



# Complete Streets for St. Pete

Building a Healthier, Safer City  
through Better Street Design

FLORIDA  
**Consumer Action**  
NETWORK *FOUNDATION*

FRONTIER GROUP

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through Better Street Design

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# Executive Summary

St. Petersburg residents, like people in many cities, suffer from a growing array of health problems. Obesity. Heart disease. Asthma. High blood pressure.

There are many contributing factors to St. Petersburg’s public health challenges, but an important factor is the design of our city’s streets.

New bike lanes, trails, and improved street crossings, along with initiatives like Healthy St. Pete, are providing St. Petersburg residents with opportunities to live healthier lives. Despite these recent improvements, the design of many streets still poses barriers to improved public health.

Streets that are unsafe or uncomfortable for walking or biking discourage people from active transportation and reinforce sedentary lifestyles. They also encourage people to drive to complete even the most basic tasks – increasing the risk that vehicle crashes pose to life and limb and producing air pollution that makes life harder for those with asthma and other respiratory diseases.

**Complete Streets - streets designed for all road users, including people on foot, on bike or taking transit - offer a solution to transportation and public health problems in St. Petersburg.** Cities around the country have found that Complete Streets redesigns get people out and moving and provide more residents

with an alternative to driving – creating the conditions that can make St. Petersburg a healthier community.

**The City of St. Petersburg has already taken important steps toward Complete Streets. The City should continue that momentum by building more protected bike lanes, improving and connecting sidewalks and calming traffic.**

*St. Petersburg faces many health problems that are exacerbated by the design of our streets.*

Streets designed solely to move cars discourage people from walking and biking and reinforce sedentary lifestyles, contributing to chronic health problems. At the same time, street designs that reinforce dependence on motor vehicles result in the creation of air pollution that exacerbates respiratory illnesses.

- The St. Petersburg/Tampa/Clearwater area has been ranked the seventh most dangerous metro area in the country for pedestrians.<sup>1</sup> **In 2016, 31 people were killed in motor vehicle crashes in St. Petersburg, nearly half of them pedestrians.**<sup>2</sup>
- Nearly two-thirds of all adults in Pinellas County were either overweight or

obese in 2013, a rate that, while lower than many other Florida counties, raises public health concerns.<sup>3</sup> Meanwhile, nearly half of the county's adults don't get the amount of daily physical activity recommended for good health.<sup>4</sup>

- Heart disease, exacerbated by inactivity and air pollution, causes nearly a quarter of all deaths in Pinellas County.<sup>5</sup>
- Transportation is responsible for the vast majority of air pollution emissions that occur within Pinellas County.<sup>6</sup> Children are particularly vulnerable: 16 percent of schools and day care centers in the county are within 500 feet of a busy roadway, and 21 percent of middle and high school students had at some point in their life been diagnosed with asthma.<sup>7</sup>
- Some neighborhoods in St. Petersburg experience particularly severe public health problems: In the neighborhoods of Childs Park, Jordan Park, Melrose-Mercy/Pine Acres, Thirteenth St. Heights, Harbordale and Methodist Town, **more than one in five adult residents suffer from asthma, more than a third are obese, and a third of adults don't get any physical activity outside of work.**<sup>8</sup> Residents of many of these neighborhoods are also more likely to have high blood pressure and diabetes than residents of other areas of the city.<sup>9</sup>

*Many streets in St. Petersburg were designed for the fast movement of cars, not the safe movement of people.*

- The vast majority of workers in St. Petersburg commute to work by driving alone (80 percent), while only 2.4 percent take public transit and just over 3 percent walk or bike.<sup>10</sup>

- From 2011 to 2016, the number of pedestrians killed increased nearly 30 percent.<sup>11</sup>
- Of the 14 pedestrians killed in car crashes in 2016, nine were in Midtown or South St. Petersburg. Multiple fatalities occurred at 18<sup>th</sup> Avenue South, 34<sup>th</sup> Street South, Dr. Martin Luther King Street South, and 5<sup>th</sup> Avenue North.<sup>12</sup>

**Properly implemented, Complete Streets can make St. Petersburg streets safer for all users and improve public health by reducing air pollution and encouraging people to be active.**

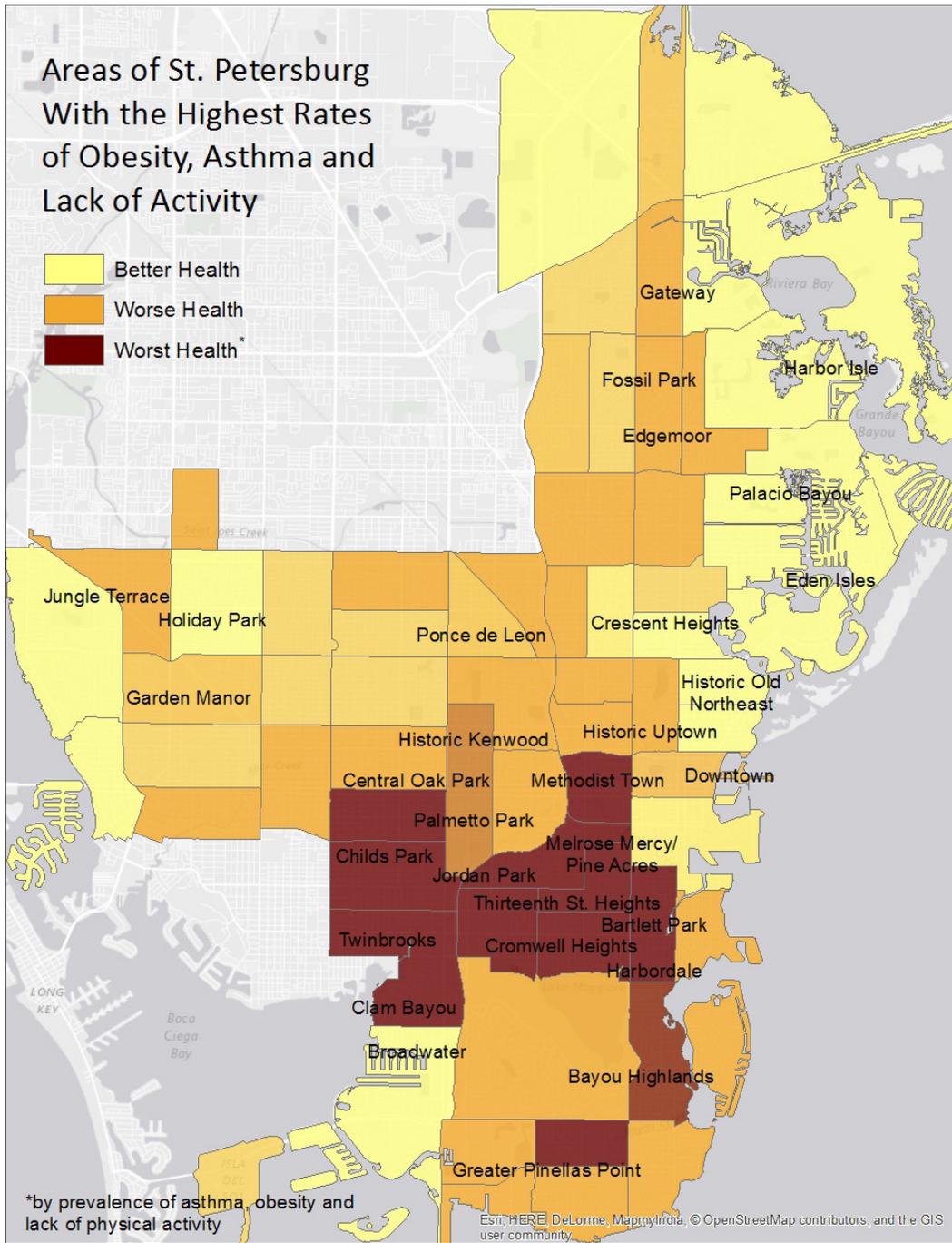
*Complete Streets make streets safer.*

- Complete Street redesigns reduce all crashes on the roadway by an average of 19 percent.<sup>13</sup>
- People on bikes suffer one-tenth the rate of injuries when they travel in bike lanes with curbs to separate bikes than when they travel on streets without bike lanes.<sup>14</sup>
- Complete Streets designs also calm traffic, reducing the likelihood of crashes and reducing their severity when they do occur.<sup>15</sup> A pedestrian hit by a car traveling 20 miles an hour is more than twice as likely to survive a crash as a pedestrian hit by a car going 45 miles per hour.<sup>16</sup>

*Improving infrastructure for biking and walking through Complete Streets gets more people out and moving as part of their daily routine.*

- More people bike to work in cities with more bike lanes and paths, regardless of climate, socioeconomic status and other factors.<sup>17</sup>

**Figure ES-1. Areas of St. Petersburg With the Highest Prevalence of Obesity, Asthma and Lack of Physical Activity, by Census Tract<sup>18</sup>**



- After the Federal Highway Administration invested in pedestrian and cyclist infrastructure in four cities, pedestrian trips in those communities increased 23 percent while the number of cycling trips increased 48 percent.<sup>19</sup>

*When people shift to walking, biking and public transportation, they often leave their cars behind, reducing air pollution.*

- Federal studies have found that half of all trips taken with private vehicles are less than three miles in length, a distance that can easily be biked in 20 minutes. More than a quarter of all car trips are under a mile, which can be walked within 20 minutes.<sup>20</sup>
- Creating a safe built environment for people to get to and from public transportation or make transit connections boosts transit ridership.



