Pinellas County MPO

2040 Long Range Transportation Plan

Safety Element

INTRODUCTION

The safety of the transportation system is vital for Pinellas County. With a population of 929,048 as of April 2013 (census.gov), Pinellas is the most densely populated county in Florida and includes 25 different jurisdictions. The Pinellas County Metropolitan Planning Organization (MPO) and other transportation agencies are committed to providing a safe and efficient transportation system and will continue to improve the safety of transportation through projects and programs for all modes of travel. Statistics show that improving safety for all modes must be at the forefront of the transportation planning process. Ideally, the transportation network should encompass adequate and safe roadways, intersections, sidewalks, street crossings, school walk routes, trails, and transit stops and routes.

SAFETY TARGET AREAS

In 2012, the Florida Department of Transportation (FDOT), in partnership with the Federal Highway Administration (FHWA) and representatives from all segments of Florida's traffic safety community, developed the 2012 Strategic Highway Safety Plan (SHSP). The SHSP (originally created in 2006) is a statewide, data-driven plan that addresses the 4 "E's" of safety – engineering, enforcement, education and emergency response. The 4 E's serve as an outline for the Pinellas County MPO traffic safety strategies, described later in this chapter. The SHSP is a major component and requirement of the Highway Safety Improvement Program, developed under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) an continued under Moving Ahead for Progress in the 21st Century (MAP-21), as a core Federal-aid program that identifies and analyzes highway safety problems and opportunities on all public roads.

SHSP Emphasis Areas

The SHSP identifies eight (8) Emphasis Areas that are to be analyzed to help counter high-ranking safety concerns within Florida. The Pinellas County MPO will monitor and track crashes associated with the first seven emphasis areas on an annual basis to evaluate safety concerns and identify strategies to help address them. Traffic data and decision support is important for the analysis of the other emphasis areas, and while it does not include any actual crashes, the importance of having accurate data for transportation planning cannot be understated.

The eight (8) emphasis areas are listed as follows:

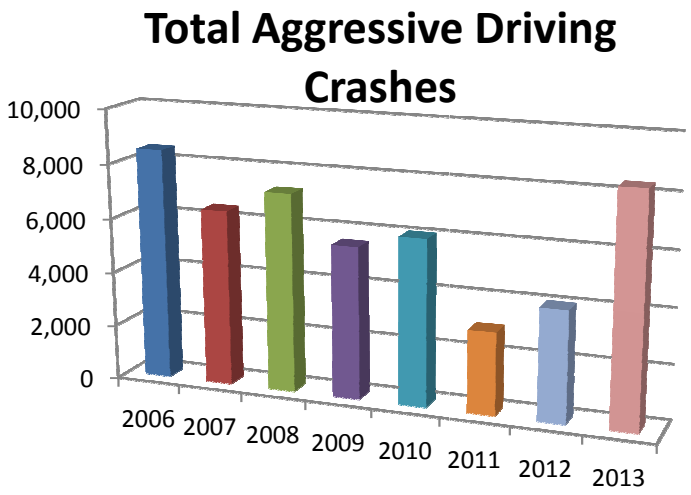
- Aggressive Driving;
- Intersection Crashes;
- Vulnerable Road Users (pedestrians, bicyclists, and motorcyclists);
- Lane Departure Crashes;
- Impaired Driving;
- At-Risk Drivers (aging road users and teens);
- Distracted Driving; and

- Traffic data and decision support.

It should be noted that only the first four emphasis areas were identified prior to 2012. Because of the relatively recent implementation of the other emphasis areas, data in years prior to 2012 is not readily available. The MPO will monitor these on an annual basis going forward, but will be unable to provide context on the extent of crashes associated with them at this time. It should also be noted that the way that crash data is recorded changed significantly in 2011 and 2012, as 'short-forms,' or reports of less serious crashes, were not collected, making data comparisons from years earlier than 2011 difficult and unreliable.

Aggressive Driving

As defined by State Statutes, aggressive driving requires the inclusion of at least two of the following contributing causes: speeding, unsafe or improper lane change, following too closely, failure to yield right-of-way, improper passing, and failure to obey traffic control devices.



Analysis

From 2006 to 2010, the number of aggressive driving crashes in Pinellas County decreased, along with fatalities associated with them. It is important to note the data collection procedures were modified in 2011, resulting in the appearance of an unusually low number of aggressive driving crashes for that year. The trend from 2011-2013 however, showed an increase in the number of crashes associated with this crash type.

The MPO will continue to monitor these crashes annually to evaluate the trends and identify appropriate strategies to address, as necessary. The chart and table below demonstrate the extent of crashes attributed to aggressive driving in Pinellas County.

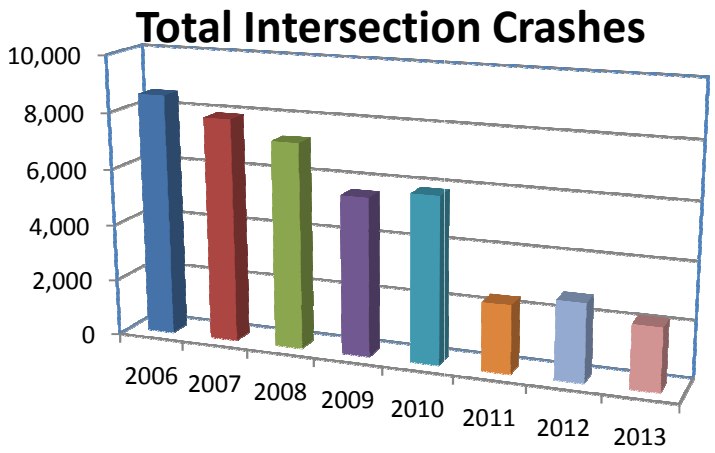
Reported Aggressive Driving Crash Totals

	2006	2007	2008	2009	2010	2011	2012	2013
Crash Total	8,481	6,441	7,260	5,558	6,064	3,001	4,039	8,358
Injuries*	1,184	1,060	1,399	1,197	1,270	1,636	1,348	2,631
Fatalities	81	73	61	44	49	26	24	34

Source: Pinellas County MPO Crash Data Management System (CDMS)
Excludes parking lot, private property, and crashes not located.
**Excludes possible injury crashes, meaning an injury was possible, but not confirmed at the time the crash report was finalized.*

Intersection Crashes

Crashes that occur at or within approximately 250 feet of signalized and unsignalized intersections are defined as intersection related. Statistics in this area include red light runners, pedestrian and bicyclists using crosswalks, failure to obey traffic control devices and/or failure to yield the right-of-way.



Analysis

Intersection crashes were decreasing from 2006-2010. From 2011-2013, these crashes continued to decrease slightly, but the MPO will continue to monitor annual to determine if there are any changes to this trend.

