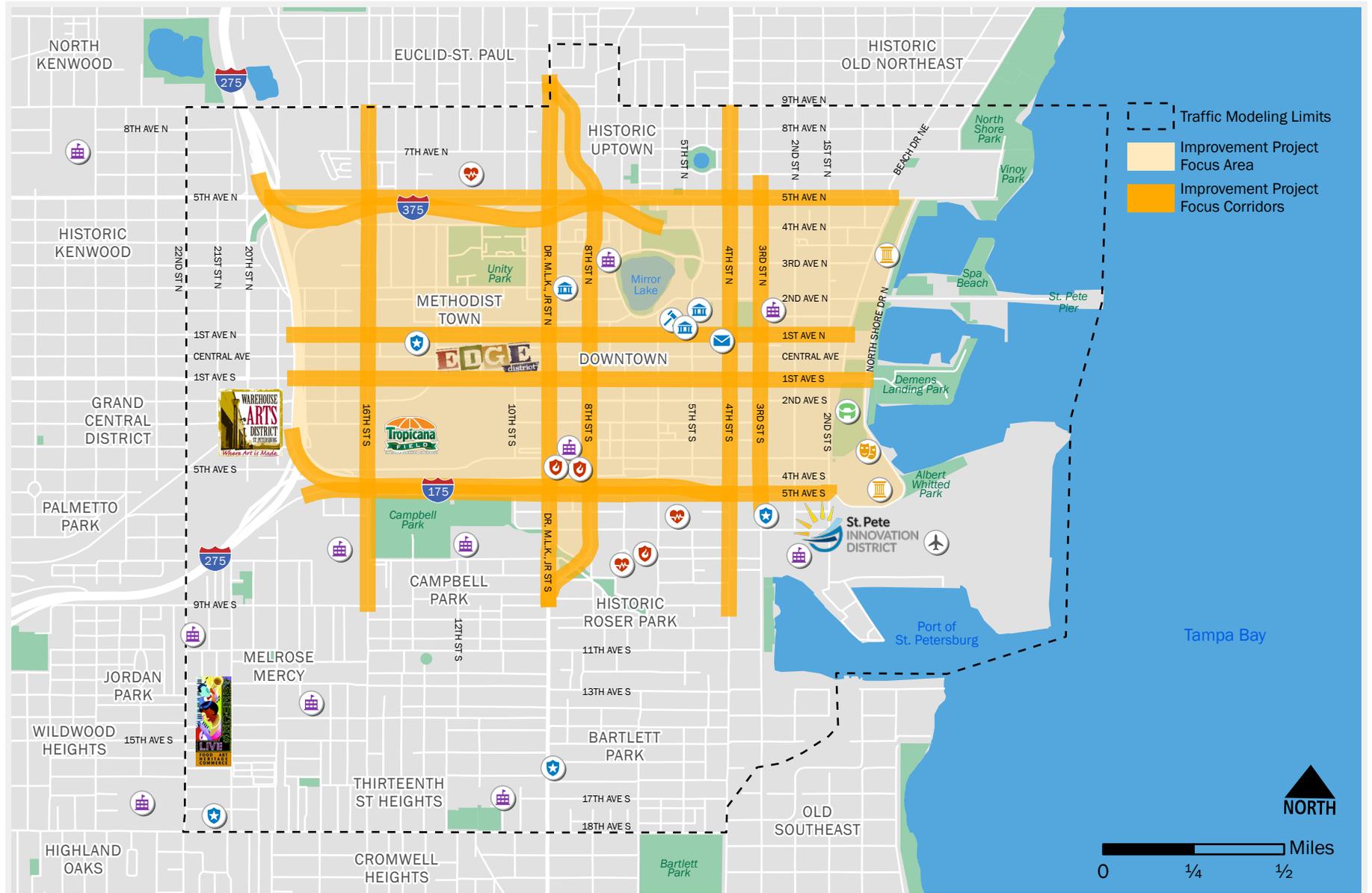


A key part of the study is the development of a traffic model to help evaluate impacts of changes to the roadway network on those traveling by car to, from, or within DTSP. The traffic modeling area is bounded by the Innovation District and 18th Ave S to the south, 22nd St to the west, 9th Ave N to the north, and Tampa Bay to the east. For the purposes of the study, DTSP includes the downtown core and portions of several adjacent neighborhoods including the EDGE District, Historic Old Northeast, Historic Uptown, Methodist Town, Euclid-St. Paul, Historic Kenwood, Grand Central District, Warehouse Arts District, Deuces Live, South St. Petersburg Community Redevelopment Area (CRA), MLK St Business District, 16th St Business District, Melrose Mercy, Jordan Park, Campbell Park, Innovation District, Historic Roser Park, Bartlett Park, and Thirteenth Street Heights. The modeling effort is focused on understanding the impacts to traffic circulation and patterns, travel time, and other operations for five sets of projects, or scenarios, that were developed to understand the feasibility of larger potential changes on the network, including potential changes to the interstates and primary roads used for regional trips to and from DTSP.

The potential improvement projects that were considered included the conversion of the one-way streets to two-way operations, lane reallocations for bicycle, pedestrian, parking or transit uses on other priority arterial roadways, and modifications to or redesign of the I-175 and I-375 “interstate spurs” that lead into and through DTSP from I-275. Many of the projects that were considered were previously identified in earlier studies, including the City’s *Complete Street Implementation Plan*.

The study offers recommendations for optimizing the multimodal transportation network in DTSP to address planned growth and development, including advancing specific projects that do not need significant lead time to accomplish. Analyses included examination of potential strategies to strengthen connectivity between neighborhoods and commercial and institutional destinations while maintaining adequate regional access between I-275 and key employment and medical uses in DTSP.

DTSP MOBILITY STUDY AREA MAP



Study Process

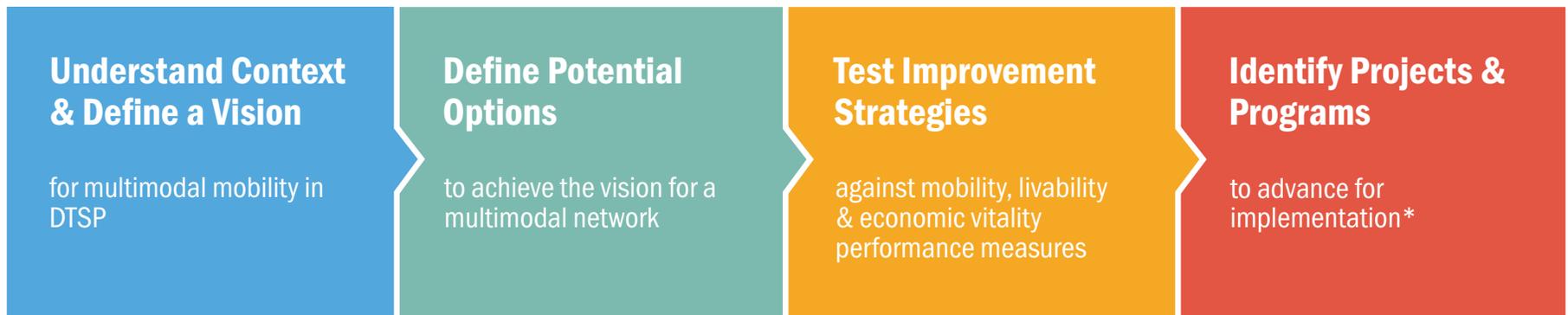
The purpose of the DTSP Mobility Study is to evaluate identified opportunities to allow DTSP to adapt to future conditions and demand consistent with community and regional goals. The intent of the study is to understand the existing mobility context and define a shared community vision for how residents, workers, and visitors travel within DTSP that is based on common, desired outcomes. The study is designed to engage the community and key stakeholders in a collaborative process to accomplish the following:

- Understand the context and vision for multimodal mobility in downtown St. Petersburg;
- Define potential changes or improvement options for the network to achieve the vision;
- Test the improvement options or strategies against a series of mobility, livability, and economic vitality performance measures that align with the vision; and

- Identify recommendations for projects and programs to advance into short-term (1-3 years), mid-term (4-6 years), and long-term (7-14 years) implementation or more detailed stages of project development, design, and engineering. Lower priority or extended term projects (15+ years) are also identified.

The DTSP Mobility Study was a multi-year effort that brought together a wide range of downtown stakeholders, including residents, business owners, workers, visitors, and regional and state partners to create a common vision and strategic plan to improve mobility within downtown St. Petersburg. Public input is a critical part of the study process, including identifying priorities and recommendations to advance for further study or implementation. The study began in early 2020 and included several rounds of outreach throughout to gather input on issues, opportunities, and ideas, as well as getting feedback on the evaluation and analysis findings.

STUDY PROCESS & GOALS:



** Depending on complexity of each project, implementation may include additional studies, projects or programs that may require additional stages of planning, environmental evaluations or analysis, design, engineering, right-of-way, and/or construction.*

Study Recommendations

Prioritization Process

The outcome of this study was an Action Plan for mobility improvements in DTSP that was aimed at expanding mobility options, creating safer streets designed for everyone, increasing comfort to attract and sustain activity, and enhancing the convenience of moving from place to place. To accomplish the goals and achieve the mobility vision established as part of this study, the Action Plan includes a series of recommended projects, studies, and programs that the City of St. Petersburg, Forward Pinellas, FDOT, or other partner agencies should take to create a more reliable, inclusive, and efficient transportation system.

The projects recommended for advancement or implementation are based on the results of the evaluation process and public input received over the course of this study. The projects were organized into two tiers or priorities: Priority One Projects are those that should be advanced in the next 14 years, and Priority Two Projects are those that should advance once implementation of the Priority One Projects are completed. For the Priority One Projects, the specific actions are organized into short-term (1-3 years), mid-term (4-6 years), and long-term (7-14 years) actions. Actions related to Priority Two Projects are anticipated to occur later (15+ years).

Summary of Recommendations

Together, the recommended actions from this study are designed to propel the City's goal of enhancing DTSP as a vibrant, unique, and walkable place where residents and visitors enjoy spending their time and money. Described in more detail in this section, the following studies, projects, strategies, or plans are recommended for advancement.

PROJECTS PREVIOUSLY IDENTIFIED FOR IMPLEMENTATION

Several lane reallocation projects previously identified for implementation including those from City's *Complete Street Implementation Plan* were evaluated as part of this study to confirm their feasibility and explore any potential impacts that would result from the other network improvement projects under consideration. Based on the findings of this study's evaluation and public outreach, no negative impacts are anticipated that would affect implementation of these projects as planned.

DTSP STUDY PRIORITY ONE PROJECTS

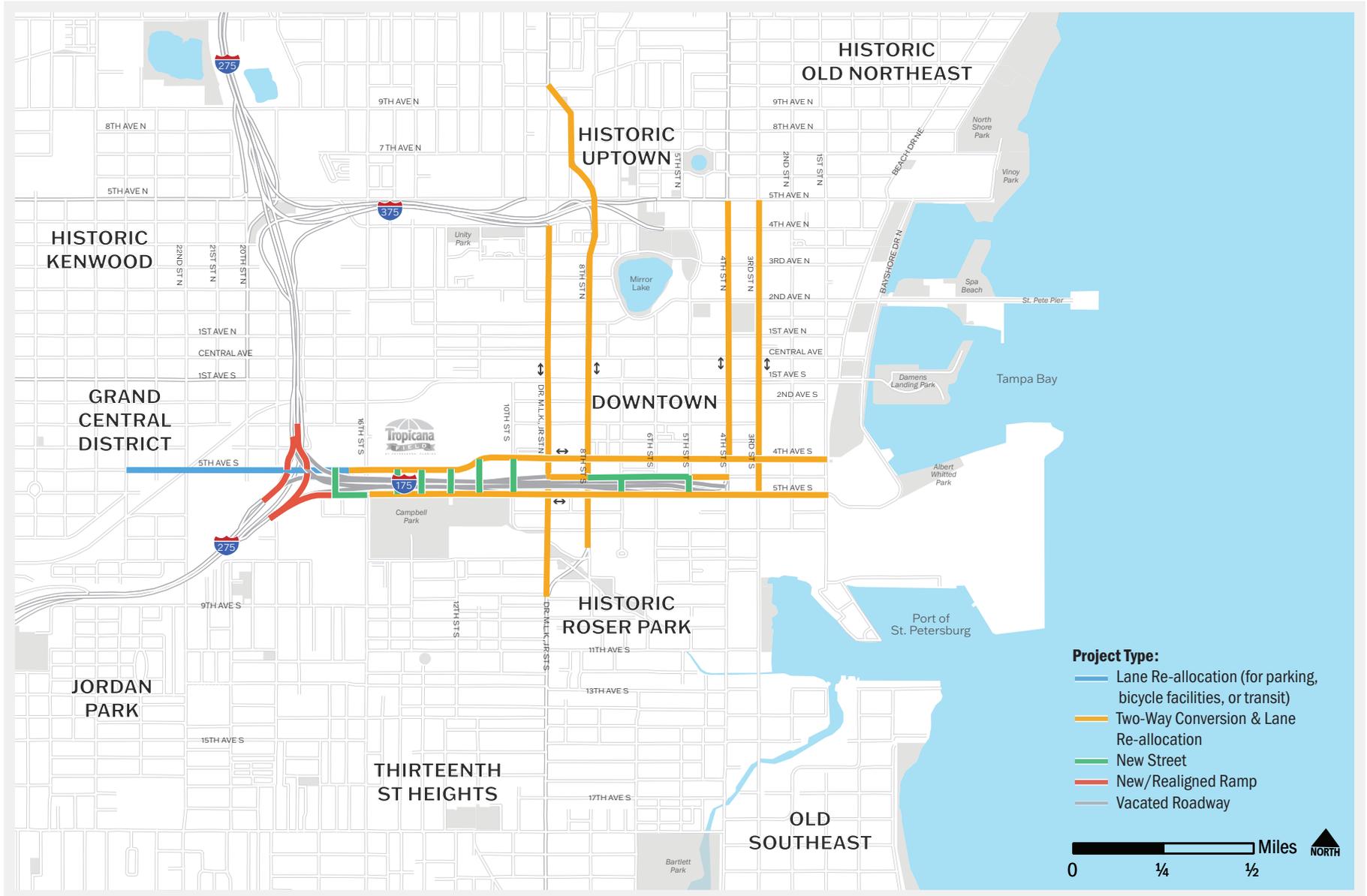
Described in more detail in the Action Plan, the following studies, projects, strategies, or plans (shown on the following map) should be advanced as the top priorities:

- Two-way conversion and lane reallocation study of the two north/south one-way pairs (3rd/4th St and 8th/Dr. MLK Jr. St)
- Studies to advance conceptual design, develop a redevelopment strategy based on community preferences, and better understand feasibility and impacts of modifications or removal of I-175. Potential to advance into next steps of FDOT project development process.
- Other projects related to transit improvements, advanced technologies, and traffic signal prioritization, and safety related projects to address crash hotspots on local DTSP streets.

DTSP STUDY PRIORITY TWO PROJECTS

At a lower priority, more detailed studies and analysis to advance conceptual design, develop a redevelopment strategy, and better understand feasibility and impacts of modifications or removal of I-375 should be advanced. Additional study or analysis may be needed prior to advancement to understand current needs and conditions since these projects are anticipated for longer-term implementation.

PRIORITY ONE PROJECTS (SHORT, MID, AND LONG-TERM)



2/UNDERSTANDING CONTEXT & VISION

Mobility Context & Vision

DTSP is an evolving place and its transportation system must also change to meet the needs of its residents, workers, and visitors. Understanding the current and future conditions that affect mobility in DTSP was a critical first step in this study. To better identify the challenges and issues that should be addressed, an existing conditions and needs assessment was completed based on a review of previous studies and plans, socioeconomic data, land use information, existing and proposed transit service, bicycle and pedestrian facilities, crash statistics, commute patterns, and roadway congestion and travel delays. This section provides the key findings of the existing conditions and needs assessment. The full report is provided in Appendix A.

Following the context research, a visioning process was conducted to define a Mobility Vision for DTSP that was used as a framework to guide the definition and evaluation of projects for this study. A set of performance measures that align with the Mobility Vision and four supporting statements were used to evaluate the potential impacts and benefits of a set of scenarios that includes combinations of short- and long-term projects.

Questions & Considerations Addressing Mobility in DTSP

- *What community needs and potential solutions have already been identified in past studies or plans?*
- *Who lives, works, and visits DTSP? What are their needs and concerns related to mobility?*
- *Where do transit-dependent residents live and where are their destinations? How does the existing transit system serve DTSP?*
- *Where do people want to walk and bike? What new facilities are needed to improve access and mobility?*
- *What are the existing and proposed land uses and pattern of development?*
- *How do commuters get to/from DTSP? How do people move around DTSP?*
- *Where are the areas in DTSP with safety concerns for drivers, pedestrians, or cyclists?*
- *Where are the congested streets or bottlenecks?*

NEEDS, CHALLENGES & OPPORTUNITIES

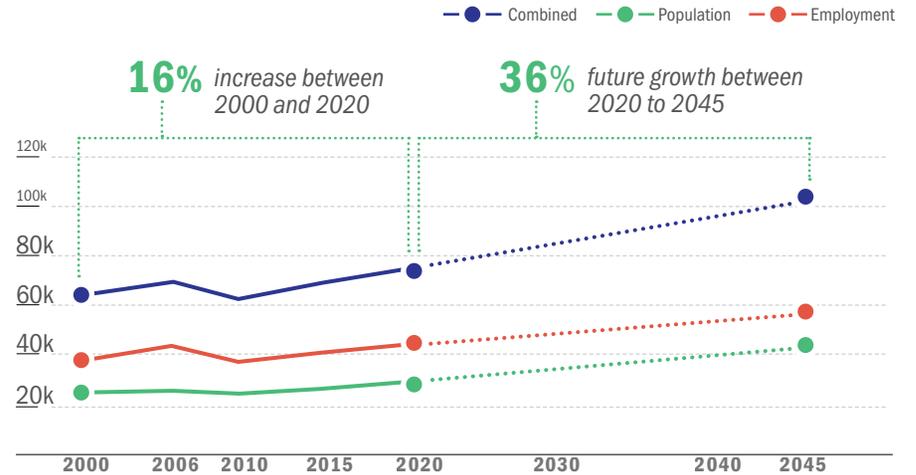
As the ways we get around DTSP change and evolve, the City must adapt to meet the needs of residents, workers, and visitors today and in the future. Understanding issues and challenges, and identifying solutions will help shape how people live, work, play, and visit DTSP.

Serving Future Growth

As a regional destination, an evolving urban neighborhood, and a hub for innovation and entrepreneurship, DTSP attracts a broad range of activity year-round and has experienced significant growth over the past 20 years, gaining 4,000 residents and 6,200 employees. DTSP is expected to gain over 14,000 new residents and 13,000 new employees over the next 25 years. **By 2045, the number of residents and employees per acre will be highest within the core of DTSP, the Tropicana site, and the Innovation District.** Activity density (the number of residents/employees per acre) is anticipated to increase primarily in the downtown core and the Tropicana Field site.

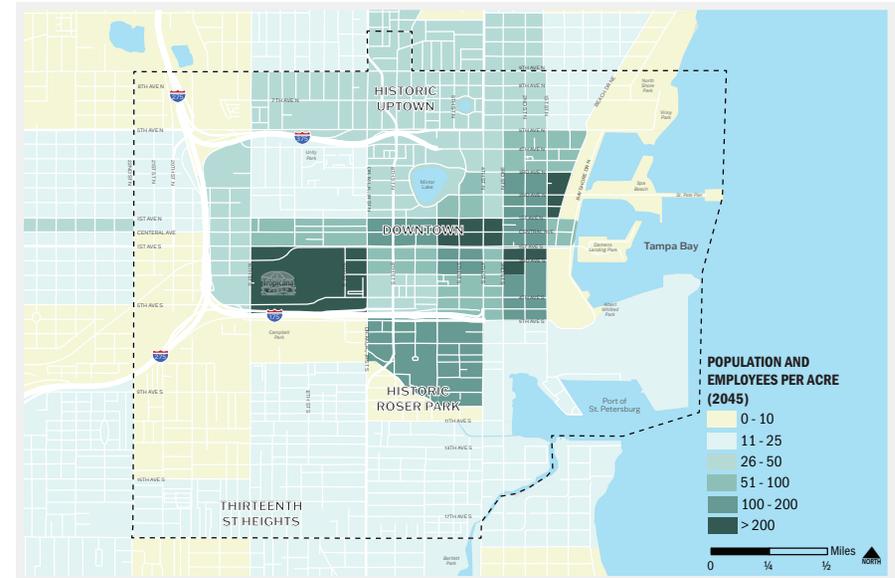
DTSP is also a hot spot for visitors in the Tampa Bay region. Between 2014 and 2019, the number of visitors in Pinellas County nearly tripled from 5.8 million to 15 million. As a major destination in the Tampa Bay Region, DTSP draws weekend crowds to museums, sporting events, restaurants and shops along Beach Dr, Central Ave, and the St. Pete Pier. Seasonal tourists are drawn to special events, festivals, and the downtown’s major attractions in winter and spring. As the number of residents, workers, and visitors grows, the pressure on the transportation infrastructure will increase. The focus in the next decade will be to anticipate the impacts of this growth and identify ways to move people more efficiently within the DTSP street network.

DTSP POPULATION & EMPLOYMENT TRENDS



Source: Tampa Bay Regional Planning Model (TBRPM) 2030, 2035, 2040, 2045, (City of St. Petersburg Revision, November 2020)

POPULATION & EMPLOYMENT DENSITY (2045)



Source: Tampa Bay Regional Planning Model (TBRPM) v.9, (City of St. Petersburg Revision, November 2020)

Bridging Barriers to Access

Although the historic street grid makes it easy to get from place to place, accessibility across DTSP is impacted by the interstate spurs and presence of high-speed, one-way streets. Residents of DTSP and surrounding neighborhoods have lower rates of car ownership than residents elsewhere in the City and County, and they are more likely to bike, walk, and take transit to work. Highway segments and streets designed to serve regional commute trips (I-175 and I-375 spurs and the one-way pairs) create barriers for those dependent on walking and biking to get to work and meet their daily needs.

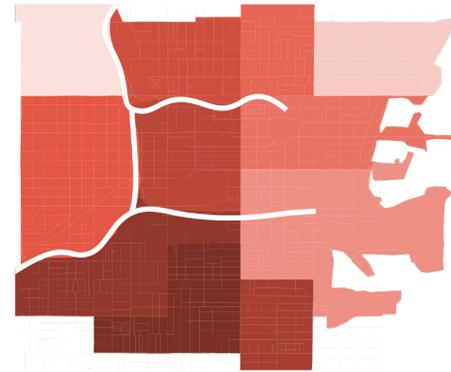
While the coverage of sidewalks is consistent through DTSP, the quality is inconsistent north and south of the interstate spurs.



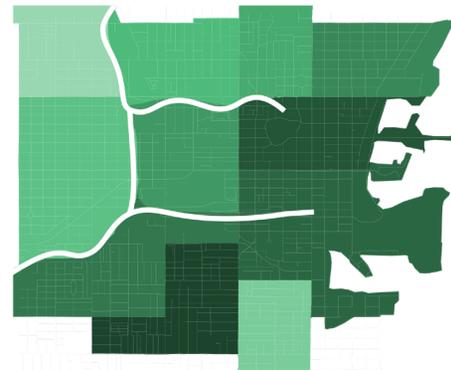
21% of DTSP households do not have access to a car



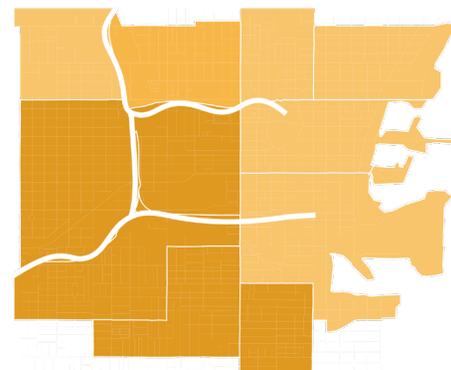
17% of DTSP residents have a disability



Areas with **higher rates of poverty** are concentrated just south of DTSP.



Areas with **high dependence on transit, walking, and biking** to access jobs.

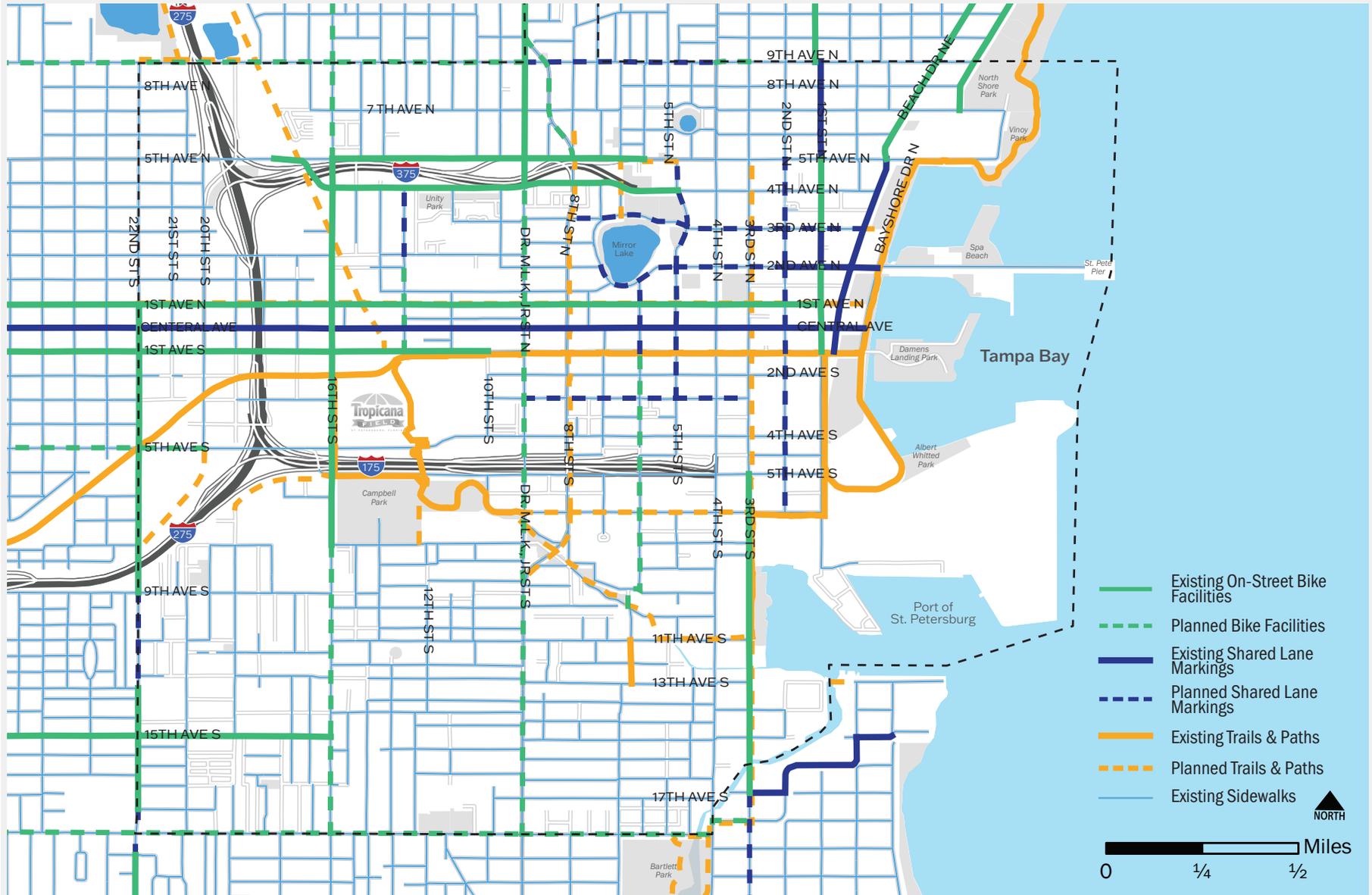


Several areas in DTSP have **negative health indicators** like obesity, asthma, and mental health.