*Bulb-outs, an extension of the curb, as pictured above in a pilot project at 2<sup>nd</sup> Avenue North and 5<sup>th</sup> Street, shorten the distance for pedestrians to cross the street, make pedestrians more visible to drivers, and help slow turning vehicles. They are one tool that can help make streets safer and more accessible for people on foot or bike.*

Experience in cities around the country has shown that designing streets to allow for safe travel on foot, by bike, or on transit can get people out and moving, with great public health benefits. St. Petersburg has the opportunity to build upon its previous success with Complete Streets improvements downtown and in the popular Grand Central District and expand better streets across the city.

To date, the City has installed more than 200 bulb-outs (extensions of curbs at intersections) downtown, which help slow traffic and make it easier for pedestrians to cross the street; painted lane markings for bike routes;<sup>21</sup> and piloted flashing lights on crosswalk signs to improve pedestrian safety along the Pinellas Trail and 4<sup>th</sup> Street. The flashing lights at pedestrian crossings in St. Petersburg increased the number of drivers yielding from 18 percent to 81 percent.<sup>22</sup>

**By building a broad network of Complete Streets in all neighborhoods, we can create a healthier St. Petersburg.** The stronger the plan, the greater the public health impact will be. Specifically, the City of St. Petersburg should:

- **Make protected bike lanes standard.** Since separated bike lanes improve safety and attract more riders over paint-only lanes, buffered or protected lanes should be the rule – not the exception – on streets with three or more lanes or heavy traffic.
- **Complete sidewalks and crosswalks around schools.** The City should expand and maintain pedestrian infrastructure like sidewalks and crosswalks to ensure that all children in St. Petersburg have a safe route to school.
- **Create a city-wide system of neighborhood greenways.** St. Petersburg's neighborhood streets should be consid-

ered for a connected greenway system for walking and biking. Improvements should expand on existing neighborhood traffic calming, and include traffic diversion, way-finding signage, and safe crossings of major streets along the routes.

- **Prioritize safety over speed.** To reduce serious crashes and improve community health, the City should encourage slower vehicle speeds by: narrowing or eliminating vehicle lanes, planting street trees, building bulb-outs, installing protected bike lanes, changing signal timing and more. Additionally, speeds on neighborhood streets should be limited to 20 miles per hour and the speed limit on bigger streets should be no more than 30 m.p.h. Enforcement of speed limits should adequately address speeding as a public safety issue.

- **Implement road diets.** Where appropriate, the City should consider converting four- or five-lane streets to three lanes to calm traffic and create space for other infrastructure, like bike lanes, bus lanes, wider sidewalks, and on-street parking.
- **Continue to seek additional resources so Complete Streets are fully funded.** The City should consider increasing Complete Streets funding so that the streets can be improved and maintained reliably in the future. The return on investment is high, considering the public health benefits: by fully investing in Complete Streets, the City of St. Petersburg can help reduce asthma, obesity and traffic fatalities, among other health outcomes.



*Some sections of Central Avenue (seen on the left looking west from 31<sup>st</sup> Street) are dangerous and intimidating for people on foot or bike. Complete Streets treatments have made other sections of the street (seen on the right) safer and more accessible. In the image on the right, the street has two lanes of vehicle traffic, instead of four, bulb-outs to help pedestrians cross the street, and painted symbols to make drivers more aware of people on bikes.*

# Introduction

**P**icture a street in your neighborhood. Maybe you are envisioning a wide street with fast-moving traffic. Perhaps the sidewalk is cracked or in disrepair – or doesn't exist at all.

That kind of street – which is all too common in St. Petersburg and many other cities – is not the kind of street where you would want to take a casual stroll, much less let a small child cross alone. It is not

the kind of street that an older or disabled person would feel safe traveling on foot, or one where many people would feel comfortable traveling on a bike. It's likely the kind of street that makes you think of pollution stinging your eyes and lungs and noise jangling your nerves.

Now imagine a different kind of street.

Picture a street where the cars move a little more slowly, where there are wide



*This section of 18<sup>th</sup> Avenue S offers pedestrians a nice, shaded sidewalk, a bus stop with a bench, and speed monitors to slow traffic.*

sidewalks and safe places to cross; where cars and bikes don't have to fight for space because the street is designed to accommodate both. This is the kind of street that would invite you on an evening stroll, or let you choose to run an errand on foot, or by taking a bike ride. Imagine allowing your child or an older relative to travel freely on the street without worry. Imagine that the air is a little cleaner, the sounds of the street a little quieter, and day-to-day life is a little more pleasant.

That is the idea behind Complete Streets – streets designed for everyone, whether young or old, able-bodied or using a wheelchair, traveling by car, by bus, on foot, or on bike. While the layout and approach varies by context, Com-

plete Streets may include a wide range of elements to make streets safer, more accessible and pleasant. By modifying the number of vehicle travel lanes or slowing traffic, improving sidewalks, crosswalks or pedestrian signals, and including bike lanes or bus lanes, Complete Streets improve public health by encouraging people to be more active, reducing air pollution, and lessening the number and severity of motor vehicle crashes.

St. Petersburg is moving toward the implementation of Complete Streets and has already made some important strides, particularly downtown. By expanding the approach city-wide, St. Petersburg has the opportunity to improve health and quality of life for the city's residents.

# St. Petersburg Faces Transportation-Related Health Problems

**T**he design of our city streets greatly impacts many aspects of life, including public health. **Right now, many streets in St. Petersburg are designed in a way that contributes to air pollution, increases the risk of death and injury in crashes, and reinforces inactive lifestyles – undermining public health.**

A standard car-oriented design for streets ignores key elements that allow people to safely bike or walk or efficiently take transit. The same wide streets and long blocks that make it possible for cars to go fast also make it difficult for people on foot to cross – especially if they are children or older adults. The decision to dedicate nearly all of the space on most of our streets to fast-moving traffic leaves pedestrians and cyclists to compete with cars and trucks in order to travel.<sup>23</sup>

The public health impacts of our street design decisions are profound. They reinforce sedentary lifestyles, contributing to chronic health impacts like obesity, heart disease, and high blood pressure. And they encourage travel in petroleum-fueled vehicles that create air pollution which exacerbates respiratory illness, asthma and other health ailments.

## Injuries and Fatalities from Traffic Crashes

The most direct way in which street design affects our health is through death and injury from motor vehicle crashes. Crash data suggest that far too many streets in St. Petersburg and the surrounding region remain perilous. According to one recent report, the St. Petersburg/Tampa/Clearwater area ranks as the seventh-most dangerous metro area in the country for pedestrians, with 821 pedestrian deaths between 2005 and 2014.<sup>24</sup> In the 2014 edition of the same report, the region ranked as the second-most dangerous.<sup>25</sup> While the most recent report appears to show an improvement, a closer look at the data reveals that the St. Petersburg/Tampa/Clearwater area actually became more, not less, dangerous to pedestrians, while other metro areas in the country became even more dangerous.

In 2016, the St. Petersburg Police Department recorded 5,152 car crashes, which caused 3,196 injuries and 29 fatalities. **Of the fatalities, 14, or nearly half, were pedestrians.** From 2011 to 2016, traffic injuries and fatalities rose 42 per-