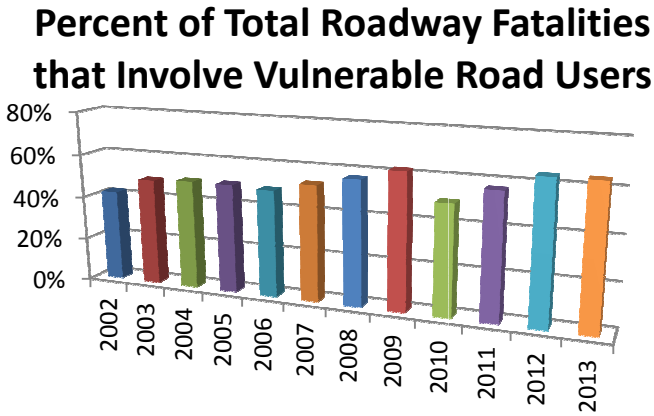
Reported Intersection Crash Totals

	2006	2007	2008	2009	2010	2011	2012	2013
Crash Total	8,574	7,910	7,268	5,596	5,870	2,404	2,750	2,218
Injuries*	1,111	1,025	1,383	1,205	1,278	1,393	1,078	898
Fatalities	40	39	37	35	39	23	20	16

Source: Pinellas County MPO CDMS
Excludes parking lot, private property, and crashes not located.
**Excludes possible injury crashes, meaning an injury was possible, but not confirmed at the time the crash report was finalized.*

Vulnerable Road Users (Pedestrians, Bicyclists, Motorcyclists)

This Emphasis Area addresses crashes involving bicyclists, pedestrians, and motorcyclists. The challenges presented by vulnerable road users may be similar, but the solutions are often unique to a specific user type, such as mid-block crosswalks for pedestrians or designated lanes for bicycles. Pinellas County ranks second in the State for



pedestrian crashes, making the emphasis on pedestrian safety in Pinellas even more vital.

Analysis

Even though total roadway fatalities have been declining in recent years, when comparing vulnerable road user fatalities to total roadway fatalities there has been an increase.

Percent of Total Roadway Fatalities that Involve Vulnerable Road Users

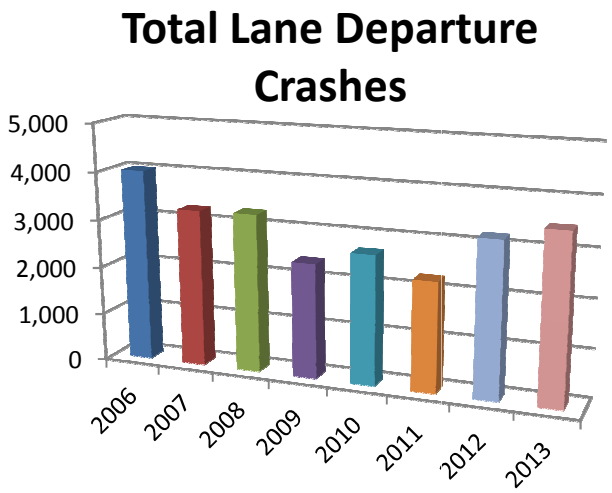
	2006	2007	2008	2009	2010	2011	2012	2013
Fatalities	49%	53%	57%	62%	50%	57%	64%	64%

Source: Pinellas County MPO CDMS
Excludes parking lot, private property, and crashes not located.

Lane Departure Crashes

Lane Departure Crashes include running off the road, crossing the center median into an oncoming lane of traffic, and sideswipe crashes. Running off the road may also involve a rollover or hitting a fixed object.

As can be seen from the following table and chart, the total number of crashes had been steadily declining from 2006-2010, but began increasing from 2011 and on.



Reported Lane Departure Crashes

	2006	2007	2008	2009	2010	2011	2012	2013
Crash Total	4,008	3,268	3,287	2,390	2,684	2,264	3,197	3,468
Injuries*	511	467	582	419	435	736	616	564
Fatalities	49	36	30	17	23	20	20	10

Source: Pinellas County MPO CDMS
Excludes parking lot, private property, and crashes not located.
**Excludes possible injury crashes, meaning an injury was possible, but not confirmed at the time the crash report was finalized.*

Impaired Driving

Previously identified as a continuing priority area in Florida's SHSP, Impaired Driving was upgraded to an Emphasis Area in 2012 to bring more attention to the problem. Impaired driving includes alcohol and drug impaired driving. The goal of the SHSP is to reduce impaired driving crashes by 5% annually. The MPO has begun tracking impaired driving crashes on an annual basis and will be reporting progress towards this goal.

Analysis

In Pinellas County in 2013, approximately 20% of our roadway fatalities were impairment related, a decrease from previous years but still a significant percentage overall. This high percentage indicates that more needs to be done in the area of preventing these crash types countywide.

Impaired Related Crash Fatalities

	2006	2007	2008	2009	2010	2011	2012	2013
Impaired-Related Fatalities	25	26	52	37	36	47	47	16
Total Traffic Fatalities	132	120	115	105	97	114	105	80
% of Impaired-Related Fatalities	19%	22%	45%	35%	37%	41%	45%	20%

Source: Pinellas County MPO CDMS

***At-Risk Drivers* (*Aging Road Users and Teens*)**

This emphasis area is comprised of aging road users (aged 65+) and teen drivers (15-19 years of age). Today's older drivers are driving longer and more miles per year than in the past. The median age in Pinellas County increased from 43.6 in 2000 to 46.3 in 2010, compared to a median age of 37.2 nationwide. With Pinellas County having a median age higher than the national average, maintaining aging road users' mobility and independence is particularly important to this community. Nearly 32% of all crashes in Pinellas County in 2013 involved an aging road user, further highlighting the importance of this emphasis area to the county.

According to the SHSP, motor vehicle crashes are the number one killer of teens. More teens die in crashes than in the next three leading causes of death – homicide, suicide and disease – combined. Speeding and aggressive driving are primary causes of crashes by younger drivers. Because of this fact and the high number involved in crashes, teens have been included as a component of the at-risk driver emphasis area.

A 5% annual reduction in crashes involving At-Risk Drivers is the goal of the SHSP. The MPO has begun tracking these crashes and will report annually on progress made toward this goal.

Distracted Driving

Distracted driving occurs when a driver allows any mental or physical activity to take the driver's focus off of the task of driving. This could include a manual, visual or cognitive distraction. With the nearly universal availability of portable technological devices, dealing with the impacts of distracted driving has taken on an increased sense of urgency. Not only are drivers distracted because of inattentive tasks such as adjusting the radio, eating, shaving, and applying makeup, but additional distractions such as GPS, mobile web applications, texting and talking serve as further distractions to the driver and remove focus from the road. Passengers also cause a distraction, particularly to younger drivers. All of these distractions can increase the risk of a crash and can have potentially disastrous consequences.

One of the efforts to reduce distracted driving is better driver navigation. Two driver navigation projects have been deployed by the MPO. They are US Highway 19 block range signs and Fish Mile Markers along Gulf Boulevard. Both provide drivers a better alternative to finding a place along the road without looking for address numbers on a building. Another driver navigation project in the process of being deployed involves adding route numbers to road name signs. This is being done to reduce the confusion of multi-named roadways in Pinellas County. The solution includes formatting the street signs to include the County or State road number/name on the sign. Having two identifiers on a road sign instead of one and a consistent route designation is expected to reduce driver distraction.

All of the MPO advisory committees have made motions to support legislation regarding distracted driving. In 2013, the Florida Legislature took action making the use of wireless communication devices a secondary offense statewide (drivers cannot be stopped for using such devices, but can be cited for their use if it leads to a crash). Consistent with the MPOAC's policy position, the Pinellas County MPO supports additional State legislation that reduces distracted driving by regulating as a *primary* offense the use of electronic wireless communications devices and other similar distracting devices while operating a moving motor vehicle. As there is no historical data for this safety emphasis area, the MPO has begun tracking and measuring distracted driving crashes and will report on the data on an annual basis.

