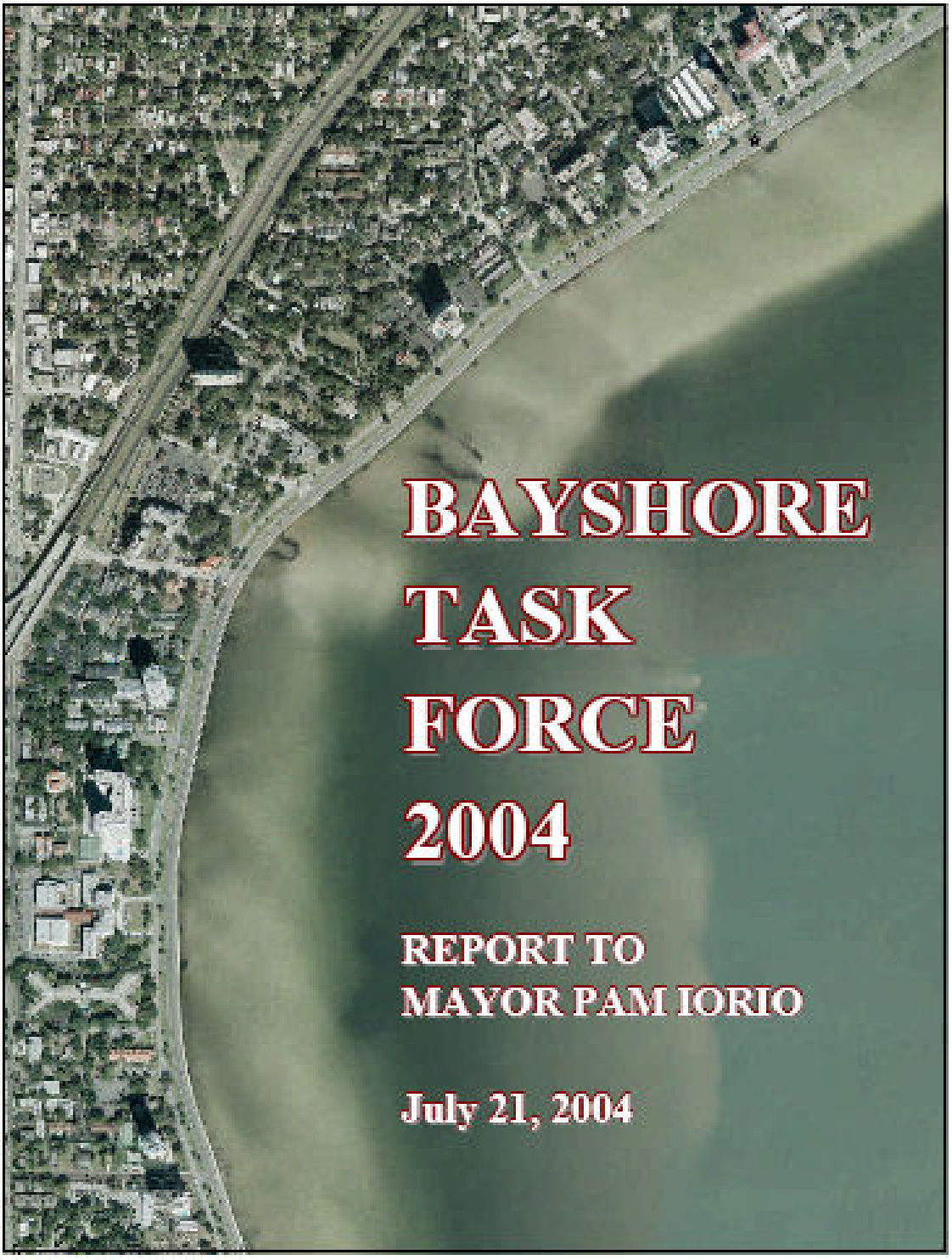


BAYSHORE TASK FORCE 2004

REPORT TO MAYOR PAM IORIO

July 21, 2004

TABLE OF CONTENTS

Appendices

Dedication

"This report is dedicated to Melissa MacKenzie and to the thousands of American pedestrians who are killed each year as a result of crashes with motor vehicles."

BAYSHORE TASK FORCE 2004

Task Force Members

Stephen W. Daignault, P.E., Chairman

John Dingfelder, City Council Member, District 4

Shannon Edge, Director, Neighborhood & Community Relations

Gene Wells, President, Ballast Point Neighborhood Association

Sue Lyon, President, Bayshore Beautiful Homeowners Association

Vicki Pollyea, President, Bayshore Gardens Neighborhood Association

Jeanne Holton-Carufel, President, Historic Hyde Park Neighborhood Association

Geoffrey Meyer, President, Hyde Park Preservation, Inc.

Anna Thomas, Representative, Hyde Park Preservation, Inc.

John Weiss, President, Virginia Park Neighborhood Association

Laura McGowan, Citizen at Large

Capt. John Bennett, City of Tampa Police Department

Sgt. Robert DuBose/Cpl. Karl Anderson, City of Tampa Police Department

Tony Rodriguez, Representative, MacDill Air Force Base

Lucie Ayer, Executive Director, Hillsborough County Metropolitan Planning Organization

Kathy Castor, County Commissioner, Hillsborough County

Staff Support

Dolores Fernandez, Executive Aide
Administrator of Public Works and Utilities Services

Mahdi Mansour, P.E., Chief Transportation Planning Engineer, Public Works

Debbie Herrington, P.E., City Traffic Engineer, Public Works

Introduction

The City of Tampa is a wonderful place to live, work, visit and raise a family. Growth has been steady at about 3-4% per year and in the 2000 Census the City's population was approximately 330,000. The City features many unique buildings, cultural areas, sports facilities, and a wide range of recreational activities. The Bayshore area is a unique part of the City. It lines the west side of Hillsborough Bay and provides outstanding views of the Bay, downtown Tampa and Davis Island. The promenade from Gandy Boulevard to the Platt Street Bridge is four and one-half miles long and includes: a seawall with balustrades; an extra wide sidewalk used for walking, jogging, and roller-blading; a narrow grassed area also used for jogging and dog walking; a bike lane (on the east side in the northbound direction); two (and in some cases closer to downtown – three) lanes for motor vehicles in the northbound and southbound directions. The four lane sections are separated by wide grassy medians at the south end but the six lane sections are separated only by narrow concrete medians north of Rome. Just before reaching the Platt Street Bridge, the median goes away altogether. Along the west side of the Bayshore are magnificent single family homes, high rise condominiums, schools, churches, clubs, a restaurant, offices and historic neighborhoods. It is the openness, great views and the four and one-half miles of wide, uninterrupted sidewalks and great vistas that attract walkers, joggers, strollers, bikers, rollerbladers, and sightseers to the area. This unique feature is a significant landmark in the City of Tampa and is utilized by citizens from all over the City as well as visitors and guests.

While the four and one-half miles of uninterrupted sidewalk are a draw for pedestrians and non-motorized vehicles, the corridor is also a draw for motorized vehicles. Bayshore Boulevard offers uninterrupted travel from Gandy Boulevard to Franklin Street when traveling northbound (toward downtown) and contains only two traffic lights southbound between Platt Street and Gandy Boulevard (one light at Howard Avenue and Bayshore Boulevard and one light at Bay to Bay Boulevard and Bayshore Boulevard).

Bayshore Boulevard continues South of Gandy Boulevard where it changes significantly. It becomes a two-lane road through a predominantly residential area. The boulevard ends at the Bayshore Gate of MacDill Air Force Base. While the major focus of this Task Force is the area of Bayshore Boulevard from Platt Street to Gandy Boulevard, we have also addressed some issues on Bayshore Boulevard south of Gandy Boulevard in this report.

The Bayshore also lines the eastern boundary of the Interbay Peninsula. The Peninsula has MacDill Air Force Base at its southern extremity and is generally bounded by Kennedy Boulevard to the north. There are relatively-few main north-south arterial roadways serving the Peninsula. They include: Westshore Boulevard (2 lanes), Dale Mabry Highway (4 lanes), MacDill Avenue (2 lanes) and Bayshore Boulevard (4 lanes). Additionally, the Crosstown Expressway runs generally north and south through the area and is a four lane divided expressway toll facility.

At any time of the day, there are a number of pedestrians using the promenade on Bayshore Boulevard. Early joggers from adjacent neighborhoods, those who drive to Bayshore to enjoy the facilities and park at a nearby Bay to Bay Boulevard parking lot, and athletic club members as they jog from downtown along Bayshore Boulevard. In the evenings, joggers and couples frequent the promenade strolling or just enjoying the view. All of these people must cross at least four lanes of traffic (two lanes of traffic that are affected by a traffic light and two lanes of uninterrupted flow). The elderly, and those handicapped or pushing children's strollers must wait for significant gaps in traffic or alternatively make a mad dash to get to the wide sidewalk, waterside of Bayshore Boulevard.

Bayshore Boulevard has a similar draw for motor vehicle operators. Those who live in South Tampa find it a convenient, uninterrupted route to downtown and beyond. Those who are bound for MacDill Air Force Base find Bayshore Boulevard to be a quick and cheap alternative to the Crosstown Expressway.

Unfortunately, the high pedestrian utilization of the Bayshore conflicts with the significant motor vehicle use of this 4.5-mile stretch of road without signalization. These conflicts have resulted in fatal crashes, and present the opportunity for more such crashes. It is because of such recent fatal crashes that the Mayor of the City of Tampa, the Honorable Pam Iorio, has appointed this Task Force. (See Appendix A).

BAYSHORE TASK FORCE 2004

Mission Statement

"Bayshore Boulevard is the "Signature Multi-use Boulevard" for the City of Tampa which includes a linear park. In order to promote safe usage by all, we will examine all issues and make recommendations to the Mayor and other appropriate agencies and government bodies."

BAYSHORE TASK FORCE 2004

Goals

1. Examine all of the entrances and exits (the ins and outs) from Bayshore Boulevard.

2. Pursue traffic volume management, with the objective of traffic calming.

3. As we evaluate alternative solutions, plan for growth (increased population and use of Bayshore Boulevard).

4. Plan for the continued maintenance of Bayshore as a Boulevard and as a Park.

5. Examine traffic patterns to ensure safety for vehicles and pedestrians.

6. Reduce crashes.

7. Consider the placement of, and interaction between, vehicle, pedestrian and recreational uses of the corridor.

8. Pursue a change in the current driving and pedestrian culture to bring about an awareness and consideration for other users, through a public awareness campaign.

9. Coordinate the use of signage, traffic control devices, maintenance features and lighting.

10. Estimate the cost of recommended solutions and when possible identify funding sources.

11. Examine the functional design of Bayshore Boulevard including flooding problems.

Information Gathering Process

Mayor Iorio appointed the Bayshore Task Force 2004 on February 9, 2004. The Task Force first met on February 13, 2004. The first meeting was primarily organizational in nature and the members resolved to meet every two weeks thereafter. The first order of business was to collect and consider as many possible thoughts and ideas as we could. An input location was established on the City's web site. All the members were asked to collect thoughts/ideas from their respective citizen groups. Input was received by e-mail, phone, letter and facsimile transmittal. Signs were posted advising pedestrians using Bayshore Boulevard about where/how to provide input, and citizens' input session was held on Tuesday, April 13, 2004. In addition to collecting as much input as possible for consideration, the Task Force heard from experts and received more information about possible road calming schemes and devices. The Task Force received formal presentations from:

1. Ken Sides, City of Clearwater, Traffic Calming Engineer
2. Elise Naufel, Channel 8 News (Safety Pilot Programs)
3. Jeanette Rouse of FDOT (Community Traffic Safety Team)
4. Carlos Martes, Engineer II, Public Works Department
5. Ron Phillips, Engineer III, Public Works Department
6. Debbie Herrington, City Traffic Engineer, Public Works Department
7. Mary Helen Duke, Greenway Trails Coordinator, City of Tampa Parks & Recreation Department
8. Capt. John Bennett and Cpl. Karl Anderson, City of Tampa Police Department
9. Mahdi Mansour, P.E., Transportation Planning, Public Works Department.