Source: 2018 American Community Survey 5 Year Estimates; Centers for Disease Control

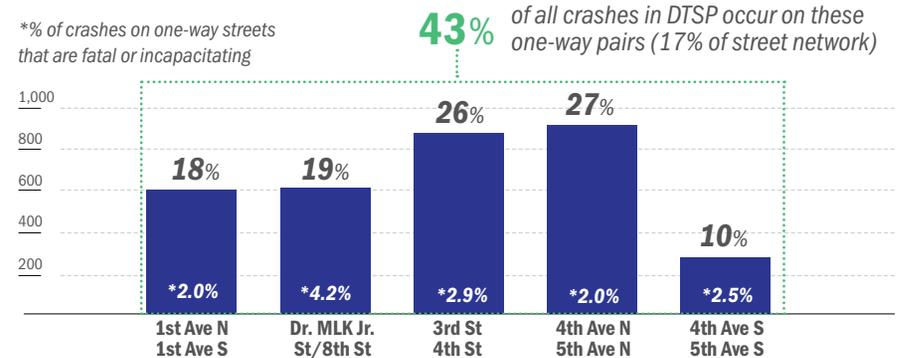
EXISTING SIDEWALKS, TRAILS & BIKE FACILITIES



Improving Safety

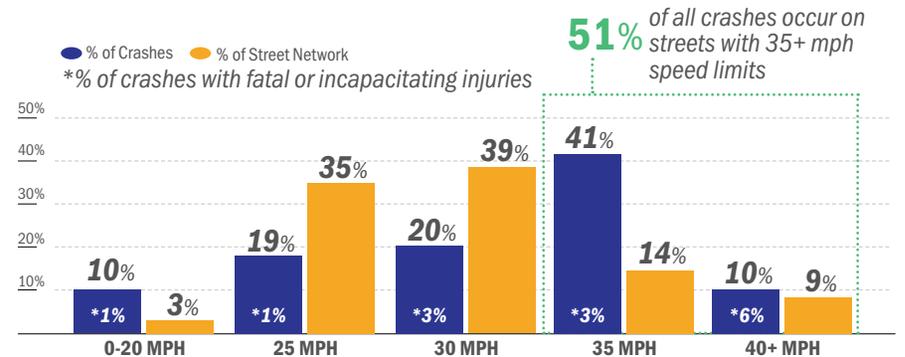
While DTSP streets provide easy access to and from downtown, safety conflict points exist between motorists traveling at higher speeds and pedestrians, cyclists, or other multimodal users. Between 2015-2019, 43% of total crashes and 45% of fatal/incapacitating crashes in DTSP occurred along the one-way streets. The one-way pairs and streets with higher speed have greater percentages of fatalities or incapacitating crashes compared to other streets. Pedestrian crashes are concentrated along the City’s busy one-way commercial streets such as 3rd St, 4th St, 1st Ave N, 1st Ave S, and Central Ave. Bike crashes are also clustered on one-way streets, especially those without bicycle facilities, in areas with lower levels of car ownership, and along commercial corridors. Crashes are also concentrated at key intersections, including the I-275 off-ramp at 5th Ave N and the end of I-375 and I-175 ramps at 4th St.

CRASHES ON ONE-WAY PAIRS



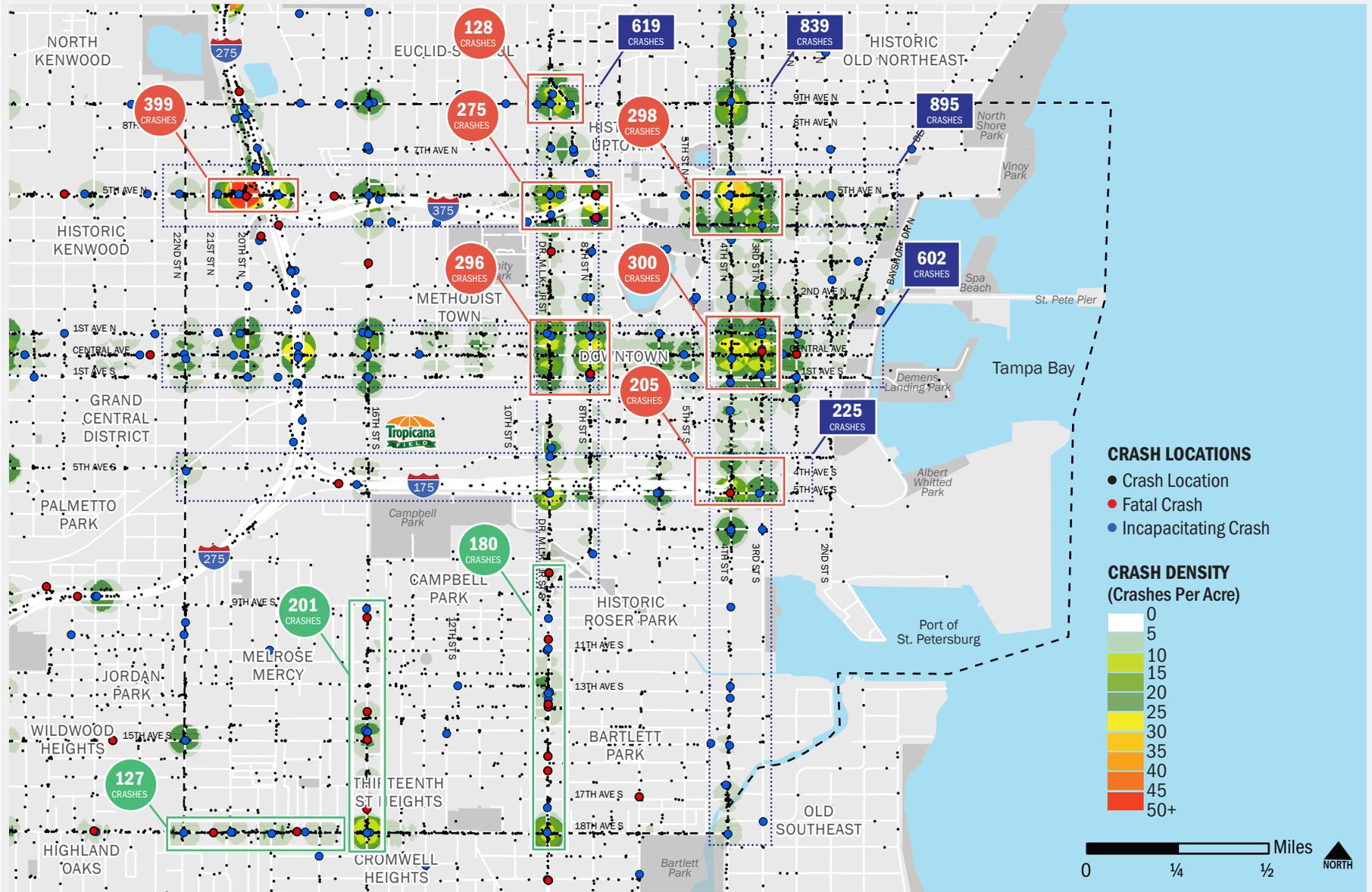
Source: CDMS, 2015-2019

CRASHES BY SPEED LIMIT



Source: CDMS, 2015-2019

CRASH HOTSPOTS, 2015-2019



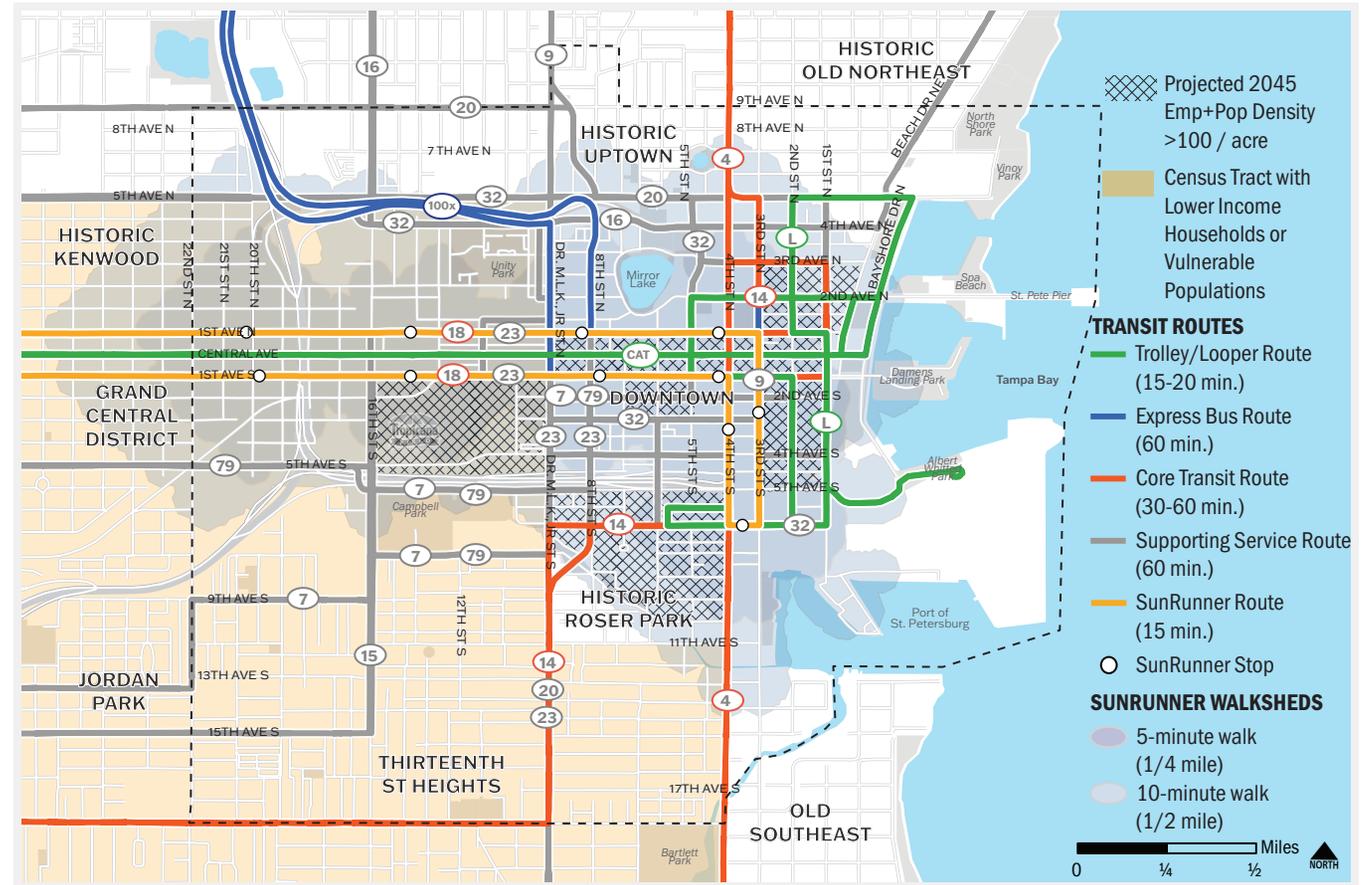
Source: CDMS, 2015-2019

Improving Access to Transit

Downtown residents, workers, and visitors have reliable and convenient access to transit service, with multiple, overlapping routes located within DTSP, especially near the waterfront and along Central Ave/1st Ave N/1st Ave S. The Central Ave Trolley and Looper services connect key destinations, and the SunRunner will offer high frequency service along the Central Ave corridor, with buses arriving every 15 to 20 minutes.

While the downtown core has frequent, accessible service, the **adjacent DTSP neighborhoods to the north and south have less access to frequent service.** Only a few routes have frequent service (Route 14, 4, and 18) every 30 minutes. The majority of bus routes operate every 60 minutes. Providing better connections between routes, increasing service frequency to transit-dependent neighborhoods north and south of the downtown core, and providing direct connections to higher

EXISTING & PLANNED TRANSIT



Source: PSTA, City of St. Petersburg, HDR

frequency services, particularly SunRunner, will help provide better access to downtown's close-in neighborhoods. Additionally, the City is finding solutions to improve micromobility to transit stops,

including bike share and scooters. Several bike share hubs and corrals are co-located with bus stops and were specifically located to help support first-mile/last-mile access between transit and destinations.

Continuing to increase these options could help make more frequent service more accessible to residents in DTSP adjacent neighborhoods.

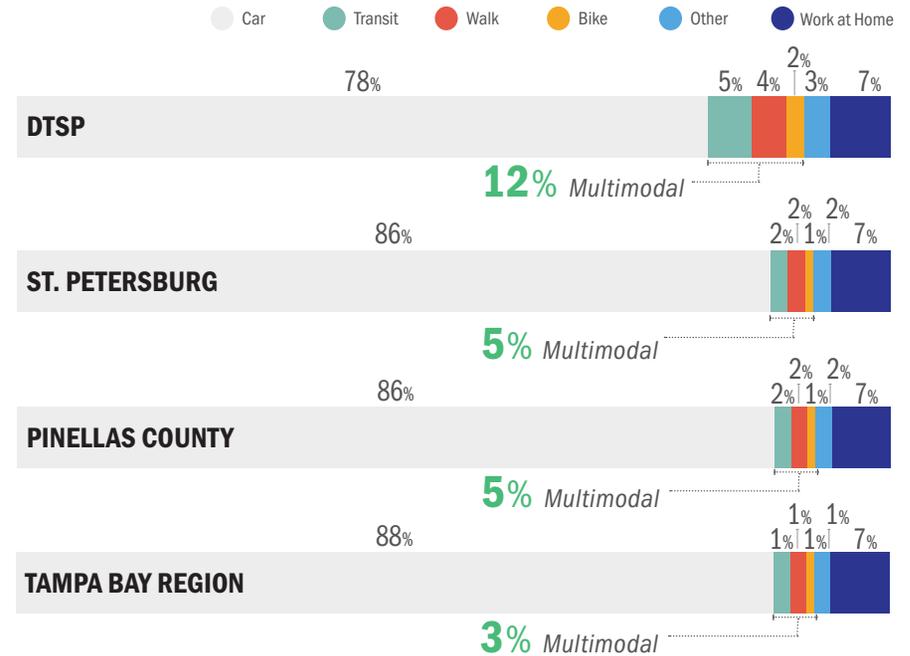
Improving Walkability

Walkability is among DTSP’s primary competitive advantages. As more people make the choice to live, work, and visit downtown, there’s an increased demand for safe, convenient, and attractive alternatives to car travel. At the same time, the downtown and adjacent neighborhoods are attracting new investment and unprecedented levels of visitation. Residential growth in DTSP has been steady over the past decade and more is anticipated as several additional multi-family housing developments have been approved and are under construction, including the Tropicana Field redevelopment plan.

Improving multimodal access and walkability in DTSP will be essential to existing and anticipated residents, workers, and visitors. Survey results conducted in summer 2020 and U.S. Census commute pattern data show that visitors and employees tend to drive to DTSP, but typically walk, bike, or get around in other ways once downtown. Also, DTSP residents have some of the highest rates of walking and biking in the Tampa Bay region.

Re-envisioning the transportation network, prioritizing multimodal transportation, and boosting walkability over increasing regional roadway could also better serve the 21% of households in DTSP without access to a personal vehicle. If walkability and other multimodal investments were prioritized and DTSP was able to become even more walkable or bikeable, the improved public health, equity, and reduction in car dependency would benefit DTSP adjacent communities as access is improved for local trips. Additionally, giving greater focus in DTSP on improving walkable streets could boost economic growth, advance redevelopment plans, and support businesses along the commercial corridors and destinations that rely upon pedestrian access.

COMMUTE PATTERNS BY MODE



Source: 2018 American Community Survey 5-Year Estimates

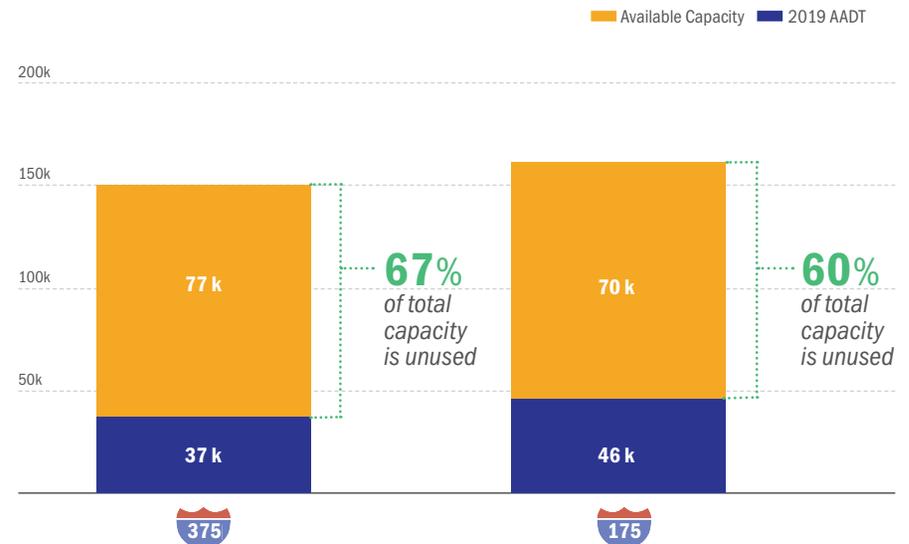
Maintaining Regional Access

As future public and private investment decisions are made, the City will need to strike a careful balance between needs of commuters, visitors, and residents who live, work, or play in DTSP. Approximately 40,000 employees work in DTSP. The majority live outside the downtown and adjacent neighborhoods. More than 37,000 workers commute into DTSP everyday and 12,000 residents leave DTSP to work elsewhere. Only a handful of DTSP residents both live and work there so most residents, workers, and visitors arrive and leave DTSP in a vehicle.

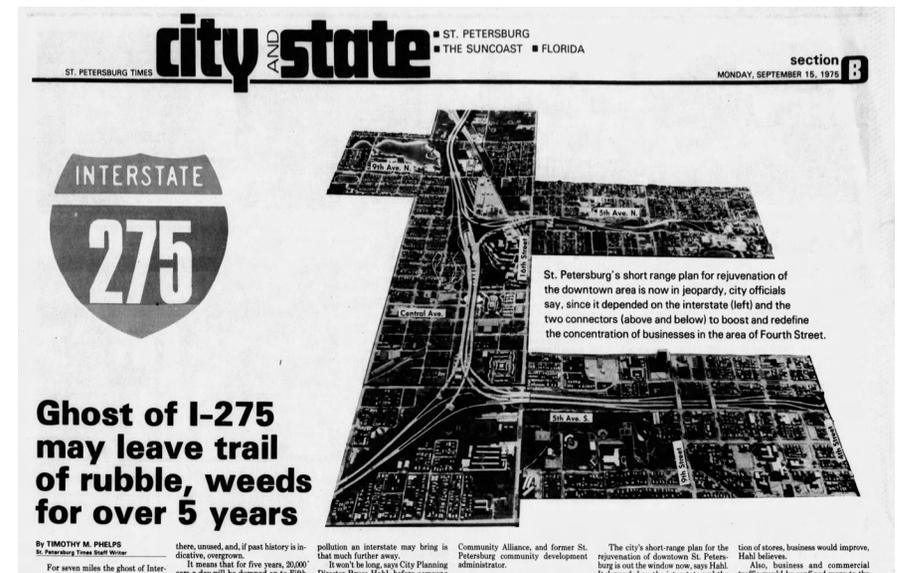
The majority of commuters to DTSP live within 10 miles, primarily in Central/Northern Pinellas County. Similarly, the majority of DTSP residents travel to jobs within 10 miles of their residence. Because the historic street grid is well defined within DTSP, regional drivers have many choices to get into and around downtown despite the presence of I-275, I-375, I-175 and other major arterials with higher capacities. StreetLight Data from 2019 indicates that commuters primarily use local streets to get to and from DTSP. **Only 38% of regional trips to DTSP entered or left the downtown on I-275 (accessing via I-375, I-175, or the ramps at 5th Ave N).**

Conceived as the beginnings of longer highways to connect DTSP with the rest of Pinellas County, I-175 and I-375 were constructed in the late 1970s to carry significant volumes of traffic into the easternmost core of downtown, east of 4th St. Coupled with the I-275 project, they effectively served to separate sections of DTSP from the adjacent neighborhoods. **Forty years after construction, I-375 and I-175 still have an excess of roadway capacity on an average day.** While traffic on I-375 and I-175 have grown as population and employment increased in the last 40 years, both of these interstate spurs still operate well under capacity. Based on 2019 traffic volumes (e.g., annual average daily traffic or AADT) and roadway capacity (number of lanes and level of service, both I-175 and I-375 have over 60% of capacity going unused on an average day.

I-375 & I-175 ROADWAY CAPACITY, 2019

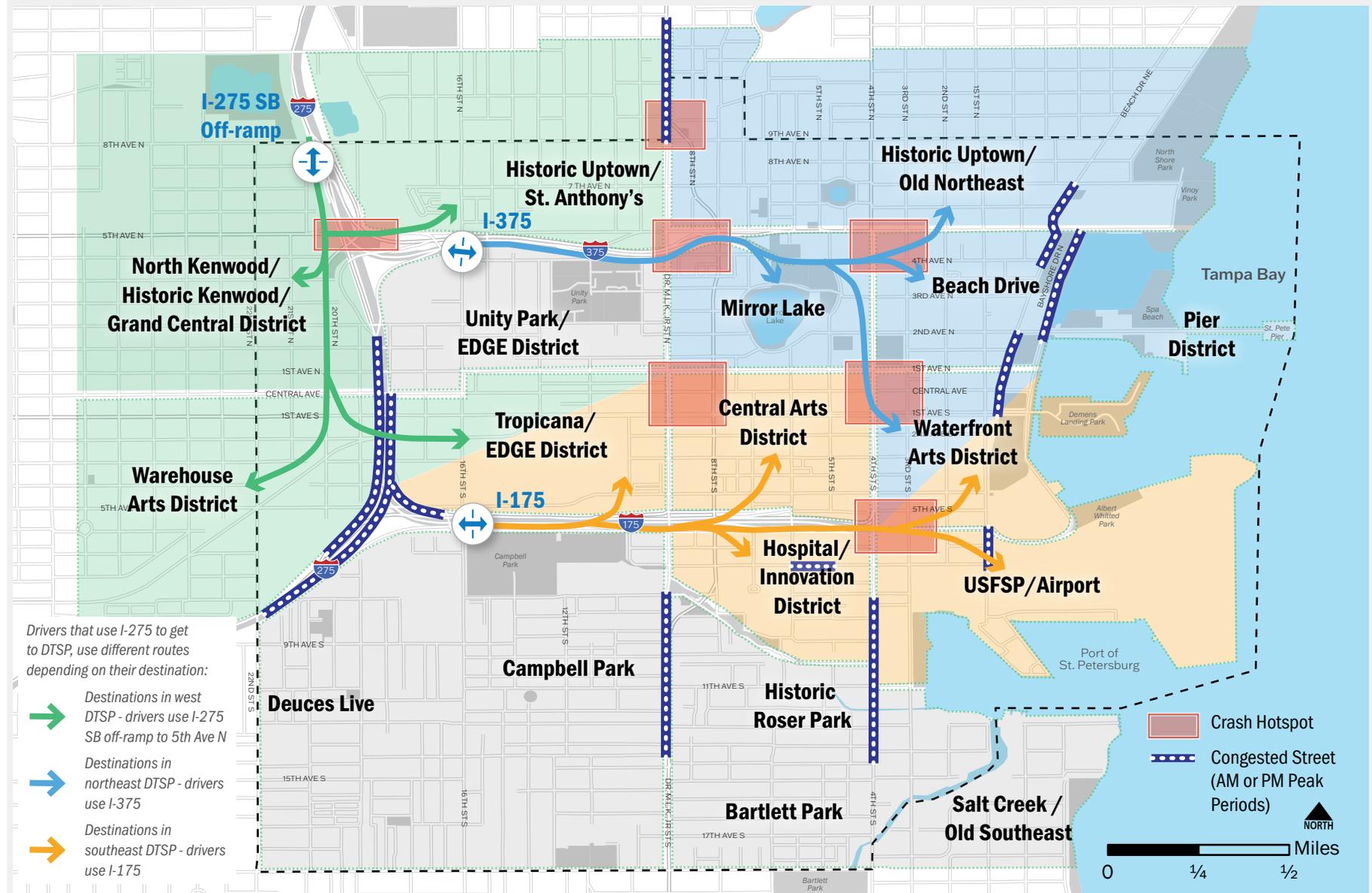


Source: FDOT, Florida Traffic Online (<https://tdaappsprod.dot.state.fl.us/fto>); 2020 Q/LOS Handbook



Source: Tampa Bay (formerly St. Petersburg) Times, Sept. 15 1975

DTSP REGIONAL TRAVEL PATTERNS FOR INTERSTATE USERS



DTSP Mobility Vision

The study team developed a Mobility Vision for DTSP to help guide the definition and evaluation of projects for this study. This vision is based on an understanding of the challenges, issues, and opportunities, past studies, planning efforts and current plans as well as public input on community desires and ideas. The vision complements work completed for the StPete2050 initiative, which was launched in 2019 by the City of St. Petersburg. The StPete2050 will serve as the City’s Comprehensive Plan for the next 30 years and addresses Citywide transportation and mobility as a major theme. The DTSP Mobility Study focused specifically on mobility within the downtown core and adjacent neighborhoods.

As shown below, the Mobility Vision for DTSP guided the development of short- and long-term transportation improvement projects that balance the needs of diverse users who live, work, and play in DTSP. A set of performance measures were established to guide these improvement projects, organize them into scenarios for testing, and conduct the evaluation process. Each scenario was evaluated on the performance measures which help test each scenario’s potential to improve safety, multimodal mobility, accessibility, connectivity, and economic vitality over the next 20-30 years. The performance measures, scenario evaluation process, and results are described later in this report.

