

AGING ROAD USERS STRATEGIC SAFETY PLAN

Work Order # GPC VI-20



Submitted by:



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**Miami-Dade Transportation
Planning Organization**

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SUMMARY

The goal of the Miami-Dade County Road Users Strategic Safety Plan is: *To improve the safety and mobility of the County’s aging road users by reducing their fatalities, serious injuries, and crashes, while maintaining their mobility and independence.* An “aging road user” is a driver, passenger, pedestrian, bicyclist, transit rider, motorcyclist, or operator of a non-motorized vehicle, who is 65 years of age and older.

In 2015, Florida led the nation in older adults with 19 percent of its population 65 years of age and older. By the year 2045, about 22 percent of Floridians will be 65 or older. Mirroring this anticipated trend, older adults in Miami-Dade County numbered about 400,000 in 2015, representing 15 percent of the County’s total population.

With this information and the goal of the project in mind, the study’s objectives and performance measures are presented in **TABLE S-1**.

The issues surrounding each type of “aging road user” are presented next.

Auto Users

In 2014, motor vehicle crashes in Miami-Dade County (MDC) for people 65 and older accounted for 8.7 percent of all crashes in the county. Older person injury crashes (982) were five percent of all crashes in the county in that year, while fatal crashes involving aging road users represented 0.3 percent. The trend in these three categories of crashes for persons 65 years of age and older indicate total crashes in Miami-Dade County between 2008 and 2014 (inclusive) increased by 127 percent, while injury crashes rose 25 percent, and fatal incidents averaged 49 per year with a range of 37 in 2008 to 59 in 2014. It is noted the trend in aging road users by gender in the categories of total and injury crashes in MDC were very similar, but the pattern of *fatal* crashes involving men is always higher than women.

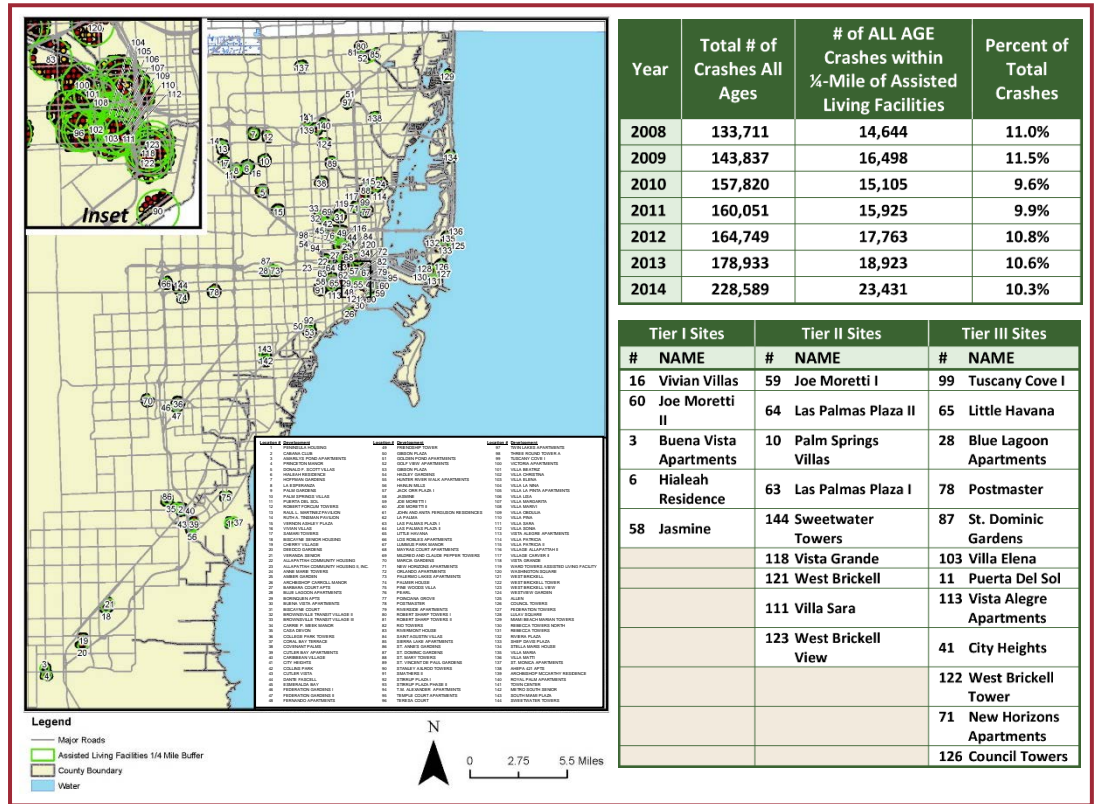
Table S-1: Project Objectives & Performance Measures