Traffic Data and Decision Support

Traffic information systems data is vital for making planning and investment decisions. Without reliable data, identifying locations with safety issues and developing strategies to address those issues is a significant challenge. Formerly identified as a Continuing Priority Area, Traffic Records was elevated to an Emphasis Area to draw attention to its importance for the State's safety needs. A five-year Traffic Safety Information System (TSIS) Strategic Plan was developed in 2012 to provide a blueprint for measuring progress towards advancing the accessibility, accuracy, completeness, timeliness and uniformity of Florida's traffic records information systems. The plan also provides Florida agencies with a common basis for moving ahead with traffic records systems upgrades, integration and data analysis required to conduct highway safety analyses in the State.

In Pinellas County, two areas in particular are in need of better crash data. Identifying crashes related to schools is important in Pinellas County as very little busing is provided to students, particularly at the elementary grade level. With so many school children walking or biking, pinpointing crashes that relate to schools can assist in the identification of safety concerns and solutions to protect one of our most vulnerable populations. Also of importance is the identification of bicycle and pedestrian crashes where no motor vehicle is involved. Currently, crash reports are only filled out when a motor vehicle is involved, a practice that leads to some important safety concerns for other modes being overlooked. For example, one roadway was experiencing a disproportionately

high rate of bicycle crashes, where riders were either falling from their bikes or colliding with pedestrians None of these crashes involved a motor vehicle so it took some time for the pattern to emerge before engineering adjustments to the roadway could be made to make it safer for these non-motorized road users.

The MPO will continue to track roadway fatality crashes on a monthly basis. This information is compiled from media reports, notifications from local agencies and fatality alerts from several law enforcement agencies. While not official crash data, this information provides more immediate tracking of problem locations, trends, etc., until official records are available. The fatalities are compiled, mapped, and routinely reviewed by MPO staff, the advisory committees and the Community Traffic Safety Team (CTST).

TRAFFIC SAFETY STRATEGIES

An Interdisciplinary Approach to Safety: The "E" Word(s)

A mainstay of safety planning has been the integration of various fields of expertise known as the "Four (4) E's." MAP-21 mandates that each state develop a SHSP, which must address these disciplines. Subsequently, the Safety Elements required by MPOs are to reflect, incorporate, and summarize the goals and policies of the Florida SHSP within the 4-E framework. The 4-E's serve as an outline for the Pinellas County MPO traffic safety strategies.

***ENGINEERING/OPERATIONAL CONSIDERATIONS AND IMPROVEMENTS**

***EDUCATION AND ENCOURAGEMENT**

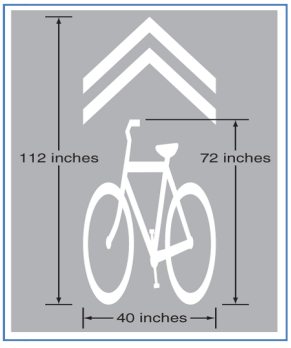
***ENFORCEMENT**

***EMERGENCY MEDICAL SERVICES/EMERGENCY RESPONSE**

The 4-E's

ENGINEERING/OPERATIONAL CONSIDERATIONS AND IMPROVEMENTS

Traditionally, engineering involved design, construction and maintenance of roadways primarily for motor vehicle travel. Over the years, crash data has shown that additional consideration to other modes is needed, and new devices have been developed to assist with engineering and operational improvements for increased safety for all transportation users. These include development of off-road facilities, sidewalks, on-road facilities, traffic safety devices, and intersection enhancements. The MPO provides assistance to, and coordinates with, local jurisdictions and FDOT to implement these operational safety road improvements. The goal is to improve safety for all travel modes.



Sharrow, Shared Lane Marking

On-Road Bicycle Lanes & Sharrows

Through coordination with local, County, and State partners, bicycle lanes are encouraged to be installed on all major roads, either with resurfacing, reconstruction or restriping projects. While implementing agencies are encouraged to have bicycle lanes, the MPO Bicycle Pedestrian Master Plan Element proposes facilities on roadways where they are most needed to provide connectivity and access important destinations. Currently, there are more than 170 centerline-miles of bicycle lanes in Pinellas County, with an additional 365 centerline-miles of bicycle lanes proposed. FDOT has been especially proactive in requiring bicycle accommodations on all road construction and resurfacing projects under its jurisdiction.

The MPO encourages bicycle accommodations on all roadway facilities functionally classified as a collector or arterial. The MPO also works with the responsible agencies to expand the use of "sharrows" on roadways where designated bicycle lanes are not feasible. A sharrow serves as a reminder that bicycles and motor vehicles should share the lane. State law allows a bicyclist to take the entire travel lane if bicycle lanes are not provided, so the road marking helps to promote the safety of the bicyclist in the absence of a dedicated space on the roadway.

Sidewalks

Sidewalks are the foundation for a pedestrian-friendly environment. Sidewalk construction in Pinellas County occurs though a variety of means, including the application of local site plan review processes, capital improvement and federal grant programs. Most major roads in Pinellas County already have sidewalks on at least one side of the road but gaps do remain and are being addressed as funding becomes available.

Street Crossings

Street crossings provide one of the most challenging movements for pedestrians. Crosswalks are an integral part of pedestrian safety enhancement planning both at intersections and mid-block locations. In Pinellas County, many of the roadways were built primarily to move automobiles, often at the expense of other modes. Many streets have wide intersections that make crossing difficult for those not in a car. Below are just two examples of roadways that present challenges to those non-motorized modes trying to cross them.

Gulf Boulevard traverses the barrier islands of Pinellas County, along an area critical to the local economy because of the tourist activity there. This stretch of road separates the county's renowned beaches from many hotels, shops and restaurants. With significant levels of traffic and high pedestrian activity along the entire corridor, the safety of pedestrians while crossing the street is an area of focus for the MPO and its partners. An extensive public education and outreach campaign was conducted to increase knowledge of appropriate pedestrian safety measures, including distribution of information to the hotels to share with their guests. Pedestrian flags were placed at key mid-block crossing locations to help increase the visibility of pedestrians as they cross the street. In addition, newly engineered mid-block crosswalks were installed along the corridor, with a consistent look across the various communities to increase driver awareness and pedestrian safety.

US Highway 19 provides another challenge for pedestrians trying to cross the corridor. In northern Pinellas County, the roadway is 6-8 lanes across, with wide intersections, high volumes of traffic and high levels of transit ridership. It is along this stretch of roadway where the intersections with the highest number of crashes are located. Years ago, FDOT began converting the roadway to a partially controlled access facility, removing signalized intersections and installing interchanges at key intersections. While relieving some of the crash problems at the intersections, this has created long stretches of roadway where pedestrians are not able to cross to the other side of the street without either walking a long distance to reach an interchange, or dodging high-speed traffic and jumping over a barrier to avoid the long walk. The land uses along the corridor also contribute to the crossing problem. For example, one recently closed intersection (closed because of the conversion) has a higher density residential complex and an employment center on one side of the street, and a recreational facility, convenience store, and major transit stops on the other side. For workers and residents to access the other side of the roadway, they must walk over one mile to get to a signalized crossing and down the other side, or ride a bus over one half mile to the north and transfer to a southbound bus. As FDOT continues the conversion of US 19, the MPO, PSTA, and the jurisdictions bordering the roadway, are working together to conduct a study to identify solutions to the pedestrian crossing challenge. As the design plans for more segments of US 19 are developed, the recommendations from this study, currently underway, will be incorporated to enhance pedestrian safety along the corridor.