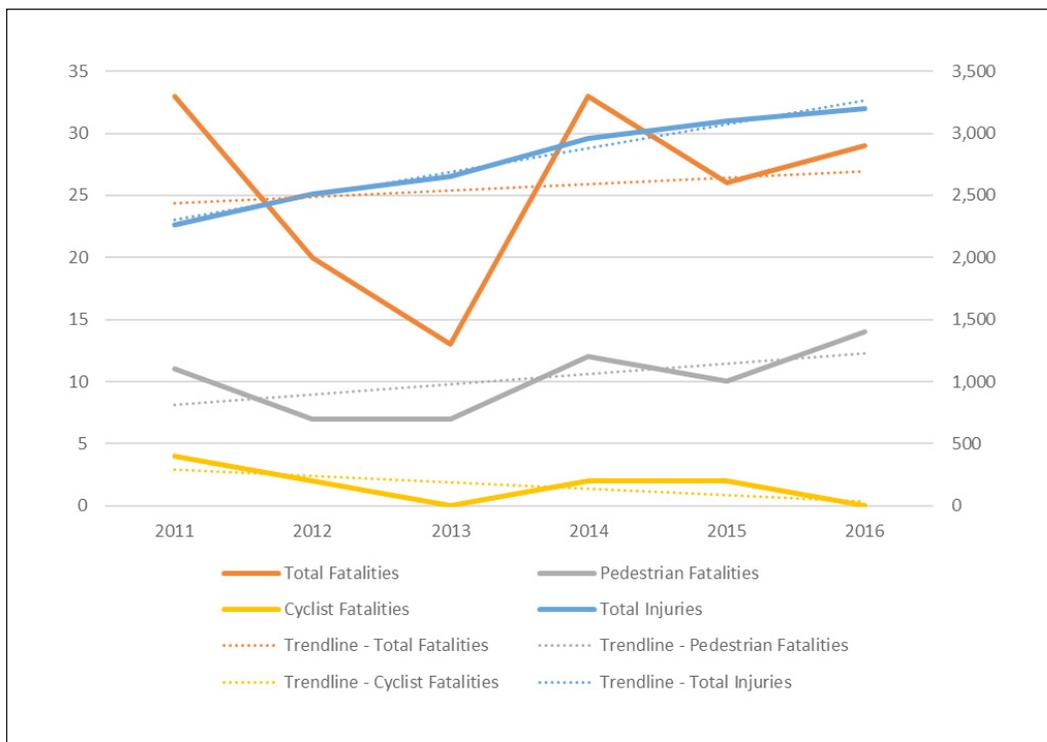
cent and fatalities among pedestrians increased nearly 30 percent, while the number of people killed each year while riding bikes has declined, with zero deaths last year. (See Figure 1.)<sup>26</sup>

Most of St. Petersburg’s major streets are poorly suited for people walking and biking, with layouts that can make it dangerous and intimidating to get around on foot and bike. This becomes an obstacle for people to live active lifestyles, exacerbating obesity and other illnesses associated with lack of activity, as we’ll see in the next section, while contributing to the isolation of older residents.

## Obesity, Inactivity and Heart Disease

St. Petersburg and the surrounding region has a variety of challenging health problems: **nearly two-thirds of all adults in Pinellas County were either overweight or obese in 2013**, along with more than a quarter of middle and high school students, according to the Florida Department of Health.<sup>28</sup> Meanwhile, more than a quarter of adults in Pinellas County report that they are sedentary and **nearly half of the county’s adults don’t get the amount of daily physical activ-**

**Figure 1. Traffic Fatalities and Injuries Recorded by St. Petersburg Police Department in Pinellas County, 2011 – 2016, with Trendline<sup>27</sup>**



ity recommended for good health.<sup>29</sup> While these percentages certainly pose major health challenges, residents of Pinellas County are actually more fit on average than people who live in other areas of the United States: Pinellas is in the top 10 percent for counties by physical activity and the share of the population at a healthy weight, and particularly stands out among other counties in the Southeast that have much higher rates of obesity and inactivity.<sup>30</sup>

Heart disease is a leading cause of death in Pinellas County, accounting for nearly a quarter of all deaths.<sup>31</sup> The risk of heart disease is lowered by physical activity, while exposure to air pollution increases risk. Streets designed for cars that are dangerous for people walking and biking, as outlined in the next section, discourage physical activity for St. Petersburg residents.

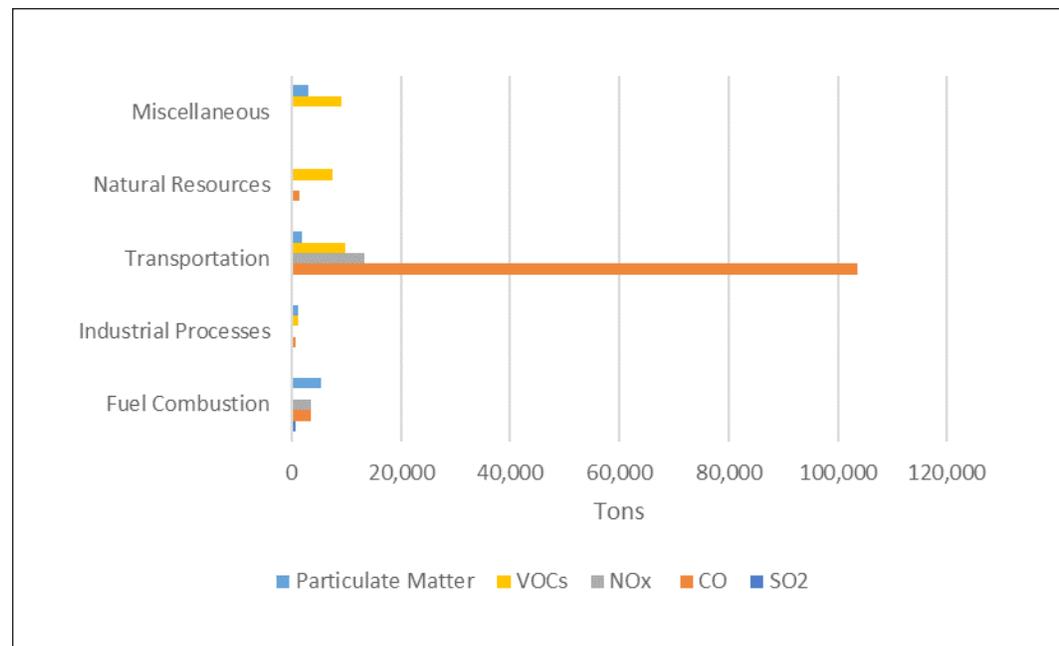
## Respiratory Illness

Over-reliance on cars contributes to many health impacts, including asthma and respiratory illnesses. **In Pinellas County, transportation is responsible for the vast majority of the air pollution that is produced locally** (see Figure 2), including particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and volatile organic compounds, emitting nearly 129,000 tons of the pollutants in 2014. Other sources of air pollution – including fuel combustion and industrial processes – combined emitted a total of 37,900 tons of these air pollutants in 2014.<sup>32</sup>

These pollutants cause a variety of health concerns:

- **Particulate Matter:** Also known as soot, particulate matter consists of small particles in the air that cause

Figure 2: Air Pollutants, in Tons, by Source in Pinellas County, 2014<sup>33</sup>



respiratory problems, like lung irritation, lung disease, and heart problems. Studies have found that even among healthy, non-smoking people, roadside exposure to particulate matter from cars causes cardiovascular problems.<sup>34</sup>

- **Nitrogen Oxides:** Caused by burning fuel, nitrogen oxides irritate respiratory systems, and cause or exacerbate respiratory diseases, including asthma.<sup>35</sup>
- **Sulfur Dioxide:** Sulfur dioxide can linger in the atmosphere for several days, meaning it can travel long distances or accumulate. Health impacts of exposure to sulfur dioxide in air pollution include difficulty breathing, irritation of the nose and throat, and the exacerbation of asthma.<sup>36</sup>
- **Volatile Organic Compounds (VOCs):** VOCs are a key component of smog and can cause eye and throat irritation and difficulty breathing.<sup>37</sup>

Children are particularly vulnerable to the effects of air pollution from vehicles: 16 percent of schools and daycares in Pinellas County were within 500 feet of a busy roadway (see Figure 3), potentially exposing children to dangerous levels of air pollution.<sup>38</sup> In Pinellas County in 2012, 21 percent of middle and high school students had been diagnosed with asthma at some point in their lives (up from 17 percent in 2006), while 9 percent of adults in the county had asthma, slightly higher than the national average.<sup>39</sup>

## Neighborhood Health Disparities

While all of St. Petersburg's neighborhoods would benefit from Complete Streets, there are some communities that

are in particular need. A 2012 study by the Florida Department of Health identified five communities within Pinellas County that showed elevated health problems, including South St. Petersburg.<sup>40</sup>