PROJECT OBJECTIVES & PERFORMANCE MEASURES	
Objective	Performance Measure
1. Ensure that aging road users have knowledge of transportation resources (agencies, etc.), and how to use them.	1. Number of resources identified and/or developed and implemented; 2. Number of outreach presentations and attendees; 3. Number of pieces of educational material distributed.
2. Ensure a variety of “non-driver” transportation options (transit, on-demand, etc.) are accessible by aging road users.	1. Number of alternative transportation options established; 2. Number of transit stops added; 3. Number of people using mobile apps to access on-demand transportation.
3. Advocate and implement streets that are safe for all users.	1. Number of Complete Street policies developed and implemented; 2. Number of crashes involving aging road users in total and within one-quarter of residential living centers for older adults.
4. Provide access to information and education for aging road users on “transitioning from driving.”	1. Number of resources identified and/or developed and implemented; 2. Number of outreach presentations and attendees.
5. Measure of the success of achieving the above objectives by surveying aging road users.	1. Conduct, on a regular basis, a countywide survey of aging road users.

While these broad trends are not alarming, they don't point to specific issues or locations at which improved safety should be afforded to seniors. To gain such insights, analyses of crash patterns for 140+ older adult residential living centers were conducted (FIGURE S-1). Specifically, the following were examined: total crashes of all types, and crashes involving persons 65 and older as auto users, pedestrians, or bicyclists that occurred within one-quarter-mile of such centers. From 2008 through 2014, between ten percent and 11 percent of all crashes in MDC occurred within one-quarter-mile of these assisted living locations. However, it should be noted that during that period incidents countywide, and those within one-quarter-mile of an assisted living facility, increased by 70 percent and 60 percent, respectively.

Each location was then ranked from highest to lowest based on the total number of crashes within one-quarter-mile in 2012, 2013, and 2014. The sites were also ranked by the number of crashes of any type involving aging road users in those three years. Each time a site ranked in the Top Five, 20 points were assigned. Each time a site was in the Top Ten ranking, it was awarded ten points. The points were then totaled to determine the sites which are of the highest priority (most points) and, therefore, qualified for detailed analysis of local street/intersection conditions to develop countermeasures to protect aging road users.

Figure S-1: Analysis of Crash Patterns



Source: The Corradino Group

The sites in three “tiers” are shown in TABLE S-2: Tier I is the top priority; Tier II sites are next in line for detailed field work/counter measure analysis; and, Tier III is third in line.

It is suggested that in 2018, Road Safety Audits (RSAs) be conducted at the “Tier I” assisted living facilities. These should be followed by RSAs at the Tier II and Tier III sites, as resources permit. A Road Safety Audit is a systematic process for

Table S-2: Field Analysis Priority of Assisted Living Sites

Tier I Sites		Tier II Sites		Tier III Sites	
#	NAME	#	NAME	#	NAME
16	Vivian Villas	59	Joe Moretti I	99	Tuscany Cove I
60	Joe Moretti II	64	Las Palmas Plaza II	65	Little Havana
3	Buena Vista Apartments	10	Palm Springs Villas	28	Blue Lagoon Apartments
6	Hialeah Residence	63	Las Palmas Plaza I	78	Postmaster
58	Jasmine	144	Sweetwater Towers	87	St. Dominic Gardens
		118	Vista Grande	103	Villa Elena
		121	West Brickell	11	Puerta Del Sol
		111	Villa Sara	113	Vista Alegre Apartments
		123	West Brickell View	41	City Heights
				122	West Brickell Tower
				71	New Horizons Apartments
				126	Council Towers

Source: The Corradino Group

checking the safety implications of roadways/intersections. The objective is to minimize future crash occurrence and severity by recommending improvements to correct unsafe conditions. Combining RSA results of the Tier I sites, with the following strategies (which are applicable throughout Miami-Dade County) can create a manageable “laboratory” to implement improvements and measure their success.

The body of the report offers “countermeasures” to those issues affecting each category of aging road user—driver, passenger, pedestrian, bicyclist, transit rider, motorcyclist, or operator of a non-motorized vehicle. Also, recommendations are made to reduce aging road user incidents in terms of: facility improvements, like signing, lighting and use of changeable

message equipment; application of new technology, such as “smart crosswalks” with inroad LED lights that begin to illuminate and flash when a pedestrian is present and ready to cross; and, innovative projects like “It Takes a Village,” and a Rapid Senior Mentor Program.

It is imperative that this *Aging Road User Safety Plan* be evaluated and revised on a regular basis. Two primary measures to be used to evaluate progress are the changes in the number of traffic-related fatalities and serious injuries that occur on an annual basis. Both problem identification and continual evaluation require effective record-keeping identifying the frequency and types of older-driver crashes, so countermeasures can be implemented.