Intersection and Roadway Safety

Intersections provide crossings for multiples modes of transportation and typically experience the highest number of crashes for all modes. Intersection and roadway enhancement projects include a vast array of tools for implementation that improve their safety. With few major remaining roadway expansion projects in Pinellas County, intersections have become a focus of many local government capital programs. As improving an intersection for the movement of vehicles can have a negative impact on the safety of pedestrian and bicycle movements, each intersection improvement involves the balancing of the safety needs of all modes of transportation.

Livable Communities Concepts and Complete Streets

Complete streets are roadways that are planned, designed, constructed, reconstructed, operated and maintained for the safety and mobility of all road users. The MPO has developed a policy statement for the 2040 LRTP promoting the development of complete streets countywide, as well as some guiding principles and strategies regarding their application. In 2007 and 2008, the MPO developed model objectives, policies, and land development code language to encourage 'livable communities,' places where people want to live, work and play, and include complete street concepts. Many location governments have already utilized portions of the code as they saw fit for their communities, and the goal is to further disseminate complete streets concepts countywide to provide for the mobility of all users of the transportation system.

Goods Movement Advisory Committee

The MPO participates in the Tampa Bay Regional Goods Movement Advisory Committee, where the movement of freight is addressed. Through the Tampa Bay Regional Strategic Freight Plan, the development of which was overseen by this committee, areas were identified where there are high levels of livability and high levels of freight activity. Strategies were identified to help balance the need to move freight with the specific character and nature of the communities through which it travels. The Freight Plan also identifies freight hot spots and large scale recommendations to solve freight problems across the region. This group also oversees the Comprehensive Freight Improvement Database that identifies small scale quick-fix projects that can be implemented immediately to improve the movement of freight. This committee meets regularly to guide and inform the freight planning process in the region.

Off-Road Trailways Network

Pinellas County opened the first segment of the Fred Marquis Pinellas Trail in 1990, and over time, the Pinellas Trail has become one of the premier urban trails in the nation. Currently about 44-miles long, the corridor allows Trail users to travel safety over or underneath busy intersections with 13 existing overpasses or underpasses. The majority of the Trail was built on an abandoned railroad corridor from Tarpon Springs to St. Petersburg along the western side of the county. The Trail is 15-feet wide, travels through the middle of the urban areas of six municipalities and several unincorporated communities, and offers a smooth paved surface safely separated from motor vehicle traffic. In addition to the Pinellas Trail, local jurisdictions have invested in expanding the community trail network by adding approximately 50-miles of non-motorized routes countywide, including an underpass at U.S. Highway 19 and an overpass at McMullen Booth Road, north of Drew Street.

There are a number of initiatives either already established or underway to enhance safety along the Pinellas Trail and other trail facilities across the county. The Pinellas Trail Security Task Force (PTSTF) meets quarterly to

coordinate law enforcement efforts and share information on the Trail. Following some recent safety issues along one stretch of the trail, the installation of security cameras to assist in monitoring by law enforcement personnel was recommended. The installation of these cameras is underway and the results of their installation will be monitored for potential future application along additional stretches of the Trail in the future. An Emergency Marker Program has been developed so that users can easily identify their location on the Trail in the event of an emergency or to report a maintenance issue (see image at right). These markers are installed every quarter mile along the entire length of the Trail and are also installed along other County trail facilities countywide. Overpasses and underpasses have been constructed to safely move users across many of the busier intersections and there is a Volunteer/Auxiliary Ranger program to monitor the Trail and assist users. The Pinellas County Parks and Conservation Resources Rangers patrol the Trail, along with municipal and county law enforcement personnel.

The MPO has been working with the jurisdictions to develop a consistent countywide approach to the type and use of signs and traffic control at trail-roadway crossings. Countywide model intersection guidelines have been developed to assist when planning, designing or improving existing and future trails. A growing concern among local governments in the County has been a lack of consistency in the treatment of trail intersection crossings from one city to the next. In response to this concern, a uniform trail crossing study was recently conducted by the County and approved by the Board in September 2014. The report provides a standard set of guidelines for local governments to follow when determining the most appropriate treatments in terms of signs, markings and signals along trails.

The MPO has also coordinated with the appropriate agencies and citizen groups to expand street name identification signage at all trail-roadway crossings. Now all streets that cross the Pinellas Trail have signage, enhancing safety by allowing Trail users to be better aware of their location at all times.

Other Tools that Enhance Safety

In addition to the engineering and operational considerations listed above, there are a number of other tools available to implementing agencies to help enhance the safety of the transportation network. These tools are listed below and include:

- *Rapid Rectangular Flashing Beacon (RRFB)* – pedestrian-activated mid-block crossing device
- *Speed Feedback Signs* – electronic signs to inform motorists of their current speed and remind them of posted speed limit;
- *Bright Sticks* – retro-reflective post covers to increase visibility of school or pedestrian-related warning signs;
- *Pedestrian Count-Down Signals* – pedestrian signals at signalized intersections showing time available for crossing streets/roads;
- *High-Emphasis Crosswalk Markings* – wide, solid crosswalk markings, may include additional advanced warnings, retro-reflective signage, and/or other enhancements;

- *Street Lighting & Intersection Lighting* – additional illumination directly on crosswalks, pedestrian walkways or at pedestrian-level;
- *Yellow-Green Retro-Reflective Pedestrian Signage* – bright yellow-green color for high-emphasis pedestrian awareness, used especially at school crossings;
- *Truncated Domes* – vibratory area at pedestrian ramps to increase awareness of an intersection for visually impaired pedestrians;
- *Reflective Lane Pavement Markers* – raised pavement markers with reflective properties to improve lane control and awareness;
- *Audible Pavement Markers* – raised pavement markers with vibratory and audible properties to alert motorists of lane departure; and
- *Safety Edge* – pavement edge shaped to a 30-degree angle to reduce potential for rollover crashes, assist with road departure recovery, and strengthen pavement to prevent erosion.

Many of the tools listed above have already been implemented in Pinellas County. RRFBs, for example, were first tested in the City of St. Petersburg and have now been installed in numerous locations countywide. For the few tools that have not yet been implemented in the county, Safety Edge, for example, Pinellas County MPO continues to support their application, where feasible and appropriate.

EDUCATION/ENCOURAGEMENT

Education and encouragement go hand-in-hand, and both are affected by the shift in emphasis within the engineering discipline. Concerns about the quality of the environment and traffic congestion have led to additional engineering considerations and enhancements during the design and construction of roadways. These improvements encourage, and make it easier and safer, for many people to get around without a car.

Safety issues, however, may also be more easily and effectively addressed through education. Education involves cooperative efforts and programs to raise awareness amongst, and disseminate public information for, the various types of transportation users.