The Task Force received input from many sources, evaluated that input and discussed the many problems and solutions occurring on Bayshore Boulevard. Hundreds of e-mails, fax transmittals, telephone calls and letters were received. (See Appendix B.) The Task Force then evaluated the entire Bayshore Boulevard roadway by examining each section of road and each intersection. In going intersection by intersection, all of the known and anticipated problems were discussed.

Throughout the Bayshore Task Force meeting process, the police department representatives provided data and analysis regarding driving conditions and citations along the Bayshore. Appendix D is a final compilation of that data.

The Bayshore

The Task Force developed four major concepts for improving pedestrian safety along the Bayshore:

1) The Bayshore is a Park. There should be a Park feeling when you enter the area whether as a pedestrian or a motor vehicle operator.

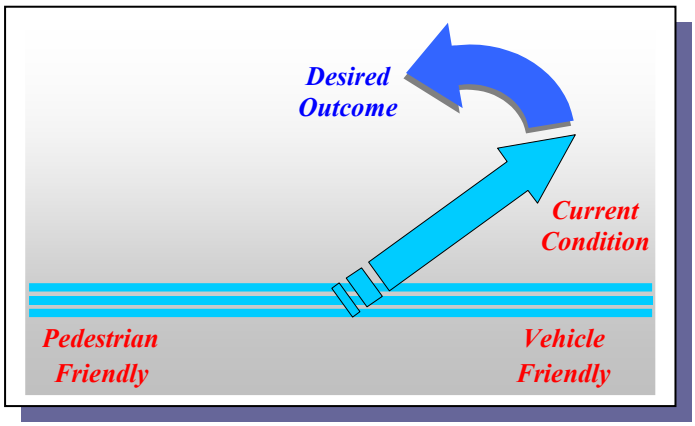
2) In considering the flow of pedestrians to the Bayshore Park, there needs to be a way to bring them to safe crossings. Safe pedestrian crossings need to be established.

3) To the extent possible, encourage traffic traveling from or through South Tampa to or toward downtown, to utilize the Crosstown Expressway.

4) All of the physical and enforcement changes that could possibly be made on the Bayshore will not prevent motor vehicle operators from speeding and/or violating traffic rules and laws. There must be a significant and sustained public awareness program, which will cause the local area motor vehicle operators to follow traffic signs, laws and rules for their benefit and the benefit of the general population.

These concepts have driven the recommendations provided in this report. Items 1, 2 and 3 will be addressed in this section and Item 4 will be addressed separately in the following section.

The Bayshore must have the feel of a Park not an expressway. Entry signage that emphasizes the Park boundaries, Park-like features and settings, slower speeds, enforcement of the "no trucks" law and changing from six lanes to four lanes, with wider medians, will all contribute to a more Park-like environment along the Bayshore. Bayshore is currently vehicle friendly. It needs to become more pedestrian friendly.



Bayshore Boulevard in its current configuration does not provide a safe crossing opportunity for pedestrians. Although there are signals at Bay to Bay Boulevard and Howard Avenue, they only effect traffic entering Bayshore Boulevard and traffic traveling southbound on Bayshore Boulevard. Traffic flows continuously in the northbound direction from Gandy Boulevard to the light at Platt and Franklin Streets. The lights at Howard Avenue and Bay to Bay Boulevard are continuous green arrows in the northbound direction. This allows a continuous flow of northbound traffic, which must be negotiated by pedestrians wishing to gain access to the Bayshore Park Area.

The Park, with its views and 4.5 mile uninterrupted sidewalk, is the main attraction for pedestrians along Bayshore Boulevard. The Park is located along the east side of the road but has no parking and no established pedestrian crossings for access. As a result, pedestrians wanting to walk, jog, stroll, roller blade or bike along the Park's sidewalk

choose to cross wherever it is most convenient for them. Essentially, joggers, walkers, parents with baby strollers, and others, cross all along Bayshore Boulevard, over and back, through four to six lanes of traffic with at least two lanes that never stop. To make matters worse, there are portions of Bayshore Boulevard where the medians are narrow concrete strips, which provide little in the way of a safe haven for those crossing Bayshore Boulevard. This occurs where Bayshore Boulevard is six lanes where the attempt to cross is more arduous. This six lane segment currently provides no stacking lanes for vehicular traffic turning left, and is located adjacent to residential areas where significant numbers of residents choose to enjoy the features and benefits of the Park. Whether living within walking distance of the Bayshore Park or living further away and parking near it to access the Park, essentially all of the pedestrians using the Park must cross Bayshore Boulevard twice (over and back) to enjoy a walk or a morning jog.

In order to provide reasonable access to the Bayshore Park area, the Task Force determined that there needs to be locations where the traffic did stop in both directions to allow pedestrians to cross Bayshore Boulevard. Changing the current, always-green, arrows for the northbound Bayshore Boulevard traffic at Bay to Bay Boulevard and Howard Avenue is believed to be a relatively quick and easy first step. On a broader conceptual scale, it is believed that something had to be done to facilitate pedestrian travel to the signalized intersections where traffic would be stopped for pedestrian crossing. There are some segments of Bayshore Boulevard that have sidewalks on the west side of the road; however, the sidewalks are not continuous. Continuous sidewalks on the west side of Bayshore Boulevard will provide pedestrian access to safer crossing

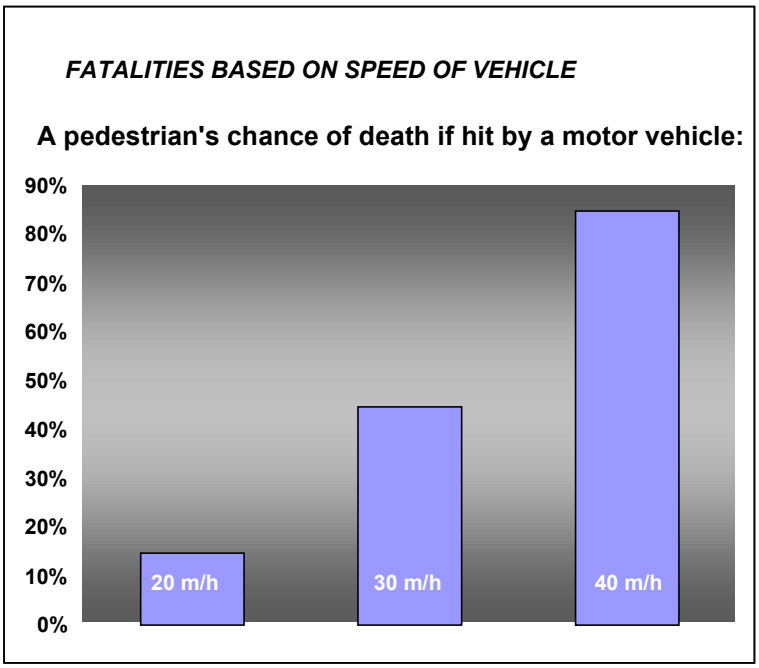
areas at signalized intersections. Additionally, while we cannot force pedestrians to cross only at the signalized intersections, we believe the full signalization at Bay to Bay Boulevard and Howard Avenue will create some gaps in traffic for pedestrians crossing Bayshore Boulevard. Additionally, reducing the six lane segment to four lanes with a wider median and left turn stacking lanes will provide a safe haven for pedestrians and shorten the distances they must cross to access the Bayshore Park.

Utilization of Bayshore Boulevard (by traffic originating in Pinellas County and crossing Gandy bridge, by traffic originating in South Tampa and by traffic originating in Brandon – East Hillsborough County) in lieu of utilizing the Crosstown Expressway, was brought up and discussed many times. Frequently, this discussion centered around military and civilian personnel headed for MacDill Air Force Base. The thought being, if that traffic utilized the Crosstown, there would be less on Bayshore Boulevard. The possibility of providing funding for those military and civilians to cover the one-dollar charge at the downtown tollbooth was discussed, but no clear source of such funding was determined.

It is recognized that the MacDill Air Force Base bound traffic goes against the typical rush hour flows of traffic (for example: during the morning rush hour, traffic heads toward downtown Tampa – northbound while MacDill bound traffic is southbound). Also, MacDill Air Force Base work hours require that people report to work by 7:30 a.m. and end work at 3:30 p.m. This means MacDill Air Force Base traffic travels Bayshore Boulevard earlier than the majority of other rush hour traffic.

Nevertheless, encouraging any and all traffic transiting south Tampa, to or from downtown, to utilize the Crosstown would greatly reduce the traffic on Bayshore Boulevard. The Task Force recognizes that tolls must be collected to cover the capital and operating expenses of the Crosstown. We believe that a dialogue should be started with the Tampa-Hillsborough Expressway Authority and local governments to find a way to eliminate the tollbooth at the south end of the Crosstown or to find other sources of funding to cover debt and operating costs. A one-dollar charge to go from downtown to South Tampa is a significant deterrent from using the Crosstown when Bayshore Boulevard will get you there for free. In the mean time, we should encourage the use of the Crosstown Expressway through signage and making access easier.

Perhaps one of the most significant recommendations made by the Task Force is the reduction of the speed limit from 40 mph to 35 mph. This is intended to be consistent with establishing a park environment. According to the Metropolitan Planning Organization's Pedestrian Crash Analysis 2001 (See Appendix C.) report, at 40 mph, a pedestrian's chance of death, if hit by a motor vehicle, is over 80%, if struck by a motor vehicle traveling 30 mph the pedestrian's chance of



death is below 50%. Hence, a reduction in speed to 35 mph would significantly reduce the chance of death to a pedestrian involved in a crash.

A reduction in speed from 40 mph to 35 mph would increase the travel time for the entire length of the Bayshore (4.5 miles from Gandy Boulevard to Platt Street) by 0.96 minutes. We believe that the significant reduction in chance of death to a pedestrian involved in a crash at 35 mph versus 40 mph more than offsets the 0.96 minute increase in motor vehicle travel time.

This reduction in speed will work well, if supported by regular and intermittent speed enforcement and a public awareness campaign.

The following pages list our recommendations regarding pedestrian safety improvement on the Bayshore.

The Bayshore Recommendations

1. Place sidewalks on the west side of Bayshore Boulevard to connect to existing sidewalks and to provide a pedestrian collection to signalized intersections.

2. At Bay to Bay Boulevard and Howard Avenue, change the northbound signal lights (which are currently always-green arrows) to traditional signals. Provide associated pedestrian crosswalks using brick pavers or other material that sets the crossing section apart from the roadway.

3. At the north end, where Bayshore Boulevard is six lanes, reduce to four lanes and add north and southbound bicycle lanes. (Pursue grant funding for this purpose).

4. Place a bicycle lane on the southbound lane, to the extent possible.

5. In coordination with Item 3 above, create widened medians and stacking lanes for left turns, to the extent possible.

6. Add a complete, red-yellow-green, traffic signal for northbound traffic at the Bayshore Boulevard and Platt Street intersection. Provide pedestrian crosswalks throughout the intersection.

7. Provide signage along Bayshore to indicate Crosstown entrances at Euclid Avenue and Bay to Bay Boulevard.

8. Provide signage at all entrances to Bayshore Boulevard, indicating “No Trucks”.

9. Swann and Magnolia
    a. Have City Transportation Division study for possible improvements and further discussions with the neighborhoods. Improve signage, running possible

modification plans by Fire Department. Look at flooding issues as well. Swann/Magnolia/Bayshore – modify radius at Magnolia, install a Stop sign at Swann and modify stop bar at Swann.

b. Fully signalize all three roads (once it is a four-lane section).