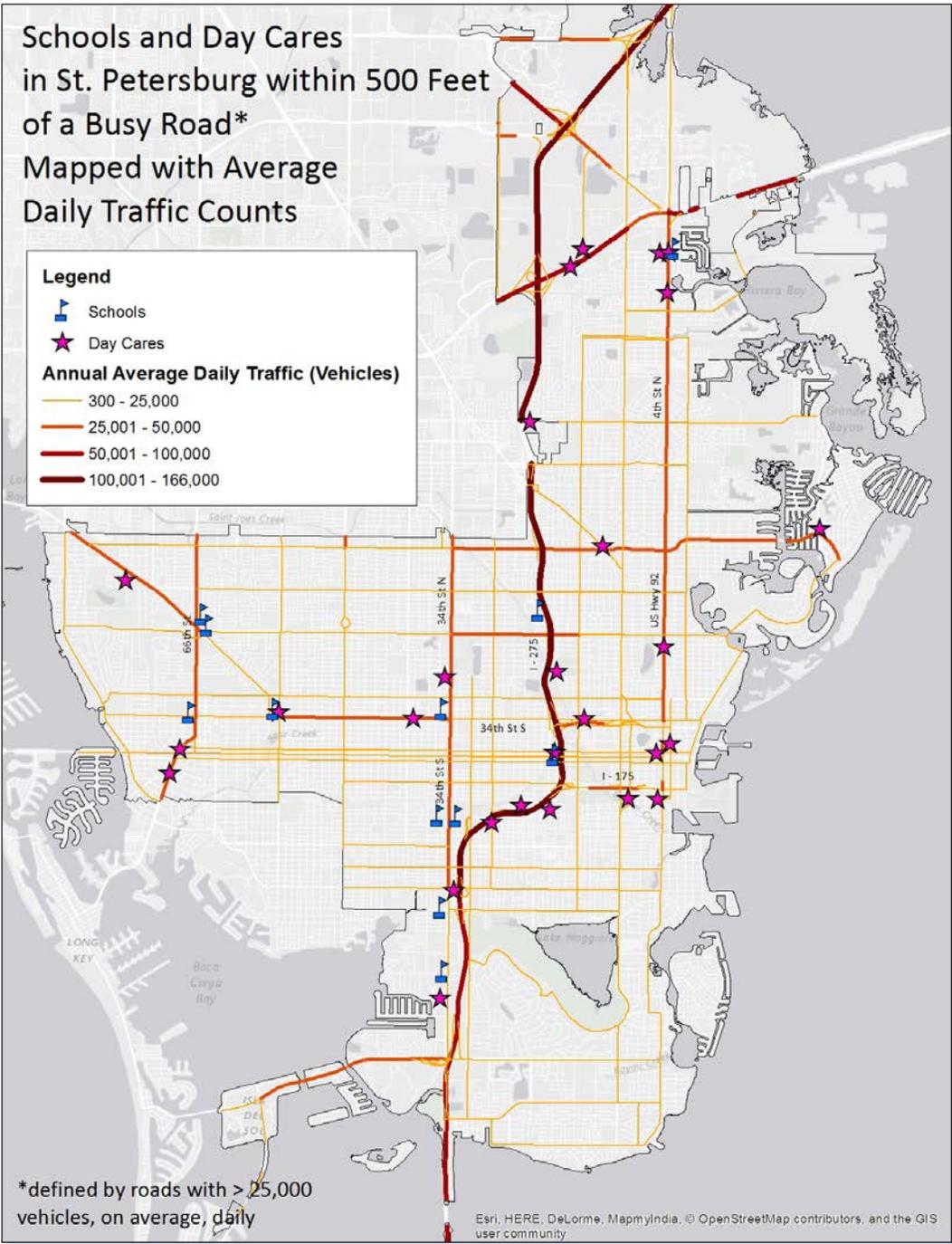
According to data from the Centers for Disease Control and Prevention, many of the same communities in St. Petersburg that experience high rates of obesity and asthma also suffer from lack of physical activity. (See Figure 4.)

In the map in Figure 4, the darkest areas show the city's populations that suffer from the most asthma, obesity and insufficient exercise. For example, **in the neighborhoods of Childs Park, Jordan Park, Melrose-Mercy/Pine Acres, Thirteenth St. Heights, Harbordale and Methodist Town, more than one in five adults suffer from asthma, more than a third are obese, and a third don't get any physical activity outside of work.** Residents of many of these neighborhoods are also more likely to have high blood pressure and diabetes than residents of other areas of the city.<sup>41</sup>

These neighborhoods also experience the highest rates of poverty in St. Petersburg. In 2015, more than 40 percent of families and people in Childs Park, Thirteenth St. Heights, Harbordale, Barlett Park and Methodist Town received an income below the poverty level. (See Figure 5.)

On the other hand, some of the healthiest neighborhoods, like Downtown and Broadwater (which are also some of the most affluent parts of the city), are also the areas with the most people walking and biking to work, as we'll explore in the next section. Complete Streets will not cure poverty, but by making streets better for walking and biking in poor neighborhoods, St. Petersburg could improve health outcomes for residents with the greatest need and reduce the health and economic burdens posed by car-focused transportation.

Figure 3. Schools and Day Cares in St. Petersburg Near Busy Roadways<sup>42</sup>



**Figure 4. Areas of St. Petersburg With the Highest Prevalence of Obesity, Asthma and Lack of Physical Activity, by Census Tract<sup>43</sup>**

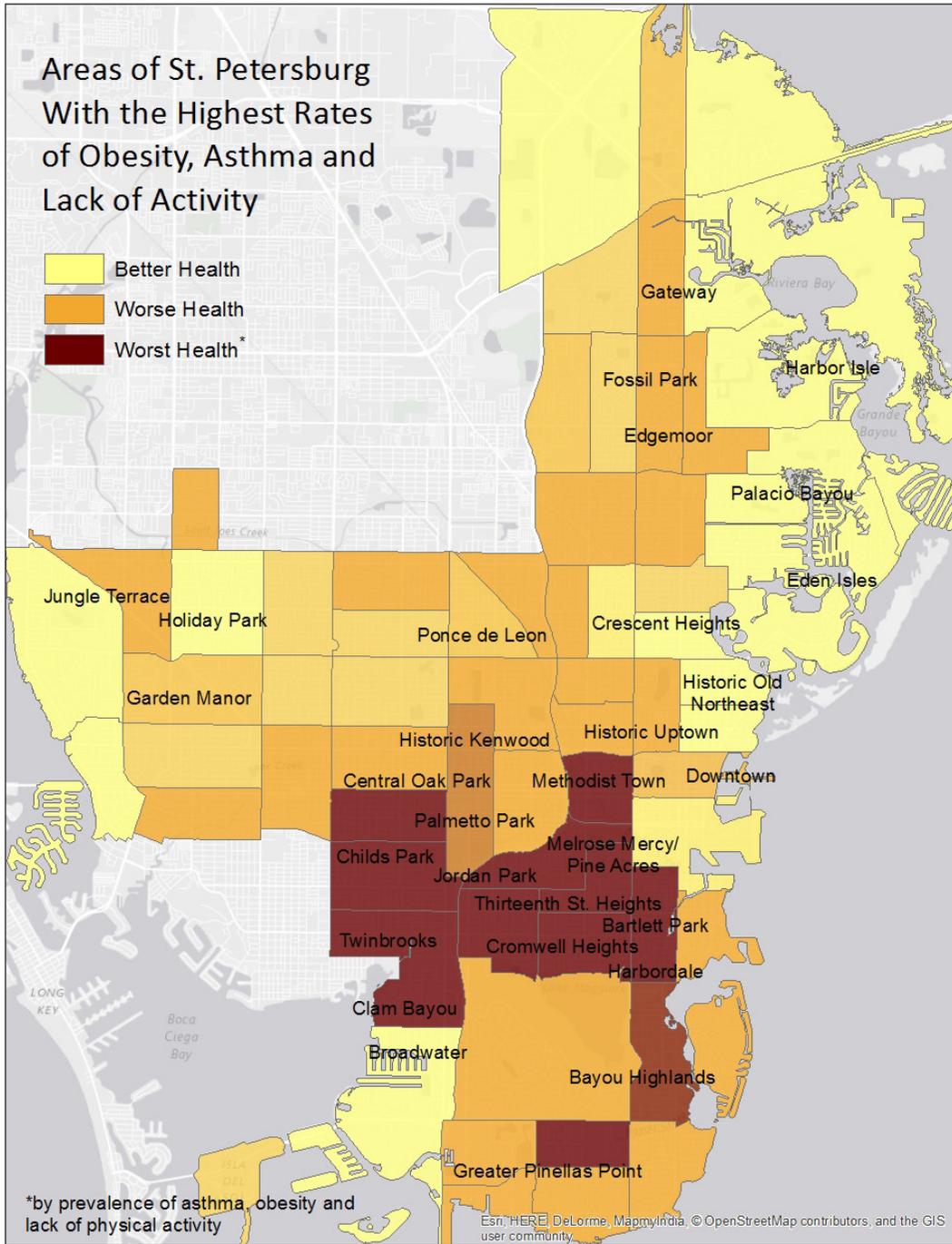
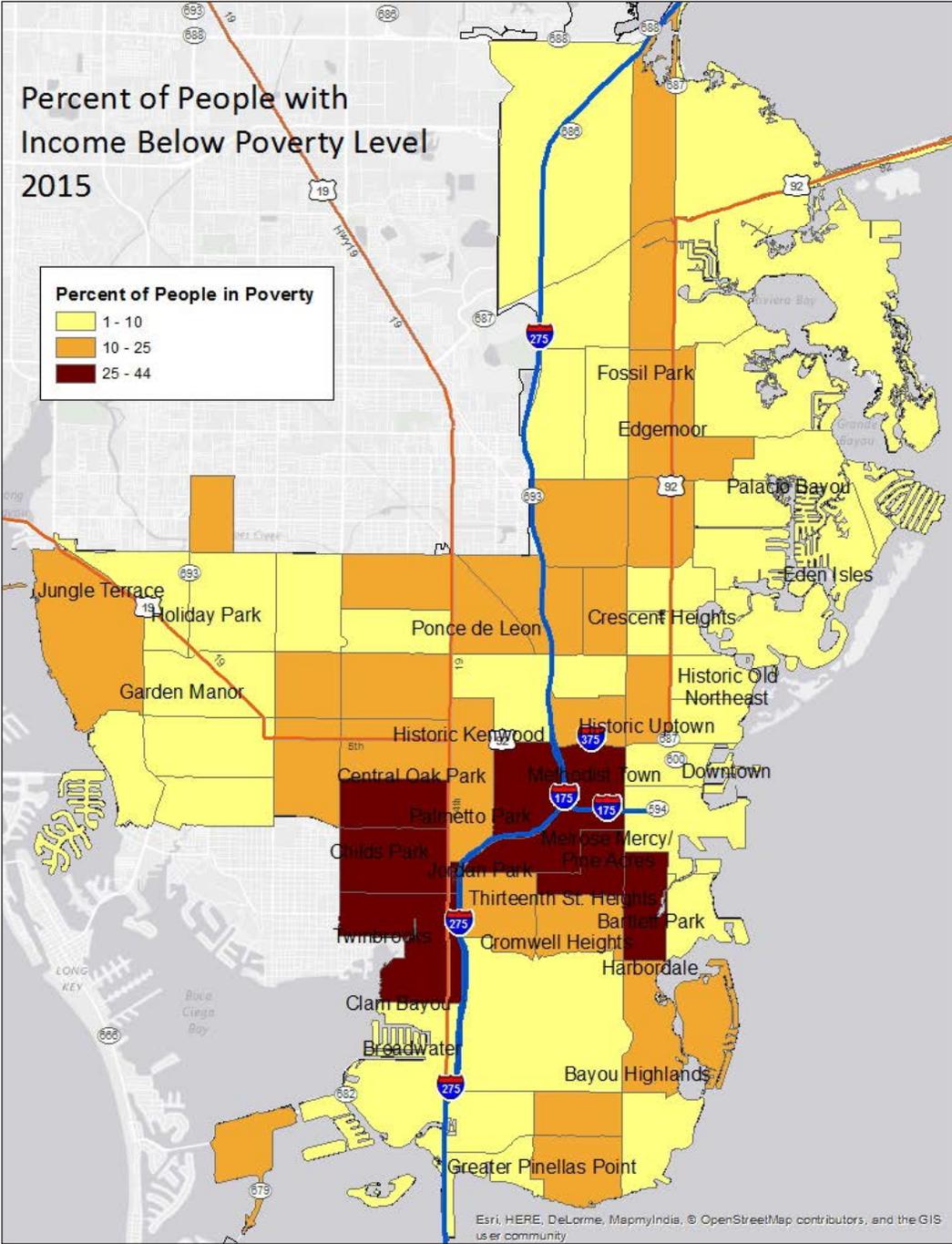