Safe and Mobile Seniors

With over 21% of Pinellas County residents over the age of 65 and a median age of 46.3 years, the population of the county is older than the national average. Within the highly urbanized community designed predominantly around the automobile, older residents may have challenges utilizing the transportation system in Pinellas County. Wide intersections with vehicles making right turns on red can make it difficult for an older resident to cross the street. Fast moving traffic can be difficult for older residents to navigate in an automobile as their vision and reflexes may not be as sharp and quick as those of a younger driver. Due to the large number of older citizens within the county, Pinellas needs to consider appropriate strategies to ensure the safety of this large group of aging road users. National studies show that today's older drivers are driving longer and driving more miles per year than in the past, and research shows that older adults can expect to outlive their ability to safely drive by 7 to 10 years. As an increasing number of aging adults drive on the county's roadways or travel the roads as pedestrians, passengers, bicyclists or motorcyclists, the issue of transportation safety for this population is an increasingly significant concern.

www.SafeandMobileSeniors.org was designed by FDOT, in cooperation with the MPO Advisory Council, as a

resource not only for seniors, but also families, caregivers, service providers for the aging, law enforcement, local governments, planners, engineers, Community Traffic Safety Teams (CTST), MPOs, and all others interested in promoting safety and mobility for Florida's elder citizens. The website is divided into major areas of interest, such as road user, vehicle laws, roadways, and "Find a Ride," with information provided on a variety of topics relevant to each area.

As of January 1, 2012, approximately 29% of the licensed drivers in Pinellas County were age 61 or older, and 21% of the total population was over the age 65, compared to a statewide average of 21.4% and a national average of 17.6%. The following are estimates of the population over age 65 for the five largest cities in Pinellas County: St. Petersburg – 15.2%; Pinellas Park – 21.1%; Clearwater – 20.7%; Dunedin – 26.6%; and Largo – 25.7%. The University of Florida Bureau of Economic and Business Research estimates that by the year 2030, 26.2% of Florida's population will be over the age of 65. It should be noted, however, that the actual number of senior drivers will likely be fewer than represented because many will give up driving but keep their licenses active for identification purposes. In 2013, approximately 32% of all crashes in Pinellas County involved an aging road user. Given these facts, resources like safeandmobileseniors.og are particularly important in Pinellas County.

School Age and Youth Safety

Promoting safety for the school age children of Pinellas County is one of the highest priorities for the MPO and its partners. The MPO works with and assists several organizations with child safety education programs. These programs provide the opportunity for the MPO to be directly involved with and educate the public on the benefits of safe behaviors while on the street, sidewalk, trail or bus. With the Pinellas County School Board voting to zone students in neighborhood schools close to their homes, and voting to end busing for students living within 2 miles of each school facility in recent years, more children are walking to school and providing for their safety has taken on increased significance.

- *School Transportation Safety Committee (STSC)* –Advisory committee to the MPO, provides and supports coordination with the local agencies and school system to improve school-related transportation.

- *Pedestrian Safety Awareness Week* – For the past several years, the Pedestrian Transportation Advisory Committee (PTAC), an advisory committee to the MPO that has since merged with the Bicycle Advisory Committee (BAC), has selected the week after Daylight Saving Time as an opportunity to highlight pedestrian safety. Educational material, including information on pedestrian, bicycle, school bus and driving transportation safety is provided to every public school student in Pinellas County. This safety brochure is also provided to senior centers, law enforcement agencies, local governments, and many private schools.

- *Safe Kids Coalition* – The Florida Suncoast Safe Kids Coalition (www.allkids.org) is sponsored by All Children's Hospital and supported by the MPO. The coalition provides bicycle helmets and child restraint devices, organizes an annual Walk to School Day program, and puts on many community-level safety events for public education.

- *Safe Routes to School Program (SRTS) –I*nitiative designed to encourage children, including those with disabilities, to walk or ride their bicycles to school. The program provides infrastructure funding to increase pedestrian and bicycle safety, as well as a non-infrastructure funding component for safety and education. With the current federal surface transportation legislation (Moving Ahead for Progress in the 21st Century – MAP-21), the MPO now has the responsibility to prioritize projects for SRTS funding, and does so through in coordination with the local jurisdictions and advisory committees.

(www.fhwa.dot.gov/environment/safe_routes_to_school)

- *WalkWise Tampa Bay* – FDOT-funded pedestrian safety education program serving Pinellas County as well as Hillsborough County. (walkwisetampabay.com/)

- *Tampa BayCycle* – Education initiative that empowers and encourages residents and visitors on both sides of Tampa Bay to bicycle to work, school, for recreation or errands instead of driving. Scheduled during Florida Bicycle Month, the goal of Tampa BayCycle is to raise awareness of the benefits of bicycling as a viable and responsible transportation choice. Bicycle riders – especially commuters – save money and gas, stay fit, reduce traffic congestion, have fun, and improve the environment. (www.tampabaycycle.com)

- *Walking School Bus* – A group of children walking to and from school accompanied by one or more adults, usually a parent or care giver. The primary benefit is a consistent, supervised system in which children can walk under adult supervision, learn transportation safety, exercise, and results in reduced traffic congestion near schools, particularly during drop-off and pick-up times.

- *Bike Train* – A group of children and parents who ride bicycles to school together with other families, similar to a walking school bus.

- *TBARTA Regional School Commute Program* – A program offered by the Tampa Bay Area Regional Transportation Authority (TBARTA) in partnership with the School District that provides free online matching for parents and students for school carpooling (a group of children and parents who ride to school together), walking school bus (a group of children walking to school with one or more adults) and bike trains (a group of children and parents who ride bicycles to school together with other families). This program provides options for busy parents, saves time and money, and promotes safety for students by arriving in a group and reducing traffic congestion around schools.

- *Bicycle Rodeos* – A bicycle rodeo is a clinic that helps teach children the importance of riding a bicycle safely and what skills and precautions they need to develop to have a safe time on their bicycles. Every year the Pinellas County Sheriff's Office (PCSO), the City of St. Petersburg, other law enforcement and safety agencies sponsor several bicycle rodeos throughout the county. Bicycle rodeos incorporate traffic signs, safety tips, and safety courses to teach transportation safety, Florida bicycle laws, and skills to the community.

- *Summer Camp Safety Presentations* – Local organizations and governments provide several summer camp opportunities for children during the summer break of the school year. Law enforcement agencies take advantage of these opportunities to help teach children how to be safe.

Transit and Rider Safety

The Pinellas Suncoast Transit Authority (PSTA) is the primary mass transit provider countywide, serving most of the unincorporated area and 21 of the 24 municipalities within Pinellas County. It presently operates 203 buses

and trolleys that serve 40 routes. PSTA representatives are active participants on the MPO's advisory committees.

The Pinellas Suncoast Transit Authority (PSTA) manages safety procedures for its present day bus system. The details of the transit safety program are formalized in PSTA's System Safety Program Plan. This document presents a systematic approach designed to improve safety over time by identifying a four-step process for effectively managing hazards. The four steps are identified at right.

1. System Considerations

2. Hazard Identification

3. Hazard Assessment

4. Hazard Resolution

PSTA's public outreach features messages encouraging safety for all transit riders, including posters on the inside of buses emphasizing that it is important to cross the street at designated crosswalks. In addition, passengers are asked to avoid falls by staying in their seats until the bus comes to a stop. Likewise, they are requested to refrain from speaking to the bus operator so as not to distract him or her while the vehicle is moving. Bus schedules, system maps, and educational brochures are available to the public. In addition to these materials, programs and services are offered to the public to promote safety.

With the "Show Me Service," PSTA staff members instruct prospective users how to ride the bus. There are two ways to learn: by phone or by a personal visit from a PSTA representative, who will even accompany users on their first bus trip. Either way, safety tips are covered such as where to stand when catching the bus and crossing the street after disembarking.