10. Install a median from just north of Beach Place to Platt Street. Make Hyde Park Place right-in/right-out, marina parking lot right-in/right-out and One Bayshore right-in/right-out.

11. Provide a northbound left turn lane on to Jules Verne Street from Bayshore Boulevard. (Adjust Davis Islands exit ramp accordingly, to include a full stop and a pedestrian crossing at the full stop). Remove parking spaces as necessary at the Marina.

12. Close the median-cut at Dakota Avenue (too close to the Rome intersection).

13. Initiate a serious Public Awareness Campaign to address the issues of speeding, with emphasis on driver, pedestrian, and bicycle safety, obeying traffic signs, signals and rules with the ultimate goal of making Bayshore Boulevard and all of the Tampa Bay Area safe.

14. Complete the sidewalk along the south side of the road on Bay to Bay Boulevard: from MacDill Avenue to Bayshore Boulevard. Widen the sidewalk on the north side of Bay to Bay Boulevard between Bayshore Boulevard and MacDill Avenue. Add a "no right on red" sign for Bay to Bay Boulevard to southbound Bayshore Boulevard.

15. Change the speed limit on Bayshore Boulevard to 35 mph. This would move traffic to the Crosstown. Launch as part of a Campaign of Law Enforcement. Bayshore Boulevard is approximately 4.5 miles long: Time to traverse at 40 mph is 6.75

minutes; while the time at 35 mph is 7.71 minutes. The difference is 0.96 minute, less than a minute's difference.

16. Evaluate the median cut at the Inman, Brevard, Bayshore intersection for safety hazards. Determine the feasibility of median closure and the impact on traffic patterns of the surrounding streets.

17. Provide improved signage for the Davis Islands, Tampa General Hospital on ramp to include an earlier notice of the ramp.

18. Study various alternatives for improved vehicle and pedestrian use at Rome Avenue.

19. Extend the left-turn lane from northbound Bayshore Boulevard onto Rome Avenue.

20. Explore the timing of the traffic light and examine vehicle counts at the intersection of Bay to Bay Boulevard and Bayshore Boulevard in order to evaluate cut-through traffic and traffic back ups during the afternoon rush hour.

21. Open the Northwest corner of the intersection at El Prado for better visibility to the North. Evaluate in conjunction with sidewalk installation to improve visibility to the North.

22. Study the area of Bayshore Boulevard, south of Bay to Bay Boulevard for possible ways to improve pedestrian safety. This is a long stretch without a signal to stop traffic for pedestrians. This area typically has higher speeds since it is long, straight and has no interruptions. The section also includes the roadway to an entrance for the Crosstown Expressway (at Euclid Avenue). The neighborhoods have expressed great desire not to have a signal at Bayshore Boulevard and Euclid Avenue. The Task Force recommends this section to be studied for possible safety improvements.

23. Recommend the installation of sidewalks and crosswalks at the Bayshore Boulevard and Gandy Boulevard intersection and stopping the free flow of southbound traffic onto Gandy Boulevard.

24. Change the speed limit to 30 mph on Bayshore Boulevard South of Gandy Boulevard; and change Interbay Boulevard South of Gandy Boulevard to 25 mph.

25. Install sidewalk on the west side of Bayshore Boulevard, from Gandy Boulevard south to Interbay.

26. Straighten out the curb on the east side of the northbound lane at the intersection of Bayshore Boulevard and Gandy Boulevard (Southeast corner of the intersection).

27. Examine the intersection for improved pedestrian and vehicular crossing safety at the intersection of Bayshore Boulevard and Interbay Boulevard (south of the "Y").

28. Provide a multi-purpose path along Bayshore Boulevard in support of the adopted Greenways and Trails Master Plan.

29. Establish a pedestrian crossing standard to be used throughout the City. Install new standard crosswalks when road or utility work is done or when a development occurs in the area (have developers fund the crosswalks at the new standard level).

30. Encourage traffic travelling eastbound from Pinellas County to get on the Crosstown Expressway through proper signage.

31. Provide and install attractive "Welcome to Bayshore Boulevard " signage at both ends of Bayshore (Gandy Boulevard and Platt Street) and at Bay to Bay Boulevard and Howard Avenue.

32. Work with neighborhoods to develop a Bayshore Boulevard area sign standard and utilize throughout.

33. Continue with a standing Bayshore Task Force to review progress of the recommendations and re-evaluate if necessary.

34. Have the Parks and Recreation and Public Works Departments look into how the planting of low hedges and palms can provide traffic calming and aid pedestrians. Include a representative of the Crime Prevention Through Environmental Design (CPTED) unit in reviewing this due to safety issues involved in creating low foliage. Evaluate landscaping from Rome Avenue south to Gandy Boulevard.

35. Consider a no right-turn on red on Bayshore Boulevard from Bay to Bay Boulevard, as the intersection of Bay to Bay Boulevard and Bayshore Boulevard backs-up during afternoon rush hour. As Patriot Park is located at that intersection, pedestrians are present, attempting to cross, and are in danger of being involved in a collision.

36. Recommend a letter (signed by the Mayor) to the Tampa-Hillsborough County Expressway Authority eliminating charges for the south end of the Crosstown Expressway (Gandy Boulevard to downtown). This section should be paid for soon and, when paid, the fee should be eliminated. The recent increase in fees at the south end tollbooth causes more traffic to use Bayshore Boulevard. South end users should not contribute to the double deck section that does not connect to the south end of the Crosstown.

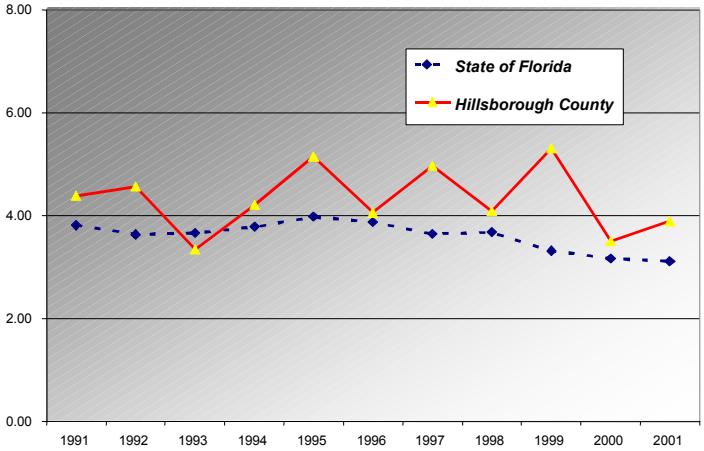
37. Recommend supporting or initiating legislation to change state law to allow the use of "photo-cop" type operations in Florida.

Please refer to Appendix 'E' for location maps and further details.

Public Awareness

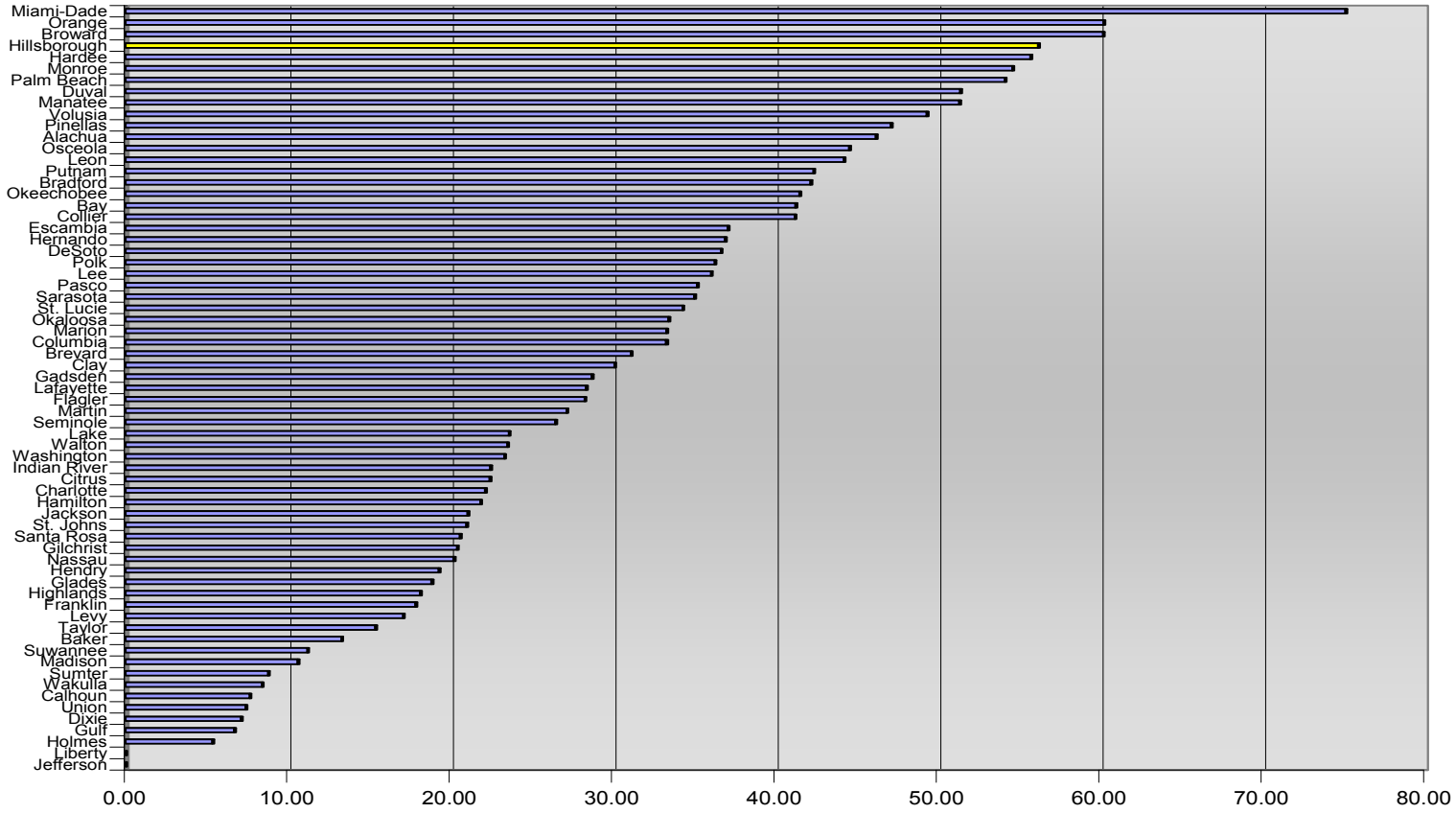
In the course of deliberations it became obvious to the Task Force that in addition to traffic calming and control devices on the Bayshore, something much more was needed to cause drivers to obey traffic rules. Briefings from Ken Sides, City of Clearwater, Traffic Calming Engineer, and the Metropolitan Planning Organization's staff revealed that Hillsborough County and the City of Tampa ranked poorly with regard to pedestrian and bicycle safety when compared to other parts of the state and country. A 1997 publication entitled "Mean Streets: Pedestrian Safety and Reform of the Nations Transportation Law" makes the following statement: *"The most dangerous metropolitan areas for walkers tend to be newer, sprawling, southern and western communities, where transportation systems are most biased toward automobiles at the expense of other transportation options. Among large metropolitan areas, (those with a population of one million or more) the five most dangerous communities in which to walk are Ft. Lauderdale, FL, Miami, FL, Atlanta, GA, Tampa-St. Petersburg-Clearwater, FL and Dallas, TX."* Oddly enough, the safest walking communities are Pittsburgh, Milwaukee, Boston and New York City, where there are significantly more walkers. In these locations, walking is a more recognized means of transportation and, therefore, traffic planning, rules and customs are more in favor of the pedestrian than they are in the southern and western areas.