Figure 5. Areas of St. Petersburg With the Highest Rates of Poverty, Defined by People Receiving an Income Lower than the Poverty Level in 2015, by Census Tract<sup>44</sup>



# The Design of Many of Our Streets Poses Barriers to Healthy Living

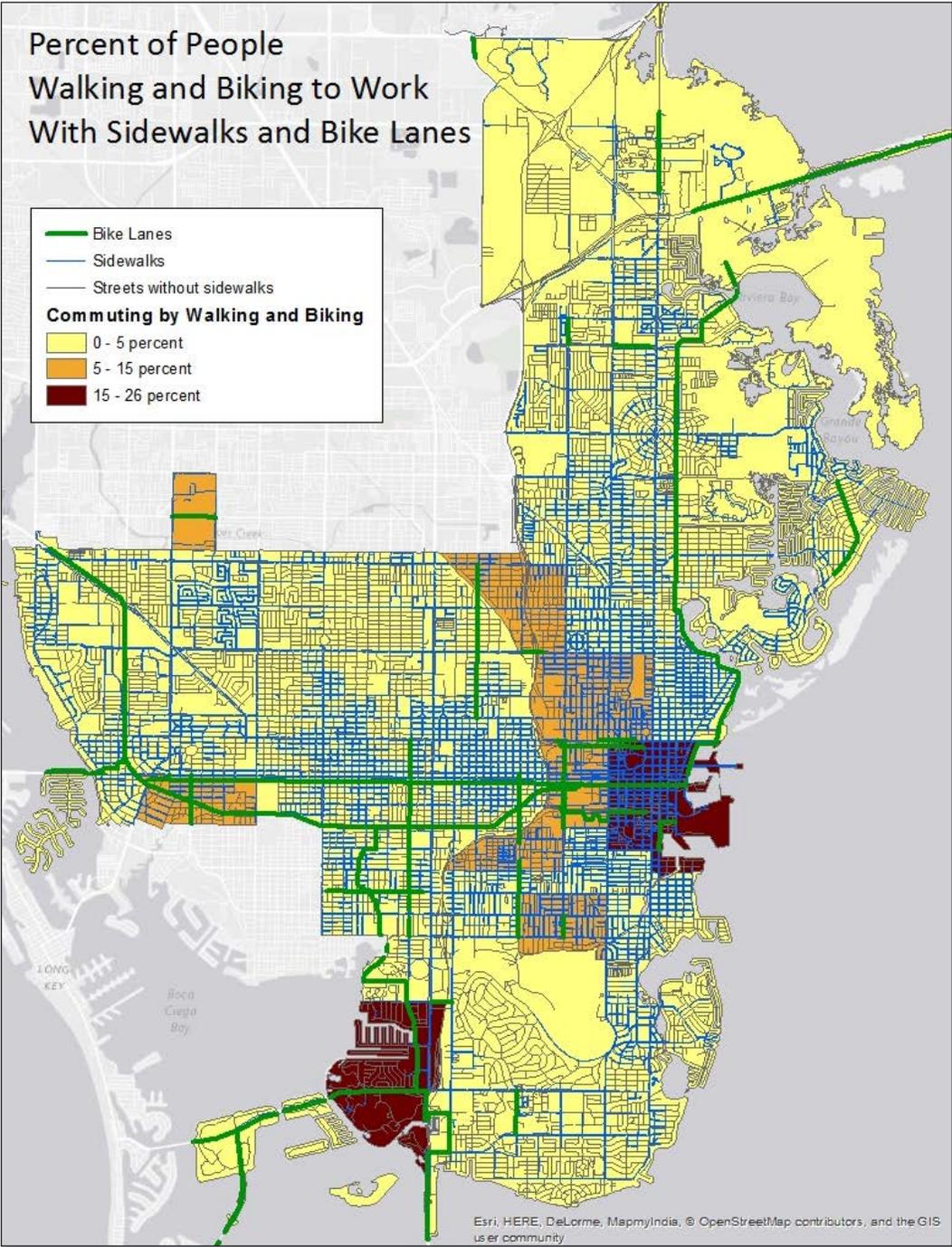
Currently, the majority of St. Petersburg's streets are built to facilitate the flow of fast-moving automobile traffic. As a consequence, most people in the city drive

for daily activities, including commuting to work. Parts of the city lack adequate infrastructure for people on foot or bike, while unsafe street design leads to frequent crashes.



*Many lanes of traffic, with cars traveling at high speeds, as well as long blocks without crossings, make 34<sup>th</sup> Street South dangerous and scary to travel by bike or to cross on foot.*

Figure 6. Areas of St. Petersburg With the Highest Rates of Commuting by Walking or Biking, Compared to Infrastructure for Walking and Biking<sup>†</sup>



<sup>†</sup> The dark red area in the bottom left of the map is the area surrounding Eckerd College.

## Access to Safe Walking and Biking Is Limited

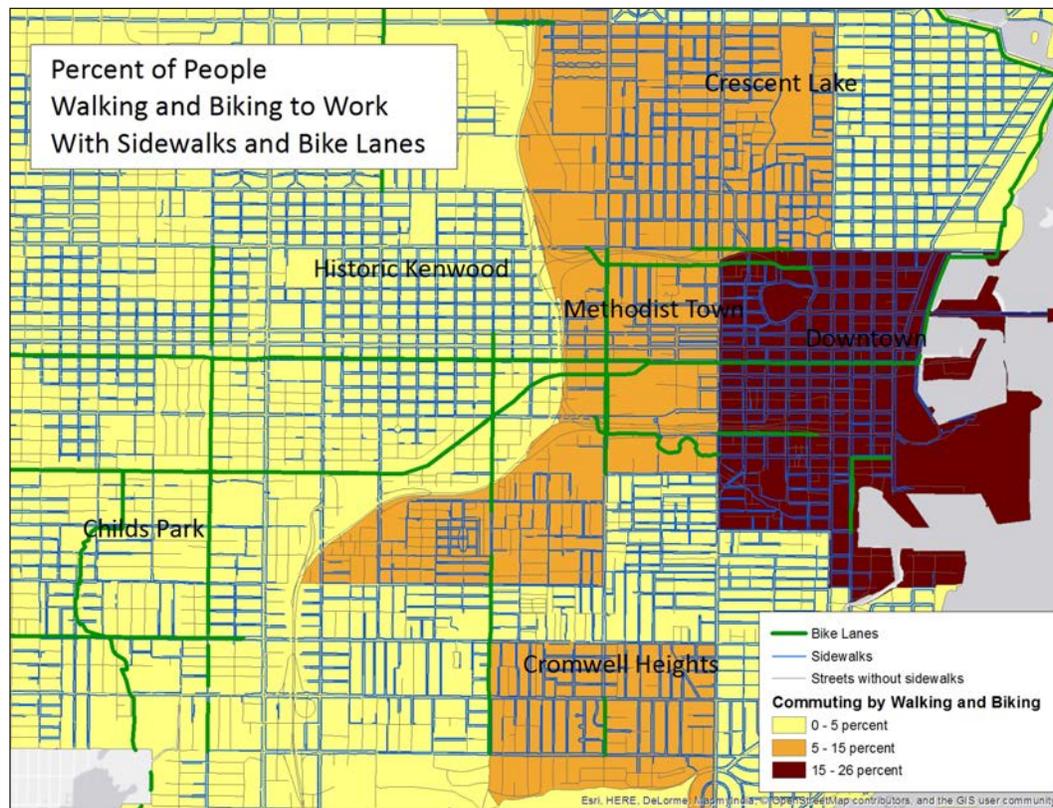
Thanks in part to the design of our streets and the layout of our neighborhoods, driving alone is by far the most common way that people who live and work in St. Petersburg get around.