A MOBILITY VISION FOR DTSP

DTSP will be a **safe, walkable, and comfortable place** to get to and get around. Together, DTSP’s unique urban setting and transportation systems will **foster sustainable growth**, prioritize **neighborhood access** for everyone, and **improve connections** for residents, workers, and visitors.



SAFE

Mobility that is safe for all users and all modes with infrastructure that protects against harm and encourages responsible traveling behavior.



VIBRANT & LIVABLE

A walkable built environment that attracts economic activity and supports active lifestyles.



MULTIMODAL

Quality multimodal mobility options, with seamless integration, and context sensitive features.

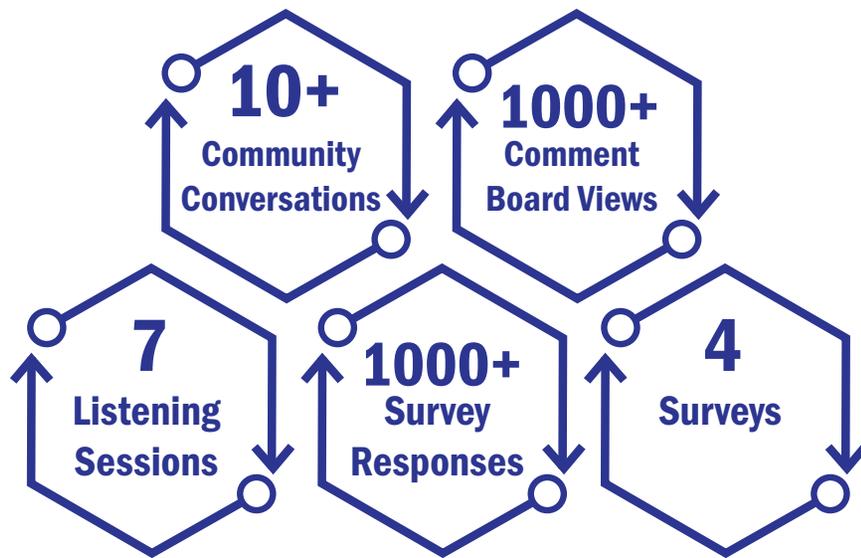


ACCESSIBLE & CONNECTED

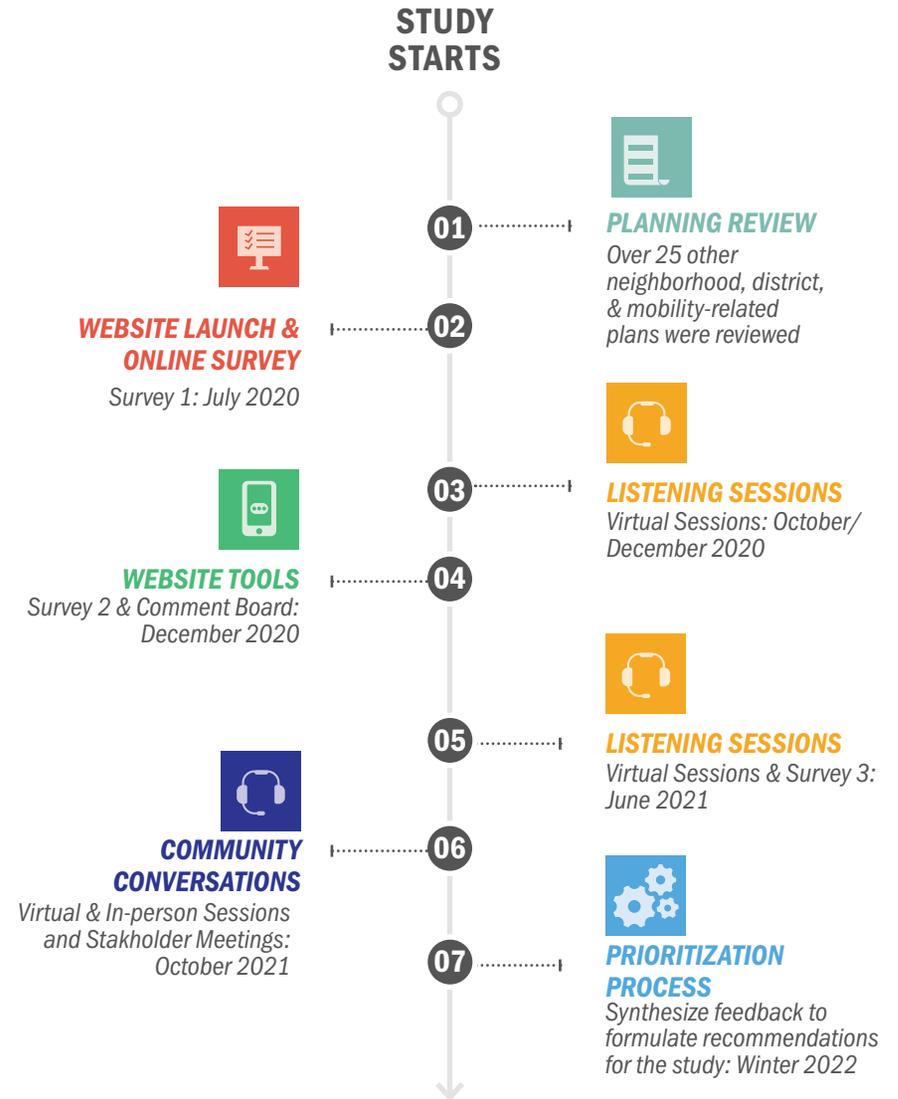
Connections to, through, within, and from DTSP destinations for all modes, equitably accessed by surrounding neighborhoods, to provide universal access for all users.

Outreach Process & Summary of Input

The City of St. Petersburg, Forward Pinellas, and HDR, Inc. (study consultant) conducted extensive community engagement activities between July 2020 and October 2021 to gain public input on the project’s vision, initial improvement projects and evaluation results, and the final recommendation of projects to advance for more study. Due to the COVID-19 pandemic, the majority of outreach over the course of the study occurred online. Activities included online surveys, an online comment board, seven Listening Sessions with community leaders, five Community Conversations held virtually and in-person, and a final presentation to the public on recommended improvement projects. A dedicated website was also created to keep the public engaged throughout the planning process.



DTSP MOBILITY STUDY OUTREACH & ENGAGEMENT PROCESS OVERVIEW



FINAL RECOMMENDATIONS & ACTION PLAN

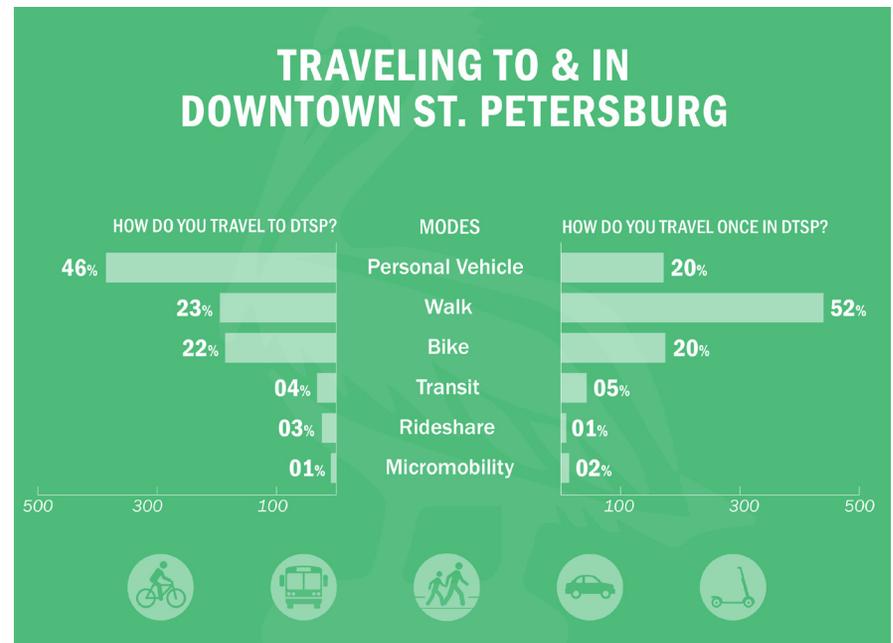
Phase 1: Project Introduction (Summer 2020)

A study website was launched in July 2020 and included a study overview, findings from initial project research, and information on how to register for public outreach events. Additionally, to better understand the community's needs and desires for improvements, an online survey was included to share thoughts on mobility challenges, issues, and opportunities in DTSP. The survey was promoted to key stakeholders, neighborhood organizations, business groups, and the larger St. Petersburg community and asked a number of questions to understand how people move around DTSP and what mobility issues they experience. Over 450 participants completed the survey.

STUDY WEBSITE



PHASE 1: WHAT DID WE HEAR ?

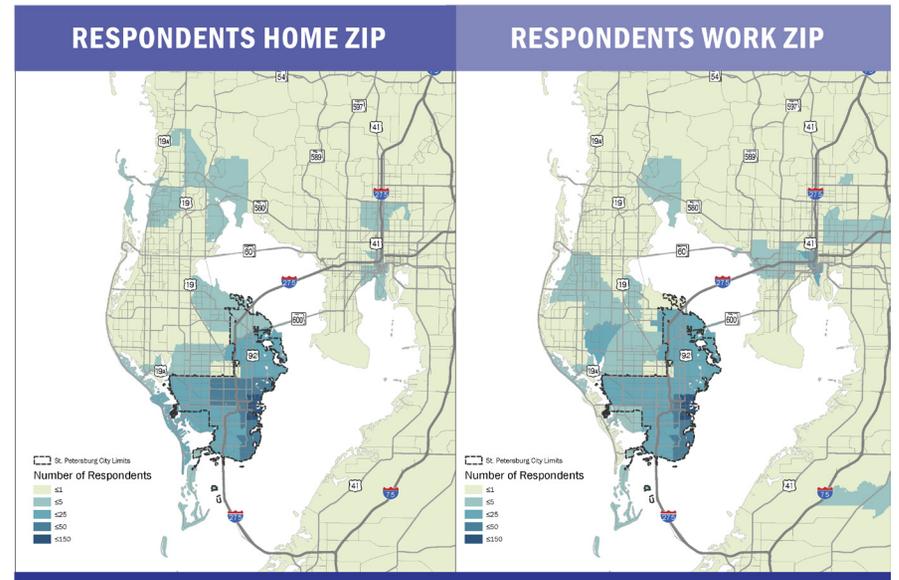




WHAT IS THE PRIMARY TRANSPORTATION ISSUE FACING DTSP?



WHERE DO YOU LIVE & WORK?

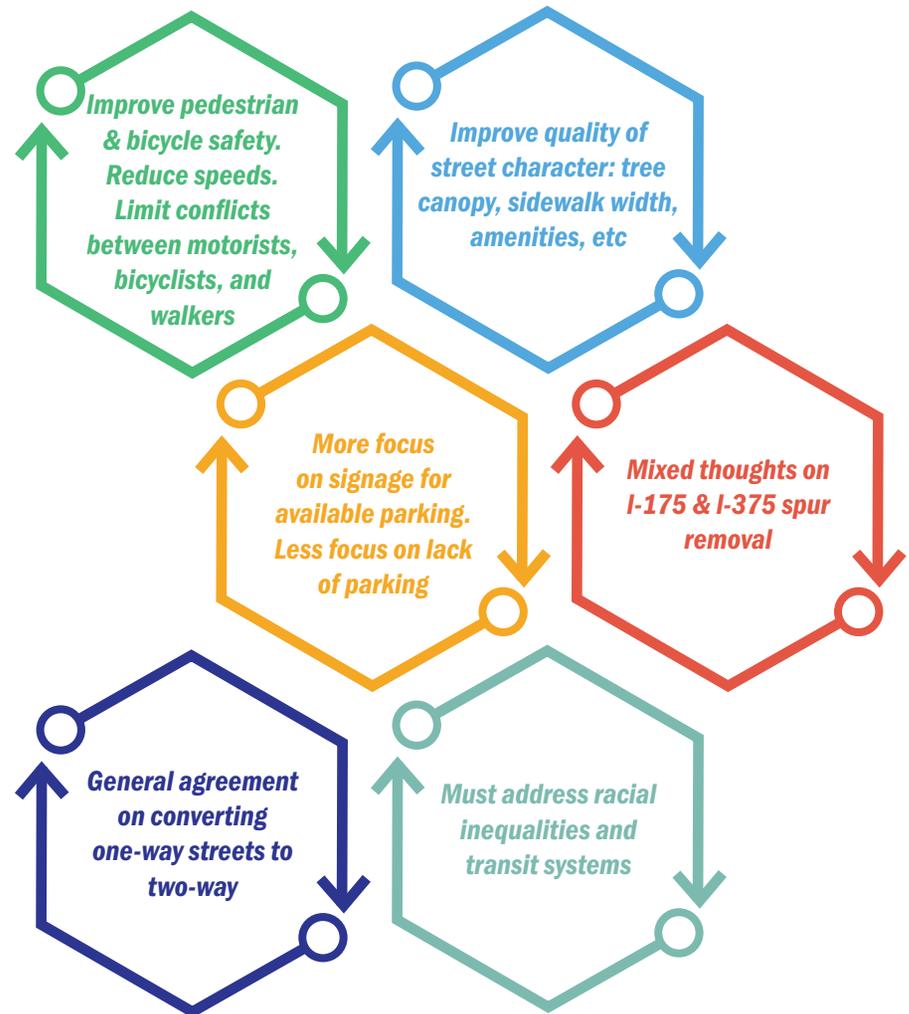


Phase 2: Existing Conditions, Issues & Opportunities (Fall 2020)

The Study Team conducted four virtual listening sessions in October and December 2020 to present the results of the existing conditions report and get stakeholder input on additional issues and opportunities for mobility in DTSP. The meetings took place on Zoom and included over 150 key stakeholders and members of the general public. Each listening session included a brief presentation outlining the findings on existing conditions, issues, and opportunities as well as breakout sessions where participants provided candid feedback on their desires for downtown mobility.

In December 2020 additional information on the study, as well as a comment board was added to the website. Over a 1,000 people visited the site and comment board and 28 participants added comments.

PHASE 2: WHAT DID WE HEAR ?



Phase 3: Initial Ideas & Evaluation Process (Summer 2021)

Three additional virtual listening sessions, with over 70 total participants, were held in June 2021. These listening sessions included a brief presentation and breakout sessions based on the topics listed below to gain input on initial ideas and the evaluation process. In addition to the virtual listening sessions, a survey was posted on the project website. The project website had more than 7,100 visits and more than 300 people responded to the online survey.

PHASE 3: WHAT DID WE HEAR ?

Interstate Spur (I-175 and I-375) Modifications

IN FAVOR OF REDESIGN OR REMOVAL

Respondents: Mainly drivers, pedestrians, bicyclists

Concerns: I-375 and I-175 are underutilized and act as barriers between downtown and surrounding neighborhoods

Ideas: Convert both to a boulevards and use land for affordable housing, green space, paths, transit

IN FAVOR OF NO CHANGE

Respondents: Mainly drivers

Concerns: Modifying/removing spurs will cause increased congestion and hinder emergency vehicle access to medical centers.

Two-Way Street Conversion

Concerned with losing automobile access through downtown St Pete if converted

One-way streets have reduced conflict points - especially for bike/ped crossing, and for vehicles turning left

Concern about emergency vehicle response if converted. Need for mitigation measures

Strong desire for speed enforcement and improved safety

Desire for signal timing throughout the corridors to prevent stopping at intersections

Bicycle Facilities

Connect gaps with added separated bike lanes

Micromobility

Some concern about scooter use on sidewalks

Pedestrian Safety

Add sidewalks and crosswalks to improve safety

Pedestrian-Friendly Streets

Prioritize walking over driving; close some streets to cars

Streetscaping

More green areas, trees, and on-street parking

Safety

Better enforcement against aggressive driving

Transit

Add light rail and express bus routes; improve existing bus service

Other Ideas

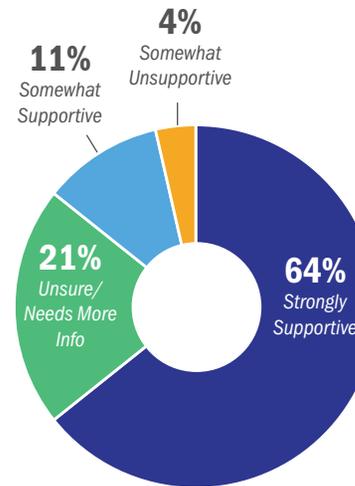
Phase 4: Evaluation Findings (Fall 2021)

Four virtual and one in-person “Community Conversation” meetings were held in October 2021 to present findings of the evaluation and gather public input on specific projects. More than 28 participants attended the five Community Conversations meetings. Additionally, the study team presented the study findings at multiple stakeholder, neighborhood organizations, and community group meetings throughout Fall 2021. Additionally, the study team attended multiple stakeholder meetings to present the findings from the study and gather additional input on project preferences.

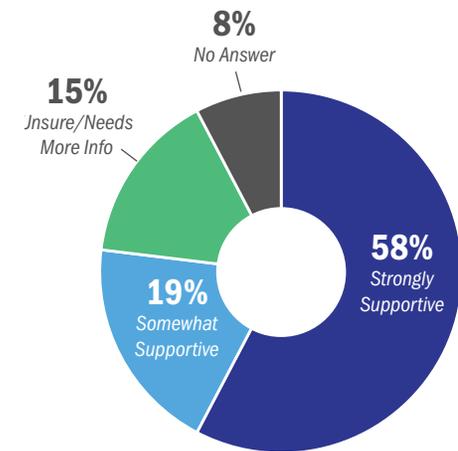
The following is a high-level overview of feedback received for each of the projects presented at these meetings. The feedback includes Zoom poll results from the virtual meetings and the in-person meeting. Overall, most of the projects received public support but there was some concern about specific design, slower vehicle speeds, and access to certain destinations.

PHASE 4: WHAT DID WE HEAR ?

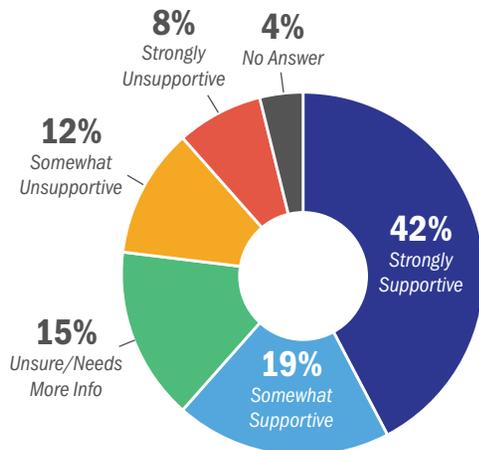
DR. MLK JR. ST/8TH ST TWO-WAY CONVERSATION (28 RESPONDENTS)



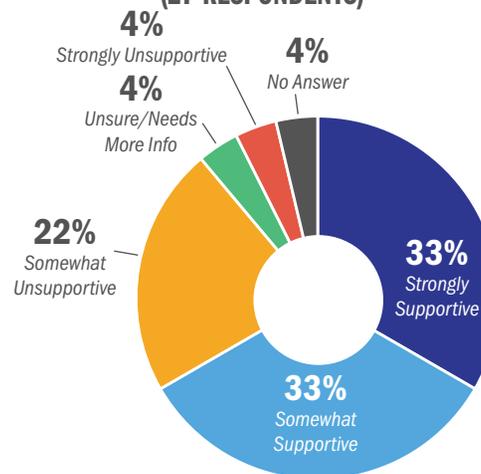
3RD ST/4TH ST TWO-WAY CONVERSATION (26 RESPONDENTS)



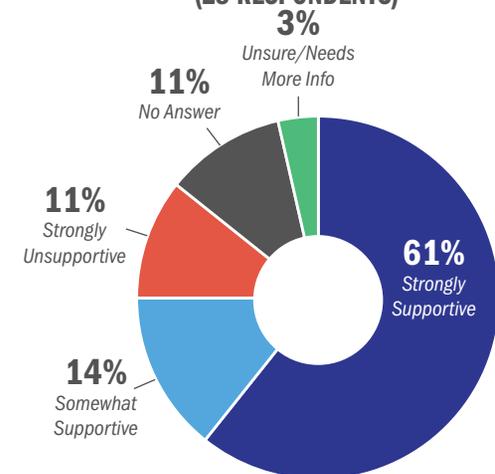
I-375 FULL HIGHWAY REMOVAL (26 RESPONDENTS)



I-375 PARTIAL HIGHWAY REMOVAL (27 RESPONDENTS)



I-175 FULL HIGHWAY REMOVAL (28 RESPONDENTS)



3/OPTIONS TO ACHIEVE THE VISION

The intent of this study is to identify projects that can help achieve the defined Mobility Vision for DTSP outlined in the previous section. The study identified four focus areas at the onset of the study to better understand some of the key mobility issues that downtown St. Petersburg is facing in regards to access, connectivity, safety, and equity. The objective of the study is to identify some potential improvement options or changes to the network related to these four focus areas:

- Two-way Street Conversions (3rd/4th St, 8th/Dr. MLK Jr St, 5th Ave N/4th Ave N, 4th Ave S/5th Ave S)
- Interstate Spur Changes (modifications to the I-175 and I-375 interstate spurs or interchanges to I-275)
- Multimodal Improvements (lane reallocations for bicycle, pedestrian, parking, and/or transit accommodations)
- Other related improvements to the network for safety, operational or connectivity

This section outlines some of the potential benefits, and impacts, that are associated with each of the four focus project types. Additionally, information on why they should be considered and how they could or could not be implemented in DTSP is provided. While additional improvements not described in this section could be undertaken to help achieve the Mobility Vision for DTSP, this study is focused on large-scale projects or major elements of the network that would potentially create significant impacts to the DTSP transportation network. These types of projects have greater potential to affect roadway capacity, intersection delay, and operational changes that can be modeled.

EXAMPLE OF HIGHWAY CONVERTED INTO URBAN BOULEVARD (DENVER, COLORADO)



Source: www.cnu.org/highways-boulevards/freeways-without-futures/2019#70

EXAMPLE OF LANE REALLOCATION (DR. MLK, JR. ST. ST. PETERSBURG, FLORIDA)



Source: City of St. Petersburg

Two-Way Conversion

One-way street configurations were implemented throughout the U.S. in the mid-20th Century as a way to efficiently move large volumes of traffic through city centers. As people left the city centers to live in the suburbs, the focus became helping commuters get in and out of downtowns as quickly as possible. Today, people are increasingly moving back to downtowns as they look for a more sustainable, multimodal lifestyle less dependent on cars. These high-speed roadways are often in conflict with safe pedestrian and bicycle mobility. This change in travel patterns and need for safety improvements requires a renewed look at how one-way roads operate and what changes can be made to improve safety, access, and livability for all.

Benefits of Two-Way Conversions

Many U.S. communities are converting one-way streets to two-way to adapt to changing travel and residential patterns. In 2017, New Albany, Indiana converted more than four miles of city streets from one-way to two-way along with traffic-calming measures. Since implementation, the city has reported a decrease in crashes involving pedestrians, motor vehicle crashes with injuries, and speeding along these roads. The interaction of pedestrians, bicyclists, and motorists has improved and traffic detour options have increased.

Converting streets from one-way traffic to two-way traffic also provides the benefit of reducing confusion for both drivers and pedestrians. Drivers who are new or less familiar with a location will be less likely to speed, make risky turns at intersections, and need to circle around to get to their destinations on one-way streets. Cyclists and pedestrians also benefit because they can better anticipate driver behavior on two-way streets. This is especially important for locations with multiple one-way streets that intersect with each other and create unsafe crossings for motorists and pedestrians.

EXAMPLE OF ONE-WAY PAIR TO TWO-WAY CONVERSION (NEW ALBANY, INDIANA)



Source: www.cnu.org/publicsquare/2019/07/09/cities-benefit-one-way-two-way-conversions

How Do Two-Way Streets Benefit a Community?

Many communities have experienced a variety of benefits after converting one-way streets to two-way operations.

Safe Streets

In Louisville, Kentucky, two-way street conversions have reduced bike, pedestrian, and vehicle crashes by 49%. Also, by increasing pedestrian traffic on the streets and lowering speeds, the “eyes on the street” effect has helped reduce crime by 23%.¹

Livable Communities

Reduced traffic speeds and the resulting improved safety can allow streets to blossom with enhancements such as benches, trees and plantings, bike lanes, community gardens, public art, building renovations, and improved property that benefit all users.²

Business Benefits

Business visibility increases with two-way streets. After being converted in the 1990s, Upper King St in Charleston, South Carolina has seen substantial economic revitalization with decreased vacancy rates and increased property values.³

Destination Access

Two-way roadways provide more direct access for all destinations along the roadway. Travelers do not need to take illogical routes as access is provided in both directions of the street.⁴

1 www.cnu.org/publicsquare/2019/07/09/cities-benefit-one-way-two-way-conversions

2 William Riggs, “Two-Way Street Conversion: Evidence of Increased Livability in Louisville,” *Journal of Planning Education and Research*, July 2015, www.urbanismnext.org/resources/two-way-street-conversion-evidence-of-increased-livability-in-louisville

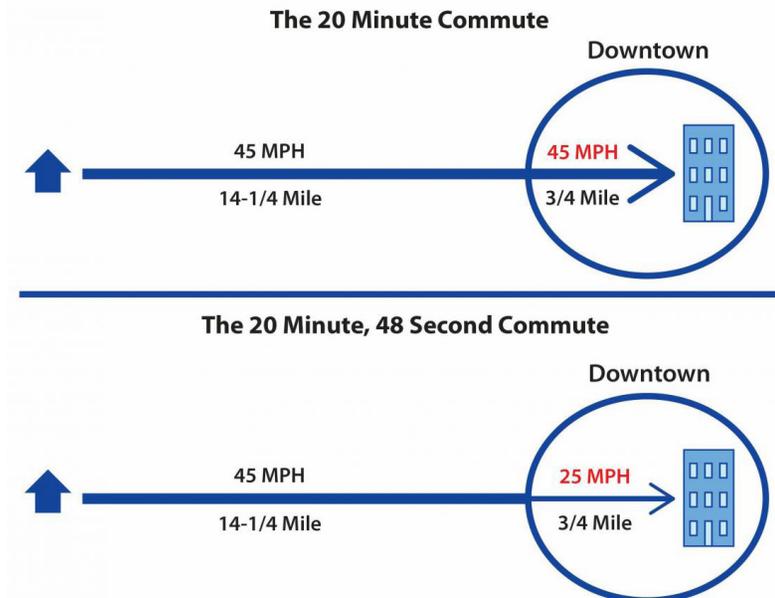
3 Meagan Baco, “One-Way to Two-Way Street Conversions as a Preservation and Downtown Revitalization Tool: The Case Study of Upper King Street, Charleston, South Carolina,” *Clemson University Thesis*, May 2009, https://tigerprints.clemson.edu/cgi/viewcontent.cgi?article=1595&context=all_theses

4 www.accessmagazine.org/fall-2012/two-way-street-networks-efficient-previously-thought/

Potential Impacts of Conversion

Communities are sometimes apprehensive to change one-way streets to two-way operations due to fears that this will result in slower travel speeds for vehicles that would impact travel time and increase congestion. In the past, cities have focused on moving traffic through their downtown areas, instead of reducing speed in certain locations with high pedestrian volumes. Focusing on slowing traffic in just the downtown can create a benefit for safety, help improve access for all users, but not add much travel time for drivers. The illustration below demonstrates how speed reductions in key locations along a roadway would not result in significant travel time increases. While delay or wait time at intersections could increase to allow left-turns from two directions, cities can implement traffic signal prioritization or other travel demand management techniques to ensure

IMPACT OF SPEED REDUCTION ON COMMUTE TIMES



Source: Nelson/Nygaard Consulting Associates, *Walkable City Rules*, cnu.org/publicsquare/2018/12/17/cities-and-streets-101-salvations

minimal delays during peak periods. Instead of prioritizing regional trips through a downtown, cities can shift these trips to the limited access roadways and prioritize safety throughout the entire downtown area.