Separate from the "Mean Streets" evaluation, the Metropolitan Planning Organization (MPO) staff has collected pedestrian crash information from around the State of Florida. In a recent presentation to the MPO Board, their data revealed that Hillsborough County (including Tampa) was ranked fourth, out of 67 counties in the state, in Pedestrian Crashes per Capita (as illustrated by the chart on page 23). Over a ten-year average from 1991 to 2001, Hillsborough County's pedestrian fatality rate per capita was consistently higher than the state's average. These are not good statistics for Hillsborough County and Tampa.



HILLSBOROUGH - FLORIDA PEDESTRIAN FATALITY RATES 1991-2001

The Task Force determined that in order to bring about a change in fatalities on Bayshore Boulevard (or elsewhere in Tampa), it would require a significant, multi agency, public-private involvement campaign across the entire region. The goal of this campaign would be to bring about a major change in driving habits, which would, in turn, reduce the pedestrian crashes, per capita. This would then change Tampa's (and Hillsborough County's) ranking statewide and nationwide.



2001 FLORIDA COUNTIES' PEDESTRIAN CRASH RATES

We recognize that it will take a significant effort to change our pedestrian crash ranking. This campaign or program will require the support of every municipality in the area. It will require financial support from public and private organizations with a grass roots effort involving and effecting the training of new drivers with special awareness training in schools.

Public Awareness Recommendations

- A press release announcing a public relations campaign after recommendations are made to the Mayor.

- The public relations campaign kicked-off through a press conference with the Mayor on Bayshore Boulevard.

- A public service announcement with the Mayor, Chief Hogue and Steve Daignault:
  Channel 15, ABC, NBC, CBS, Bay News 9 and Fox.
  Channel 15 has agreed to shoot the PSA: a date is needed from the Mayor, Chief Hogue and Steve Daignault.

- A Letter to the Editor by the Mayor – perhaps the Mayor could meet with the editorial board.

- The creation of a Tag Line, (i.e. "Doing My Part…Driving Friendly/Driving Safely"), utilizing the "I Am Tampa" campaign.

- Marketing with the tag line incorporated into newspaper ads in the Tampa Tribune, St. Pete Times, La Gaceta, Florida Sentinel and neighborhood association newsletters.

- A City of Tampa "Neighborhood News" newsletter article.

- Marketing in Hillsborough County's high schools.

- A call upon neighborhood presidents to share the campaign with their communities, asking neighborhood presidents to include the message at their meetings and in their newsletters.

- The dissemination of statistics without appearing negative, in other words, explaining the difference a 10 mph reduction might make in terms of the time it takes to get to work and the effect on the mortality rate.

- Signage on Bayshore Boulevard at three locations: Gandy Boulevard, Bay to Bay Boulevard and Platt Street with a message such as: "Welcome to Bayshore Boulevard, Scenic Roadway". Message may need further development.

- Seeking a corporate sponsor to fund bumper stickers and t-shirts with the tag line.

- Partnering with the Tampa Police Department on a future grant (to be determined) for an aggressive driving campaign.

- Partnering with Elise Nauful from Media General, Channel 8, on their $50,000 grant for a safe driving campaign.

Potential Partners And Supporters

Potential partners and supporters may include (in alphabetical order):

- American Automobile Association (AAA).
- Bicycle Clubs.
- Bicycle Pedestrian Advisory Committee.
- Chamber of Commerce.
- Churches.
- Community Traffic Safety Team (CTST).
- Driver Training Schools and Institutes.
- Greenways & Trails.
- Hillsborough County.
- Insurance Companies.
- Liquor Distributors.
- MacDill Air Force Base.
- Metropolitan Planning Organization.
- Neighborhood Groups and Associations.
- School Board and Schools.
- Tampa Downtown Partnership.
- The Buccaneers.
- The Devil Rays.
- The Media.

Summary

The Bayshore Task Force Members appreciate the opportunity to be involved with the process of trying to improve the overall safety of the Bayshore.

We believe there are a number of steps that could be taken, some more quickly and less expensive than others, that would make the Bayshore safer for use by pedestrians. Reducing the speed limit to 35 mph combined with other recommended measures would greatly reduce pedestrian deaths from motor vehicle crashes. Sidewalks on the west side of Bayshore Boulevard to provide safe walking to safer crossing locations would significantly aid pedestrians.

Creating safe crossing locations by adding complete signalization (with associate intersection markings and improvements) at Bay to Bay Boulevard, Howard Avenue and Platt Street will provide safe havens for pedestrians and reduce the distances they must cross to access the Bayshore Park. Establishing a more park-like setting will increase the awareness of motor vehicle operators. A public awareness campaign is key and essential if we are to bring about a change in driving habits, not only along Bayshore Boulevard but also throughout the region. It is only through such a program, with meaningful results, that we could remove the Hillsborough County – Pinellas County area from being one of the top five most dangerous metropolitan areas for pedestrians.

We recognize that not all of these recommendations can be achieved immediately. However, the reduced speed limit, signalized streetlights, signage and sidewalks on the

west side should be pursued immediately, and would bring about a significant improvement. Reducing the northernmost segment from six lanes to four lanes with widened medians would also provide significant improvement. Funding for this change should be aggressively pursued.

In closing, the Bayshore Task Force would like to offer to be a standing committee to meet once or twice a year to review issues and improvements along Bayshore Boulevard and to provide community input to the City administration regarding the Bayshore.

Thank you, again, for this opportunity.

SIGNATURE PAGE

APPROVED BY:

_____

Steve Daignault, Chairman, Bayshore Task Force & Administrator, Public Works & Utilities Services, City of Tampa

_____

The Hon. John Dingfelder, Council Member, City of Tampa

_____

Shannon Edge, COT Neighborhood & Community Relations

_____

Gene Wells, President, Ballast Point Neighborhood Association

_____

Sue Lyon, President, THAN & Bayshore Beautiful Homeowners Assn.

_____

Vicki Pollyea, President, Bayshore Gardens Neighborhood Assn.

_____

Jeanne Holton-Carufel, President Historic Hyde Park Neighborhood Assn.

_____

Geoffrey Meyer, President, Hyde Park Preservation, Inc.

Anna Thomas, Representative, Hyde Park Preservation, Inc.

John Weiss, President, Virginia Park Neighborhood Association

Laura McGowan, Citizen at Large

Capt. John Bennett, City of Tampa Police Department

Cpl. Karl Anderson, City of Tampa Police Department

Tony Rodriguez, Engineer, MacDill AFB Representative, Hillsborough County Safety Team, Sponsored by FDOT

Lucie Ayer, Executive Director Hillsborough County MPO

The Hon. Kathy Castor, Commissioner, District 1, Hillsborough County

HILLSBOROUGH COUNTY
PEDESTRIAN CRASH ANALYSIS
2001

Hillsborough County MPO

Bicycle/Pedestrian Advisory Committee

Jim Fleming
Chairman

Erle Boynton
Member At-large

Debb Carreno
Hillsborough County

Richard Clarendon
The Planning Commission

Ed Crawford
Hartline

Chris Hagelin
Member At-large

Richard Johnson
Member At-large

Steve Love
FDOT, District 7

Nina Mabilleau
City of Tampa

Vice Chairman

Barbara Motte
Hillsborough Co. EPC

Tom Mueller
Temple Terrace

Joe Neumeister
Member At-large

Jonathon Noll
Member At-large

Sharon Noll
Member At-large

Sharon Monahan
University of South Florida

Ray Potter
Hillsborough County Parks & Rec

Joanna Swindell
Alternate At-large

Tina Russo

TABLE OF CONTENTS

LIST OF FIGURES, MAPS, TABLES

FIGURE

MAP

TABLE

BACKGROUND

In the past, it often took a tragic accident before a community would make improvements for pedestrians such as building sidewalks, installing safe pedestrian crossings, using traffic calming treatments, and providing safe routes to school. But that is changing, because people want to live in healthy neighborhoods where they can walk, bicycle, and socialize and are demanding that transportation engineers and planners no longer overlook the most basic form of transportation – walking.

In an estimation for the 2000 Census, the percentage of journeys to work by foot in Hillsborough County was approximately 3.0 percent for workers 16 years and over. According to the 1995 Nationwide Personal Transportation Survey, which covers trips of all kinds, 5.4 percent of trips in the country were by walking and for the following purpose.

In addition to the public's demand for better facilities, the alarmingly high number of pedestrian crashes in Hillsborough County has grabbed the attention of decision makers who can help make a difference.

A National Highway Traffic Safety Administration report *Pedestrian Roadway Fatalities*[1], analyzes in great depth the national pedestrian fatality trends from 1998-2000. Included in the analysis are pedestrian fatality rates by city. Out of the top 10 cities with the highest fatality rates, 5 are in the state of Florida, with Tampa ranked third. The fatality rate for Tampa in 2000 was 6.04 per 100,000 population, as compared to the national average of comparably sized-cities with a fatality rate of 1.93.

In 2001, there were 577 pedestrian/motorist injuries reported by law enforcement agencies and 40 pedestrians killed in motor vehicle crashes in Hillsborough County.

This report analyzes those traffic crash reports, and the outcome of this analysis will help prioritize improvements that can increase the safety of pedestrians, thereby reducing these disturbing numbers. Planners and engineers should strive to be proactive and identify safety problems in an area before crashes occur. It is hoped that the analysis in this report will be useful in avoiding even one crash before it happens.

[1] USDOT NHTSA Pedestrian Roadway Fatalities, April 2003, p.26.

METHODOLOGY

The crash reports for 2001 were analyzed using the *Manual Accident Typing Pedestrian Accidents – Coder's Handbook* produced by the U.S. Department of Transportation National Highway Traffic Safety Administration. Thirty-seven types of pedestrian crashes are identified that fall into 9 specific categories. In order to classify the crashes, each report was reviewed to determine the cause of the crash.

EXPOSURE DATA

Useful to the analysis would be the existence of reliable exposure date. Exposure data, in the case of pedestrians, is knowing the number of people currently walking along a particular segment of roadway. This information is vital to determining whether a high crash location equates to a poorly designed roadway or to a well-designed and utilized facility that attracts a high number of pedestrians.

For motor vehicles there are ways to capture how many vehicles travel along a facility by using tube counters. Technology for determining non-motorized travelers has not been refined for widespread application. Video cameras have been installed at a limited number of intersections in Hillsborough County to gather traffic-related information such as red light running, causes of traffic congestion, accident reporting, etc. It could also be used to count the number of pedestrians, their location in the roadway, where they choose to cross the intersection, and if they cross with the green light. But these cameras are not present system-wide and would still require a person to watch the tapes, count, and record the information.

Initially designed to count wildlife, infrared data collector counters have been used on the Upper Tampa Bay Trail to successfully track the number of people walking, skating or cycling on the trail. By nature, the trail attracts many recreational weekend users and with the trail designed to minimize conflicts with motor vehicles, little if any crashes have been reported there. More importantly, the pedestrian stays their course along the trail, unlike on roadways where they may choose to cross at any given location. A commitment by governments to purchase, install and maintain these counters would be needed to gain reliable pedestrian exposure date along the thousands of miles of roadways in Hillsborough County.

In 2000, the Hillsborough County MPO conducted bicycle and pedestrian counts at 20 locations throughout the county. **Appendix A** summarized the results of those counts. Fourteen of the sites were specifically chosen because either the area was known to have a substantial number of bicyclists and pedestrians present or a road improvement was planned and a before and after comparison of non-motorized activity could be made. The other six sites were chosen randomly. **Figure 1** shows a map of the sites. A

comparison between the number of crashes and the number of pedestrians counted is shown below in **Table 1**.