Overall, the vast majority of workers in St. Petersburg commute to work by driving alone (80 percent), while only 2.4 percent take public transit and just over 3 percent walk or bike, according to the American Community Survey.<sup>46</sup> Areas of the city that have more infrastructure for walking and biking (sidewalks, bike lanes

and trails) also have higher rates of biking and walking, as shown in Figure 6. Access to safe infrastructure encourages active transportation choices, whereas residents in areas that lack sidewalks or bike lanes are more likely to drive.

Designated bikeways are primarily located along the Central Avenue corridor running east-west between downtown and the west edge of St. Petersburg, with a few shorter, more disconnected north-south routes. Sidewalks similarly are concentrated downtown, along the Central Avenue corridor, and directly north and south of downtown (See Figure 7).

**Figure 7. The Section of St. Petersburg with the Most Infrastructure for Walking and Biking**

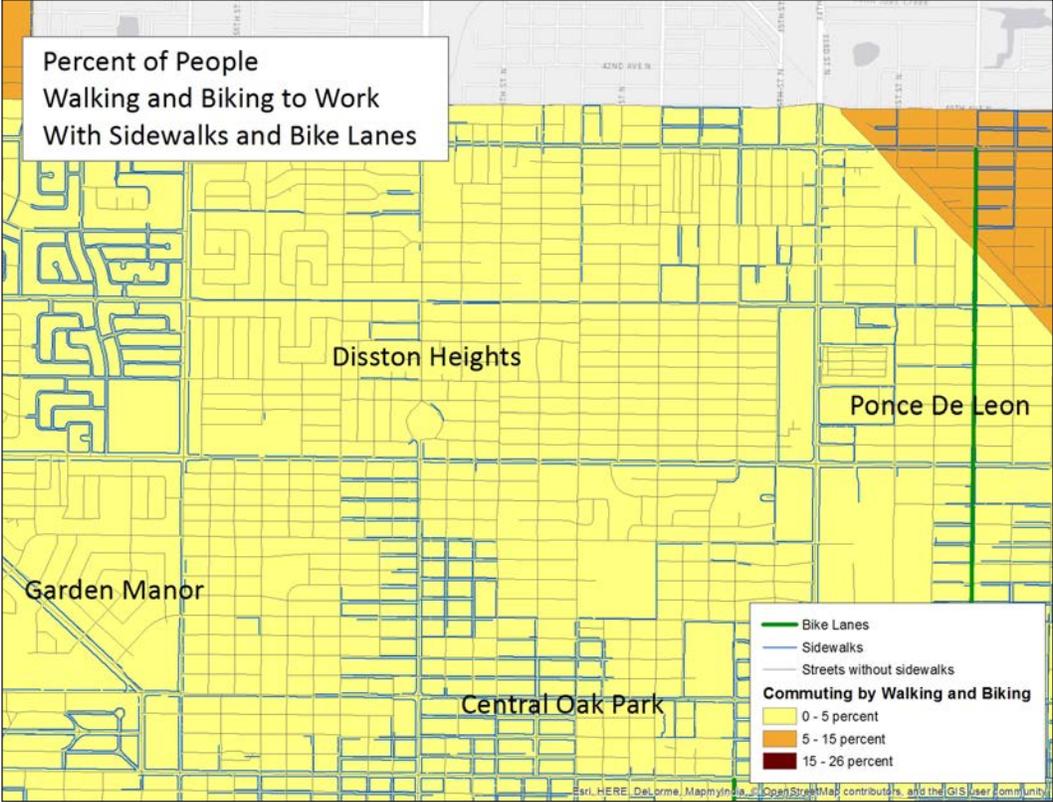


Much of the northeast (see Figure 8), west, and southern parts of the city lack safe walking and biking routes, and Census data shows that fewer people in those neighborhoods commute by walking or biking. Even the streets in those areas that do have sidewalks or bike lanes still do not match the City of St. Petersburg’s criteria for being Complete Streets – streets that are safe for people of all ages and abilities.<sup>47</sup>

In Midtown, residents have two main east-west corridors: 18<sup>th</sup> Avenue South and 22<sup>nd</sup> Avenue South. 15<sup>th</sup> Avenue

South is another option for trips west of 34<sup>th</sup> Street, while 26<sup>th</sup> Avenue South serves some trips east of 37<sup>th</sup> Street. Both currently have bike lanes and sidewalks, although they are narrow and lack buffers from traffic in some sections. 18<sup>th</sup> Avenue South has continuous sidewalks but many are narrow, cracked or in disrepair. The street also lacks bike lanes and is intimidating for people on bikes so many cyclists ride on the sidewalk. Transit is available but a lack of curb ramps and limited crosswalks hinder easy and safe access to bus stops. On 22<sup>nd</sup> Avenue South, sidewalks

**Figure 8. The Disston Heights Neighborhood of St. Petersburg Lacks Many Sidewalks or Bike Lanes**



are lacking along much of the north side of the street and, as with 18<sup>th</sup> Avenue South, there are no bicycle facilities.

North-south travel also poses a challenge. Many north-south streets such as 34<sup>th</sup> Street and 4<sup>th</sup> Street (both of which are controlled by the Florida Department of Transportation, not by the City of St. Petersburg) lack bike lanes and carry high volumes of traffic with speed limits in excess of 35 miles per hour, which is dangerous and uncomfortable for people on bikes. Sidewalks are present but often lack any buffer from the fast vehicle traffic.

It is no surprise, given how we've designed our major streets, that so few people walk or bike for transportation. By expanding good infrastructure throughout St. Petersburg, like sidewalks and protected bike lanes, the City can improve safety and health of all neighborhoods.



*A sidewalk in need of repair on 18<sup>th</sup> Avenue South.*

## Incomplete Street Design Causes Crashes

According to Forward Pinellas (the county's regional planning organization), some intersections and blocks in St. Petersburg have high crash rates.<sup>48</sup> The intersections with the most crashes in Pinellas County in 2015 include:

- 54<sup>th</sup> Avenue South and 31<sup>st</sup> Street South in the Skyway Marina District and Greater Pinellas Point, which had the third-highest crash rate in the county with 46 crashes;
- 66<sup>th</sup> Street North and 38<sup>th</sup> Avenue North in Jungle Terrace, with the fifth-highest crash rate;
- In Riviera Bay, Gandy Blvd. and 4<sup>th</sup> Street North ranked eighth.

Some of the blocks with the highest crash rates include:

- In Historic Kenwood, the section of 28<sup>th</sup> Street North between Central Avenue and 1<sup>st</sup> Avenue North, which ranked eighth in the county for crashes;
- 22<sup>nd</sup> Avenue South between 31<sup>st</sup> Street South and I-275 in the 31<sup>st</sup> Street / Highland Oaks neighborhood ranked ninth.

While crash rates are helpful for identifying places that could use better street design, from a public health perspective it is more helpful to look at crashes that cause serious injuries or fatalities. In the five years between 2011 and 2015, injury crashes in Pinellas County fell 18 percent, while fatalities fell 11 percent. The number of people killed while biking dropped 70 percent. However, the number of people killed while walking in the county in-



*The intersection of 54th Avenue South at 31st Street is confusing and dangerous. It had Pinellas County's third highest crash rate in 2015.*



*18th Avenue South was one of the deadliest streets in St. Petersburg in 2016, featuring poorly marked lanes and crosswalks, along with wide lanes that are hard for pedestrians to cross and encourage drivers to speed.*

creased 20 percent.<sup>49</sup> Compared to other urbanized counties, Pinellas County's pedestrian fatality rate is the highest in Florida and was 80 percent higher than the national average for urbanized counties in 2015.<sup>50</sup> This suggests that particular attention should be paid to improving infrastructure for pedestrians and that further gains can be made by continuing to improve infrastructure for people on bikes.