Why Convert One-Way Pairs in DTSP?

The City of St. Petersburg completed two studies in 2000 to 2001 to explore the conversion of many one-way streets in DTSP, the *Dr. MLK, Jr. Street Corridor One Way Pairs Study* and the *Downtown St. Petersburg One-Way Conversion Study (2001 Study)*. Since then, the City has restored two-way operations to several of the streets recommended in these studies including:

- 1st St from 5th Ave N to 5th Ave S
- 2nd St from 5th Ave N to 5th Ave S
- Dr. MLK, Jr. St from 9th Ave N to 4th Ave N
- 3rd Ave N from 4th Street to 5th St
- 2nd Ave N from 3rd St to 5th St
- 2nd Ave S from 1st St to 10th St
- Mirror Lake Dr from 3rd Ave N at 5th St to 2nd Ave N at 5th St
- 3rd Ave N from Mirror Lake Dr to Dr. MLK, Jr. St
- 9th Ave N from Bayshore Dr to 3rd St
- 8th Ave N from Bayshore Dr to 4th St
- Burlington Ave N from 13th St to 16th St
- 2nd Ave N from 13th St to 16th St
- 4th St from 4th Ave S to 6th Ave S

These one-way pair conversions are generally viewed as successful and have been well received. Access to businesses has improved and walkability has been enhanced. Residential growth has also occurred on these streets, which may be a result of lower speeds.

The following streets were approved to be converted to two-way operation in 2001 Study but have not yet been completed. These streets are under consideration for conversion as part of this study:

- Dr. MLK, Jr. St from 4th Ave N to 9th Ave S
- 8th St from north of 9th Ave N to 9th Ave S

The following streets were identified for potential two-way operation in 2001 Study, but were not yet completed:

- 4th and 5th Ave S from 3rd St to 1st St
- 4th and 5th Ave N from 3rd Street to Beach Dr
- 4th Ave S from Dr. MLK, Jr. Street to 16th St
- 3rd St from 5th Ave N to 5th Ave S
- 4th St from 5th Ave N to 4th Ave S
- 9th Ave N from 4th St to 3rd St
- 1st Ave S from 1st St to Bayshore Dr

The 2001 study recommended that 1st Ave N and 1st Ave S would remain one-way operations. The SunRunner will operate along these one-way streets. The 2001 study also recommended that the design of Central Ave would become pedestrian-oriented. Although identified as not suitable for two-way operation in the 2001 Study, these streets are under consideration for conversion in conjunction with interstate spur modifications:

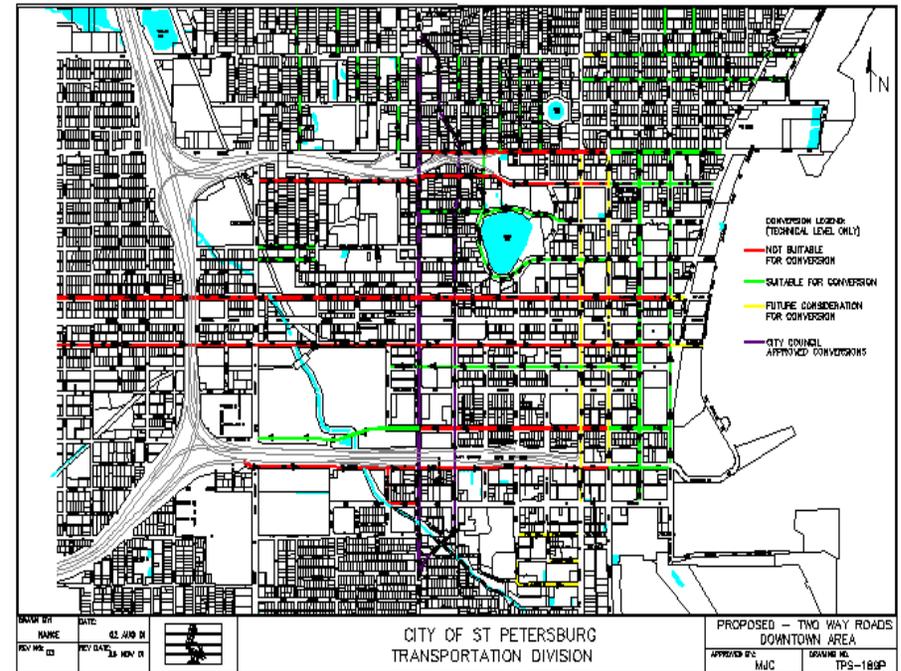
- 5th Ave N from Dr. MLK, Jr. St to 3rd St
- 4th Ave N from 16th St to 3rd St
- 4th Ave S from 3rd St to Dr. MLK, Jr. St
- 5th Ave S from 16th St to 3rd St

All of these streets under consideration for conversion as part of this study are key roadways that provide great regional access to DTSP, but also serve as local commercial corridors for downtown residents and businesses. Many of the safety concerns and crash hotspots are located along these streets, which is especially concerning given the high volumes of pedestrians and bicyclists who travel these roadways everyday. Finding opportunities to balance these concerns and provide the optimum travel experience for all users and modes is a key goal of this study.

Articles & Studies For More Information:

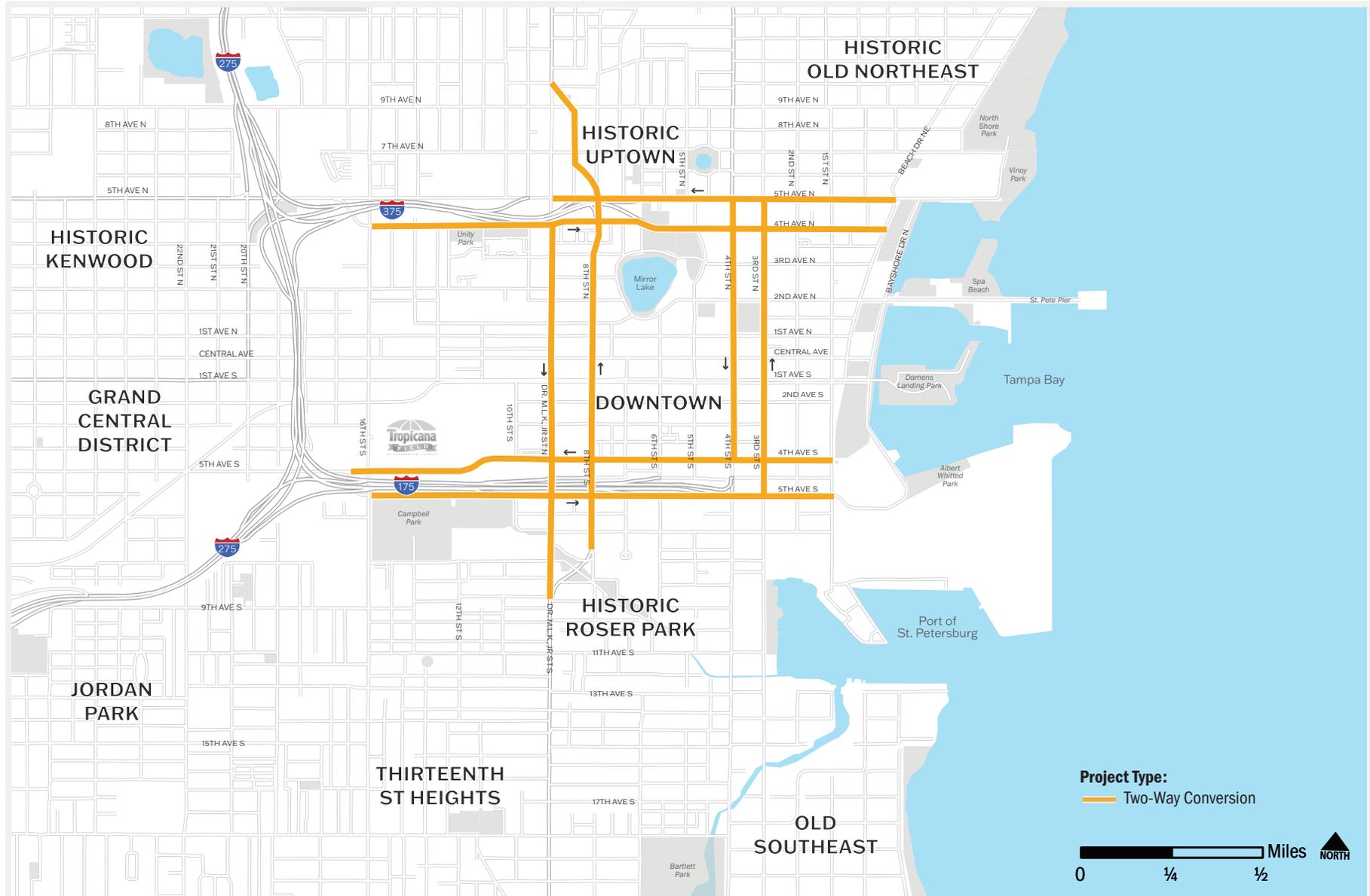
1. Robert Steuteville, "Cities Benefit From Restoring Two-Way Traffic," Public Square, A CNU Journal, July 9, 2019, <https://www.cnu.org/publicsquare/2019/07/09/cities-benefit-one-way-two-way-conversions>
2. Meagan Baco, "One-Way to Two-Way Street Conversions as a Preservation and Downtown Revitalization Tool: The Case Study of Upper King Street," Charleston, South Carolina, Clemson University Thesis, May 2009, https://tigerprints.clemson.edu/cgi/viewcontent.cgi?article=1595&context=all_theses
3. William Riggs, "Two-Way Street Conversion: Evidence of Increased Livability in Louisville," Journal of Planning Education and Research, July 2015, www.urbanismnext.org/resources/two-way-street-conversion-evidence-of-increased-livability-in-louisville
4. Vikash V. Gayah, "Two-Way Street Networks: More Efficient than Previously Thought?" Access Magazine, www.accessmagazine.org/fall-2012/two-way-street-networks-efficient-previously-thought/

DOWNTOWN ST. PETERSBURG ONE-WAY CONVERSION STUDY RECOMMENDATIONS (2001)



Source: Downtown St. Petersburg One-Way Conversion Study Preliminary Report

DTSP ONE-WAY PAIRS CURRENTLY UNDER CONSIDERATION FOR TWO-WAY CONVERSION



Interstate Spur Changes

In the 1950s, urban highways were promoted as a faster option for shipping companies and suburban commuters to speed movement between downtowns and bedroom communities. Throughout the U.S., these highways were built as part of “urban renewal” efforts, impacting or displacing predominantly low-income and minority communities who had the least political voice and ability to resist. Freeway construction caused homes and businesses to be demolished; limited access to housing, services, jobs, and open space; and polluted air, soil, and water. As people today move back to urban centers, the concerns about the impacts of these highways has grown.

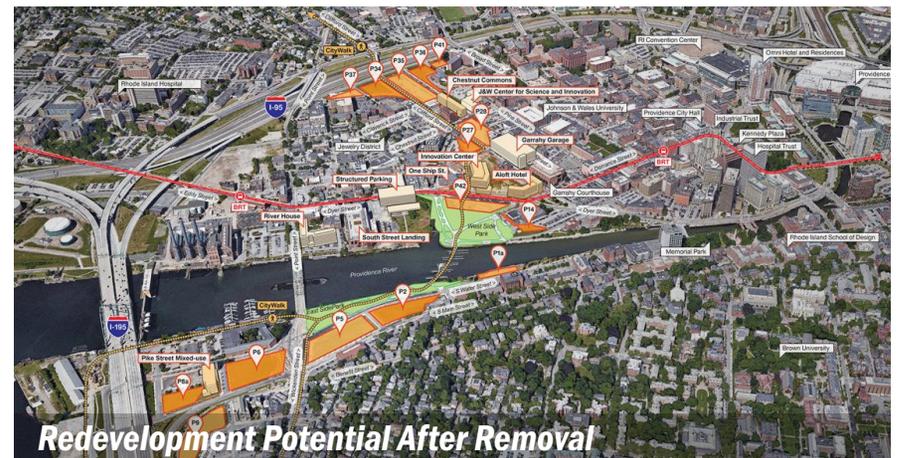
Benefits of Highway Redesign

Communities around the U.S. are exploring ways to provide great access to urban centers while also reducing social, economic, health, and environmental impacts. In 2017, the Inner Loop Highway in Rochester, New York was redeveloped into a urban boulevard. Between 2014 and 2019, walking increased 50% and biking 60% in the project area. The area now offers several affordable housing units and market rate town homes, various apartment complexes, retail space and a parking garage. The \$22 million project has resulted in \$229 million in economic development.

Potential Impacts of Highway Redesign

As communities contemplate the future of aging highways nearing the end of their useful lives and are facing the significant costs for reconstruction, they are considering the potential transformation of redesigning urban highways from a high-speed, limited access roadway to subterranean highway or surface level streets or boulevards. Transforming these highway corridors can create redevelopment sites and improve the urban conditions for pedestrians and bicyclists at the potential cost of reducing vehicular access for regional drivers. Similar to converting one-way streets or slowing speeds on local roads, removing, redesigning or otherwise changing limited access

EXAMPLE OF HIGHWAY REMOVAL (PROVIDENCE, RHODE ISLAND)



Source: Utile Design, www.utiledesign.com/work/providence-i-195-on-call-planning/

highways may increase travel time for commuters, but in many cities the longer term benefits of new jobs, housing, tax revenues, and more walkable, urban neighborhoods is outweighing the quick and easy regional access.

EXAMPLE OF HIGHWAY REMOVAL & REDEVELOPMENT (ROCHESTER, NEW YORK)



Before Removal



During Removal



Redevelopment On Filled In Highway

Source: Google Maps

How Can Highway Redesign Benefit a Community?

Communities have witnessed many benefits from removing or converting highways into boulevards or more accessible facilities.



Increase Walking & Biking

Highways can be transformed into boulevards or urban linear parks with active transportation amenities. In Seattle, the Tom McCall Waterfront Park was once a highway that now has 1.6 million recreation users each year.¹



Economic Opportunity

In Milwaukee, the Park East Freeway spur was replaced with a boulevard and the adjoining street grid was restored. The project has resulted in the transformation of 24 underutilized acres, \$1B in downtown investment, and increased land values by over 180%.²



Environment

Replacing a highway with a greener boulevard can reduce urban heat island effect and air pollution. In Seoul, South Korea after an expressway conversion to a linear park, summer heat island effect decreased by 8 degrees Fahrenheit and pollution (PM10) by 21%.³



Neighborhood Benefits

The conversion of San Francisco's Octavia Boulevard, the former Central Freeway, has resulted in many benefits including neighborhood revitalization and blight removal in the Hayes Valley community.⁴

¹ Ben Welle, "Urban Highway Removal: To Your Health," The City Fix, April 10, 2012, nextcity.org/daily/entry/urban-highway-removal-to-your-health#:~:text=Road%20Safety&text=Freeway%20removal%20provides%20opportunities%20to,pedestrian%20safety%20and%20mass%20transport.

² Kathleen McCormick, "Deconstruction Ahead," Lincoln Institute of Land Policy, April 14, 2020, www.lincolnst.edu/publications/articles/2020-03-deconstruction-ahead-urban-highway-removal-changing-cities

³ Welle (ibid).

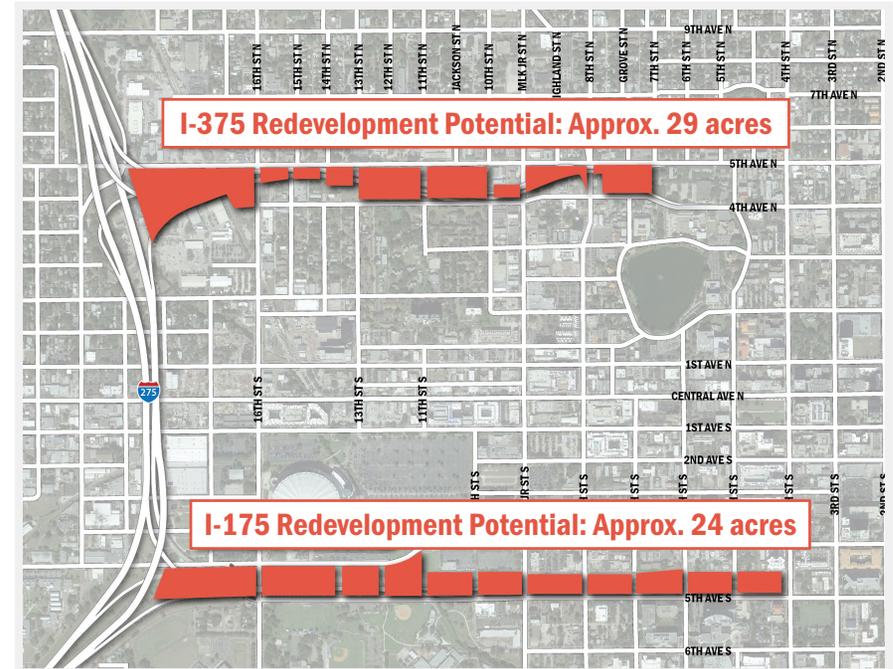
⁴ re:Streets, Case Studies: Octavia Boulevard, San Francisco, California, www.restreets.org/case-studies/octavia-boulevard

Why Redesign I-175 & I-375 in DTSP?

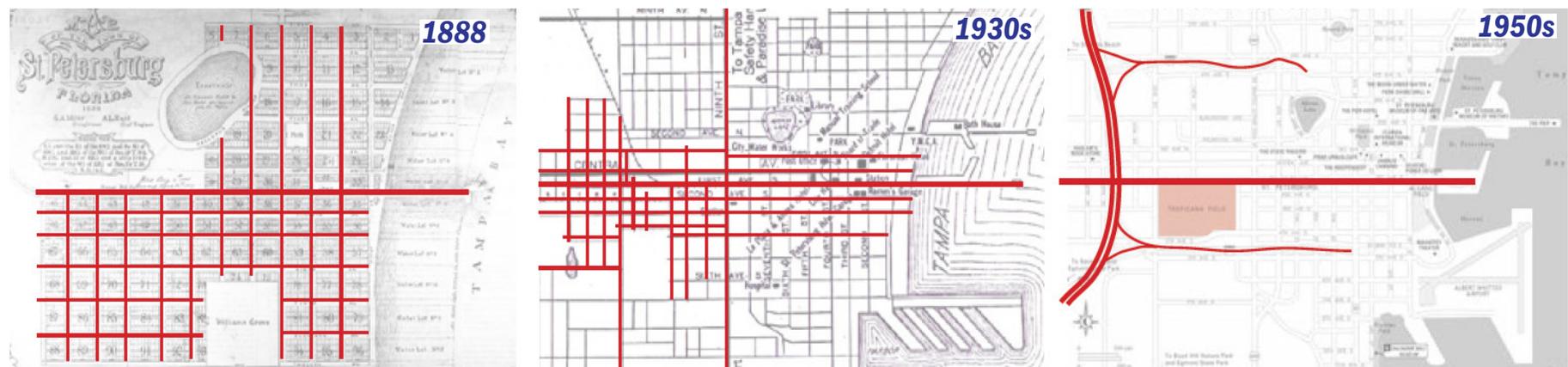
The interstate spurs transformed the social fabric of DTSP and adjacent communities when they were built in the 1970s. Before construction, this area of DTSP had a continuous street grid. Tropicana Field was constructed within the historic African American Gas Plant community, which was connected directly to other adjacent neighborhoods and not separated by I-175. The original plans to extend I-175 and I-375 to the west and northwest across Pinellas County never realized.

Today, neighborhoods directly adjacent to the spurs, in particular in South St. Petersburg, are faced with significant economic, transportation, and health disparities. While I-175 and I-375 provide excellent access for emergency vehicles, to regional employers, key destinations and attractions, it comes at the cost of adjacent neighborhoods that are cut off by the limited access highways. Drivers on these interstate spurs travel at much higher speeds than drivers on the local networks, which is a major safety concern. In DTSP, the ramp termini are crash hotspots where drivers on the highways enter the local street network at the intersections at the end of the ramps.

I-375 & I-175 REDEVELOPMENT POTENTIAL



HISTORIC STREET GRID BEFORE & AFTER I-175 CONSTRUCTION



Source: City of St Petersburg, Tropicana Conceptual Master Plan, <https://cms5.revize.com/revize/stpete/Residents/Current%20Projects/docs/Tropicana%20Conceptual%20Master%20Plan%20FINAL.pdf>

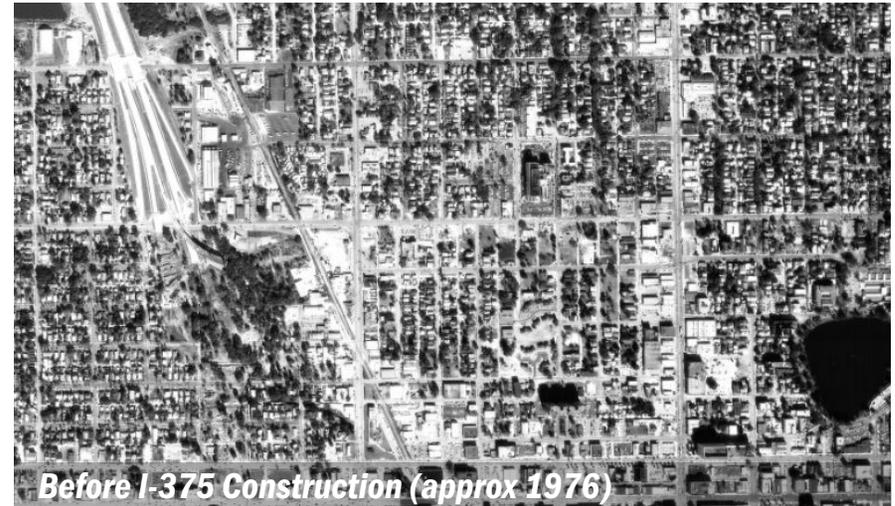
This study is exploring options to change or redesign I-175 and I-375, including complete or partial removal, modifying ramp access, capping the highway to allow development above the roadway, elevating the entire highways to allow use underneath, or reconstructing as a multimodal boulevard. Changes to these highways could potentially impact the travel time and regional access to key destinations, but could also offer potential positive impacts to the downtown core and adjacent neighborhoods, such as increasing opportunities for safety, multimodal transportation, economic opportunities for public or private redevelopment or open space.

The right-of-way for I-375 occupies approximately 29 acres and I-175 occupies approximately 24 acres. If either of these highways were modified, this right-of-way could become available for redevelopment and there would be increased opportunities to reconnect the local street grid. Modifications could include capping (which may be unfeasible due to grade changes, ramp length, and water table), elevating the highway spurs, or full or partial removal. The complete removal of the spurs without adding full interchanges to I-275 at both the north and south ends (at or near 5th Ave N and 5th Ave S) is not recommended due to existing traffic volumes that use the spurs.

Articles, Studies & Sources For More Information:

1. Nadja Popovich, Josh Williams, and Denise Lu, "Can Removing Highways Fix America's Cities?," May 27, 2021, New York Times, www.nytimes.com/interactive/2021/05/27/climate/us-cities-highway-removal.html?smid=em-share
2. Kathleen McCormick, "Deconstruction Ahead: How Urban Highway Removal Is Changing Our Cities," Lincoln Institute of Land Policy, April 14, 2020, www.lincolnst.edu/publications/articles/2020-03-deconstruction-ahead-urban-highway-removal-changing-cities
3. Congress for New Urbanists (CNU), "Freeways Without Futures," 2021, www.cnu.org/sites/default/files/FreewaysWithoutFutures_2021.pdf
4. Ben Crowther, "A Federal Highways to Boulevards Program is the Infrastructure Project a Healthy and Equitable America Needs," Public Square, A CNU Journal, August 17, 2020, www.cnu.org/publicsquare/2020/08/17/federal-highways-boulevards-program-infrastructure-project-healthy-and

DTSP STREET NETWORK BEFORE & AFTER CONSTRUCTION OF I-375



Source: City of St. Petersburg Archives

5. Ben Welle, "Urban Highway Removal: To Your Health," The City Fix, April 10, 2012, nextcity.org/daily/entry/urban-highway-removal-to-your-health#:~:text=Road%20Safety&text=Freeway%20removal%20provides%20opportunities%20to,pedestrian%20safety%20and%20mass%20transport

Multimodal Improvements

Incorporating transit and active transportation modes such as walking or biking into the overall transportation system is important to the quality of life of a community. The quality of a community’s active transportation infrastructure can have a significant impact on public health and equity (ODPHP). The lack of physical activity in the U.S. is a major contributor to the steady rise in rates of obesity, diabetes, heart disease, stroke, and other chronic health conditions (CDC).

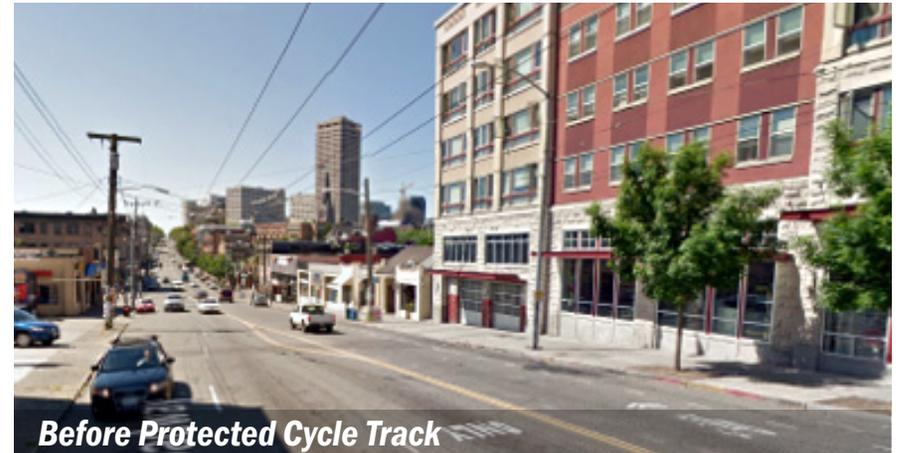
Public transportation provides people with a range of mobility choices and better access to employment, community resources, medical care, and recreational opportunities. Access to premium or frequent transit service provides reliable transportation options that are convenient for all users, especially commuters. Increasing transit ridership depends largely on the walkability of its nearby urban infrastructure and the frequency and reliability of its service.