TABLE 1 Pedestrian Counts & Number of Crashes

LOCATION	Counted	Crashes	%
Gandy & Westshore	30	1	3.33
Himes & Tampa Bay	61	2	3.28
Lumsden & Providence	37	1	2.70
Waters & Hanley	81	2	2.47
Himes & Euclid	72	1	1.39
Fletcher & Bruce B. Downs	194	2	1.03
Howard & Main	284	3	1.06
Bullard & Glen Arven	139	1	0.72
Morgan & Harrison	256	1	0.39
40th & Bougainvillea	195	0	0
Bayshore & Gandy	184	0	0
Rowlett Park & Waters	76	0	0
Waters & Montegue	27	0	0
Fowler & Riverhills	21	0	0
Shell Point & Tamiami Trail	18	0	0
SR 39 & Alsobrook	16	0	0
Bloomingdale & Bell Shoals	12	0	0
Linebaugh & Anderson Rd.	8	0	0
Ehrlich & Gunn Hwy.	2	0	0
Suncoast & Lutz Lake Fern	0	0	0

There is some correlation between a site having a higher number of pedestrians counted and a greater number of crashes, such is seen at Howard Ave. and Main Street.

There were some sites though, where a large number of pedestrians were counted, but there were no or a relatively low number of crashes. For example, many pedestrians were observed at 40th Street and Bougainvillea. It currently only requires crossing two lanes of traffic, and the speed along each road is also relatively slow – often due to heavy congestion. This will be a good location to recount after 40th Street is widened to four lanes. Two other sites with many pedestrians yet a low number or no crashes are at Bayshore/Gandy, and Morgan/Harrison. It is possible that motorists are prepared for a high number of people pushing strollers, walking dogs, skating, and cycling both along Bayshore Blvd. and at the site in Downtown. In addition, it is likely that the majority of motorists come to a complete stop before turning and the lower speeds allow better reaction time for both those walking and those driving.

Conversely, there was a concentration of crashes at several sites with a lower number of pedestrians counted. The crashes reported at the intersection at Tampa Bay and Himes may be attributed to activity at nearby stadiums and also the lack of pedestrian activated crossings. The intersections of both Lumsden/Providence, and Gandy/Westshore, are very unfriendly to pedestrians with wide crossing distance with many motor vehicle turning movements.

When analyzing the 2001 pedestrian crashes and making recommendations on how to improve the environment around a site with a high number of crashes, care should be taken not to automatically assume that the conditions are poor for walking. Engineering recommendations should assess how many people are typically present along the roadway in determining whether hazardous conditions exist.

TRENDS

The state of Florida continues to rank very high for the number of pedestrian/motorist crash rates. Florida's pedestrian fatality rate in 2001 was 3.06 per 100,000 population. This rate is almost twice the national average of 1.73 per 100,000 population.

More specifically, the Tampa Bay Area was ranked as the second most dangerous metropolitan area in the "Mean Streets" report for 2001[2] and as mentioned earlier, the City of Tampa was third in pedestrian fatalities in cities across the nation according to the NHTSA Pedestrian Roadway Fatalities report.

In 2001, Hillsborough County had a pedestrian fatality rate of 3.90 per 100,000 persons, which is two and a half times the national average. **Figure 2** displays where Hillsborough County ranks in relation to other Florida counties.

Table 2 shows the trend in pedestrian crashes in Hillsborough County over a ten year period and **Figure 3** shows the trend of total crashes. Analyzing total crashes is useful to get a sense of how safe or unsafe walking is in the County, but comparing those numbers to the population gives an even better sense of safety.

Although the total number of crashes is rising, the crash rates per 100,000 population have remained relatively stable. Therefore as the population increases, there has not been a significant increase nor decrease in Hillsborough County's crash rate.

This is not necessarily comforting when in comparison to other parts of the country, Hillsborough County still has significantly higher number of injuries and fatalities. In addition, people are walking less as evidenced by the U.S. Census and the Nationwide Personal Transportation Survey.

[2] Surface Transportation Policy Project MEAN STREETS, 2002, pp 1,4.

Trend analysis in regard to the age of pedestrians involved in the crashes is discussed later in this report.

FIGURE 2 – 2001 FLORIDA COUNTIES PEDESTRIAN CRASH RATES

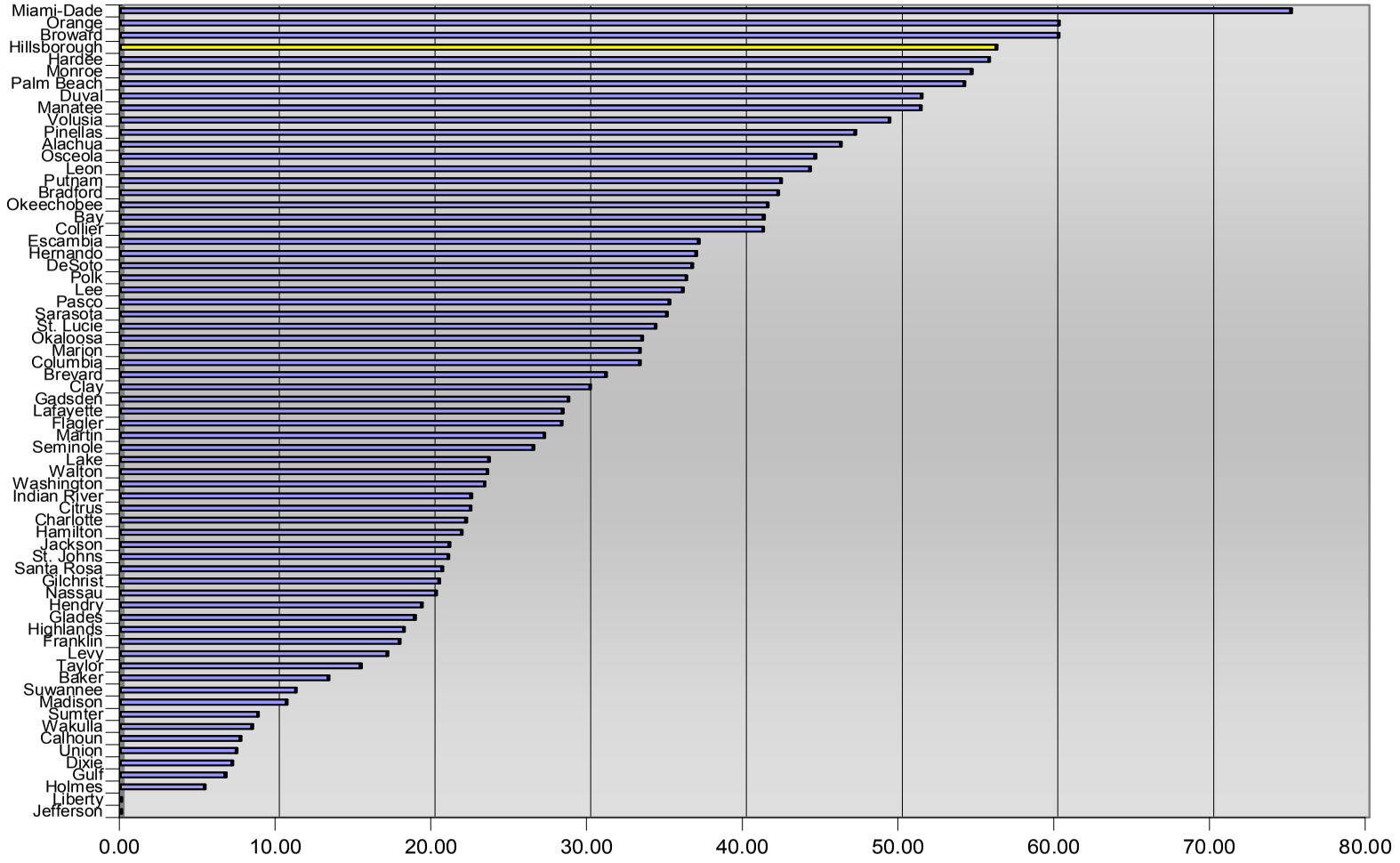


Figure 4 shows the total crash rates over the ten years and **Figure 5** shows the fatality rate in Hillsborough compared to the State of Florida.

2001	**617**	**1,026,906**	**60.08**

TABLE 2 – HILLSBOROUGH COUNTY PEDESTRIAN/MOTOR VEHICLE CRASH TRENDS

YEAR	TOTAL # CRASHES (INJURIES & FATALITIES)	POPULATION	CRASH RATE (PER 100,000 POPULATION)
1991	583	839,185	69.477
1992	597	846,721	70.51
1993	534	859,457	62.13
1994	546	870,094	62.75
1995	580	891,680	65.05
1996	590	910,855	64.77
1997	592	928,731	63.74
1998	603	925,277	64.96
1999	539	940,484	57.31
2000	599	998,948	59.96

FIGURE 3 – HILLSBOROUGH COUNTY PEDESTRIAN CRASHES & FATALITIES 1991-2001

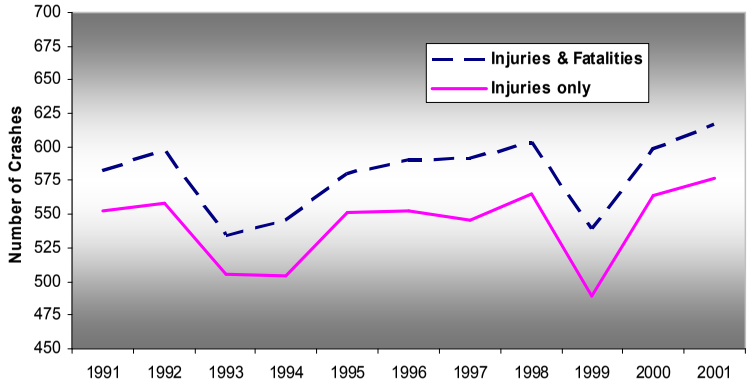


FIGURE 4 – HILLSBOROUGH COUNTY PEDESTRIAN CRASH RATES 1991-2001

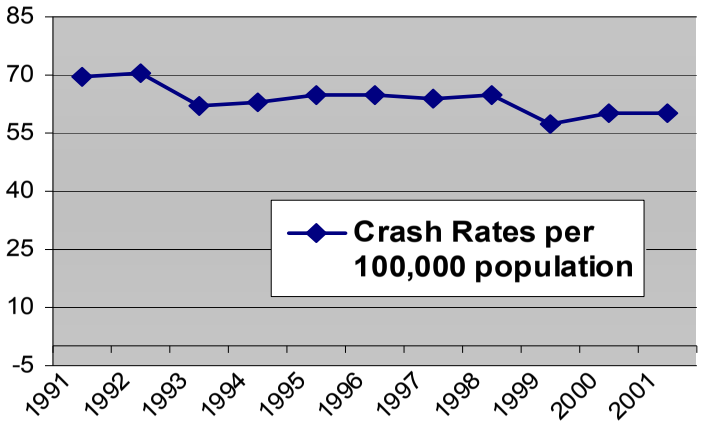
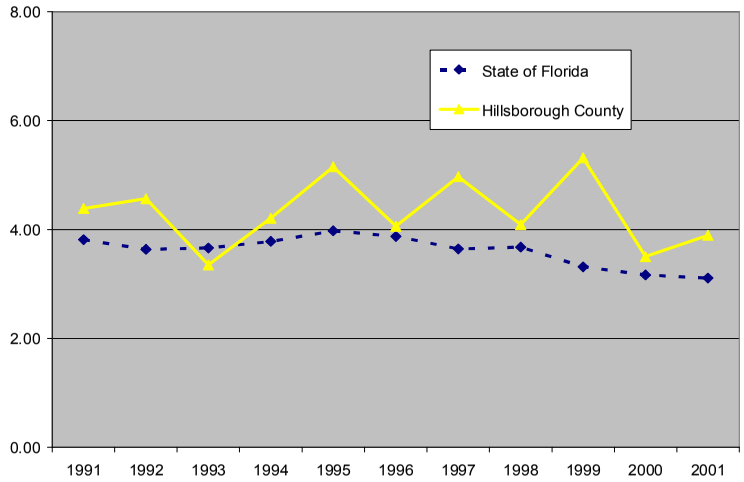