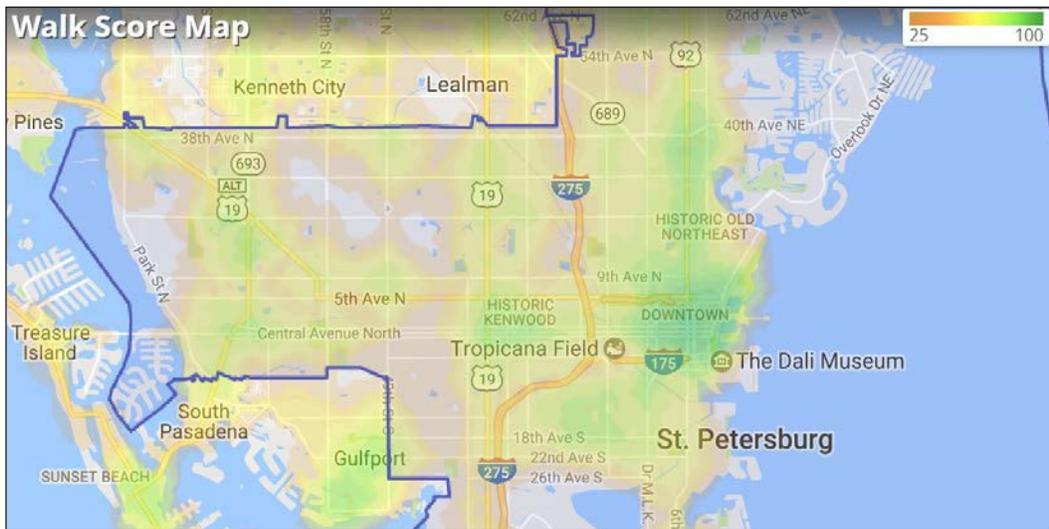
In 2016, 14 of the county's 46 pedestrian fatalities were in St. Petersburg.<sup>51</sup> Of those deaths, nine were in Midtown or South St. Petersburg, areas highlighted earlier in the report for health concerns. In 2016, multiple fatalities occurred on 18<sup>th</sup> Avenue South, 34<sup>th</sup> Street South, Dr. Martin Luther King Street South, and 5<sup>th</sup> Avenue North.<sup>52</sup>

## St. Petersburg Has Great Potential for Better Streets

The parts of St. Petersburg where people are more likely to walk or bike are also those where the streets and neighborhoods are designed to give people more choices for how to safely get around.

In Figure 9, areas in red and yellow present obstacles to walking – where a car is required to do most tasks and long block-lengths or circuitous designs are challenging for pedestrians. The map also shows areas of the city (in green) that are most amenable to walking – where amenities are a close walk, blocks are short, and daily errands can be done on foot.<sup>53</sup> Based on this analysis, downtown St. Petersburg could be one of the best downtowns for walking and biking in the country: a walk and bike score of 91 puts downtown St. Petersburg ahead of downtown Miami, Indianapolis, Nashville and San Diego, for example. However, this analysis does not include the presence, absence, or

Figure 9. St. Petersburg by “Walk Score” or Measure of Walkability<sup>54</sup>



Walk Score ranks neighborhoods based on their walkability. The measure takes into account proximity of amenities, population density, and the street network but does not include the presence, absence, or quality of pedestrian infrastructure such as sidewalks. Areas in green, like downtown, allow residents to run errands on foot, while areas in red or yellow are largely car dependent.

quality of pedestrian infrastructure such as sidewalks, which are critical for people to feel safe and encouraged to walk or bike.

In parts of downtown, nearly a third of the population walks or bikes to work, while in areas around Historic Uptown 13-15 percent of people commute on foot or bike. (See Figure 6.)<sup>55</sup> These neighborhoods also have more bike infrastructure, including several bike lanes, and better transit access. Sidewalk coverage in Downtown and Historic Old Northeast is extensive, speeds are lower and residents can use the Pinellas Trail and North Bay Trail to reach their destinations. Recently installed curb bulb-outs and flashing lights at pedestrian crossings make crossing the street easier and safer for travelers of all abilities.

Large sections of St. Petersburg are walkable – or could be if the street network were designed to enable people to travel safely by foot or on a bike. Some of the poorest areas that also suffer from adverse health outcomes, such as Midtown, do have amenities within walking distance. Neighborhoods around the 4th Street North corridor, like Fossil Park and Edgemoor, which have mid-level poverty (see Figure 5), also have amenities within walking distance. The Melrose-Mercy neighborhood, Jungle Terrace, and west Central Avenue corridor also have amenities within walking distance and need improved infrastructure to make them great walking and biking neighborhoods.

## Progress To-Date

The City of St. Petersburg has a Complete Streets Policy and various Complete Streets projects currently underway with street reconstructions, installation of bulb-outs, widening of sidewalks and lower speed limits. The City is also developing a Complete Streets Implementation Plan that will guide transportation planning and future investments in Complete Streets. Over the past decade, the City of St. Petersburg has taken steps to improve conditions for people walking and biking, including several innovative pilot programs:

- St. Petersburg was the first city in the country to install and study flashing lights at intersections and has now installed 103 sets of the lights at crosswalks around the city. The pedestrian-activated flashing lights have been found to increase the number of drivers yielding from 18 percent to 81 percent.<sup>56</sup>
- In intersections downtown, the City has installed more than 200 bulb-outs, which help slow traffic and make it easier for pedestrians to cross the street.<sup>57</sup>
- Along the biggest streets in St. Petersburg, the City has expanded sidewalks so that every street classified as a collector or an arterial has a sidewalk on at least one side of the street.
- When the Pinellas Trail extension through downtown, along 1<sup>st</sup> Avenue South, was completed in 2008, it became the first protected two-way bike path in Florida.<sup>58</sup>

- The City now includes the addition and improvement of bicycle facilities as part of regular resurfacing projects, which has resulted in several new pieces of bike-friendly infrastructure, including the separated bikeway along the downtown waterfront.<sup>59</sup>

To help make biking more accessible for all residents, at the end of 2016, the City launched the first phase of its bike share program with 300 bikes at 30 locations across downtown.<sup>60</sup>



*Newly launched bikeshare bikes are parked in front of a two-way protected bike lane along 1<sup>st</sup> Avenue South downtown.*

Forward Pinellas (the county's regional planning organization) has identified 34th Street (U.S. Route 19) as a priority area and the City of St. Petersburg is planning to widen and buffer the sidewalk along 34th Street South in the Skyway Marina District.<sup>61</sup> The City is also considering pedestrian safety improvements on north-south corridors through downtown, including 4th Street, 3rd Street, Martin Luther King / 9th Street, and 8th Street. Central Avenue is currently being redesigned with painted shared lane markings for bikes and signage that says "Bikes May Use Full Lane." In Midtown, east-west routes (including 18th Avenue South, 22nd Avenue South and 26th

Avenue South) have also been identified as areas ripe for improvement. The City also plans to add bike lanes along a 49-block long section of 30th Avenue North and build a new section of trail to connect the Pinellas Trail to Treasure Island.<sup>62</sup>

The City of St. Petersburg has begun to make progress in improving streets, but there is great potential to do more. And, with many people in St. Petersburg suffering from health problems worsened by pollution or inactivity, there is great incentive to do better. **By building a broad network of Complete Streets in all neighborhoods, we can create a healthier St. Petersburg.**

# Complete Streets Mean a Healthier St. Petersburg

**P**roperly implemented, Complete Streets can make St. Petersburg streets safer for all users and improve public health by reducing air pollution and encouraging people to be active. They can also create neighborhoods that are more welcoming for residents and visitors and better for business.



*An example of a crosswalk sign, shown above on 22<sup>nd</sup> Avenue, that will flash as a pedestrian approaches the intersection. Credit: Screenshot of Google Street View.*

## Components of Complete Streets

Complete Streets include components that allow everyone to share the road:

- For pedestrians, joggers, or people pushing strollers or using wheelchairs, wide and well-maintained sidewalks make travel safe and comfortable. Curb extensions at crosswalks shorten the distance to cross a street while reducing the speed of turning vehicles; median islands in the center of streets allow people to safely stop halfway; pedestrian signals give people dedicated time to cross the street without dodging cars; and flashing lights at crosswalks alert drivers to crossing pedestrians.
- For people on bikes, protected or buffered bike lanes provide safety and comfort with distance from traffic.
- For people taking public transportation, accessible and comfortable stations or stops make waiting for buses or trains easier and more pleasant. Given Florida's sweltering climate and summer thunderstorms, a bus stop

with shelter is not just “nice to have” but necessary for a comfortable trip.

These improvements help encourage people to engage in active transportation, improving people’s health while reducing air pollution and improving the safety of city streets.

St. Petersburg is moving toward the implementation of Complete Streets and has already made progress, particularly downtown. By expanding the approach city-wide, St. Petersburg has the opportunity to improve health and quality of life for St. Petersburg residents.