Benefits of Active Transportation

St. Petersburg has a long history of accommodating active transportation with its first Bicycle Pedestrian Master Plan in 2003. In 2015, the City adopted a Complete Streets Policy to recognize that Complete Streets are planned, designed, operated, and maintained to create streets that are safe and convenient for all users of the roadway, including people who are walking, riding bicycles, motorists, people with disabilities, users and operators of public transit, seniors, children, and movers of commercial goods.

Cities around the country are undertaking Complete Streets or lane reallocation initiatives to better design and re-allocate public right-of-way for all modes of transportation. One example of this is along Central Ave in Minneapolis. In 2012, bike lanes were installed by reducing the width of the travel lane and removing parking lanes. After completion, retail employment

EXAMPLE OF BICYCLE CYCLE TRACK IMPROVEMENT (SEATTLE, WASHINGTON)



Source: www.usa.streetsblog.org/2014/08/19/6-things-to-like-and-one-to-fix-about-seattles-new-broadway-bike-lanes/

increased by 12.6% and food sales increased by 52.4%. After a bike lane was added along Broadway in Seattle in 2-14, this corridor had a 30.8% increase in food service employment. This compared to 2.5% and 16.2% increases in control areas during the same time period (Litman).

Complete Streets and Vision Zero are strategies to eliminate traffic fatalities and severe injuries and to promote safe, healthy, and equitable mobility for all. Providing bicycle and pedestrian facilities or infrastructure and creating dedicated or a separate environment for pedestrians and cyclists can have a significant impact on safety for all users. The strategies included in Vision Zero have proved successful in many cities. In 2019, Helsinki achieved zero bicycle and pedestrian deaths. After implementing a protected bike lane, pedestrian islands, and split-phase signals on Ninth Ave in Manhattan, injuries to all street users decreased 58%.

10 ELEMENTS OF A VISION ZERO STREET



- | | | | |
|-------------------------|-------------------------|--|-----------------------------|
| 1. ADA Accessibility | 4. Narrow Vehicle Lanes | 7. Dedicated Mass Transit Facilities | 9. Dedicated Unloading Zone |
| 2. Public Amenities | 5. Pedestrian Islands | 8. Signal-Protected Pedestrian Crossings | 10. Signal Retiming |
| 3. Protected Bike Lanes | 6. Wide Sidewalks | | |

Source: <https://visionzeronetwork.org/>

Benefits of Improving Transit Access

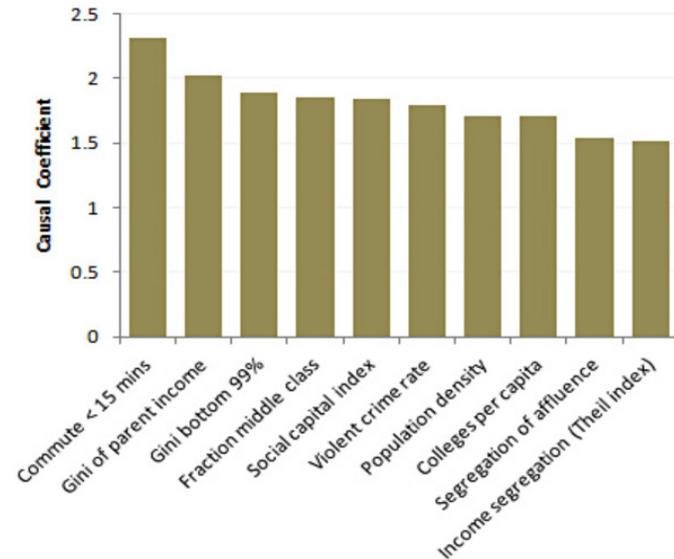
Built at a cost of \$550 million in 2015, Connecticut’s CTfastrak is a Bus Rapid Transit (BRT) service that runs 9.4 miles between Hartford and New Britain. The line has exceeded ridership projections from the start and is encouraging walkable development around the line. Prior to BRT service, the corridor averaged 9,000 rides a day; today, the corridor has 18,000 rides on the BRT or the bus lines feeding it. According to an analysis by the University of Minnesota, this BRT project has helped to make Hartford one of the most-improved cities in job access by transit between 2015 and 2016 (Schmitt).

Access to frequent transit service can improve commute times, which is associated with opportunities to increase a household’s economic position. According to a 2015 Harvard University study, shorter commute times has the highest correlation to income mobility out of all of the factors the study reviewed (e.g., income segregation, social capital, crime, income, density, etc.) Living in a neighborhood where people commute to work less than 15 minutes has a significant impact on upward mobility. The study reviewed 20 years of data and determined that living in such neighborhoods increases a child’s future income by 7%.

EXAMPLE OF BUS RAPID TRANSIT IMPROVEMENT (HARTFORD, CONNECTICUT)



NEIGHBORHOODS CHARACTERISTICS ASSOCIATED WITH INCOME MOBILITY



Source: <https://www.motherjones.com/kevin-drum/2015/11/great-mystery-commute-time-and-income-mobility/>



Source: www.cttransit.com/about/ctfastrak/before-after-gallery

How Can Investing in Multimodal Improvements Benefit a Community?

Communities have witnessed many benefits from adding and enhancing bicycle and pedestrian infrastructure or improving access to transit.



Health

One hour a day on a bike reduces risk of death by 18%. Walking can reduce the risk of death by 39%. Thirty minutes of walking a day can also help improve mental health. Public transit users get over three times the amount of physical activity per day of those who don't by walking to stops and final destinations.¹



Economic Opportunity

Better walking conditions are correlated with higher property values, sometimes \$7.05 for every foot closer a property is to a trail. This infrastructure stimulates tourism revenues where an investment in paths and widening can generate \$60 million from cyclists.²



Environment

Investing in active transportation reduces congestion and associated environmental impacts from vehicle exhaust pollution which are responsible for 28.5% of emissions.³



Transportation Equity

Vehicles can be costly to buy and maintain for low-income families. Having quality choices for walking and biking helps with commuting, health, and quality of life.⁴ Predominantly Black communities are six times more likely and Latino/a communities are three times more likely than White communities to rely on public transit.⁵



Cost Savings

An average household spends 16 cents of every dollar on transportation. A household can save nearly \$10,000 annually by taking public transportation and living with one less car.⁶



Economic Impact

Every dollar invested in public transportation generates 5 dollars in economic returns. After investments are made, home values rise 24% higher near public transportation than other areas.⁷

1 www.peoplepoweredmovement.org/benefits-of-biking-walking/; https://www.railstotrails.org/media/847675/activetransport_2019-report_finalreduced.pdf

2 www.vtpi.org/nmt-tdm.pdf

3 www.peoplepoweredmovement.org/benefits-of-biking-walking/

4 www.vtpi.org/nmt-tdm.pdf

5 www.thepraxisproject.org/sdoh/transportation

6 www.apta.com/news-publications/public-transportation-facts/

7 www.apta.com/news-publications/public-transportation-facts/

Potential Impacts of Reduced Vehicle Lanes

Many people worry that Complete Streets or lane reallocation projects that remove vehicle lanes and replace with on-street parking, sidewalks, bike lanes, or other pedestrian or bicycle features will increase congestion or travel times for drivers. The function of streets within urban areas is very complex and providing facilities for all modes is critical for several reasons, including safety, business access, demands for curbside usage for deliveries or rideshare drop-offs, micromobility, parking, and transit access. Downtowns are vibrant because of the walking, biking, and micromobility.

Why Make Multimodal or Transit Investments in DTSP?

Improving DTSP bicycle and pedestrian infrastructure is a top priority for the City of St. Petersburg. The City adopted its *Complete Streets Implementation Plan* in 2019, which outlines a citywide strategy to improve bicycle and pedestrian facilities along city streets. As shown on the following map, many of the recommended project corridors are located within DTSP. A key part of this study is to identify specific bicycle or pedestrian infrastructure improvement projects and determine the priorities for implementation or further study. This includes any changes to the one-way pairs or interstate spurs to provide improved access and connectivity to the surrounding neighborhoods. The DTSP Mobility Study is considering many of the recommended improvements from this plan to help to prioritize them as part of a greater mobility network.

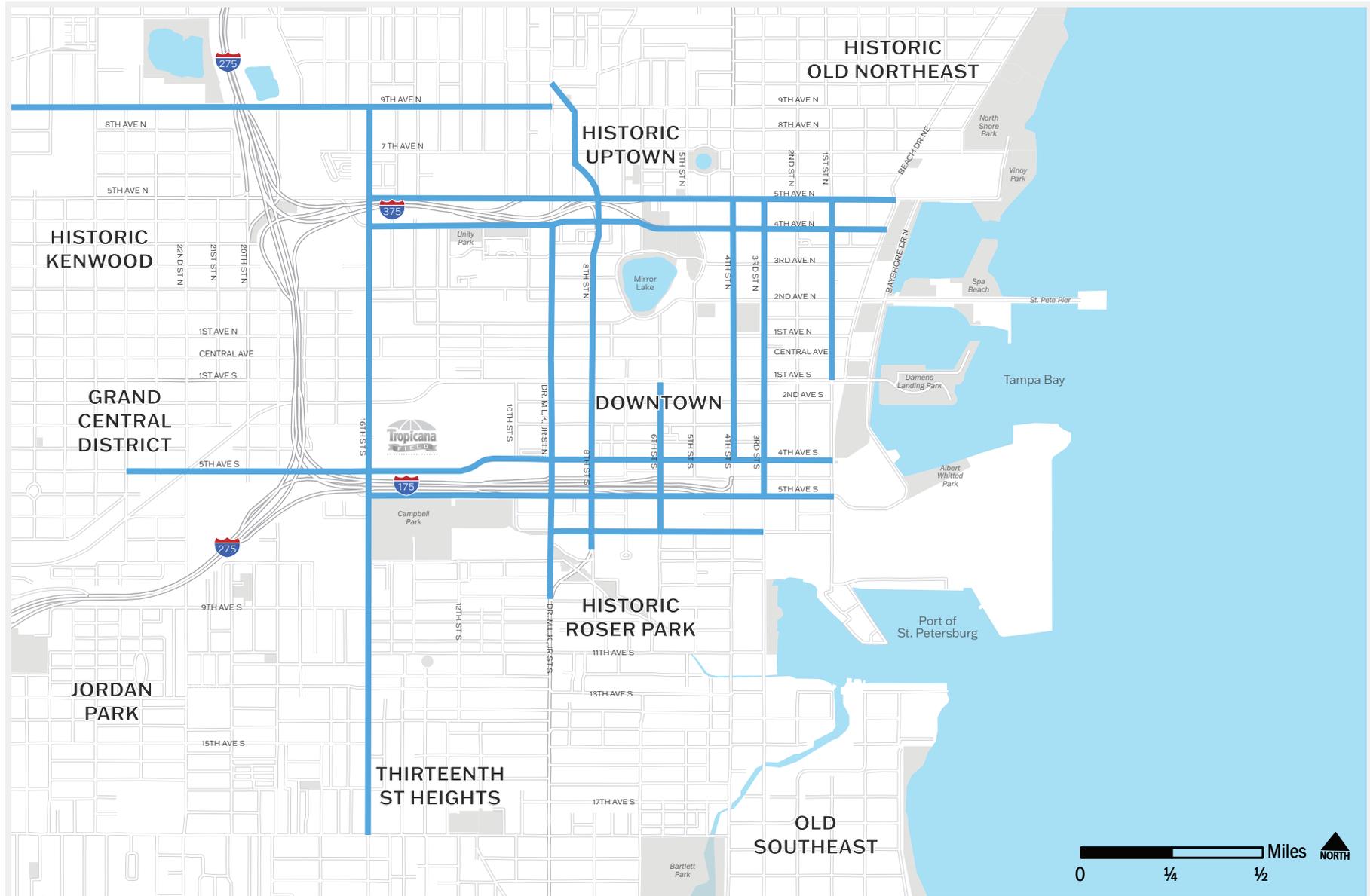
In an effort to create a safe, healthy, and equitable mobility network, Forward Pinellas has initiated Safe Streets Pinellas, the county's Vision Zero effort to achieve a goal of zero traffic related deaths by 2045. Through this effort, Forward Pinellas is working with its partner agencies, including the City of St. Petersburg, to identify projects such as lane reallocations and other bicycle, pedestrian, and multimodal improvement projects that will help eliminate fatalities and severe injuries in Pinellas County. DTSP has multiple crash hotspots, including bicycle and pedestrian crash hotspots. Projects to address these safety problem areas will help the City achieve its Vision Zero goal.

Running along the 1st Ave N/S corridors, the SunRunner BRT project will provide frequent service between DTSP, St. Pete Beach, South Pasadena and communities along the way. Increasing bicycle and pedestrian access to SunRunner stops and finding other opportunities to add more frequent service between DTSP and surrounding communities, would increase mobility options for an area that has higher percentages of no car households and transit dependent households.

Articles, Studies & Sources For More Information:

1. Florida DOT, "Complete Streets Implementation Plan," December 2015, [fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/completestreets/files/final-csi-implementation-plan.pdf?sfvrsn=96979438_2](https://www.fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/completestreets/files/final-csi-implementation-plan.pdf?sfvrsn=96979438_2)
2. Complete Streets Brochure, [fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/completestreets/files/fdot-completestreets-brochure.pdf?sfvrsn=b7c1dd93_4](https://www.fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/completestreets/files/fdot-completestreets-brochure.pdf?sfvrsn=b7c1dd93_4)
3. NACTO, Urban Street Design Guide, nacto.org/publication/urban-street-design-guide/
4. State of Colorado, "Economic and Health Benefits of Bicycling and Walking," October 6, 2016, www.codot.gov/programs/bikeped/building-a-bike-ped-friendly-community/bike-walk-study/assets/report-economic-and-health-benefits-of-bicycling-and-walking-in-colorado-2016-report
5. People Powered Movement, "Benefits of Biking and Walking," www.peoplepoweredmovement.org/benefits-of-biking-walking/#:~:text=Bicyclists%20are%20less%20prone%20to,death%20by%20nearly%2028%20percent
6. Todd Litman, "Evaluating Active Transport Benefits and Costs," Victoria Transport Policy Institute, April 22, 2021, www.vtpi.org/nmt-tdm.pdf
7. Torsha Bhattacharya, Ph.D.; Kevin Mills, J.D.; and Tiffany Mulally, Ph.D., Active Transportation Transforms America: The Case for Increased Public Investment in Walking and Biking Connectivity (Washington, D.C.: Rails-to-Trails Conservancy, 2019), www.railstotrails.org/media/847675/activetransport_2019-report_finalreduced.pdf
8. Angie Schmitt, "America's Early Bus Rapid Transit Systems Are Working Well," Streetsblog USA, November 5, 2018, usa.streetsblog.org/2018/11/05/checking-in-on-americas-pioneering-bus-rapid-transit-systems
9. Office of Disease Prevention and Health Promotion (ODPHP), Social Determinants of Health, www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/environmental
10. Centers for Disease Control (CDC), CDC Transportation Recommendations, www.cdc.gov/transportation/

STREETS UNDER CONSIDERATION FOR LANE REALLOCATIONS & TRANSIT IMPROVEMENTS



Emerging Trends & Related Improvements

In addition to the other improvement projects previously described, a series of related or complementary improvements could be implemented in DTSP for safety, operational, or connectivity enhancements.

A number of emerging trends in technology and mobility patterns will also impact future transportation decisions in DTSP. These technologies, design concepts, and emerging modes of travel should be considered and integrated as part of other transportation projects to create a comprehensive system that works for today and will be able to adapt for future needs and demands.

RIDESHARE & ECOMMERCE

Rideshare services and deliveries have exploded in popularity and rely heavily on access to waiting space at the curb. These curbside services have forced a rethinking of how to best design the right-of-way to meet demand without challenging safety or adding to congestion. Some cities have removed parking spaces to create dedicated pick-up and drop-off zones. Alternately, some places have increased on-street parking rates to encourage more space for pick-up and drop-off. Balancing this access to the curb and need for other uses is a big concern in many cities.

MICROMOBILITY

Cities are seeing growing numbers of small, personal mobility devices ranging from electric wheelchairs, electric scooters or e-scooters, or other micromobility devices along city streets. As an alternate to walking or biking, users on these devices are able to travel short distances on sidewalks or streets. These devices can be helpful in addressing first/last mile transit needs. Parking for these devices tend to be dockless on sidewalks, but some cities including the City have implemented specific parking zones, corrals, or parking hubs to address the concerns that devices are cluttering sidewalks.

MOBILITY AS A SERVICE (MAAS)

Mobility as a Service (MaaS) refers to the integration of access to several transportation modes via a smartphone app with a single payment system. Private providers like Whim and Moovit offer the ability for users to rideshare, ride an e-scooter or bike, rent a car, or use transit using a single app. This type of service has been effective to help encourage seamless multimodal travel in places like Singapore, Helsinki, and Louisville, Kentucky.

CONNECTED TECHNOLOGIES

Connected technologies refer to devices that create interactions between infrastructure (like traffic signals), vehicles (like emergency vehicles), and smartphones. The City of Arlington, Texas is using automated traffic signal performance measure (ASTM) devices at 31 traffic signals along a congested street to help automate traffic flow using data collected from smartphones.

AUTONOMOUS MICROTRANSIT

Microtransit is the smaller, technology-enabled shuttle that offers flexible routes accessing demand locations that sometimes are not suitable for larger vehicles. Microtransit can also be autonomous and typically operates at slower speeds. The City of Tampa has a pilot shuttle that is 93% autonomous with a shuttle specialist on-board just in case manual operation is needed.

MODAL PRIORITY

Adding elements such as crossings, curb extensions, separated facilities, or signal controls are all ways to improve the environment, creating spaces that prioritize non-motorized travel can also be beneficial. Cycling priority can be dedicated and protected cycle tracks and transit priority can be exclusive lanes. Not all streets are the same and sometimes other modes make more sense to prioritize for safety or other purposes.



EXAMPLES OF EMERGING TECHNOLOGIES & BEST PRACTICES



ESCOOTERS

In Paris, France, scooter riders are rewarded after parking in designated locations throughout the city to encourage better parking behavior.



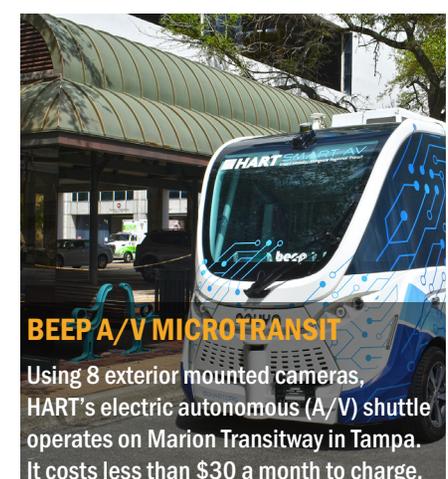
CURB MANAGEMENT

Curb “Load Zones” are being tested in Seattle, Washington to see how they can reduce congestion caused by rideshare and ecommerce.



VELOCIA MOBILITY AS A SERVICE

In Miami, Velocia rewards multimodal users by collecting points towards discounted rideshare, bike share system, transit passes, and other discounts.



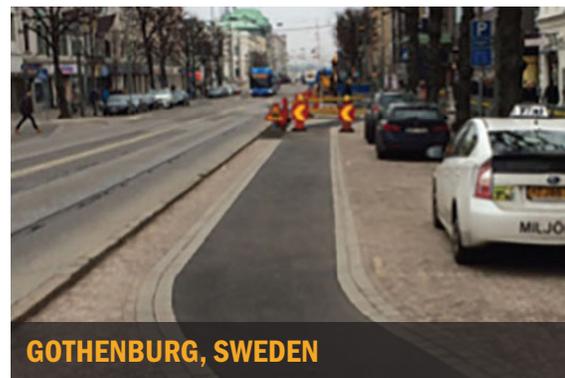
BEEP A/V MICROTRANSIT

Using 8 exterior mounted cameras, HART’s electric autonomous (A/V) shuttle operates on Marion Transitway in Tampa. It costs less than \$30 a month to charge.

EXAMPLES OF MODAL PRIORITY STREETS



STROGET, COPENHAGEN



GOTHENBURG, SWEDEN



MELBOURNE, AUSTRALIA

4/TESTING & EVALUATING OPTIONS

Evaluation Overview

The following four-step process was followed to define projects and combine them into scenarios for testing and evaluation. Details on this process and summary of results are provided in this section of the report.

Step 1: Develop Baseline

2045 was established as the future horizon year for this study. A Planned Network (2045) traffic model was developed to understand future DTSP network performance with planned transportation investments. These investments include lane reallocation and intersection improvements identified by the City for implementation over the next decade.

Step 2: Identify Potential Projects

A series of additional improvement projects, drawn from the City’s Complete Streets Implementation Plan and other recent studies or plans, public outreach input, and agency partner collaboration, were defined for evaluation as part of this study. These include conversion of the one-way

streets to two-way operations, lane reallocations for multi, pedestrian, parking or transit uses on other priority arterial roadways, and modifications to or redesign of the I-175 and I-375.

Step 3: Define Scenarios for Evaluation

The additional projects were combined into five future scenarios for evaluation and comparison against the Planned Network (2045) scenario. Each scenario includes a different combination of large-scale transportation improvements. The list of projects included in each scenario and a graphic depicting the limits of the projects are shown later in this section.

Step 4: Complete Scenario Evaluation

The scenarios were evaluated to understand how each performed against a Planned Network (2045) base scenario. A traffic model was developed for each scenario to evaluate the impacts of changes to the roadway network. All five scenarios assumed a number of projects that were also included in the Planned Network (2045) base model. Additionally, the performance of several of the projects was also analyzed and presented to the public for their specific input to help with prioritization for future implementation.

DTSP MOBILITY STUDY SCENARIO DEFINITION & EVALUATION PROCESS



Traffic Analysis & Evaluation Results

A key part of the scenario evaluation process was conducting the traffic modeling to understand the impacts to traffic volumes, route choice, intersection delay, and travel time. The full traffic modeling effort and results for each scenario is described in Appendix B: Network Traffic Analysis.

Evaluation Framework

Each scenario was also analyzed to identify the impacts on travel, destination accessibility, bike/pedestrian connectivity, and economic vitality and livability. As shown on the following page, the complete set of Performance Measures address a range of factors and impacts related to four supporting elements of the DTSP Mobility Vision: Safety, Economic Vitality, Accessibility & Connectivity, and Roadway Network Performance. The measures used in the evaluation include a range of ways to understand how the package of improvements in each scenario affect the overall network performance and understand the potential benefits or impacts of each project.

The performance measures were selected as ways to understand how implementing individual projects would relate to the desired vision for mobility in DTSP. Some of the measures are quantitative, including several outputs from the AIMSUN traffic model or calculations from GIS analysis. Other measures are qualitative based on assumptions on how the package of proposed improvements in each scenario would benefit or impact mobility in DTSP.



DTSP MOBILITY STUDY PERFORMANCE MEASURES

OBJECTIVE	PERFORMANCE MEASURE
Safety	
Improve Safety at Crash Hotspots	Quantitative measure based on potential for improvements at Crash Hotspots (7 intersection hotspots and 2 bicycle/pedestrian crash spots identified in Existing Conditions & Needs Assessment) due to road reconfiguration/lane reallocation.
Reduce Vehicle Travel Speeds	Qualitative measure based on potential for improvements resulting in lower average travel speeds. Improvements resulting in lower travel speeds include road reconfiguration/lane reallocation for bicycle/pedestrian facilities and two-way conversion.
Economic Vitality, Livability & Equity	
Create Opportunities for New Development or Public Space	Quantitative measure of acres of land potentially available for private development or park space.
Enhance Mobility between DTSP Destinations and Disadvantaged Neighborhoods	Qualitative measure based on potential for accessibility and active transportation improvements within or adjacent to census tracts with vulnerable populations/disadvantaged communities/ lower household income or transit dependency (as identified in Existing Conditions & Needs Assessment) due to road reconfiguration/ lane reallocation and new streets.
Accessibility & Connectivity	
Create New or Improved Bicycle or Pedestrian-Oriented Streets	Quantitative measure of length of streets with opportunities for enhanced active transportation and/or pedestrian-oriented activity due to road reconfiguration/lane reallocation and new streets. Pedestrian-oriented streets are those with enhanced sidewalks, bicycle facilities, tree canopy, streetscape and public realm improvements.
Expand Bicycle/Pedestrian Access to SunRunner Service within DTSP	Quantitative measure of size (acres) of the 1/4-mile and 1/2-mile walksheds to SunRunner stops.
Improve DTSP Network Connectivity	Quantitative measure of new connections between downtown core and adjacent neighborhoods. (Length of new streets in linear feet/miles or intersection density (intersections/square mile))
Roadway Network Performance	
Maintain Overall Network Intersection Performance	Quantitative measure of signalized intersections with unacceptable delay times in AM and PM peak periods (overall intersection performance: approach delay time greater than 55 seconds per vehicle).
Maintain Overall Network Roadway Utilization	Quantitative measure of length of over-capacity/congested roadway segments (miles of roadway segments with volume to capacity (v/c) ratio greater than 1.1 during AM and PM peak periods).
Maintain Commute Times to DTSP Key Employment Destinations	Quantitative measure of AM peak period travel time for vehicles to St. Anthony's Hospital and Johns Hopkins All Children's/Bayfront. (All scenarios assume a 20-minute drive time to I-275 ramps to I-375/I-175 based on existing typical commutes to DTSP. Planned scenario assumes starting point at I-275 ramps to I-375 or I-175. Scenario 1 & 2 assumes starting point at SB I-275/5th Ave S off-ramp and SB I-275/5th Ave N off ramp. Scenario 3 assumes a starting point at I-275 ramp to I-375 and SB I-275/5th Ave S off-ramp. Calculated using posted travel speeds on each street, assumption of no delay at intersections, and route uses the shortest and most direct path between the starting and end points.)