The Bikes on Buses Program allows passengers to bring their bikes along for the ride easily, conveniently, and safely. It is one of PSTA's most popular programs as special permits are no longer required. Annual usage totals 398,000 riders, who through this program have been encouraged to use their bicycles for transportation, recreation, or commuting to and from work. PSTA also provides special training videos on its Internet website www.psta.net under the Riding PSTA heading on the homepage.

Public Outreach

The MPO's efforts to provide a safe transportation system involve educating the public about the overall transportation system and related safety issues. Since educating the public and providing necessary information go hand in hand, the MPO puts great emphasis on community outreach and involvement. The MPO hosts public hearings, workshops, and forums open to the public, while also utilizing social media tools such as Facebook and Twitter. Upon request, the MPO offers presentations to professional, civic, and social groups. Transportation safety information is also disseminated to the public using several media formats that include brochures and flyers, other printed communication (such as news articles, posters, press releases, and Trail guides), interactive internet sites, and public service announcements.

Bicycle and Pedestrian Safety Education Programs

Safety measures for pedestrians and bicyclists promote these alternative travel modes, a cleaner environment, and healthier lifestyles. In order to encourage more people to travel by foot or bicycle, safety considerations must be foremost. The MPO has several approaches to provide adequate safety for bicyclists and pedestrians, among them:

- Work with the Pinellas County School District to ensure safe access for students to schools.
- Educate trail users how to travel safely on trails throughout the county.

- Continue education programs so that bicyclists, pedestrians, and motorists better understand safety practices and laws that involve bicycle lanes, pedestrian travel and trail facilities.

- Provide crash data and other resources to Pinellas County, the municipalities, FDOT, and School District-affiliated committees to improve the safety of bicyclists and pedestrians.

- Identify high crash locations and implement strategies to reduce their number by working through the appropriate MPO advisory committees and implementing agencies.

- Distribute bicycle and pedestrian safety information on an ongoing basis at elementary, middle, and high schools, to media outlets, Chambers of Commerce, through social media and through other means, as necessary and appropriate.

- Organize and provide information on bicycle safety through local cycling associations and events.

- Incorporate safety information into park and trail guides.

As new bicycle lanes are added to roadways and the trail network continues to expand, the necessity for bicycle safety education increases. The MPO and its advisory committees provide support in various ways to address this growing need.

- *The MPO Bicycle Pedestrian Advisory Committee (BPAC)* – The BPAC's responsibilities include developing safety materials for various forms of distribution, media relations, review of bicycle-pedestrian roadway facility designs, and providing input to the MPO on other bicycle and pedestrian related matters.

- *Bicycle Month (Nationwide and Statewide)* – National Bicycle Month occurs each May and provides the county with opportunities to offer creative methods to promote bicycle safety and increase ridership. In addition, March has been declared Florida Bicycle Month. March is a cooler month for the State's residents and visitors. Cooler weather encourages people to consider bicycling as a recreational activity and as an alternative means of transportation as well. The MPO supports local National Bike Month activities.

- *Safety Fairs* – The Pinellas County MPO participates in numerous health and safety fairs that are aimed at promoting the well-being of both adults and children. The MPO uses portable displays to teach bicycle and pedestrian safety at events such as the National Trails Day, corporate fairs, and neighborhood association meetings. Event organizers are encouraged to request safety education information from the MPO for their events.

ENFORCEMENT

Enforcement may be considered education through experience, due to lack of knowledge, error, or careless behavior on the part of a driver, bicyclist, motorcyclist, or pedestrian. Being cited for a moving traffic violation or receiving a ticket is certainly learning the hard way.

The Pinellas County Sheriff's Office (PCSO), the Florida Highway Patrol (FHP), and 13 municipal law enforcement agencies are responsible for upholding and implementing State and local traffic laws. These law enforcement agencies cover 25 jurisdictions within Pinellas County. The MPO works with law enforcement by providing traffic crash data to assist them in identifying high crash locations that would benefit from the presence of officers. The MPO supports DUI checkpoints and wolf packs by providing traffic count and crash data. This data is utilized by law enforcement to select locations for impaired driving checkpoints. This effort will continue to be expanded

countywide to address the high impaired fatality rate.

Motorists, Bicyclists, Pedestrians and the Law

Everybody needs to follow the rules. In general, motorists, bicyclists, and pedestrians must share a common roadway. Four legislative acts in particular relate to motorists, bicyclists, and pedestrians: Motorists Move It; Move Over Law; Three-Foot Passing Law; and the Stop for Pedestrians Law.

Motorists Move It

Florida Statutes Sections 316.027, 316.061, 316.063, and 316.071 require motorists involved in a traffic incident or attending a disabled vehicle to relocate their vehicle off the roadway when the vehicle is moveable and there are no injuries. Moving damaged vehicles out of the way helps clear crash scenes quickly and improve safety conditions for the parties and responders involved. It also helps reduce incident-related traffic congestion and possible subsequent crashes.

Motorists Move Over

Enacted by the Florida Legislature in 2002, Florida Statute Section 316.126(1)(b) requires that drivers move over from stopped emergency vehicles wherever possible or to slow down to 20 mph below the speed limit or to five mph when the speed limit is 20 mph or less. This law was amended in 2013 to include all utility vehicles working in the road right-of-way.

Bicyclists on Roadways

Under Florida law, the bicycle is defined as a vehicle. Bicyclists therefore have the same rights and responsibilities on the roadway as motor vehicles. Unfortunately, problems can develop in traffic, especially when drivers are overtaking and passing bicyclists. Large mirrors that protrude from passing trucks and large sport utility vehicles (SUVs) can pose special hazards to bicycles. The draft from these vehicles can also draw riders into traffic lanes. In 2006 the Florida Legislature amended Florida Statute Sections 316.083(1). This law now stipulates that drivers give bicyclists (and other non-motorized vehicles) at least a three-foot clearance when passing.

Pedestrians in Crosswalks

Florida law requires motorists to stop for pedestrians in crosswalks. Previously, motorists had been required to only yield to pedestrians. The former Pedestrian Transportation Advisory Committee (PTAC) and the Citizens Advisory Committee (CAC) recommended stronger legislation, and in 2008 State law was amended to rule that motorists now must come to a complete stop before entering a crosswalk when facing a steady, red signal. They must also come to a complete stop where a traffic signal or signage is in place. Motorists must remain stopped to allow pedestrians with a permitted signal to cross.

Red Light Cameras – In 2010, a State law went into effect allowing municipalities to use red light cameras on all state-owned rights of way and fine drivers who run red lights in order to enhance safety. The MPO, in coordination with the local agencies, developed guidelines for the installation and use of red light cameras in Pinellas County. The MPO developed and maintains a map of the red light camera devices countywide on its website to provide camera location information to the public. The link is also available from other government agency websites.

EMERGENCY RESPONSE

Emergency Response (also called Emergency Medical Services) includes first responders from fire departments, law enforcement, and other agencies as well as medical personnel. In Pinellas County, taking action and providing assistance in emergency situations involves the following responsibilities.

• The MPO primarily coordinates hurricane evacuation with Pinellas County Emergency Management Services (EMS) through its work with emergency response duties, with the Tampa Bay Regional Planning Council (TBRPC) through the identification and maintenance of evacuation routes, and with local agencies.

• The Pinellas County Intelligent Transportation Systems (ITS) Committee consists of transportation planners, engineers, law enforcement, and emergency management staff. It addresses traffic congestion through ITS technological functions such as a detection system, traffic control and monitoring, information dissemination, and emergency preemption for fire vehicles.