85
70
55
40
25
10
-5
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
Crash Rates per 100,000 population

FIGURE 5 – HILLSBOROUGH VS. FLORIDA PEDESTRIAN FATALITY RATES 1991-2001



CRASH TYPES

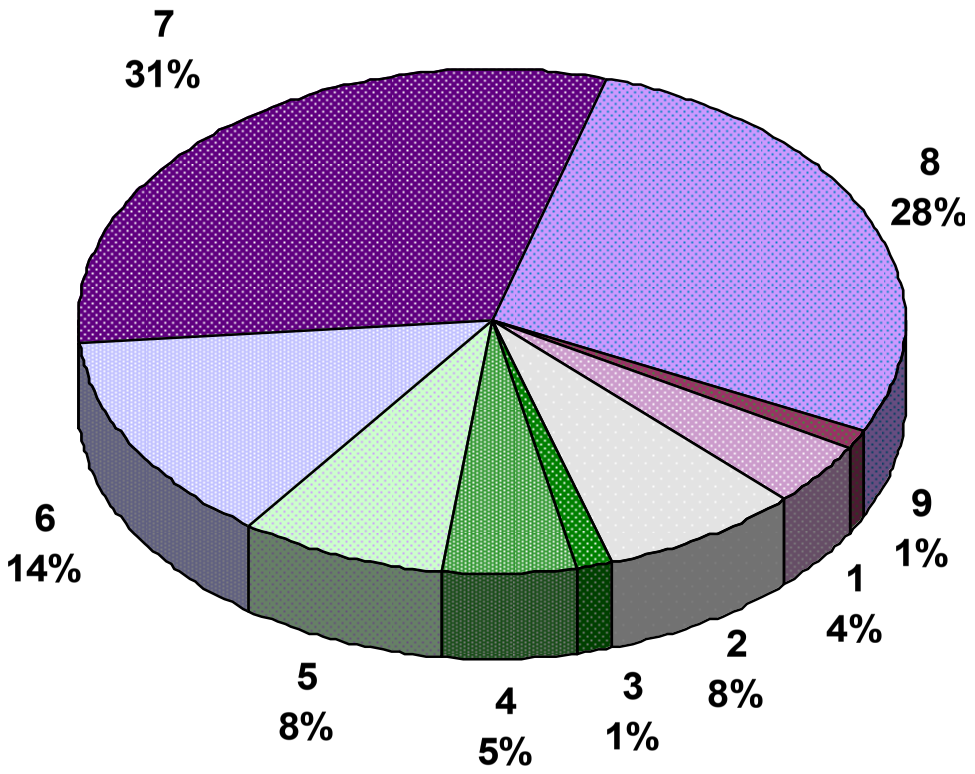
As stated before, the U.S. Department of Transportation National Highway Traffic Safety Administration identifies thirty-seven situations of pedestrian crashes that are then identified in 9 specific categories.

Figure 6 shows the break down of the nine crash categories of pedestrian crashes in 2001.

The highest number of total crashes in 2001 (125 or 31.02%) occurred at intersections. Crossing at a non-intersection also accounted for a high percentage (27.79%) of pedestrian crashes, as did standing near the road (13.65%). Walking along the road accounted for 7.94% of pedestrian crashes. The crash reports did not specify if the pedestrian was walking with or against traffic, but the recommended practice is for pedestrians to walk against the flow of traffic.

FIGURE 6 – HILLSBOROUGH COUNTY PEDESTRIAN CRASHES BY ACTION-

1. Motorists struck the pedestrian going to/from or crossing near a bus or bus stop, ice-cream vendor, rural residential mailbox or exiting/entering a stopped or parked vehicle.
2. The striking vehicle was driverless, backing, in pursuit, being pursued, or was an emergency vehicle.
3. The pedestrian was struck by a motorist while going to/from or near/next to a disabled vehicle or active police/emergency vehicle.
4. Pedestrian was struck while working or playing in the roadway or on a play vehicle.
5. Pedestrian was struck by motorist while hitchhiking, crossing limited access expressway, walking or running along a road without sidewalks.
6. Motorist struck pedestrian on/near curb or roadway edge, on sidewalk or other non-roadway location.
7. Crash occurred at or within 50 feet of an intersection.
8. Crash occurred midblock (more than 50 feet from an intersection).
9. Other type or inadequate information.



The types of crashes occurring in various age groups are shown in **Figure 7**. Elementary aged children, in the age group from 0-14 years experienced the most crashes when crossing the roadway away from an intersection; this is sometimes referred to as crossing midblock. Many of these crashes are due to children not being able to judge the speeds of motorists and darting across the road unaware of the presence of motorists.

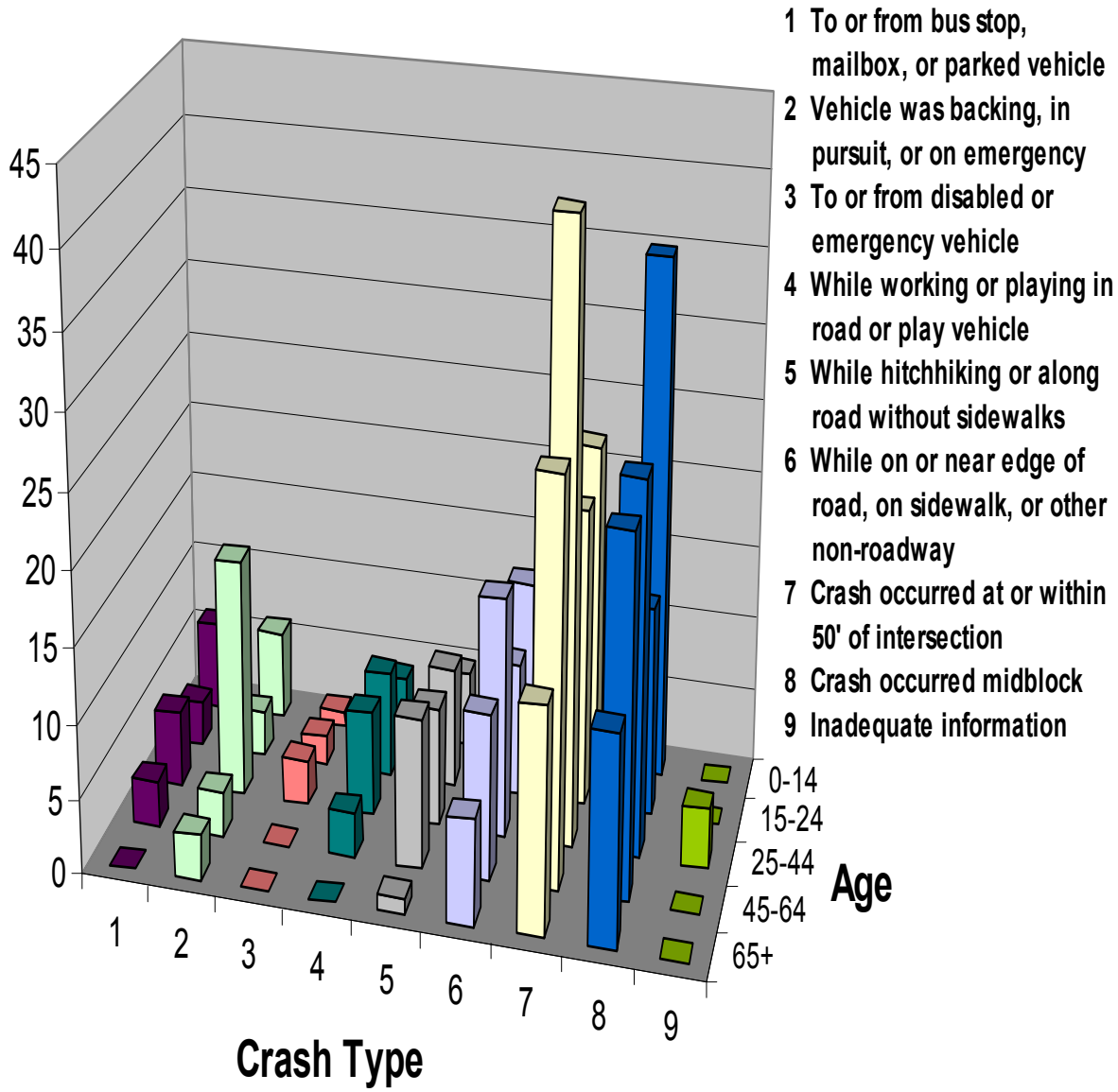
There was an unusual peak of crashes involving the backing up of vehicles or a pedestrian being struck by a vehicle that was in pursuit in the age range from 25 to 44 years. This group and the elder population age 65 or older, are also most likely to be hit crossing at an intersection. This is likely due to the experience that the intersection is often designed to accommodate pedestrians and the best place to cross a road.

Standing near the roadway edge or in a non-roadway location, such as on private property, accounted for a high number of crashes for both children between 0-14 years and the young adults between 25 and 44 years.

The high number of crashes exhibited in the age range from 25-44 years comes as no surprise when compared to the data collected for the counts as explained in the section on Exposure data. When pedestrians were counted, an observation was also made on the approximate age range according to the following groups: child, teen, adult, mature adult. The adult age group had over 3 times as many observations as the teen group and 9 times as many as the child group.

MAP 1 located in the folder at the back of this document identifies where each type of crash has occurred in Hillsborough County. The crashes do not necessarily occur in any pattern, but the more rural areas seem to have a predominance of crashes where the pedestrian is walking or standing on the roadway edge. Many rural areas either do not have sidewalks, marked crosswalks at intersections, or there are long distances between intersections

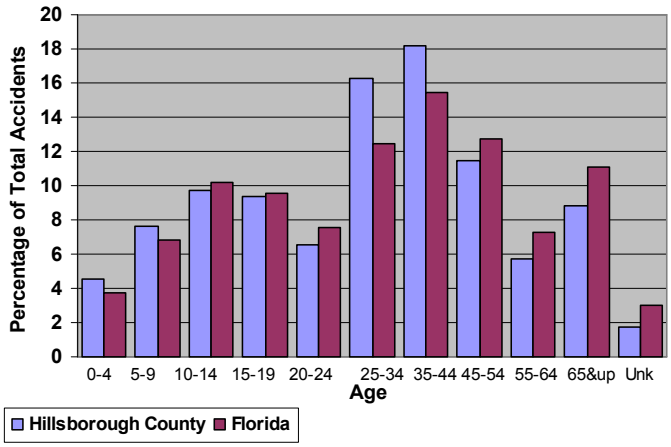
FIGURE 7 PEDESTRIAN CRASHES BY CRASH TYPE AND AGE – HILLSBOROUGH COUNTY 2001



AGE

The ages of pedestrians involved in crashes in Hillsborough County vary, but show the highest number in the adult category. This is similar across the state as shown in **Figure 8**. Many people assume that children are most at risk, but the theory among pedestrian planners is that many of the people in the age range from 25 to 54 years are walking as part of a utilitarian trip, along the same roads that a motorist uses for their trip.

FIGURE 8 2001 PEDESTRIAN INJURIES BY AGE HILLSBOROUGH COUNTY VS. FLORIDA



They may be walking because they have lost their license to drive, do not own a motor vehicle, or are walking to a bus stop. In some cases the pedestrian is under the influence of alcohol or walking at night, which can cause that age range to show greater injuries.