Scenario Definition & Evaluation Results

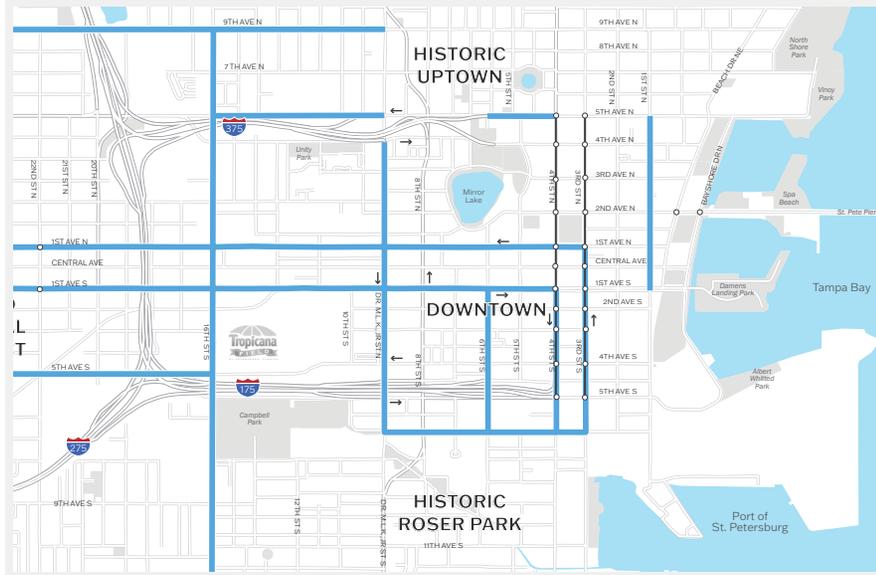
The following pages provide a summary of the potential improvement projects included in the five scenarios developed as part of this study. Each scenario included a combination of projects, including the committed or funded projects that were included as part of the baseline (2045) traffic model. The complete Evaluation Matrix with results for each scenario is also provided later in this section. The full traffic modeling effort and results for each scenario is described in Appendix B: Network Traffic Analysis.

The next section provides information regarding the performance of individual projects to understand how each specific project would either benefit or impact mobility in the future. The next section of the report outlines the prioritization process and recommends specific projects for implementation.

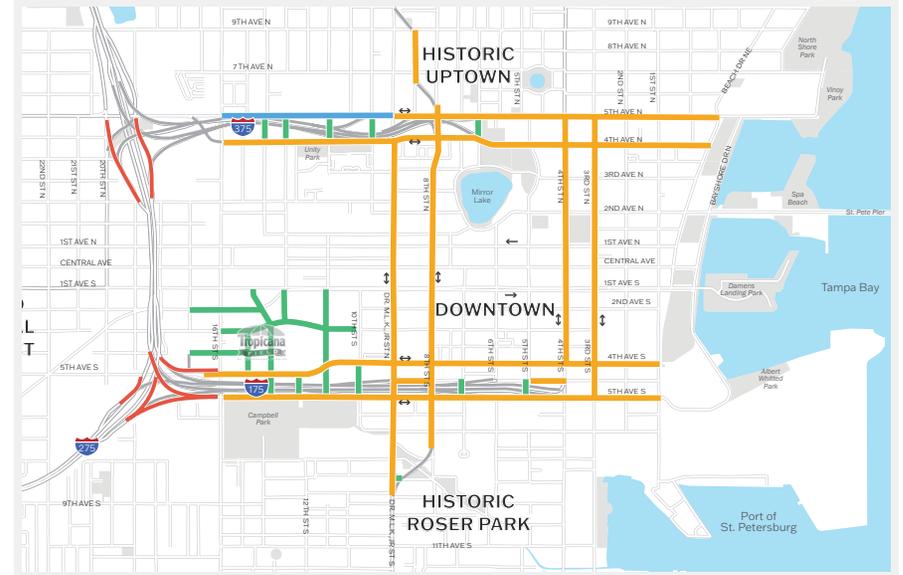
PLANNED NETWORK & SCENARIO IMPROVEMENT PROJECTS

ID	PROJECT NAME	PLANNED	SCENARIO				
			1	2	3	4	5
A	2nd Ave N Intersection Modifications	X	X	X	X	X	X
B	SunRunner BRT Lane Re-allocation	X	X	X	X	X	X
C	5th Ave N Lane Re-allocation	X				X	
D	6th Ave S Lane Re-allocation	X	X	X	X	X	X
E	3rd St Intersection Modifications	X					
F	4th St Intersection Modifications	X					
G	Dr. MLK Jr St Lane Re-allocation	X					
H	6th St S Lane Re-allocation	X	X	X	X	X	X
I	22nd St Intersection Modifications	X	X	X	X	X	X
J	5th Ave S Lane Re-allocation	X	X				X
K ¹	16th St Lane Re-allocation (18th Ave S to 9th Ave N)	X	X	X	X		
K ²	16th St Lane Re-allocation (18th Ave S to 3rd Ave N)					X	X
L	1st St Lane Re-allocation	X	X	X	X	X	X
M	9th Ave N Lane Re-allocation	X	X	X	X	X	X
N	5th Ave N Lane Re-allocation	X	X	X	X	X	
O ¹	Future Grid Connections at Tropicana Site		X				
O ²	Alt. Future Grid Connections at Tropicana Site			X	X	X	X
P ¹	Remove I-375, Full Interchange at I-275/5th Ave N, 4th/5th Ave N Two-Way Conversion		X				
P ²	Remove I-375, Alt. Full Interchange at I-275/5th Ave N, 4th/5th Ave N Two-Way Conversion of, 20th St Two-Way Conversion			X			
P ³	Remove I-375, Alt. Full Interchange at I-275/5th Ave N, 4th Ave N Two-Way Conversion (1EB/1WB), 5th Ave N Widen (2EB/2WB between 16th St and Dr. MLK Jr. St) & Two-Way Conversion (2WB/1EB)						X
Q ¹	Remove I-175, New Full Interchange to 5th Ave S/16th St, 4th/5th Ave S Two-Way Conversion		X				
Q ²	Remove I-175, Alt. New Full Interchange to 5th Ave S/16th St, 4th/5th Ave S Two-Way Conversion			X	X	X	
R	Dr. MLK Jr St/8th St Two-Way Conversion		X	X	X	X	X
S	4th St/3rd St Two-Way Conversion		X	X	X	X	X
T	13th Ave S/Dr. MLK Jr. St Intersection Modifications			X			
U	Partially Remove I-375 east of 11th St, New Ramps, 4th Ave N/5th Ave N Two-Way Conversion, New Roundabout at 16th Street/4th Ave N				X		
V	5th Ave N/2nd St N Intersection Modifications				X		
W	Beach Dr/4th Ave N Roundabout				X		
X	Burlington Ave/16th St Intersection Modifications				X		
Y	4th Ave S Two-Way Conversion						X

PLANNED NETWORK (2045) PROJECTS



SCENARIO 1 NETWORK (2045) PROJECTS*

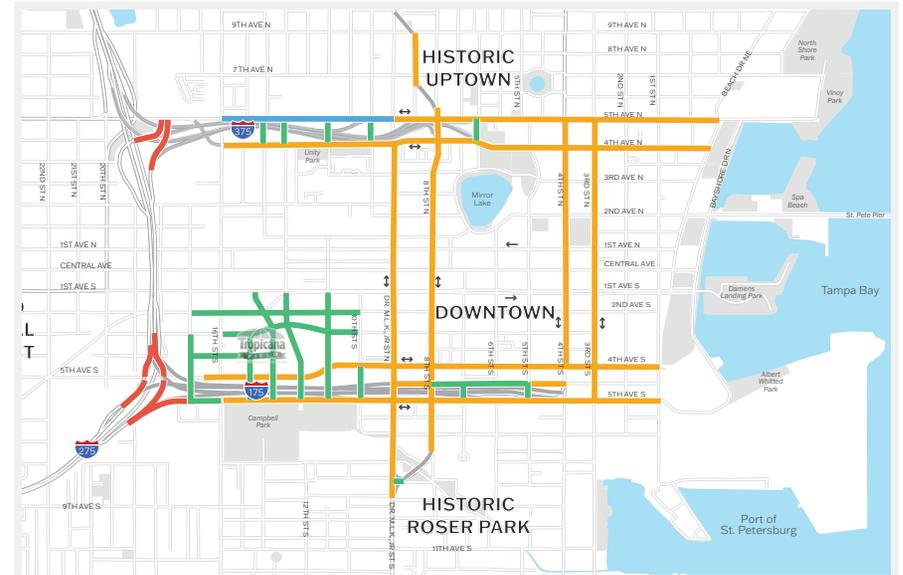


Proposed Project Type Key:

- Intersection Modification
 - Lane Re-allocation*
 - Two-Way Conversion
 - New Street
 - New/Realigned Ramp
 - Vacated Roadway
 - Interstate Spur Modification
- *for parking, transit, or bicycle facilities

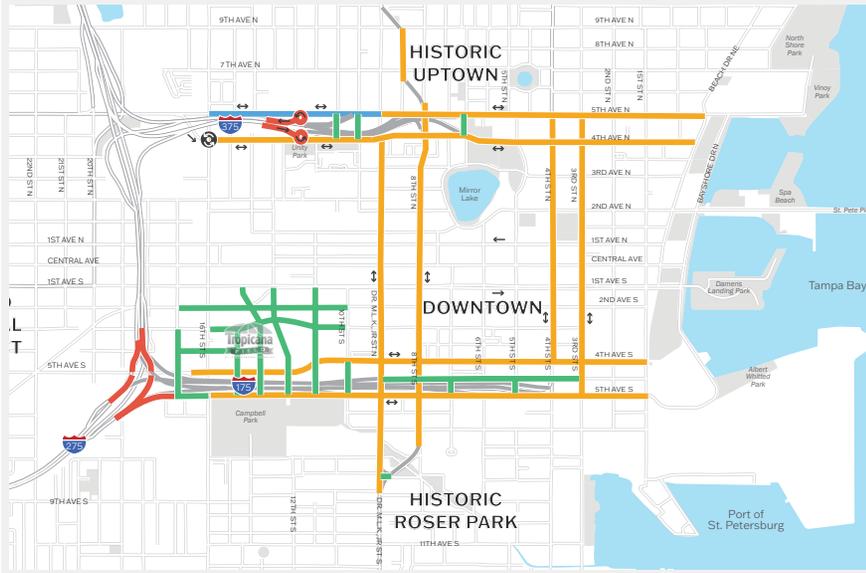
Note: Larger versions of the scenario maps, complete project descriptions, and scenario performance are included in Appendix B: Network Traffic Analysis.

SCENARIO 2 NETWORK (2045) PROJECTS*

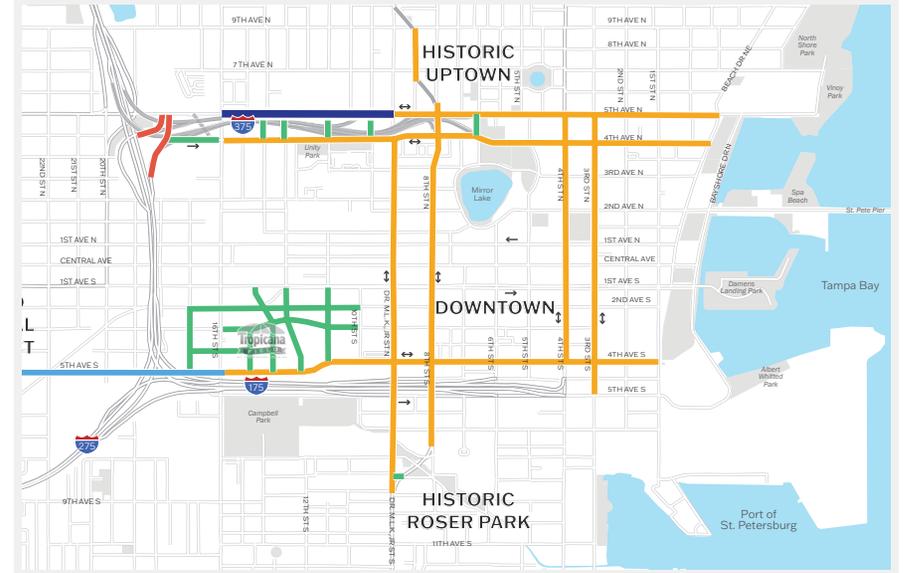


*This scenario also includes several of the Planned projects as indicated in the table.

SCENARIO 3 NETWORK (2045) PROJECTS*

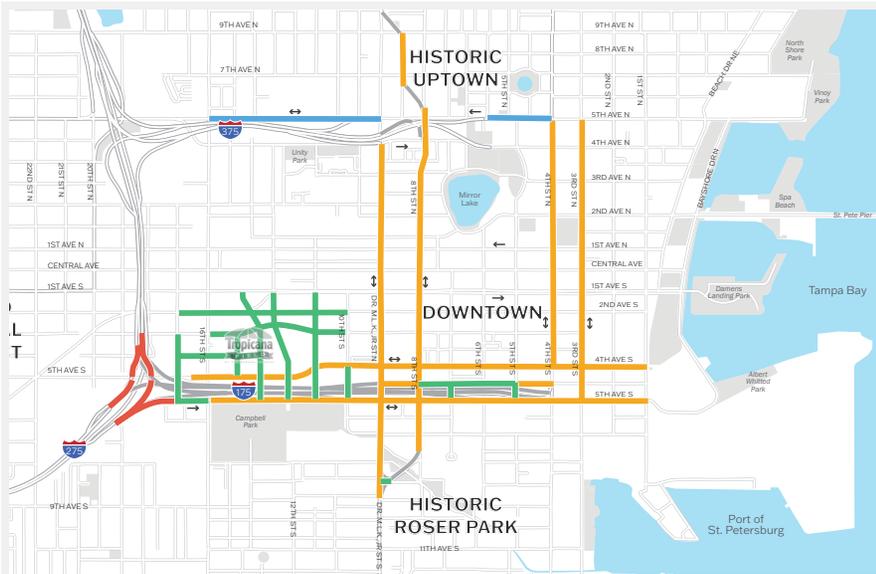


SCENARIO 5 NETWORK (2045) PROJECTS*



**This scenario also includes several of the Planned projects as indicated in the table.*

SCENARIO 4 NETWORK (2045) PROJECTS*



**This scenario also includes several of the Planned projects as indicated in the table.*

SCENARIO EVALUATION MATRIX

OBJECTIVE	PERFORMANCE MEASURE	PLANNED	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5
Safety							
Improve Safety at Crash Hotspots	Crash Hot Spots Addressed:	1 of 7	7 of 7	7 of 7	7 of 7	6 of 7	7 of 7
Reduce Vehicle Travel Speeds	Miles of Streets with Improvements Resulting in Reduced Travel Speeds:	10.38 mi.	18.17 mi.	17.58 mi.	15.22 mi.	13.88 mi.	15.36 mi.
Economic Vitality, Livability & Equity							
Create Opportunities for New Development or Public Space	Land Available for Redevelopment:	n/a	Removal of I-375 (28.9 ac.) Removal of I-175 (24.4 ac.)	Removal of I-375 (25.3 ac.) Removal of I-175 (25.4 ac.)	Partial removal of I-375 (12.3 ac.) Removal of I-175 (25.4 ac.)	Removal of I-175 (25.4 ac.)	Removal of I-375 (25.3 ac.)
Enhance Mobility between DTSP Destinations and Disadvantaged Neighborhoods	Potential for New Connections between DTSP and Adjacent Neighborhoods with Higher Rates of Households/Populations that are Lower Income, Transit-Dependent, or Have Vulnerable Health Indicators):	n/a	High	High	Medium	Medium	Low
Accessibility & Connectivity							
Create New or Improved Bicycle or Pedestrian-Oriented Streets	Miles of New/Improved Pedestrian-Oriented Streets:	6.08 mi.	16.26 mi.	16.69 mi.	13.95 mi.	12.61 mi.	13.63 mi.
Expand Bicycle/ Pedestrian Access to SunRunner Service within DTSP	Acres within ¼-Mile Walkshed:	780 ac.	833 ac.	859 ac.	859 ac.	859 ac.	831 ac.
	Acres within ½-Mile Walkshed:	1,524 ac.	1,537 ac.	1,537 ac.	1,533 ac.	1,532 ac.	1,531 ac.
Improve DTSP Network Connectivity	Intersection Density (Intersections/Square Mile):	134 intersections/sq mi	140 intersections/sq mi	141 intersections/sq mi	140 intersections/sq mi	140 intersections/sq mi	140 intersections/sq mi

Scenario Comparison Key

Benefits	Limited	Low-Medium	Medium-High
Impacts	High	Low	None
Performance	Worse	Same	Better



OBJECTIVE	PERFORMANCE MEASURE	PLANNED	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5
Roadway Network Performance							
Maintain Overall Network Intersection Performance	# of Signalized Intersections:	109	108	117	116	115	113
	% of Signalized Intersections with Unacceptable Delay (>55 seconds):	(AM) 1% of intersections (1) (PM) 5% of intersections (5)	(AM) 2% of intersections (2) (PM) 5% of intersections (5)	(AM) 0% of intersections (0) (PM) 3% of intersections (3)	(AM) 0% of intersections (0) (PM) <1% of intersections (1)	(AM) 0% of intersections (0) (PM) 0% of intersections (0)	(AM) 0% of intersections (0) (PM) <1% of intersections (1)
Maintain Overall Network Roadway Utilization	Network Roadway Miles:	98.4 mi.	105.6 mi.	108.1 mi.	109.7 mi.	108.0 mi.	107.7 mi.
	% of Network or Total Roadway Miles with Congestion (v/c > 1.1):	(AM) 5% of network (5.0 mi.) (PM) 8% of network (8.0 mi.)	(AM) 8% of network (8.6 mi.) (PM) 15% of network (15.8 mi.)	AM: 10% of network (10.3 mi.) PM: 11% of network (12.1 mi.)	AM: 8% of network (8.6 mi.) PM: 11% of network (11.6 mi.)	AM: 6% of network (6.4 mi.) PM: 9% of network (9.3 mi.)	AM: 6% of network (6.8 mi.) PM: 10% of network (10.4 mi.)
Maintain Commute Times to DTSP Key Employment Destinations	Estimated Travel Time During AM Peak Period with Average 10-mile Commute Trip to DTSP: I-275 to St. Anthony's via I-375 or I-275/5th Ave N interchange	(AM) 21:22	(AM) 22:40	(AM) 22:47	(AM) 21:09	(AM) 21:21	(AM) 22:12
	Estimated Travel Time During AM Peak Period with Average 10-mile Commute Trip to DTSP: I-275 to Johns Hopkins All Children's/Bayfront via I-175 or new I-275/5th Ave S interchange	(AM) 21:53	(AM) 22:21	(AM) 24:46	(AM) 26:00	(AM) 24:35	(AM) 21:38

Scenario Comparison Key			
Benefits			
Impacts	Limited	Low-Medium	Medium-High
Performance	High	Low	None
	Worse	Same	Better

PROJECT PERFORMANCE SUMMARY: 8th St/Dr. MLK, Jr. St Two-Way Conversion

Conditions & Issues

One-way operations and higher travel speeds contribute to high number of crashes and unsafe bike/ped conditions along 8th St and Dr. MLK, Jr. St. Reducing travel speed and creating more walkable streets with increased safety for pedestrians and bicyclists along these streets is a priority for the City.

Currently, both streets are one-way throughout DTSP, but are two-way streets north and south of the downtown core.

- **8th St.** One-way between 9th Ave S and 9th Ave N, primarily 3 northbound lanes.
- **Dr. MLK, Jr. St.** One-way between 9th Ave S and 4th Ave N, primarily 4 southbound lanes. The City has plans for lane reallocation for dedicated cycle track between 6th Ave S and 4th Ave N.
- **North/South Termini.** At the southern end of the one-way pair between 7th Ave S and 9th Ave S, a diagonal roadway connects 8th St to Dr. MLK, Jr. St over Booker Creek. At the northern limits, 8th St connects to Highland Ave, which then connects back over to Dr. MLK, Jr. St north of 9th Ave N.

Project Concept

Both streets were previously considered for two-way conversion through the *One-Way Street Conversion Study*, which is reflected in the *Complete Street Implementation Plan* with added consideration for inclusion of bicycle facilities. For the scenario testing process, the concept included:

- **8th St.** Convert to two-way, lane reallocation with 1 northbound/1 southbound lane. Opportunity for multimodal improvements (lane reallocation of one travel lane) on 8th St (instead of on Dr. MLK, Jr. St).
- **Dr. MLK Jr. St.** Convert to two-way with 2 northbound/2 southbound lanes.
- **North/South Termini.** Remove diagonal streets and reconnect the street grid.

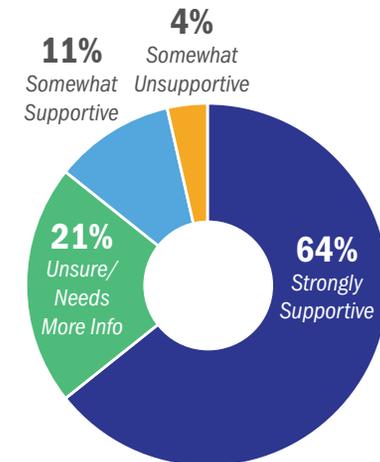
Performance Results

Based on the scenario testing and evaluation effort, the project performs well and has the potential to create safer multimodal streets, but does not create significant congestion or delay. Results are summarized in the graphic on the next page.

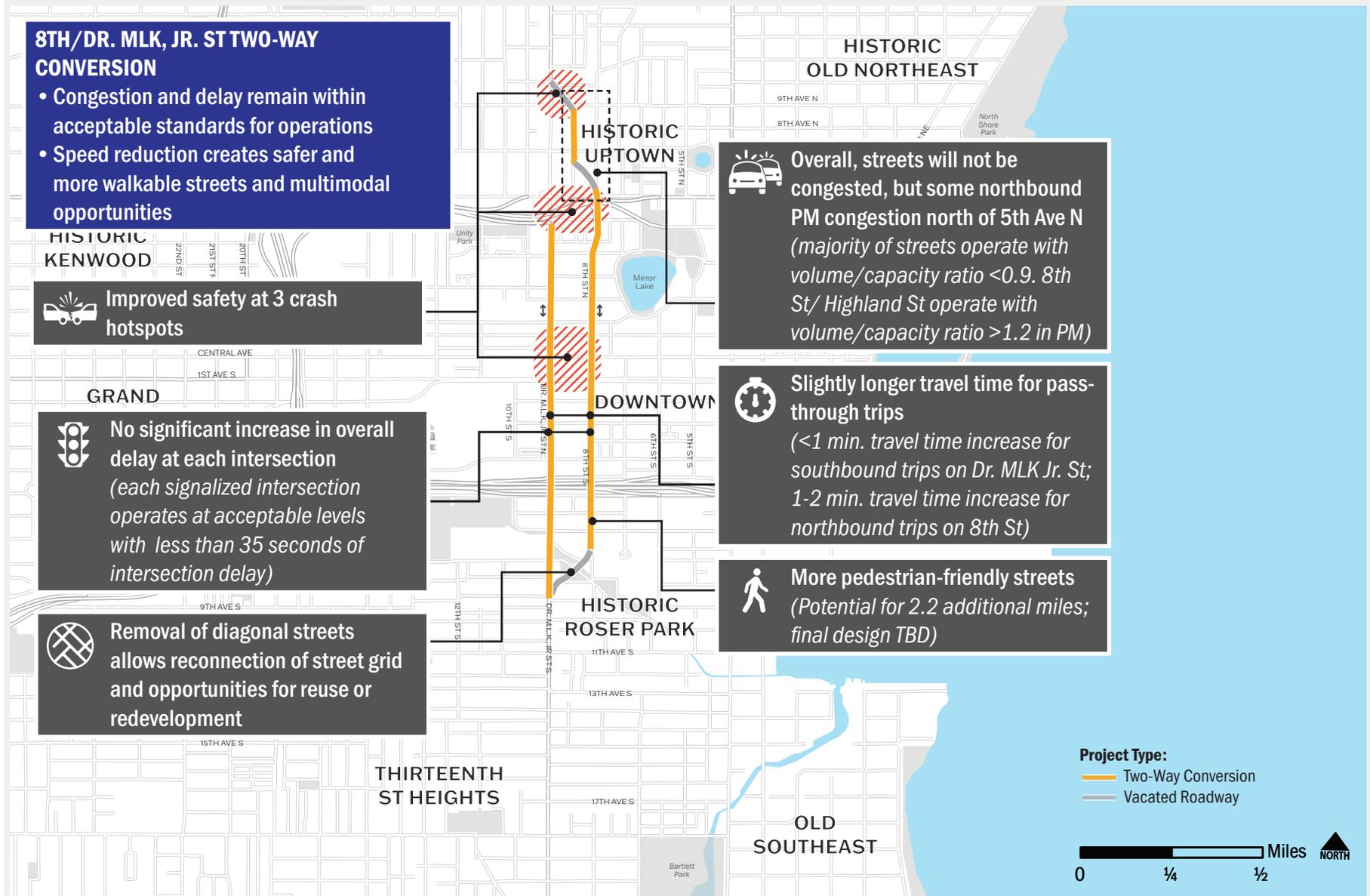
Public & Stakeholder Input

Public and stakeholder group support for the conversion of 8th/Dr. MLK Jr., St is strong. During the community conversations, survey comments related to this project concept included concerns about safety, potential negative impacts to travel time, and a desire to add protected bicycle lanes along one or both of these streets. The MLK Business District also indicated their support for the conversion.

PUBLIC SUPPORT FOR TWO-WAY CONVERSION OF 8TH/DR. MLK JR. ST (FALL 2021 SURVEY)



SUMMARY OF PROJECT CONCEPT & PERFORMANCE: 8TH/DR. MLK, JR ST TWO-WAY CONVERSION



PROJECT PERFORMANCE SUMMARY: 3rd St/4th St Two-Way Conversion

Conditions & Issues

One-way operations and higher travel speeds contribute to high number of crashes and unsafe bike/ped conditions along 3rd St and 4th St. Reducing travel speed and creating more walkable streets with increased safety for pedestrians and bicyclists along these streets is a priority for the City.

Both streets are one-way throughout DTSP, but are two-way streets north and south of the downtown core.

- **3rd St.** One-way between 5th Ave S and 5th Ave N, primarily 4 northbound lanes. The City has plans for lane reallocation for dedicated cycle track (*Complete Streets Implementation Plan*) between 6th Ave S and 4th Ave N.
- **4th St.** One-way between 4th Ave S and 5th Ave N, primarily 4 southbound lanes.

Project Concept

The City previously identified these streets as a candidate for two-way conversion (*One-Way Street Conversion Study*). For the scenario testing process, the concept included:

- **3rd St.** Convert to two-way, lane reallocation with 1 northbound/1 southbound lane. Opportunity for multimodal improvements (lane reallocation of one travel lane) on 8th St (instead of on Dr. MLK, Jr. St).
- **4th St.** Convert to two-way with 2 northbound/2 southbound lanes.

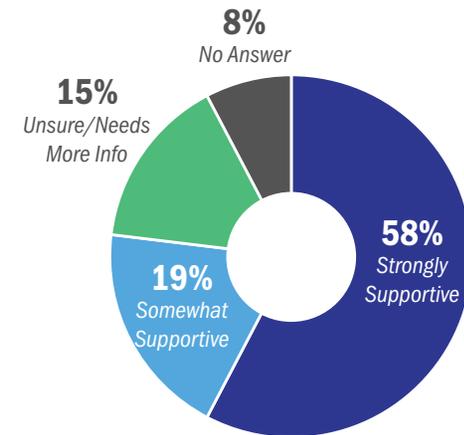
Performance Results

Based on the scenario testing and evaluation effort, the project performs well and has the potential to create safer multimodal streets, but does not create significant congestion or delay. Results are summarized in the graphic on the next page.