In order to improve emergency dispatch, video-feeds from nearby ITS cameras are available to the 9-1-1 Center emergency vehicles and dispatcher. This provides information on the exact location of the crash to simplify responding vehicle approach and staging. This tool will continue to be expanded as new cameras are installed.

• MPO involvement also includes the Pinellas County Community Traffic Safety Team (CTST), one of its safety partners, of which it is an active member. The CTST Education/EMS Subcommittee disseminates traffic safety information to the public and works to lower response times to traffic crashes.

Project Safety Checklist & D7 Design Safety Prompt List

During the 2035 Long Range Transportation Plan (LRTP) update process, the MPO created a Project Safety Checklist, which is an assessment tool that is being used in project review stages to assist local jurisdictions and transportation agencies to seriously consider safety and security during those early processes of development. The checklist includes three (3) stages overall: preview considerations, implementation and post construction review of traffic plans and performance measures.

After adoption of the 2035 LRTP, the checklist was distributed to all local governments in Pinellas to encourage each to incorporate the checklist into their local transportation project review process. FDOT modified and expanded the checklist to facilitate its use throughout District 7. The resulting D7 Design Safety Prompt List (www.d7ctst.org/FDOT%20D7%20Design%20Safety%20Prompt%20List.pdf) is now used to ensure the consideration of all travel modes during design review.

RESOURCES THAT FACILITATE SAFETY PLANNING

The Pinellas MPO has several resources in place that help facilitate safety within the planning process. These include committees, safety partners, interagency cooperation, and programs and projects, including data collection and management. The MPO receives assistance in prioritizing policies and programs through its numerous advisory committees and other partners and agencies.

MPO Advisory Committees

The MPO advisory committees are generally made up of: professionals (technical, social service, law enforcement, County, state, and municipal agencies, etc.), policymakers (elected officials), and private citizens. The MPO Advisory Committees also provide the basis for the expertise and local coordination efforts countywide. In fact,

the committees provide the MPO with a key source of public input.

Committees include:

- Bicycle Pedestrian Advisory Committee (BPAC)
- Citizens' Advisory Committee (CAC)
- Intelligent Transportation System (ITS) Committee
- Pinellas Trail Security Task Force (PTSTF)
- School Transportation Safety Committee (STSC)
- Technical Coordinating Committee (TCC)

Other Partner Organizations

- Pinellas County Community Traffic Safety Team (CTST)
- Pinellas County School Board School Transportation and Enhanced Pedestrian Safety (STEPS) Committee

Crash Data: Monitoring, Collection and Reporting

The MPO and its partners require the availability of accurate and timely crash data in order to maintain, prioritize and monitor the transportation network. With 13 individual enforcement agencies investigating crashes throughout Pinellas County, countywide data was not readily available. The MPO has established and administers the countywide Crash Data Management System (CDMS).

The MPO CDMS is responsible for monitoring traffic crashes that occur on the Pinellas roadway network. Information found in reports is useful for planners and engineers in order to pinpoint intersection and roadway problems, prioritize roadway improvement projects, develop operational enhancements, indicate safety and enforcement needs, and complete traffic signal studies. The CDMS provides access to the data to many governmental agencies for road improvement projects and traffic signal warrant analysis. For traffic calming projects, the data is provided to determine if measures need to be taken to ensure neighborhood safety. Data provided by the CDMS is also useful to law enforcement in determining placement of officers at roadway locations experiencing high crashes, speeding, and alcohol/drug-related crashes.

The Pinellas MPO manages a web interface system to the crash data. The local governments and enforcement agencies access the system through a secured log on process in order to evaluate crash events. The system does have a 60-day delay in releasing data, due to limits established by State Statute. The crash data provided are the best and most up to date available. This system greatly enhances the ability of the MPO's partners in safety to provide a safer, more effective transportation network.

Enhanced System Monitoring Program

The MPO manages an Enhanced Systems Monitoring Program (ESMP). The MPO performs traffic counts and coordinates the data collection from other agencies on functionally classified roadways so that traffic congestion can be evaluated. Count data is collected on over 200 roadway segments annually. A map of the count data is

produced annually for the public and is one of the most downloaded maps on the MPO's website.

Roadways are rated by a performance measure known as level of service (LOS). This quantitative measure is expressed in letter grades ranging from "A" through "F". Annually, the MPO produces the Level of Service Report, identifying locations where roadway capacities are being exceeded by traffic volume. This data, and the resulting analysis, are used by the MPO and local governments to assess the functionality and safety of intersections and roadways.

FDOT's Traffic Incident Management (TIM)

The TIM Team includes representatives from the FDOT, the MPO, law enforcement, fire departments, emergency medical personnel and private sector transportation stakeholders. TIM involves reducing the time it takes to clear traffic incidents and restore roadway capacity, most of the focus is on our regional and major road network. When vehicle delays are lessened, safety is enhanced, with a significant decline in the occurrence of secondary accidents. The overall goal is to improve detection, verification, response and removal methods. Also to improve the time it takes to clear a road a program called Rapid Incident Scene Clearance (RISC) was developed and is used for major incidents on the interstate system. It is a program of pre-contract services that facilitates the incident clearance goals along with the Road Ranger Program.

Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) applications have been implemented on many Pinellas County roads. ITS technologies augment safety in a number of ways. Computerized traffic signal systems automatically adjust in order to maximize traffic flow and permit emergency vehicles to quickly pass through intersections with less risk. Cameras and detectors identify congested areas so that adjustments to signals can be made to ease that congestion. Electronic message signs on freeways and highways alert users who are approaching an incident of the conditions ahead, and can recommend alternative routes.

Transportation Studies/Safety Audits

Periodically, studies are conducted by the MPO to provide information and develop criteria regarding the performance and safety of the transportation system. This involves assessing roadways, public transportation, and bicycle and pedestrian facilities. Studies include the identification of capital improvement needs, the evaluation of specific findings, the anticipated benefit of proposed solutions, and cost estimates of those solutions. These studies may also lead to the development of performance standards to measure the effectiveness of transportation programs. Road Safety Audits (RSAs) are conducted to identify safety improvements to counteract high crash frequencies recorded at specific locations. Operational and safety audits can provide a detailed review of the operating conditions as well as corrections or enhancements needed to improve the functionality of the area, roadway or intersection. The recommendations from these audits are incorporated into other transportation projects as much as possible.

Congestion Management Process (CMP)

The transportation system is continually evaluated against performance measures identified in the MPO's Congestion Management Process (CMP). This process includes methodology used to assess congestion and safety. Congestion is determined by measuring the number of hours in an average day where traffic demand exceeds roadway capacity. Safety is determined by analyzing crash data in relation to individual sections of roadway.

Prioritization is a process that identifies where existing dollars should be spent in order to achieve the greatest good. For roadways, the following aspects are considered: existing traffic congestion, regional connectivity, and

safety issues.

Numerical scores for various aspects of effectiveness are applied to transportation facilities. These scores are then weighted according to the goals identified in the Long Range Transportation Plan (LRTP).

Mobility and Safety - "SWEEP"

The MPO's Congestion Management Plan's SWEEP analysis provides the opportunity to identify, evaluate and prioritize congested corridors and locations throughout the County for not only inclusion in the CMP, but also the MPO's TIP and LRTP. The congested roadways and intersections are identified based on local input, including a review of county and municipal roadway and intersection projects, freight hot spots, top crash locations, top congested SIS and non-SIS roadways, and the enhanced corridors recognized in the LRTP. Enhancements may include bicycle and pedestrian features, intersection and safety improvements, or aesthetic improvements.