## Reducing Crashes

Complete Streets reduce conflict between different modes of travel by creating a network of streets that provides dedicated space for people to cross the street, ride a bike, wait for public transportation, or drive a car. Complete Streets measures prevent injuries and save lives: for example, people on bikes suffer one-tenth the rate of injuries when they travel in bike lanes with curbs to separate bikes from cars as they do when they travel on streets without bike lanes.<sup>63</sup>

Complete Streets designs also calm traffic, reducing the likelihood of crashes and



*Protected bike lane and clearly marked sidewalks in downtown St. Petersburg. Credit: Flickr user Tom Jackson.*

reducing their severity when they do occur.<sup>64</sup> A pedestrian hit by a car traveling 20 miles per hour has a 93 percent chance of surviving; a pedestrian hit by a car going 45 miles per hour has a 40 percent chance of surviving. Older people are even less likely to survive being hit by a car, especially at higher speeds.<sup>65</sup>

The evidence from across the country that Complete Streets can make streets safer is overwhelming:

- Since being reconstructed as a Complete Street, Atlanta's Ponce de Leon Avenue has seen 25 percent fewer crashes while accommodating more traffic.<sup>66</sup>
- In Manhattan, after adding a bike path to a section of 9<sup>th</sup> Avenue, crashes with injuries fell 53 percent. A street redesign that included pedestrian safety islands in Queens reduced injury crashes 63 percent.<sup>67</sup>
- After a fatal crash in 2013 prompted the City of Seattle to redesign NE 75<sup>th</sup> Street, total collisions fell 45 percent.<sup>68</sup>

Not only were these streets made safer for people walking and biking, but crash rates and injury rates for all road users, including people in cars, also fell with safer design. A 2010 study by the Federal Highway Administration found that in larger cities or suburban areas around cities, Complete Street redesigns reduced the total number of crashes on the roadway by an average of 19 percent.<sup>69</sup> The built environment and road design greatly influences the likelihood of crashes. By changing roads to simplify traffic patterns and slow speeds, streets can increase the safety of people on foot, on bike, and in cars.<sup>70</sup>

Further, evidence shows that there is safety in numbers – when more people

bike or walk, the risk of drivers hitting people on bikes or walking actually declines. The first study on the issue, published in *Injury Prevention* in 2003, found that if the number of people biking triples, the crash rate between cars and people on bikes falls by half.<sup>71</sup> Similar results happen as more people walk in a city. The idea is that as people on bikes and foot become more common, drivers become more attentive and cause fewer crashes.<sup>72</sup>

The result is a virtuous circle: the better the infrastructure and the safer people feel to walk or bike, the more people walk or bike, and the safer streets become for everyone.<sup>73</sup> A 2011 study, for example, found that cities with the highest rates of bicycling have the lowest risk of fatal or severe crashes for *all* road users, bicyclists, walkers and drivers alike.<sup>74</sup>

## Helping People Be More Active

Americans want to be more active in their daily lives – but many report that they do not feel comfortable or safe walking or biking in their neighborhoods. In poll after poll, Americans say they would walk or bike more if they had access to better infrastructure.

- According to estimates by the U.S. Department of Transportation, if all communities had sidewalks, nearly 3 million more Americans would walk regularly.<sup>75</sup>
- A recent poll in Denver found that 60 percent of people would ride a bike instead of driving to their office, school, or favorite restaurant if there was a protected bike lane between their home and destination. Among young

adults aged 18 to 34, willingness to bike jumped to 85 percent.<sup>76</sup>

- In Los Angeles County, two-thirds of voters say they'd walk or bike more if the streets felt safer.<sup>77</sup>
- According to a poll by the National Association of Realtors, 28 percent of people stated that they were prevented from walking more because there are too few sidewalks, while 24 percent reported that they don't feel safe because of traffic.<sup>78</sup>

Improving infrastructure for biking and walking gets more people out and moving as part of their daily routine. After the Federal Highway Administration undertook a “non-motorized transportation pilot program” and invested in pedestrian and cycling infrastructure in four cities, pedestrian trips in those communities increased 23 percent while the number of cycling trips increased 48 percent.<sup>79</sup>

A study of adults in the state of Georgia found that people were more likely to get enough exercise if they knew of and had access to a convenient place to walk.<sup>80</sup> In Grandview, Missouri, the city improved Main Street with pedestrian infrastructure and saw a 900 percent increase in pedestrian traffic.<sup>81</sup>

Similarly, an analysis of bike lanes in 90 of America's largest cities confirmed that more people bike to work in cities with more bike lanes and paths, regardless of climate, socioeconomic status or other factors.<sup>82</sup> A team from Portland State University looked at new protected bike lanes in five U.S. cities and found that cycling spiked 21 to 171 percent in the new lanes, rising even in areas where an unprotected lane had previously been. An estimated 10 percent of these riders said they switched from previous modes of travel.<sup>83</sup> In 2009,

the mayor of Philadelphia issued a Complete Streets executive order, directing all city agencies to consider people who bike, walk and take public transit when developing the city's transportation system. Since this time, the number of people commuting by bike has nearly doubled across the city, with more than 5 percent of residents in some neighborhoods riding to work.<sup>84</sup>

## Reducing Pollution

When people shift to less-polluting modes such as walking, biking and public transportation, they often leave their cars behind, reducing air pollution. Providing infrastructure that enables people to make short trips without driving a private vehicle can have a significant effect on vehicle travel and pollution levels. Federal studies have found that half of all trips taken with private vehicles are less than three miles in length, a distance easily biked in 20 minutes; more than a quarter of all car trips are under a mile, which could be walked within 20 minutes.<sup>85</sup> Replacing some of these vehicle trips with trips by bike or on foot would reduce pollution.

Furthermore, creating a safe built environment for people to get to and from public transportation or make transit connections boosts transit ridership, which reduces congestion and pollution. For example, the reconstruction of Euclid Avenue in Cleveland, Ohio, included the city's first bike lane and expansion of transit service. Several private companies invested nearly \$6 billion along the corridor in tandem with the reconstruction, making it a transit and employment hub – one that more people could navigate on foot or by bike. Overall crashes and injuries both fell about 25 percent, while transit ridership increased more than 60 percent.<sup>86</sup>

# Conclusion and Recommendations

Experience in cities around the country has shown that designing streets to allow for safe pedestrian, bicyclist and transit travel can dramatically increase walking, biking and transit ridership, with great public health benefits. St. Petersburg has the opportunity to build upon previous success with Complete Streets downtown and expand better streets across the city. By building a broad network of Complete Streets in all neighborhoods, we can create a healthier St. Petersburg.

The stronger the plan, the greater the public health impact will be. Specifically, the City of St. Petersburg should:

- **Make protected bike lanes standard.** Separated and protected bike lanes improve safety and attract more riders compared to paint-only lanes. As a result, buffered or protected lanes should be the rule – not the exception – on streets with three or more lanes or heavy traffic.
- **Complete sidewalks and crosswalks around schools.** The City should expand and maintain pedestrian infrastructure like sidewalks and crosswalks to ensure that all children in St. Petersburg have a safe route to school.
- **Create a city-wide system of neighborhood greenways.** St. Petersburg's neighborhood streets should be considered for a connected greenway system for walking and biking. Improvements should expand on existing neighborhood traffic calming, and include traffic diversion, way-finding signage, and safe crossings of major streets along the route.
- **Prioritize safety over speed.** To reduce serious crashes and improve community health, the City should encourage slower vehicle speeds by narrowing or eliminating vehicle lanes, planting street trees, building bulb-outs, installing protected bike lanes, and changing signal timing. Additionally, speeds on neighborhood streets should be limited to 20 m.p.h. (the lowest maximum speed limit allowed by state law for residential areas). On bigger streets, the speed limit should be no more than 30 mph (the maximum speed limit allowed by state law for business or residential areas). Enforcement of speed limits should adequately address speeding as a public safety issue.
- **Implement road diets.** Where appropriate, the City should consider converting four- or five-lane streets to

three lanes to calm traffic and create space for other infrastructure, like bike lanes, bus lanes, wider sidewalks, and on-street parking.

- **Continue to seek additional resources so Complete Streets are fully funded.** The City should consider increasing Complete Streets funding so that the streets can be improved and maintained reliably in the future. The return on investment is high, considering the public health benefits: by fully investing in Complete Streets, the City of St. Petersburg can help reduce asthma, obesity and traffic fatalities, among other health outcomes.

Transforming St. Petersburg's streets should build upon previous efforts to develop new solutions for safer, health-

ier streets. The City of St. Petersburg should continue implementing creative ideas on a network-wide scale and include additional metrics of success. For example, traffic metrics have historically prioritized the movement of vehicles. In downtown areas, one-way streets allow for higher travel speeds, less frequent stops and increased flow of cars. However, two-way streets may provide safety benefits by slowing traffic and creating more logical and predictable travel for all road users.<sup>87</sup>

The commitment of St. Petersburg to a Complete Streets policy represents a potential breakthrough moment for the city's health and vitality. A robust build-out of Complete Streets throughout every neighborhood in St. Petersburg will maximize public health, safety and quality of life benefits.

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