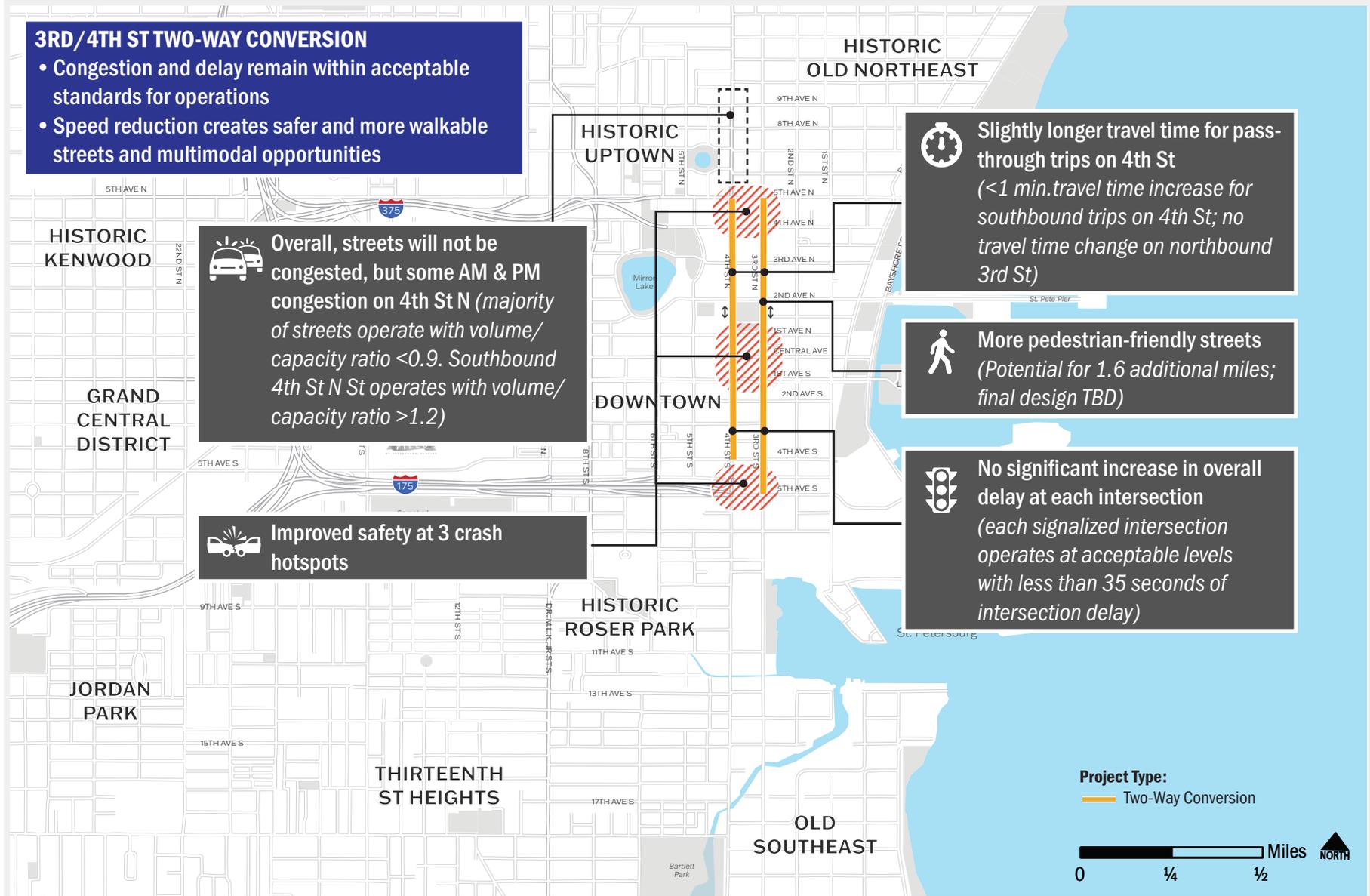
Public & Stakeholder Input

Public support for the conversion of 3rd/4th St is strong. During the community conversations, survey comments related to this project concept included concerns about potential negative impacts to travel time.

PUBLIC SUPPORT FOR TWO-WAY CONVERSION OF 3RD/4TH ST (FALL 2021 SURVEY)



SUMMARY OF PROJECT CONCEPT & PERFORMANCE: 3RD/4TH ST TWO-WAY CONVERSION



PROJECT PERFORMANCE SUMMARY: I-375 Full Removal, New Full Interchange at 5th Ave N & 4th/5th Ave N Two-Way Conversion

Conditions & Issues

I-375 provides quick access from I-275 to destinations in northern DTSP and the waterfront. The ramps from the interstate spurs and I-275, along with one-way operations and higher travel speeds contribute to high number of crashes and unsafe bike/ped conditions along 4th Ave N and 5th Ave N. Both streets are one-way throughout DTSP, but are two-way streets west of the downtown core.

- **I-375.** This interstate spur runs east-west approximately 1.2 miles from I-275, with 2-3 eastbound and 2-3 westbound lanes. Eastbound off-ramps to 4th Ave N are located near 10th St N and 5th St N. Westbound on-ramps from 5th Ave N are located near 7th St N, 8th St N, and 10th St N.
- **4th Ave N.** One-way along the south side of I-375 with 2 eastbound lanes.
- **5th Ave N.** One-way along the north side of I-375, with 2-3 westbound lanes east of Dr. MLK Jr. St. 5th Ave N is two-way with 3 lanes west of Dr. MLK, Jr. St. The City and FDOT have plans to do a lane reallocation on 5th Ave N that would shift 1 westbound lane for a cycle track between Dr. MLK, Jr. St and 16th St.

Removing barriers for multimodal travel, improving safety and walkability, increasing opportunities for neighborhood connections between the areas north and south of I-375, and exploring potential redevelopment opportunities is a priority for the City.

Project Concept

This study evaluated the following concepts to remove I-375, construct a new full I-275 interchange at 5th Ave N, and convert 5th Ave N/4th Ave N to two-way operations:

- **I-275 Interchange.** Three full interchange configurations were considered with ramps to northbound and southbound I-275 from 5th Ave N.
- **4th Ave N.** Convert to two-way with 1 eastbound/ 1 westbound lane. Opportunity for multimodal improvements.
- **5th Ave N.** Convert to two-way with 1 eastbound/ 1 westbound lane. One scenario considered additional capacity with 1 eastbound/2 westbound lanes.
- **New Streets.** Additional north-south streets provided between 4th Ave N and 5th Ave N.

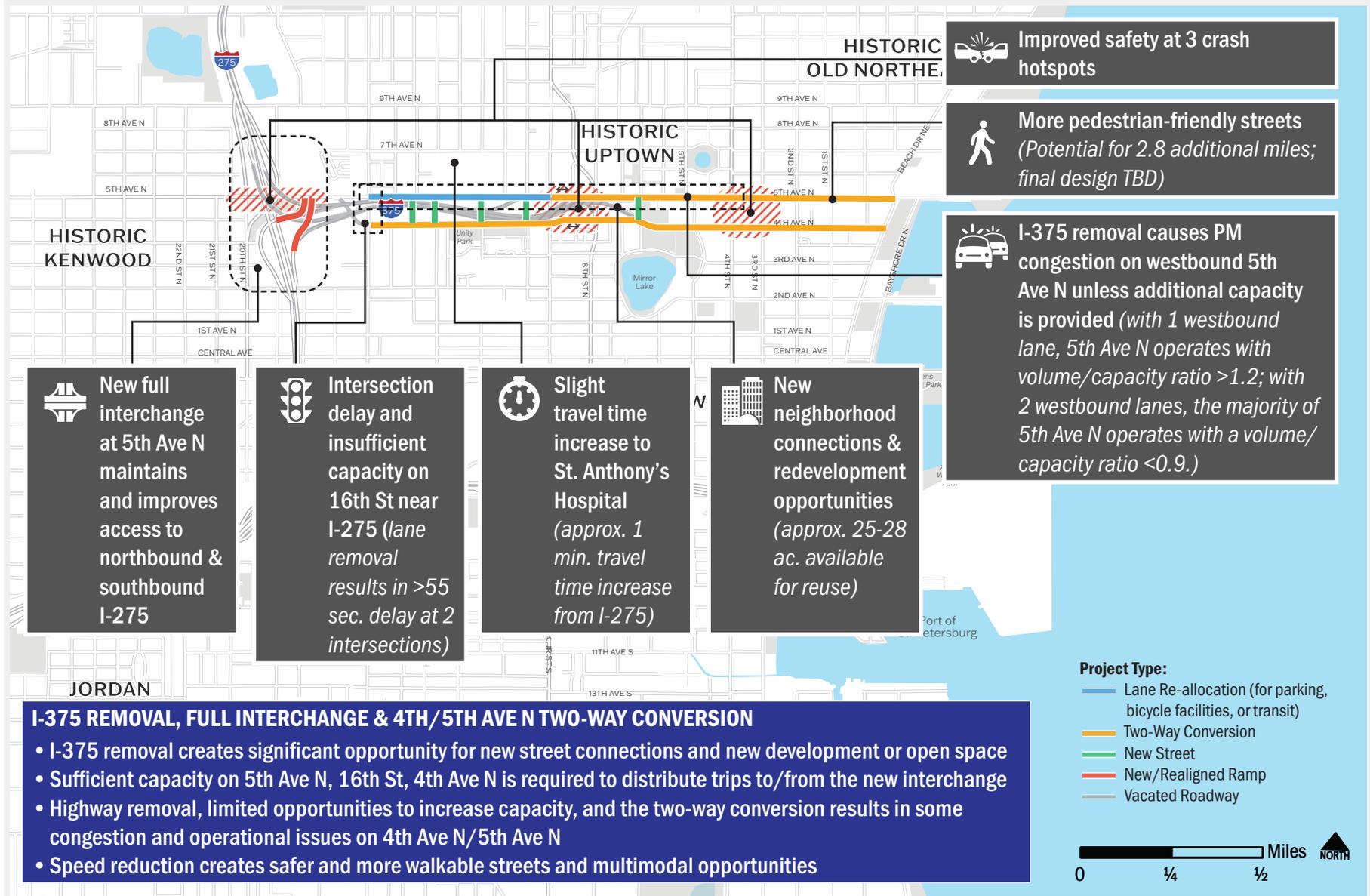
Performance Results

Based on the scenario testing and evaluation effort, the full I-375 removal, new interchange at 5th Ave N and one-way conversion of 4th Ave/5th Ave S creates better opportunities for neighborhood connections, multimodal streets, and redevelopment. Congestion may be a concern along local streets, unless sufficient capacity can be provided to distribute trips from the new full interchange. Results are summarized in the graphic on the next page.

Public & Stakeholder Input

Public support for the full removal of I-375 was mixed. During the community conversations, survey comments related to this project concept included concerns about potential negative impacts to travel time and limiting emergency vehicle access to the medical centers. Additionally, the I-275 project north of I-375 is currently advancing into the design phase, and changes to I-375 may impact the proposed FDOT record of decision and timeframe for those improvements so potential changes to I-375 may not be possible in the short term. Removal of I-375 may put too much pressure on local streets (16th St and 5th Ave N) that have proposed lane reallocations for multimodal uses and the Tropicana Field redevelopment.

SUMMARY OF PROJECT CONCEPT & PERFORMANCE: I-375 FULL REMOVAL, NEW FULL INTERCHANGE & 4TH/5TH AVE N TWO WAY CONVERSION



PROJECT PERFORMANCE SUMMARY: I-375 Partial Removal & 4th/5th Ave N Two-Way Conversion

Conditions & Issues

I-375 provides quick access from I-275 to destinations in northern DTSP and the waterfront. The ramps from the interstate spurs and I-275, along with one-way operations and higher travel speeds contribute to high number of crashes and unsafe bike/ped conditions along 4th Ave N and 5th Ave N. Both streets are one-way throughout DTSP, but are two-way streets west of the downtown core.

- **I-375.** This interstate spur runs east-west approximately 1.2 miles from I-275, with 2-3 eastbound and 2-3 westbound lanes. Eastbound off-ramps to 4th Ave N are located near 10th St N and 5th St N. Westbound on-ramps from 5th Ave N are located near 7th St N, 8th St N, and 10th St N.
- **4th Ave N.** One-way along the south side of I-375 with 2 eastbound lanes.
- **5th Ave N.** One-way along the north side of I-375, with 2-3 westbound lanes east of Dr. MLK Jr. St. 5th Ave N is two-way with 3 lanes west of Dr. MLK, Jr. St. The City has plans to do a lane reallocation on 5th Ave N that would shift 1 westbound lane for a cycle track between Dr. MLK, Jr. St and 16th St.

Removing barriers for multimodal travel, improving safety and walkability, increasing opportunities for neighborhood connections between the areas north and south of I-375, and exploring potential redevelopment opportunities is a priority for the City.

Project Concept

This study evaluated the following concept to partially remove I-375, consolidate entry/exit to I-375 with ramps accessed from roundabouts near 11th St, and convert 5th Ave N/4th Ave N to two-way operations:

- **New I-375 Ramps.** New on-ramp from 5th Ave N and new off-ramp to 4th Ave N near 11th St N. The ramps would be tied into separate roundabouts that would allow traffic to/from the highway to merge with through traffic on 4th Ave N and 5th Ave N.
- **4th Ave N.** Convert to two-way with 1 eastbound/ 1 westbound lane. Opportunity for multimodal improvements.
- **5th Ave N.** Convert to two-way with 1 eastbound/ 1 westbound lane. Opportunity for multimodal improvements.
- **New Streets.** Additional north-south streets provided between 4th Ave N and 5th Ave N.

- **16th St/4th Ave N Intersection.** The diagonal, eastbound one-way street from 5th Ave N would connect to a new roundabout intersection at 16th St/4th Ave N.

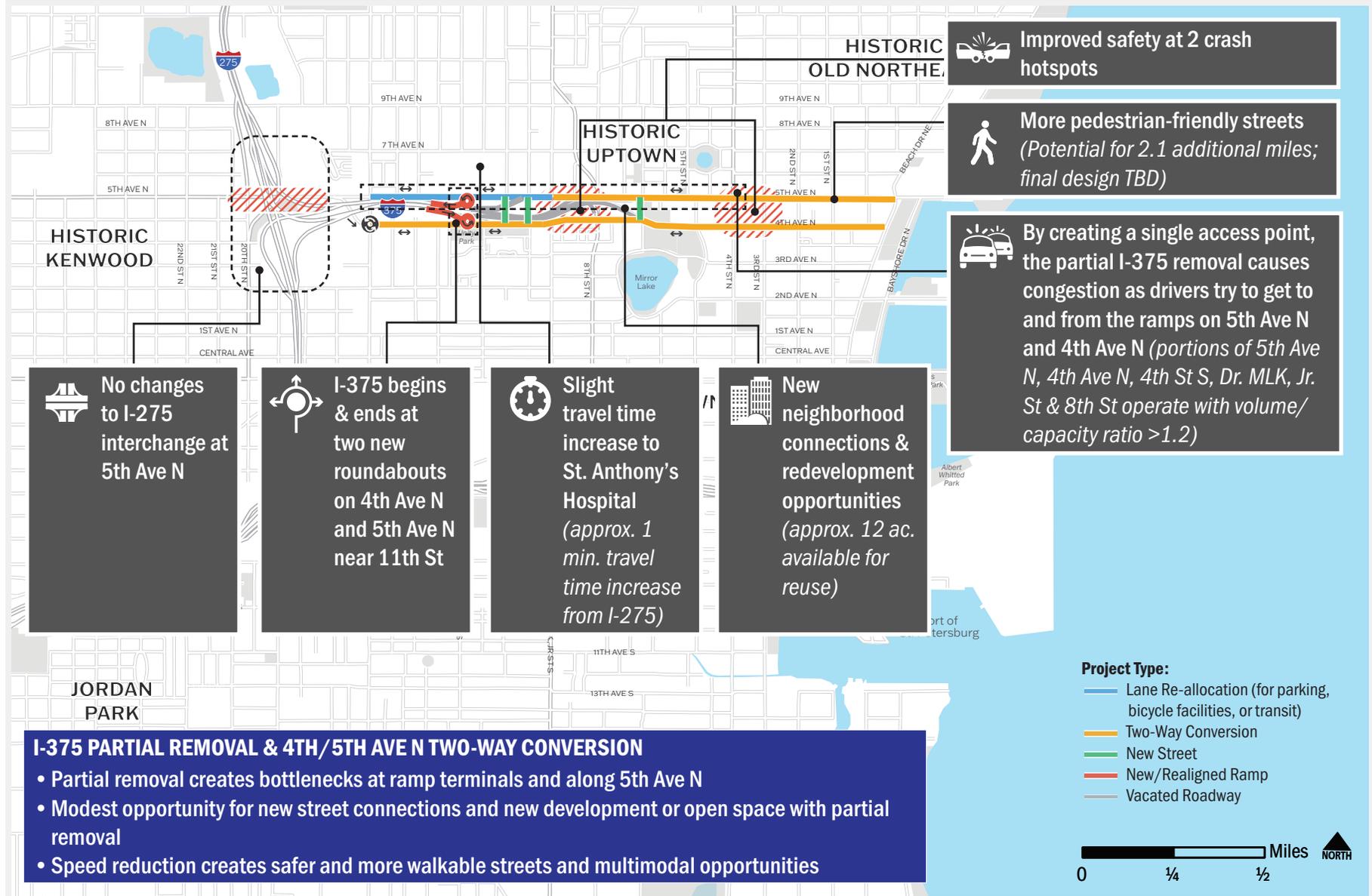
Performance Results

Based on the scenario testing and evaluation effort, the partial I-375 removal and one-way conversion of 4th Ave/5th Ave S creates some opportunities for neighborhood connections, multimodal streets, and redevelopment. Congestion on local streets may be a concern, unless sufficient capacity can be provided to distribute trips from the I-375 ramp. Results are summarized in the graphic on the next page.

Public & Stakeholder Support

Public and stakeholder support for the partial removal of I-375 was mixed but higher than full removal. Comments received were related to potential impacts to travel time and limiting emergency vehicle access to the medical centers. Fire and rescue agencies and other key stakeholders are concerned that removal may affect their regional access to/from I-275.

SUMMARY OF PROJECT CONCEPT & PERFORMANCE: I-375 PARTIAL REMOVAL & 4TH/5TH AVE N TWO WAY CONVERSION



PROJECT PERFORMANCE SUMMARY: I-175 Removal, New Full Interchange at 5th Ave S & 4th/5th Ave S Two-Way Conversion

Conditions & Issues

I-175 provides quick access from I-275 to destinations in southern DTSP, the Innovation District, and the Waterfront Arts District. The ramps from the interstate spurs and I-275, along with one-way operations and higher travel speeds contribute to high number of crashes and unsafe bike/ped conditions along 4th Ave S, Delmar Terrace, and 5th Ave S. 4th Ave S and 5th Ave S are one-way throughout DTSP, but are two-way streets west of the downtown core.

- **I-175.** This interstate spur runs east-west approximately 1.3 miles from I-275, with 2-4 lanes in each direction. Eastbound off-ramps to 5th Ave S and westbound on-ramps from Dr. MLK, Jr. St S, Delmar Terrace/6th St, and 4th St S.
- **5th Ave S.** One-way between 16th St and 1st St S, with 2 to 3 eastbound lanes.
- **4th Ave S.** One-way between 16th St and 1st St S, with 2 to 3 westbound lanes. *(name changes to 5th Ave S west of Booker Creek)*
- **Delmar Terrace.** One-way on the north side of I-175, with one lane. Does not connect.

Removing barriers for multimodal travel, improving safety and walkability, increasing

opportunities for neighborhood connections between the areas north and south of I-175, and exploring potential redevelopment opportunities is a priority for the City.

Project Concept

This study evaluated the following concepts to remove I-175, construct a new full I-275 interchange at 5th Ave S, and convert 5th Ave S/4th Ave S to two-way operations:

- **I-275 Interchange.** Two full interchange configurations were considered to allow entry and exit from northbound and southbound I-275 to 5th Ave S.
- **4th Ave S.** Convert to two-way with 2 eastbound/2 westbound lanes. Opportunity for multimodal improvements.
- **5th Ave S.** Convert to two-way with 2 eastbound/2 westbound lanes. One scenario considered additional capacity with 1 eastbound/2 westbound lanes.
- **New Streets.** Additional north-south streets provided between 4th Ave N and 5th Ave N.

Performance Results

Based on the scenario testing and evaluation effort, the full I-175 removal, new interchange

at 5th Ave N and two-way conversion of 4th Ave S/5th Ave S creates better opportunities for neighborhood connections, multimodal streets, and redevelopment. Congestion is a concern along local streets, unless sufficient capacity can be provided to distribute trips from the new full interchange. Overall the DTSP network would not be impacted by the highway removal. Results are summarized in the graphic on the next page.

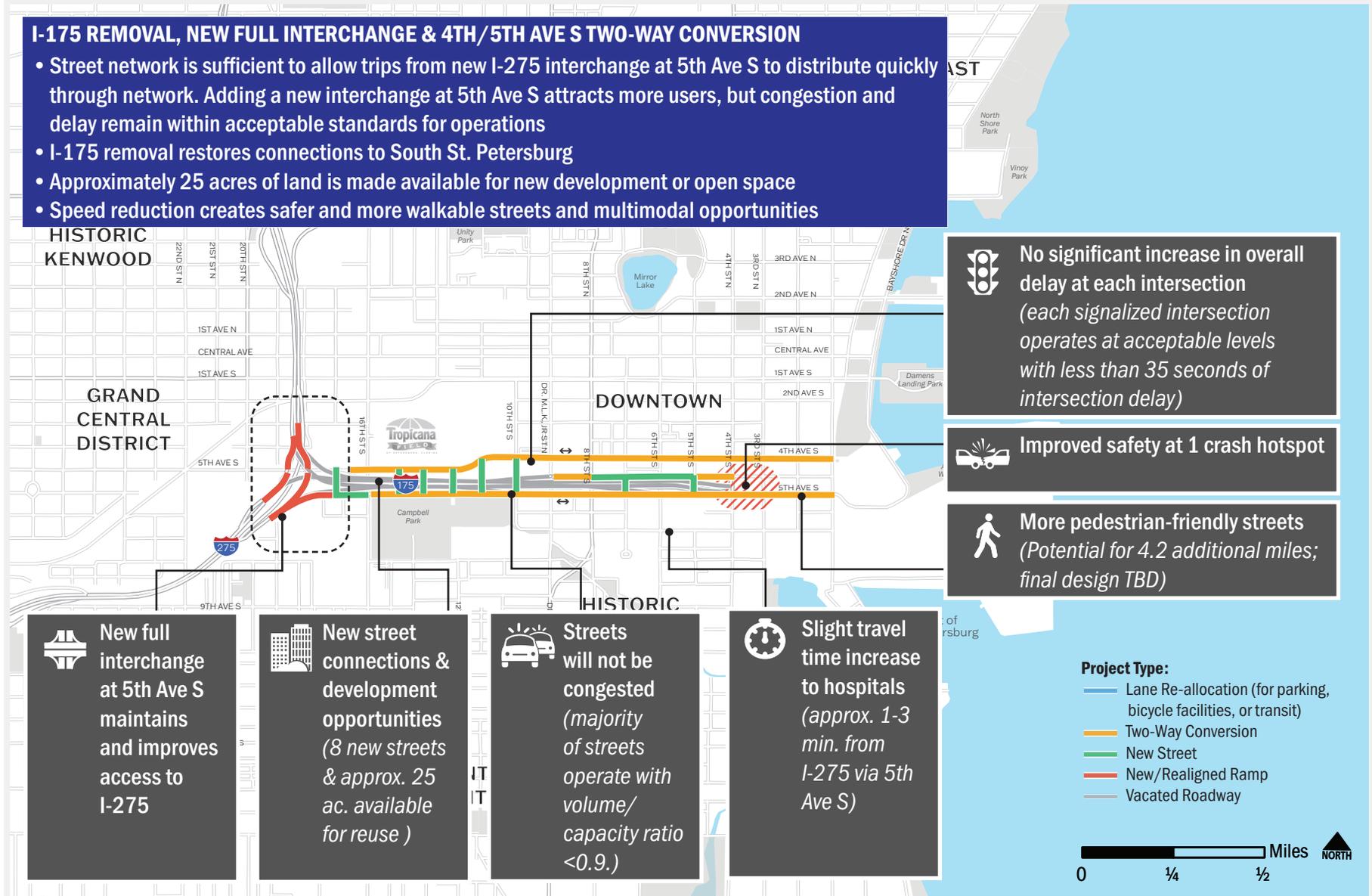
Public & Stakeholder Support

Public and stakeholder support for the partial full removal of I-175, creation of a new interchange at I-275 at 5th Ave S, and two-way conversion of 4th Ave/5th Ave S was strong. During the community conversations, survey comments related to this project concept included concerns about potential negative impacts to travel time and limiting emergency vehicle access to the medical centers. Stakeholders from the area’s hospitals are concerned about travel time increases for patients if the highway is removed. Ambulance operators are more concerned about smooth travel, compared to speed. Fire and rescue agencies are concerned that removal may affect their travel time and regional access to/from I-275.

SUMMARY OF PROJECT CONCEPT & PERFORMANCE: I-175 REMOVAL, FULL INTERCHANGE & 4TH/5TH AVE S TWO WAY CONVERSION

I-175 REMOVAL, NEW FULL INTERCHANGE & 4TH/5TH AVE S TWO-WAY CONVERSION

- Street network is sufficient to allow trips from new I-275 interchange at 5th Ave S to distribute quickly through network. Adding a new interchange at 5th Ave S attracts more users, but congestion and delay remain within acceptable standards for operations
- I-175 removal restores connections to South St. Petersburg
- Approximately 25 acres of land is made available for new development or open space
- Speed reduction creates safer and more walkable streets and multimodal opportunities



No significant increase in overall delay at each intersection (each signalized intersection operates at acceptable levels with less than 35 seconds of intersection delay)

Improved safety at 1 crash hotspot

More pedestrian-friendly streets (Potential for 4.2 additional miles; final design TBD)

New full interchange at 5th Ave S maintains and improves access to I-275

New street connections & development opportunities (8 new streets & approx. 25 ac. available for reuse)

Streets will not be congested (majority of streets operate with volume/capacity ratio <0.9.)