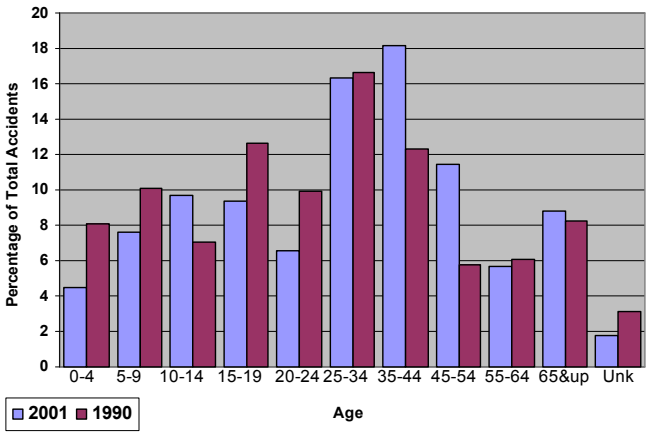
Another peak occurs with pedestrians 65 and older who may not be able to drive due to age or illness. Although this age group tends to be more cautious, they also have more difficulty crossing wide intersections in enough time and have slower reaction time to avoid possible crashes. The fatality rates are also higher as explained in the next section.

Comparing the ages of pedestrians involved in crashes from a previous analysis of 1990 crashes shows similar trends. However, as seen in **Figure 9**, there was an overall reduction in crashes for the younger population from 0 to 19 years. The extensive efforts across Florida and locally to educate children in school on traffic safety awareness may have contributed to the reduced number of crashes in the ten year period.

There was also an increase in crashes for the adult age range from 35 to 54 years. Again, discussion among professionals points to increased law enforcement for drunk driving may have caused more people to walk instead of

drive. There is also speculation that a changing economy makes driving too expensive.

FIGURE 9 PEDESTRIAN INJURIES BY AGE
1990 VS. 2001

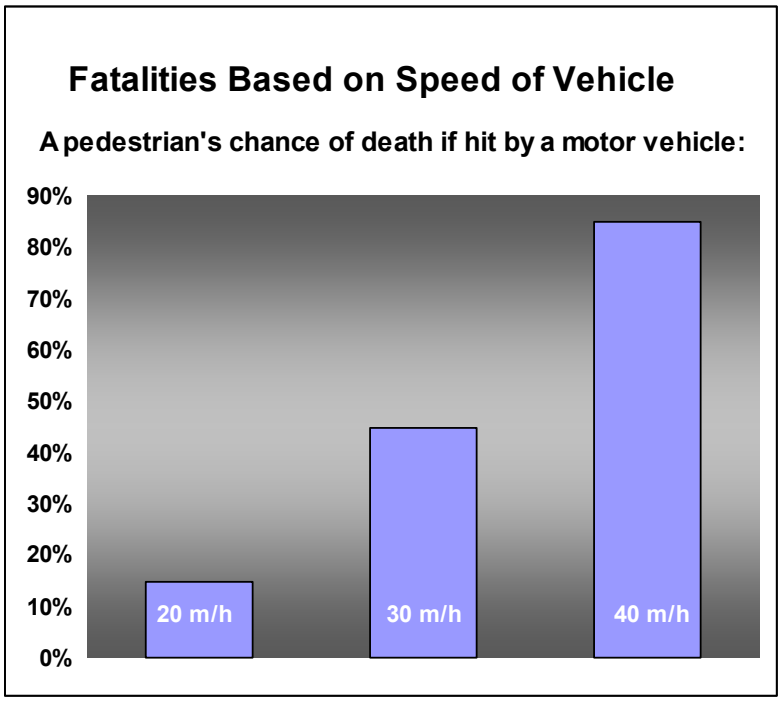


MAP 2 shows location of pedestrian crashes according to age category. Also shown on the map are the location of elementary, middle, and senior high schools. The wide dispersion of crashes by age across the entire county does not appear to indicate a particular concentration near schools or by age group.

An in-depth analysis could be prepared if a particular school wanted to assess the conditions around their site. For instance, the data could be analyzed and a map made showing only the age of students at that school during a certain time of day. Those crashes could further be analyzed for what type of crash occurred, laying over the existing sidewalk map to help identify needed sidewalks or focus useful educational programs to the most affected students.

SEVERITY

Crash report forms filled out by the responding law enforcement officer categorizes the severity of the pedestrian injuries into five groupings: none, possible, non-incapacitating, incapacitating, and fatal. The likelihood that a pedestrian will not sustain any injuries in a crash with a motor vehicle is improbable as seen below.



MAP 3 shows where the crashes occurred according to the severity of injuries. For those crashes where no injuries were recorded, almost all are located in the City of Tampa. In general, motorists face shorter distances between intersections in heavily populated urban areas, so that vehicle speeds are lower and the crashes that occur are less serious.

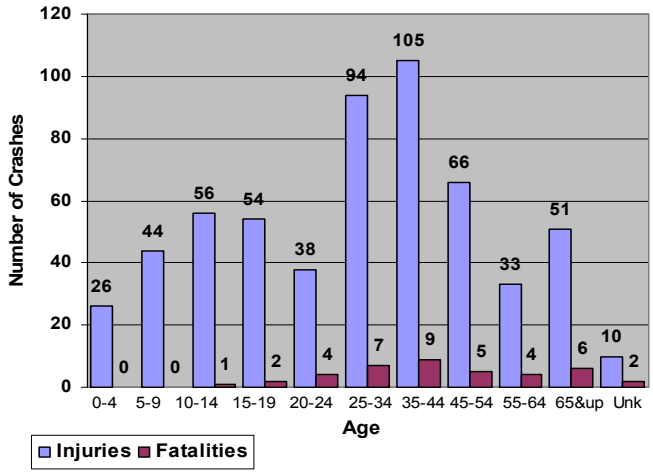
The most accurately reported crashes are those where a fatality has occurred because law enforcement and emergency medical services are called and the crash is fully documented. Further analysis of those fatalities reveals some interesting information. Of the 40 fatalities, 28% were pedestrians age 55 and older, even though this age category made up less than 15% of all crashes in 2001. See **Figure 10** for the injuries and fatalities by age group. Older pedestrians are more vulnerable to serious injury or death when struck by a motor vehicle than younger pedestrians.

The causes of the fatal crashes show 52% were due to the pedestrian walking out into the roadway from midblock, although for all crashes in 2001, midblock crossings only accounted for 27% of the crashes. Most of the fatalities occurred at nighttime, whereas the majority of all injury crashes occur during the day (see next section on Lighting Conditions). Recommendations may be to install street lighting along a dark roadway, or that increased educational efforts be directed toward older citizens to walk against traffic, carry a light, and cross at intersections.

The map also shows a concentration of fatalities around Fowler and 15th Street and on South Dale Mabry Highway near Henderson Blvd. Both intersections require crossing multiple lanes and turn lanes. Surrounding land uses such as retail, grocery, restaurants, after hours establishments and nearby residences make both locations appealing to walk to if it were safe to do so.

Nationally, only 14.3% of non-fatal pedestrian crashes occur in rural areas, yet for pedestrian fatalities, 25% occur in rural areas where vehicle speeds are higher than on city streets.[3]

FIGURE 10 PEDESTRIAN CRASHES BY AGE INJURIES VS FATALITIES- HILLSBOROUGH 2001

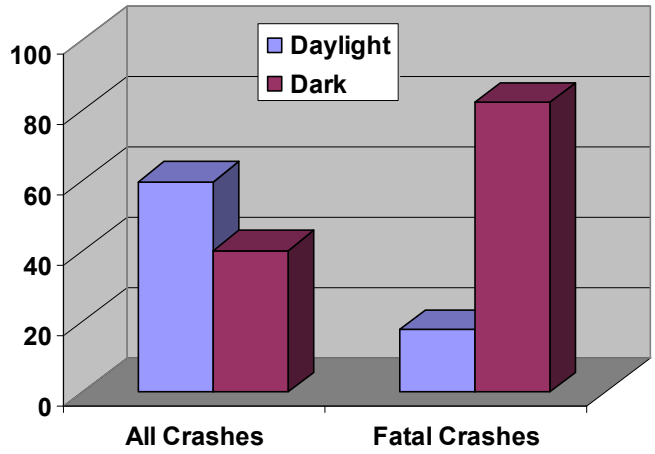


LIGHTING CONDITIONS

Pedestrian crashes were most prevalent during daylight hours. This correlates to when traffic levels are highest. Fatal pedestrian crashes typically occur later in the day when darkness and alcohol are factors. **Figure 11** displays the percentage of crashes relating to daylight and darkness. Quite obviously, fatal crashes are much more likely to occur at night.

FIGURE 11 PERCENT PEDESTRIAN CRASHES BY LIGHTING CONDITION – ALL VS FATAL

[3] The National Safety Council *Traffic Facts*, Washington, D.C. 1998

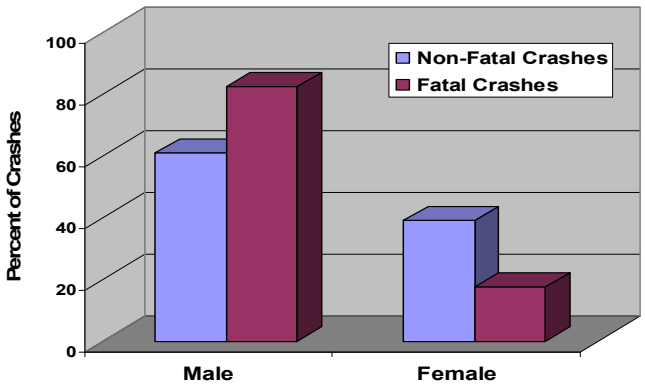


The crash report prompts officers to note if the crash occurred during daylight, dusk, dawn, dark with streetlights, and dark with no street lights. **Map 4** shows the location of the pedestrian crashes according to the lighting conditions. Lack of streetlighting in unincorporated Hillsborough County is apparent in Map 4.

GENDER

Of the pedestrian involved in crashes in Hillsborough County for 2001, 61% were males. The outlook for men is even grimmer when considering the fatalities; men make up 82.5% of the fatal crashes as opposed to 17.5% for females. See **Figure 12**.

FIGURE 12 PERCENT PEDESTRIAN CRASHES BY GENDER - HILLSBOROUGH 2001



The higher number of males involved in pedestrian crashes coincides with the data collected during the count study (discussed under Exposure data on page 4). The gender of the pedestrians and cyclists were noted at all 20 locations and in total, about 68% were male. This may be attributed to the higher number of males being employed, and using walking as all or part of their work trip.

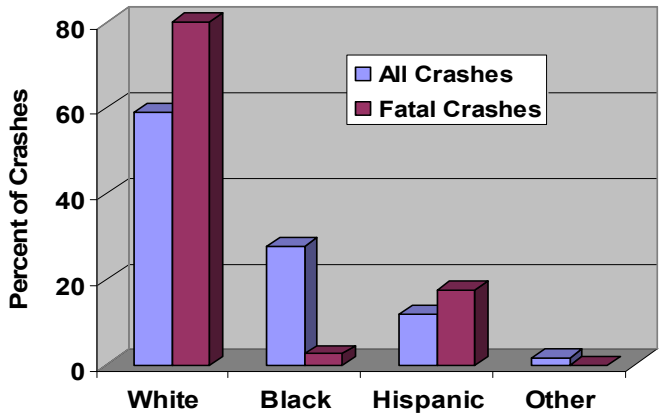
RACE

Law enforcement officers make a determination at the scene of the crash as to the race of the pedestrian. The only categories on the crash report to choose from are White, Black, Hispanic or Other. Demographic data collected for the 2000 Census, categorizes racial ethnicity differently than the crash reports. The racial groups are: white, black, American Indian, Asian/Pacific Islander, and Other. Those of Hispanic decent are dispersed among those other groups. Therefore a clear comparison cannot be made between the racial make-up of Hillsborough County residents and those involved in pedestrian crashes, however generalities and useful analysis is still possible.