- *Screen level of service*, traffic count and duration of congestion data, freight "hot spot" data and other State of the System (SOS) Report data; data from FDOT, PSTA and other transportation partners; and local input to determine which segments may be experiencing severe congestion, based on roadway performance objectives.

- *Weigh road performance data* and safety/crash data for selected facilities/corridors/segments to achieve a single, combined score (rank) for each, based on a 60:40 (congestion: crash) ratio.

- *Evaluate segments* based on the highest combined raw scores and consideration of neighborhood and environmental impacts, economic development needs, and other local input.

- *Eliminate locations,* with MPO advisory committee input, that do not meet established criteria or are already programmed in the TIP for improvement.

- *Prioritize remaining locations* for programming in the TIP or LRTP or for implementation by local governments.

SPECIAL PROJECTS & REPORTS

Pedestrian Safety Action Plan (PSAP)

The Pinellas County Pedestrian Safety Action Plan (PSAP) was adopted by the Pinellas County MPO on September 9, 2009. This countywide document was developed with funding and assistance from the Federal Highway Administration (FHWA). The purpose of the PSAP is to help local government agencies focus on the pedestrian crash issues specific to their jurisdiction, provide a set of proven strategies for consideration, and help practitioners understand the tools and organizational changes necessary to implement these strategies. Some of the recommendations include installing mid-block crosswalks, making signing improvements to intersections and focusing future enhancements along major transit routes. The MPO will continue to work with its partners to implement the recommendations. The MPO will soon be updating the PSAP, to incorporate the most up to date data and other developments over the past five years.

Bi**cycle Pedestrian Crash Data Report**

The MPO conducted an analysis of the bicycle and pedestrian crashes within the county to identify issues and trends affecting bicycle and pedestrian safety as well as countermeasures aimed at reducing crash incidents. This report is a component of the MPO Bicycle and Pedestrian Master Plan. This report includes an examination of

crash data from a countywide perspective as well as on corridors with a high incidence of bicycle and pedestrian crashes. The report provided a General Summary of Counter Measures that should be considered to address issues related to bicycle and pedestrian safety. The MPO will work with the BPAC and TCC to implement these counter measures, as appropriate. A summary of the general countermeasures is included on the following page.

General Summary of Counter Measures

Challenge	Counter Measures
Bicycle	
Riding against traffic on the sidewalk	Horizontal signage at driveways/Education (targeted at the bicyclist, but message appropriate for motorists)
Speeds and traffic volumes too high for many bicyclists to ride on the roadway so many bicyclists choose to ride on the sidewalk	Secondary bike network on parallel low-volume, low-speed streets
Site lines obstructed	Require and enforce maintenance of landscaping and signage so as not to obstruct line-of-sight
Poor lighting conditions	Improve conditions per PPM standards and FHWA *Informational Report on Lighting Design for Midblock Crosswalks*
Right-hook bicycle crashes	Signage at intersections alerting motorists to presence of the bicyclists
Pedestrian	
Crossing between signals, mid-block	Pedestrian Origin and Destination studies, particularly at high-volume transit stops to identify opportunities for enhanced mid-block crossings; Installation of raised medians/pedestrian refuge
Crashes when vehicle turns right on a green light and doesn't see pedestrian in crosswalk	Installation of LPI signal timing to give pedestrian a head start when crossing the street
Crashes when vehicle turns right on a red light and doesn't see pedestrian in crosswalk	NO RIGHT TURN ON RED blank out sign activated when pedestrian requests WALK signal
Poor lighting conditions	Improve conditions per PPM standards and FHWA *Informational Report on Lighting Design for Midblock Crosswalks*
Crossing against signals	Education, enforcement
Sidewalks and curb ramps may not be in compliance	Compliance with Florida Greenbook, the AASHTO Pedestrian Facility Design, Americans with Disabilities Act Accessibility Guidelines (ADAAG), and Public Right-of-Way Accessibility Guidelines (PROWAG)

SOURCE: Pinellas County MPO Bicycle and Pedestrian Master Plan, Crash Data Report, 2012.

SAFETY AGENCY PARTNERS

National Highway Traffic Safety Administration (NHTSA)

The National Highway Traffic Safety Administration (NHTSA, www.nhtsa.gov/) was established by the Highway Safety Act of 1970. NHTSA is dedicated to achieving the highest standards of excellence in motor vehicle and highway safety, offering safety material, technical assistance, traffic safety programs and services, and administers safety grants.

Federal Highway Administration (FHWA)

The Federal Highway Administration (FHWA, www.fhwa.dot.gov) is an agency within the U.S. Department of Transportation created in 1966 to support State and local governments in the design, construction, and maintenance of the Nation's highway system.

Florida Department of Highway Safety and Motor Vehicles (DHSMV)

The Florida Department of Highway Safety and Motor Vehicles (DHSMV, www.flhsmv.gov) is responsible for ensuring the safety of our highways and providing quality service to motorists. Services include driver licensing, vehicle registration, improving and enhancing on-line assistance to the public, and other customer services.

Among other programs, DHSMV has promoted several safety media campaigns (www.flhsmv.gov/SafetyTips):

- Move Over – Staying Alive on I-75
- Safety Belt - Buckle-Up Florida
- Child Safety
- Share the Road
- Motorcycle Safety
- Safety First

Florida Department of Transportation (FDOT)

The Florida Department of Transportation (FDOT, www.dot.state.fl.us) is responsible for the planning and development of a safe, viable, and balanced transportation system. Florida's multi-modal transportation system includes State and non-state highways, bridges, urban and rural fixed-route transit systems, 143-miles of state-owned rail corridors, seaports, waterways, airports, and spaceports. The FDOT Safety Office strives to improve the safety of users of Florida's highway system, and oversees Safe Routes to School (SRTS), federal highway safety grants, crash data collection, a bicycle and pedestrian program, including the Pedestrian & Bicycling Safety Resource Center (www.pedbikesrc.ce.ufl.edu) and school crossing guard training.

Safety programs and campaigns include Walk Wise; Bike Smart; Alert Today-Alive Tomorrow; Safety Doesn't Happen by Accident; Bicycle/Pedestrian Safety; Child Safety; School Bus Safety; Distracted Driving, Drowsy, Drunk or Drugged Driving; Motorcycle Safety; Speed Prevention; Older Drivers & Teen Safety; No Texting While Driving.

SUMMARY AND CONCLUSION

Historically, the emphasis in transportation planning has been the expedient movement of vehicular traffic. However, there has been a shift from focusing mainly on motorized traffic to also concentrating on pedestrian and bicycle travel and related safety concerns. This is due in part to federal legislation enacted from the early 1990s and culminating with MAP-21, the current federal surface transportation legislation. Such legislation has designated funding for projects to make transportation systems more "user friendly" for non-motorized traffic and "environmentally friendly" for all.

The MPO works with local governments to develop and implement strategies to operate an efficient transportation network. The primary responsibility of the MPO is planning of an affordable, safe, and effective transportation system to move people and goods. The strategies and measures outlined in this report aim to help fulfill that worthy objective. In the end, the Pinellas County MPO, Pinellas County, the municipalities, and residents countywide all form one community. This community deserves transportation that promotes the well-being of its citizens along myriad paths of travel in all walks of life.