Slight travel time increase to hospitals (approx. 1-3 min. from I-275 via 5th Ave S)

Project Type:
 Lane Re-allocation (for parking, bicycle facilities, or transit)
 Two-Way Conversion
 New Street
 New/Realigned Ramp
 Vacated Roadway



5/PROJECT PRIORITIES & ACTION PLAN

Prioritization Process

This Action Plan for mobility improvements in DTSP is aimed at expanding mobility options, creating safer streets designed for everyone, increasing comfort to attract and sustain activity, and enhancing the convenience of moving from place to place. To accomplish the goals and achieve the mobility vision established as part of this study, an Action Plan was prepared with a series of recommended projects, studies, and programs that the City of St. Petersburg, Forward Pinellas, FDOT, or other partner agencies should take to create a more reliable, inclusive, and efficient transportation system.

The projects recommended for advancement or implementation are based on the results of the evaluation process and public input received over the course of this study. The projects were organized into two tiers or priorities: Priority One Projects are those that should be advanced in the next 14 years, and Priority Two Projects are those that should advance once implementation of the Priority One Projects are completed. For the Priority One Projects, the specific actions are organized into short-term (1-3 years), mid-term (4-6 years), and long-term (7-14 years) actions. Actions related to Priority Two Projects are anticipated to occur later (15+ years).

Summary of Recommendations

Together, the recommended actions from this study are designed to propel the City's goal of enhancing DTSP as a vibrant, unique, and walkable place where residents and visitors enjoy spending their time and money. Described in more detail in this section, the following studies, projects, strategies, or plans are recommended for advancement.

Projects Previously Identified For Implementation

Several lane reallocation projects previously identified for implementation including those from City's *Complete Street Implementation Plan* were evaluated as part of this study to confirm their feasibility and explore any potential impacts that would result from the other network improvement projects under consideration. Based on the findings of this study's evaluation and public outreach, no negative impacts are anticipated that would affect implementation of these projects as planned.

DTSP Study Priority One Projects

Described in more detail in this section, the following studies, projects, strategies, or plans should be advanced as the top priorities:

- Two-way conversion and lane reallocation study of the two north/south one-way pairs (3rd/4th St and 8th/Dr. MLK Jr. St)
- Studies to advance conceptual design, develop a redevelopment strategy based on community preferences, and better understand feasibility and impacts of modifications or removal of I-175. Potential to advance into next steps of FDOT project development process.
- Other projects related to transit improvements, advanced technologies, and traffic signal prioritization, and safety related projects to address crash hotspots on local DTSP streets.

DTSP Study Priority Two Projects

At a lower priority, more detailed studies and analysis to advance conceptual design, develop a redevelopment strategy, and better understand feasibility and impacts of modifications or removal of I-375 should be evaluated further in the future. Additional study or analysis may be needed prior to

advancement to understand current needs and conditions since these projects are anticipated for longer-term implementation.

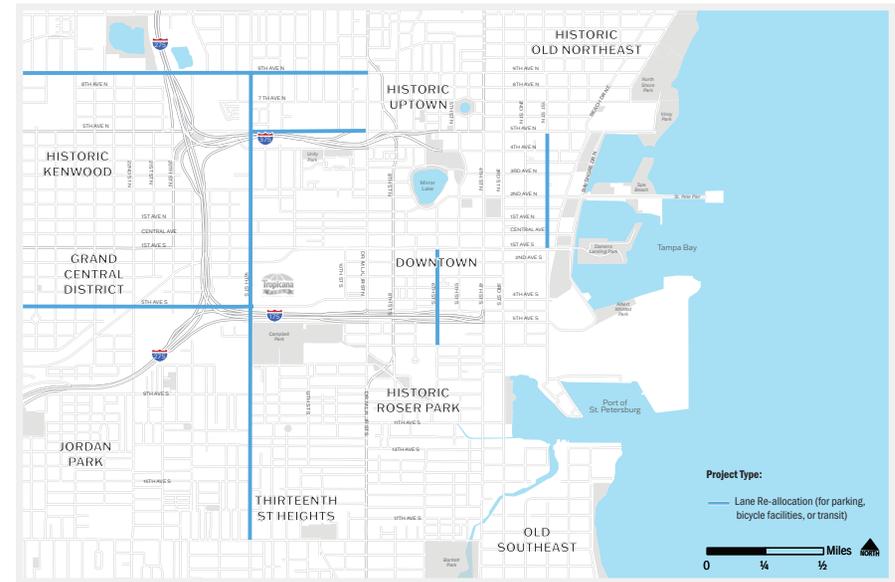
Projects Previously Identified For Implementation

Complete Streets Implementation Plan Projects

The City should continue to advance the DTSP projects recommended in the *Complete Streets Implementation Plan* for design and construction. Implementing some of these projects may require re-allocating the existing roadway space. Each project that may involve lane re-allocation will include additional study, further public involvement, and coordination with regional stakeholders such as Pinellas County and the Florida Department of Transportation. The Complete Streets Implementation Plan includes a strategy for possible phasing of the following lane reallocation projects that were included as part of the base model for this study:

- **6th St S Lane Re-allocation.** Reduce to 1 lane, parallel parking, and buffered bike lanes in each direction between 6th Ave S and 1st Ave S. This project is fully designed and expected to advance to construction in 2022. (*Complete Street Implementation Plan, 2019*)
- **5th Ave S Lane Re-allocation.** Reduce to 1 lane in each direction between 31st St S and 16th St S. (*Warehouse Arts District-Deuces Live Joint Action Plan, 2018* and *Complete Street Implementation Plan, 2019*)
- **16th St Lane Re-allocation.** Reduce to 1 lane and buffered bike lanes in each direction between 18th Ave S and 9th Ave N. (*Complete Street Implementation Plan, 2019*)
- **1st St Lane Re-allocation.** Reduce to 1 lane and buffered bike lanes in each direction between 1st Ave S and 5th Ave N. (*Complete Street Implementation Plan, 2019*)

PLANNED LANE REALLOCATION PROJECTS (FROM COMPLETE STREETS IMPLEMENTATION PLAN AND FDOT)



Source: City of St. Petersburg Complete Streets Implementation Plan, 2019

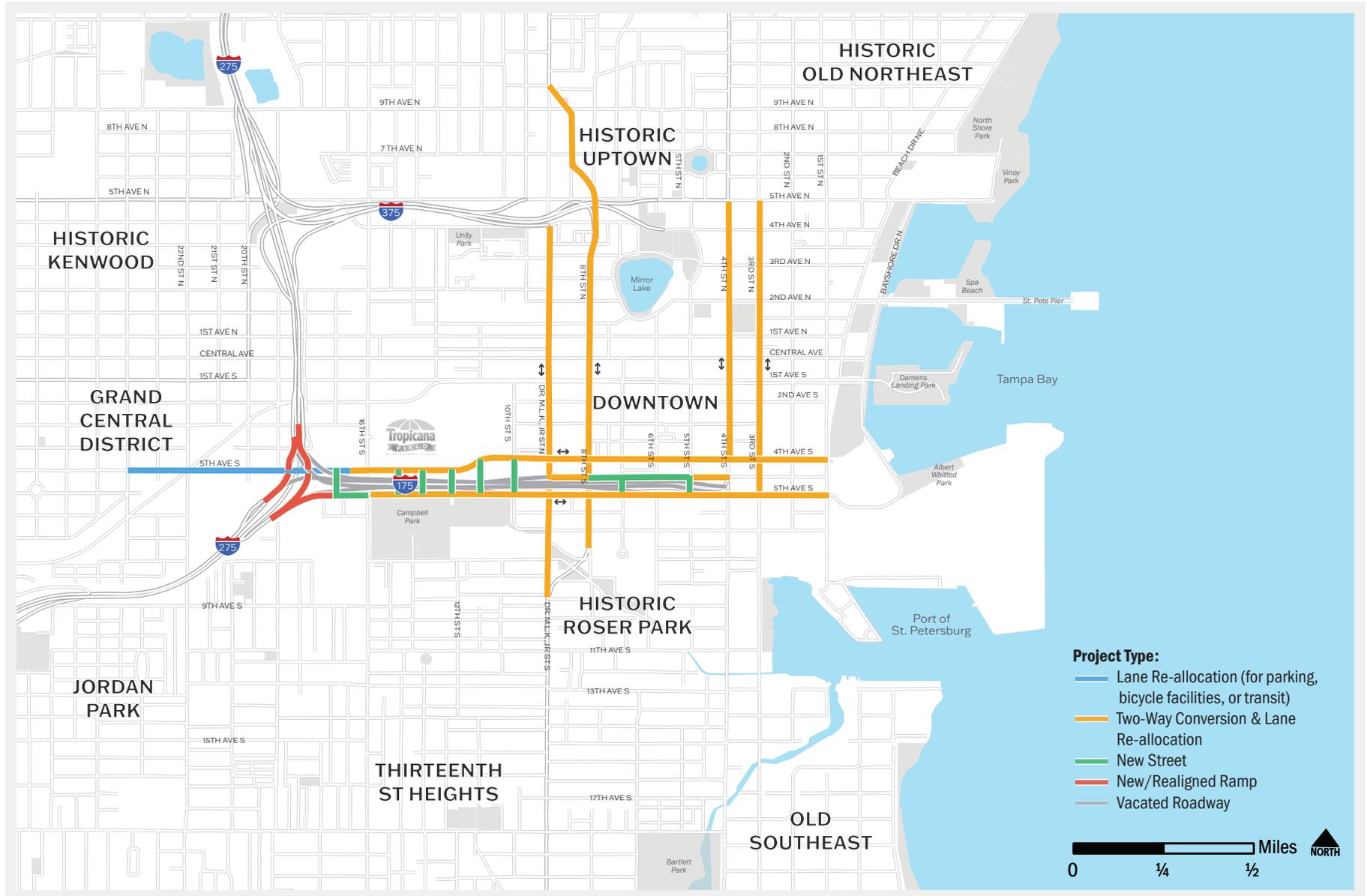
- **9th Ave N Lane Re-allocation.** Reduce to 1 lane and buffered bike lanes in each direction west of 22nd St and Dr. MLK Jr St. (*Complete Street Implementation Plan, 2019*)

FDOT Lane Reallocation Projects

FDOT identified an additional lane reallocation project that was considered as part of the base model for this study:

- **5th Ave N Lane Re-allocation.** Reduce to 1 lane in each direction and a two-way buffered cycle track on the north side between 16th St to Dr. MLK Jr, St. The project is currently paused and may not advance.

PRIORITY ONE PROJECTS (SHORT, MID, AND LONG-TERM)



Priority One Project: 8th/Dr. MLK, Jr. St Two-Way Conversion and Lane Reallocation Study

The City should advance the two-way conversion of 8th/Dr. MLK, Jr. St. Additional studies and public outreach are needed in the short-term to identify a preferred conceptual design for lane reallocation and changes to the one-way operations and intersections along each street.

Short-Term Action: 8th/Dr. MLK, Jr. St Two-Way Conversion Study

The City should undertake a study to identify concept plans and typical sections for two-way conversion and lane reallocation on 8th St and Dr. MLK, Jr. St. The study should also include a signal modification plan, preliminary funding strategy, and redevelopment strategy or plan for removal of diagonal connections/vacated roadways.

Mid-Term Action: 8th/Dr. MLK, Jr. St Two-Way Conversion & Lane Reallocation Design & Implementation

If the preferred concept results in two-way conversion and lane reallocation along these streets, the City advances the project into final phases of project development: design, right-of-way acquisition or disposition, and construction.

DR. MLK, JR ST S AND 8TH ST ST AT BOOKER CREEK IN ROSER PARK



Two-way conversion provides an opportunity to re-purpose underutilized land, especially at the north and south ends of the pairs that are connected with diagonal roadways.

TWO-WAY CONVERSION OF DR MLK, JR. ST & 8TH ST OPTIONS



Source: City of St. Petersburg

Priority One Project: 3rd/4th St Two-Way Conversion and Lane Reallocation Study

The City should advance the two-way conversion of 3rd St/4th St. These streets are currently in state ownership, so potential transfer of ownership to the City may be required. Additional studies and public outreach are needed in the short-term to identify a preferred conceptual design for lane reallocation and changes to the one-way operations and intersections along each corridor.

Short-Term Action: 3rd/4th St Two-Way Conversion Study

The City in partnership with FDOT should undertake a study to identify concept plans and typical sections for two-way conversion and lane reallocation on 3rd St and 4th St between 5th Ave N and 5th Ave S. The study should also include a signal modification plan, potential strategy to convert ownership of the roadways from the state to City, and a preliminary funding strategy.

Mid-Term Action: 3rd/4th St Two-Way Conversion & Lane Reallocation Design & Implementation

If the preferred concept results in two-way conversion and lane reallocation along these streets, the City advances the project into final phases of project development: design, right-of-way transfers, and construction.

Priority One Project: I-175 Corridor Modifications

The City and Forward Pinellas should support FDOT efforts to advance studies to further understand opportunities to potentially modify I-175 and change access from I-275. Described below, a series of short-, mid- and long-term actions would be needed to further develop the project concept and advance the project into the next phases of the FDOT project development process (Planning, Project Development and Environment or PD&E Study, Design, Right-of-Way, and Construction). All studies described below are envisioned to include significant public outreach and engagement efforts.

Short-Term Action: Interstate Spur Engineering Concept Development Study

FDOT in partnership with Forward Pinellas and the City undertakes a conceptual development study to evaluate engineering options for the modification or removal of I-175 and the modification of I-375.

The study should include development of engineering concepts for I-175 modification including highway capping, removal, viaduct construction, and/or other build alternatives. The intent of the study should be to evaluate options to preserve existing mobility efficiency provided by the interstate spurs, but all concepts will be equitably and fairly evaluated. Additionally, I-375 including its ramps shall be studied from the standpoint of any anticipated impacts due to I-175 modification scenarios, the one-way to two-way conversions of local streets, as well as any safety improvements that may be identifiable. The study should consider potential related changes to 5th Ave N, 4th Ave N, 4th Ave S, and 5th Ave S that may be needed at or between the ramp termini to accommodate the various modification scenarios.

Short-Term Action: I-175 Redevelopment and Reconnecting Communities Strategy

The City and Forward Pinellas undertakes a land use, urban design, equity, and transportation study to evaluate options for I-175, 4th Ave S, and 5th Ave S corridors.

This study should include an equity analysis, preliminary environmental and cultural resources screening (ETDM level), redevelopment strategy for 25-28 acres, conceptual plan and typical sections for street network improvements (including new and existing local streets), preliminary cost estimating and project finance strategy. The study could explore opportunities to utilize funding through the *Reconnecting Communities Act*. Preliminary screening of structural and economic feasibility of alternatives including highway capping, removal, and/or other build alternatives. The strategy should also consider and integrate recommendations or plans for new street grid network on the Tropicana Field redevelopment site and other ongoing studies. This strategy will be based upon a community-driven process with robust public engagement to determine the preferred concept(s). The strategy should help establish policy direction for future phases of study/evaluation and identify alternatives to consider in the Project Development and Environment (PD&E) phase. Strategies should be developed as part of these study efforts that would dedicate a portion of excess right-of-way for the public purpose of providing land for affordable and workforce housing.

This strategy will also explore options for Viaduct Public Space Improvements to improve conditions underneath the interstate viaducts in DTSP. The study will explore aesthetic, activation, and active transportation investments, and other potential improvements to capitalize on underutilized right-of-way along the I-275, I-175, and I-375 corridors.

Mid-Term Action: I-175 PD&E Study

FDOT in partnership with Forward Pinellas and the City initiates a PD&E Study to evaluate Build and No Build options to modify or remove I-175 and make adjustments to the local street network (4th Ave S, 5th Ave S, and connections to the Tropicana Field site) and I-275 ramps to 5th Ave S/16th St.

The PD&E Study will include a full environmental review and traffic analysis of the improvement options identified in the I-175 Redevelopment Strategy.

Mid-Term Action: I-175 Land Disposition Strategy

If the Preferred Alternative identified in the PD&E Study supports I-175 highway removal or modification that results in surplus right-of-way, as expected, the City works with FDOT and Forward Pinellas to develop a land disposition strategy.

The strategy will identify the process to transfer land from FDOT to the City or other entities and set the stage for private or public development, affordable or workforce housing, and/or public space improvements of the land that would become available after the highway modifications are completed. Additional environmental analysis including equity related issues or impacts may be required beyond the analysis conducted during the PD&E Study.

Mid-Term Action: 4th/5th Ave S Two-Way Conversion Study

Based on the results of the I-175 PD&E Study (or completed in conjunction with the I-175 PD&E Study), the City in partnership with Forward Pinellas and FDOT should undertake a study to identify concept plans and typical sections for two-way conversion and lane reallocation on 4th Ave S and 5th Ave S. The study should also include a signal modification plan, potential strategy to convert ownership of the roadways from the state to City, and a preliminary funding strategy.

Mid-Term Action: I-175 Interchange Modification Analysis

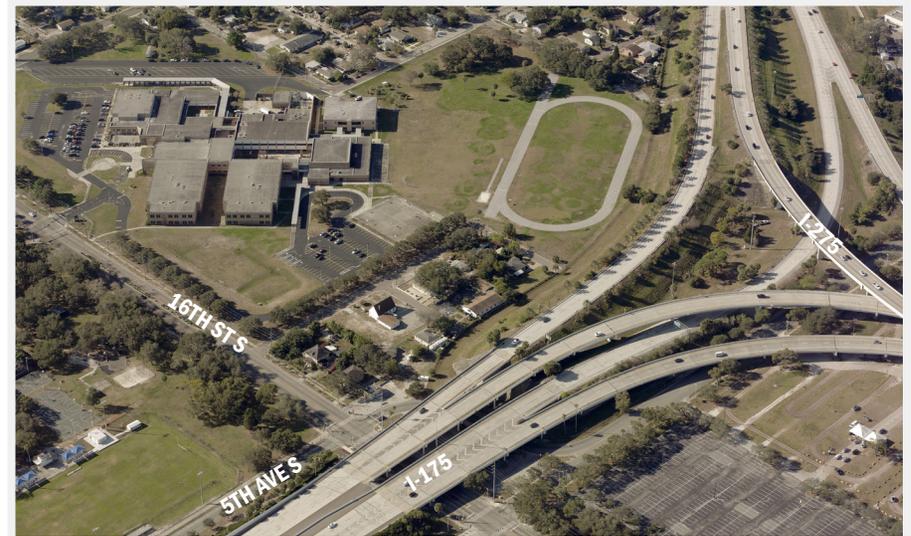
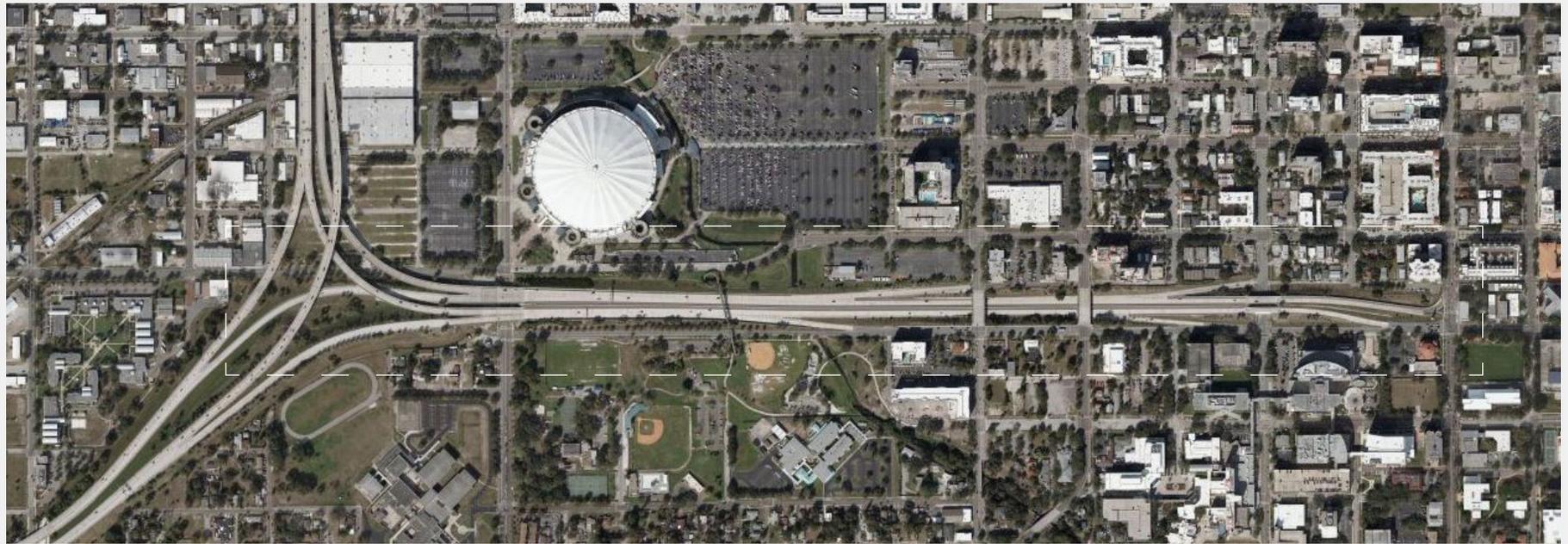
If the Preferred Alternative identified in the PD&E Study results in changes to the I-275 and I-175 interchange, FDOT initiates a Interchange Access Request (IAR).

The Interchange Modification Analysis would involve additional evaluation of traffic impacts related to changes to I-175. It is possible that changes to the other downtown I-275 interchanges, including the interchange with I-375 and 5th Ave N, could also be included as part of this process. The IAR could explore a larger area that extends north/south on I-275 with limits TBD through further analysis. The analysis would be conducted assuming that lane continuity and managed lane improvements on I-275 are committed projects. It would be initiated following completion of I-175 PD&E Study and timing dependent on project inclusion in FDOT work program. *(Note: The type of IAR to be determined in coordination with FHWA).*

Long-Term Action: Future Phases for Design & Engineering, Right-of-Way & Construction

If the Preferred Alternative identified in the PD&E Study results in changes to the I-275 and I-175 interchange, FDOT advances the project into the final phases of project development: design, right-of-way acquisition or disposition, and construction.

I-175 EXISTING CONDITIONS



Priority One Projects: Transit & Traffic Projects

The City should continue to work with partner agencies including FDOT, PSTA, TBARTA, and Forward Pinellas to advance the following related projects designed to improve DTSP mobility and accessibility:

Short-Term Action: Traffic Signal Priority Analysis

The City should coordinate with area hospitals and St. Petersburg Fire and Rescue to conduct an analysis to explore options to maintain or improve travel times and access to the hospitals, potentially through inclusion of traffic signal preemption for emergency vehicle response (Bayfront Health St. Petersburg is the only Level 1 trauma center in Pinellas County). The study could happen as a follow-on to the County's Advanced Traffic Management System (ATMS) project.

Mid-Term Action: Transit Service Modification Study

PSTA and TBARTA update existing plans or conduct a new study to evaluate impacts to regional and local transit route changes as part of I-175 or I-375 modification, lane reallocation, and two-way conversion studies. The study will explore options for improvements to accommodate premium transit along additional streets in DTSP. The study will relate to other regional transit studies and services and ongoing and proposed studies for rapid transit.

Mid-Term Action: Connected Vehicle Technology/ Intelligent Transportation System Strategy & Plan

In conjunction with FDOT (and Forward Pinellas or Pinellas County as appropriate), the City undertakes a study or pilot program to evaluate options for implementation of connected vehicle (CV) technology or infrastructure on interstates, major arterials, and key facilities in the DTSP network to improve safety and accessibility. (Note: autonomous vehicles (AV) technologies could be considered as part of a Long-Term Action)

Priority One Projects: Safety Projects

The City should continue to work with partner agencies including FDOT and Forward Pinellas to advance the following project designed to address crash hotspot within DTSP.

Short-Term Action: 5th Ave N Interchange and I-375 Ramp Safety Study

FDOT in partnership with the City initiates a study to evaluate safety and operational issues at the I-275 at 5th Ave N interchange and ramp terminals along I-375. The study will be undertaken to address crash hotspots and operational issues at the I-275 at 5th Ave N interchange and I-375 ramp terminals on 5th Ave N and 4th Ave N.

Priority Two Project: Mobility Study Update

Upon completion of the Priority One Projects, the City should to work with partner agencies to complete an update to the DTSP Mobility Study. The update will include a network analysis to help the City and partner agencies better understand how the mobility projects recommended in this or other studies have impacted the DTSP transportation network and identify the next set of projects that are needed to improve roadway operations, safety, and connectivity for all users.

Extended-Term Action: DTSP Mobility Study Update

The City and partner agencies should prepare an update to this study to reevaluate network performance once implementation of priority one projects have been completed. The study will be based on current conditions and needs and identify if future changes to the network, including potential I-375 modification still needed or are there other changes that should be implemented instead.

Priority Two Project: I-375 Corridor Modifications

In addition to the other recommended higher priority projects, the City and Forward Pinellas should also support FDOT efforts to advance studies to further understand opportunities to modify I-375 and change access from I-275. I-375 is a lower priority due to the planned I-275 improvement projects that end just north of I-375. It is anticipated that these studies would occur to I-375 once proposed changes to I-275 are completed.

Extended-Term Action: I-375 PD&E Study

FDOT initiates a PD&E Study to evaluate Build and No Build options to modify or remove I-375 and make adjustments to the local street network (4th Ave N and 5th Ave N) and I-275 ramps to 5th Ave N.

The PD&E Study will include a full environmental review and traffic analysis of options of the highway removal or modification to I-375, changes or removal of I-375 ramps, modifications to the I-275 at 5th Ave N interchange, and the potential two-way conversion of 5th Ave N/4th Ave N. The I-375 PD&E Study would be conducted following the I-175 PD&E Study and would include I-175 Preferred Alternative as a committed project.

Extended-Term Action: I-375 Land Disposition Strategy

If the Preferred Alternative identified in the PD&E Study supports I-375 highway removal or modification that results in surplus right-of-way, the City works with FDOT to develop a land disposition strategy.

The strategy will identify the process to transfer land from FDOT to the City or other entities and set the stage for development or public space improvements of the land that would become available after the highway modifications are completed. Additional environmental analysis may be required beyond the analysis conducted during the PD&E Study.

Extended-Term Action: I-375 Interchange Modification Analysis

If the Preferred Alternative identified in the PD&E Study results in changes to the I-275 and I-375 interchange, FDOT initiates a Interchange Access Request (IAR).

The IAR would involve additional evaluation of traffic impacts related to changes to I-375. It is possible that changes to the other downtown I-275 interchanges, including the interchange with I-175 and 5th Ave S, could also be included as part of this process. The IAR could explore a larger area that extends north/south on I-275 with limits TBD through further analysis. The analysis would be conducted assuming that lane continuity and managed lane improvements on I-275 are committed projects. It would be initiated following completion of I-375 PD&E Study and timing dependent on project inclusion in FDOT work program. (*Note: The type of IAR to be determined*).

Extended-Term Action: Future Phases for Design & Engineering, Right-of-Way & Construction

If the Preferred Alternative identified in the PD&E Study results in changes to the I-275 and I-375 interchange, FDOT advances the project into the final phases of project development: design, right-of-way acquisition or deposition, and construction.