As displayed in **Figure 13**, the 2001 reported pedestrian crashes in Hillsborough County show almost 59% of pedestrians involved in the crash were white, 30% black, 12% Hispanic, and about 2% were another race or unknown. The black population shows a higher representation in the number of pedestrians in non-fatal crashes.

However, for fatal pedestrian crashes the white population is much more likely to be involved in a fatality. Those categorized as white made up 80% of the pedestrian fatalities, 2.5% were black and 7% were Hispanic.

FIGURE 13 PERCENT PEDESTRIAN CRASHES BY RACE -HILLSBOROUGH 2001



LOCATION

As evidenced by the various maps referenced throughout this study, the heaviest concentration of crashes in 2001 occurred in the City of Tampa.

This is reasonable because neighborhoods with dense populations of residences and shopping within walking distance allows for walking to be a practical travel

mode. Also, areas where there is low auto ownership requires residents to use alternative modes other than driving to reach their destinations.

As shown in **Table 3**, the location of crashes from 1990 and 2001 continue to show the heaviest concentration in the City of Tampa as compared to the other jurisdictions that make up Hillsborough County.

TABLE 3 –PEDESTRIAN/MOTOR VEHICLE CRASHES BY JURISDICTION - 1990 and 2001

	Total Crashes		Crash Rate /100,000		Fatals		Fatal Rate /100,000	
	'90	'01	'90	'01	'90	'01	'90	'01
Tampa	302	301	107.9	97.4	14	16	5.0	5.2
Plant City	16	10	70.3	32.2	1	0	4.4	0
Temple Terrace	7	3	42.6	14.3	0	0	0	0
Unin-corporated	202	261	39.2	39.2	22	24	4.3	3.6
TOTAL	527	577	63.2	56.2	37	40	4.4	3.9

Another factor why pedestrian crashes are more evident in the City of Tampa is that the highest transit routes are in the City and all transit riders are pedestrians first. Corridors showing an abundance of pedestrian crashes are along Nebraska Ave., Florida Ave., Dr. Martin Luther King Blvd, Hillsborough Ave., Waters Ave., Fletcher Ave., Fowler Ave., Kennedy Blvd., and Columbus Ave.

Hillsborough County's prevalent crash locations support the National Safety Council's estimation that 85.7% of all non-fatal pedestrian crashes in the United States occur in urban areas and 14.3% occur in rural areas.

CONCLUSIONS

Just as the National Highway Safety Administration concludes in the Pedestrian Roadway Fatalities Report: "there is not a single strategy that will reduce pedestrian fatalities – it is a comprehensive approach employing engineering, education and enforcement **with the focus on both the driver and pedestrian**."

Some pedestrian crashes are associated with deficient roadway designs and others are a result of the lack of motorists and pedestrians understanding of laws and safe driving or walking behavior. Because most crashes are a result of

human error, crashes will not be completely eliminated as long as pedestrians and vehicles share the same space.[4]

Even with the understanding that there will be human error, it is also understood that crashes are made worse by speeding, failing to yield or failing to check both directions for traffic.

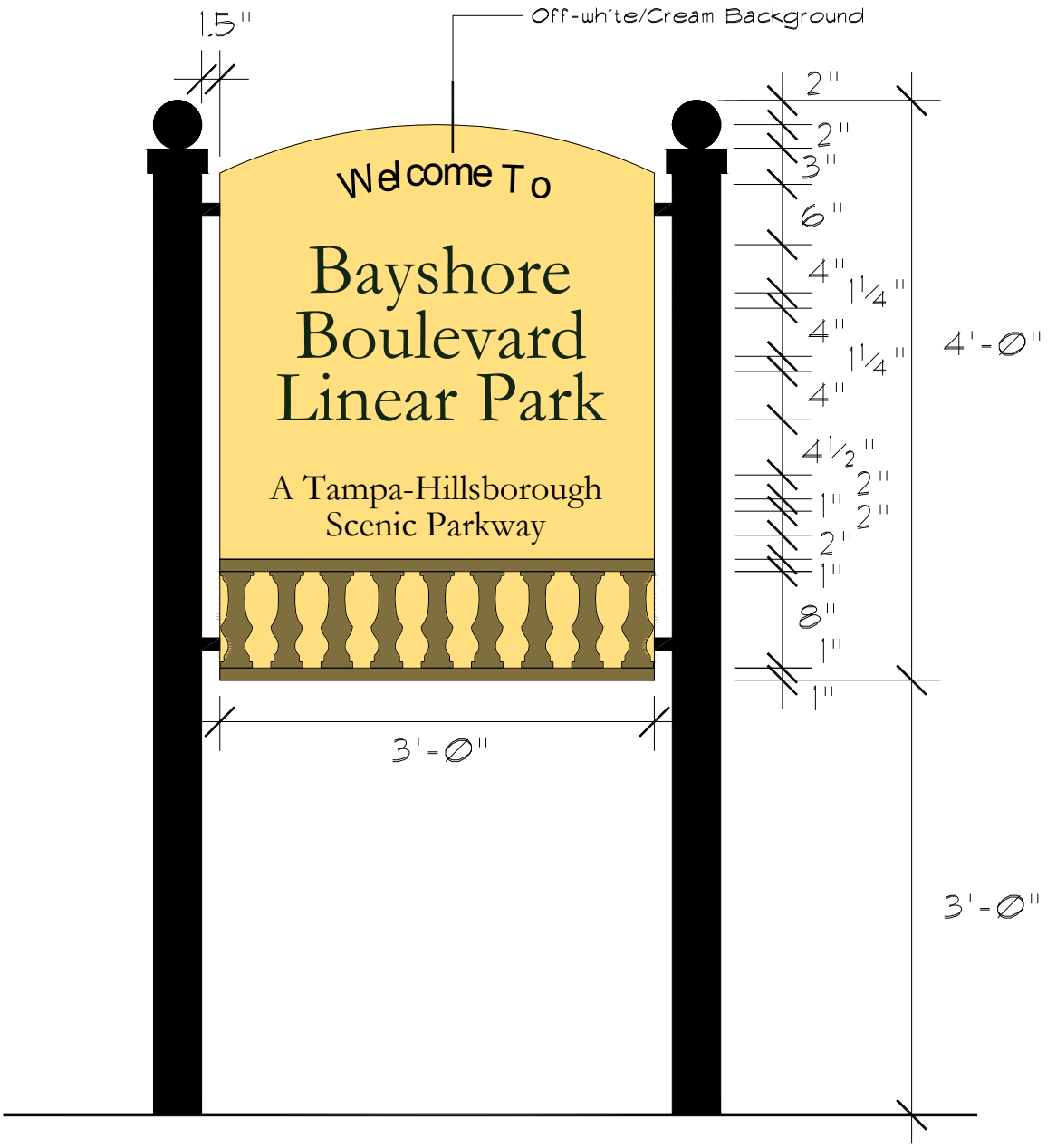
This Crash Analysis should be used as a tool to assist engineers in the design of road widening projects, intersection improvements, and direct safety projects to reduce the risk of crashes for pedestrians.

These improvements could include sidewalks, crosswalks, calming traffic, lighting, traffic control, enforcement of existing laws for motorists and pedestrians, revitalizing downtown areas, improving safety near schools, educating pedestrians to wear reflective clothing and using flashlights when walking at night.

Researchers at the Pedestrian and Bicycle Information Center, a center within the UNC Highway Safety Research Center have released the Pedestrian Facilities User Guide that provides a matrix of 47 engineering treatments that are possible countermeasures for various crash groups. **See Appendix B**. The guide also provides the purpose, considerations, and estimated cost for each countermeasure suggested.

The MPO is preparing for an update to the existing Pedestrian Plan. The results of this Crash Analysis will be considered when recommendations are made and projects are prioritized in order to make the most beneficial use of available funding for improving the pedestrian environment.

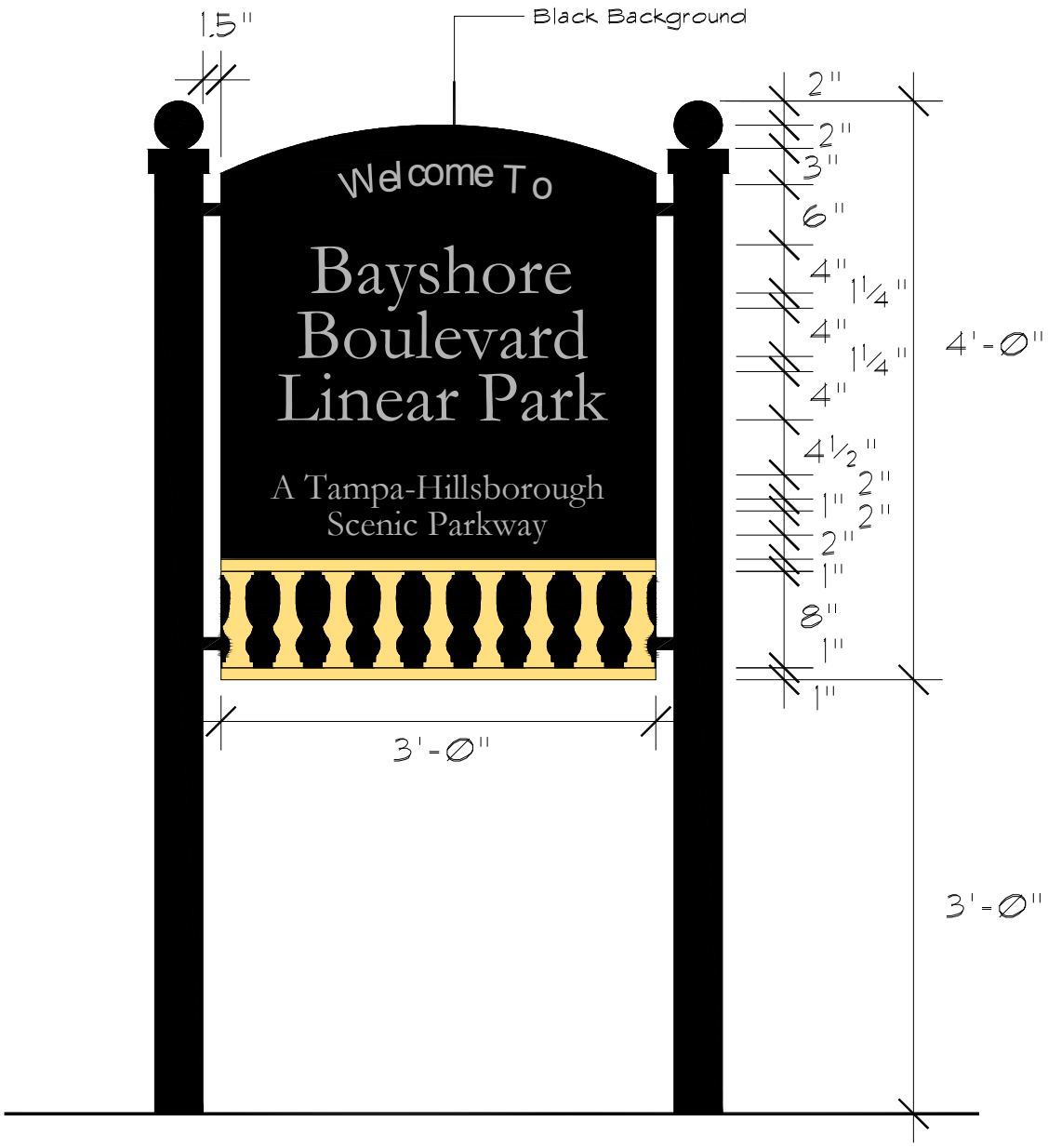
[4] USDOT Federal Highway Administration Pedestrian Facilities Users Guide, March 2002, p. 19.



Bayshore Boulevard

Linear Park Signage at Gandy Blvd.

Not to Scale



Bayshore Boulevard

Linear Park Signage at Gandy Blvd.

Not to Scale