

Chapter 10

Bicycle & Pedestrian

Introduction

The Volusia County Metropolitan Planning Organization (MPO) recognizes the importance of providing pedestrian and bicycle facilities as a means of expanding the travel opportunities for residents who, either by choice or by circumstance, do not use an automobile. These groups often include, but are not limited to, disabled individuals, children, the elderly, and the financially disadvantaged. In treating bicycling and walking as legitimate forms of travel the Volusia County MPO satisfies the spirit and intent of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU legislation seeks to “create an integrated, intermodal transportation system which provides travelers with a *real* choice of transportation modes.”

Additionally, community leaders have recognized the role of bicycle and pedestrian facilities as a tool for economic development. This point of view is supported by the results of transportation studies such as the SR A1A Corridor Enhancement Study, which was completed in 1997. The study was initiated to identify how the coastal communities could benefit from the beach as an economic resource. Key recommendations included upgrades to the corridor that would improve the atmosphere for bicycle and pedestrian travel, thus enhancing the experience of area visitors.

Bicycle and pedestrian facilities provide expanded recreational opportunities for residents and visitors alike. As a recreational amenity, trail systems throughout Florida generate millions of dollars for state and local economies by attracting visitors from surrounding counties and states. The MPO will continue to work with Volusia County as well as municipal government agencies (including Flagler Beach and Beverly Beach in Flagler County) to incorporate the trail vision into the functional aspects of the MPO planning efforts. An example of this collaboration led to the development of the County’s first multi-use trail running between Gemini Springs Park and the DeBary Mansion. Using federal funds from the TEA-21 (federal legislation that was the precursor to SAFETEA-LU) Transportation Enhancement Program, administered by the Florida Department of Transportation (FDOT), the Spring to Spring Trail opened in August 2000. The project represents the first phase of a network of multi-use trails that are planned to stretch over 76 miles throughout Volusia County. As the network expands, it will contribute to continuing economic growth without sacrificing environmental assets.

The crash statistics available for Volusia County indicate that transportation decision-makers have not always recognized the full importance of accommodating bicycle and pedestrian activity. In 1991, Volusia County recorded the fourth highest bicycle crash rate in the state with 281 crashes countywide. This yielded a bicycle injury rate of 69.82 and a fatality rate of 1.86 per 100,000 residents. In recent years however, it appears that the crash rates in Volusia County are declining; however they are still above the statewide average. Table 10.1 and Table 10.2 below show the bicycle and pedestrian injury and fatality rates for the past ten years.

Table 10.1 – Volusia County Bicycle and Pedestrian Crash Statistics^{1, 2}

Year	Pedestrian Injury Rate per 100K		Pedestrian Fatality Rate per 100K		Bicycle Injury Rate per 100K		Bicycle Fatality Rate per 100K	
	Volusia	Florida	Volusia	Florida	Volusia	Florida	Volusia	Florida
1995	49.38	56.05	3.72	3.93	<u>66.00</u>	47.13	0.74	0.96
1996	53.05	55.08	<u>6.39</u>	3.82	<u>70.73</u>	43.85	<u>1.96</u>	0.72
1997	<u>64.54</u>	52.17	<u>4.35</u>	3.58	<u>55.84</u>	38.13	<u>0.97</u>	0.76
1998	<u>57.80</u>	54.13	<u>4.28</u>	3.67	<u>44.48</u>	34.26	<u>0.95</u>	0.64
1999	<u>55.53</u>	49.87	3.05	3.32	<u>48.50</u>	31.31	0.23	0.76
2000	<u>53.01</u>	48.69	<u>3.83</u>	3.17	<u>38.12</u>	28.69	0.45	0.52
2001	<u>49.34</u>	48.14	<u>3.98</u>	3.11	<u>40.71</u>	27.30	<u>0.89</u>	0.65
2002	<u>49.38</u>	44.56	<u>4.35</u>	2.90	<u>40.68</u>	29.74	0.44	0.65
2003	<u>51.00</u>	43.77	<u>3.40</u>	2.99	<u>36.54</u>	29.33	0.42	0.56
2004	<u>46.05</u>	43.11	<u>3.51</u>	2.88	<u>34.49</u>	27.52	0.21	0.68

- 1) Note: underline and bold represents fatality/injury rates in Volusia County that are worse that the State average.
- 2) Source: *Traffic Crash Facts*, published by the Florida Department of Highway Safety and Motor Vehicles – <http://www.hsmv.state.fl.us>.

Table 10.2 – Flagler County Bicycle and Pedestrian Crash Statistics^{1, 2}

Year	Pedestrian Injury Rate per 100K		Pedestrian Fatality Rate per 100K		Bicycle Injury Rate per 100K		Bicycle Fatality Rate per 100K	
	Flagler	Florida	Flagler	Florida	Flagler	Florida	Flagler	Florida
1995	40.54	56.05	<u>5.41</u>	3.93	32.44	47.13	0.00	0.96
1996	30.73	55.08	0.00	3.82	23.05	43.85	0.00	0.72
1997	33.99	52.17	0.00	3.58	12.14	38.13	0.00	0.76
1998	34.53	54.13	2.30	3.67	9.21	34.26	0.00	0.64
1999	26.19	49.87	<u>4.37</u>	3.32	10.91	31.31	<u>2.18</u>	0.76
2000	14.05	48.69	<u>4.01</u>	3.17	14.05	28.69	0.00	0.52
2001	28.27	48.14	0.00	3.11	11.31	27.30	<u>1.88</u>	0.65
2002	12.33	44.56	1.76	2.90	21.13	29.74	<u>1.76</u>	0.65
2003	26.00	43.77	<u>4.87</u>	2.99	14.62	29.33	<u>1.62</u>	0.56
2004	30.14	43.11	1.44	2.88	21.53	27.52	<u>1.44</u>	0.68

- 1) Note: underline and bold represents fatality/injury rates in Flagler County that are worse that the State average.
- 2) Source: *Traffic Crash Facts*, published by the Florida Department of Highway Safety and Motor Vehicles – <http://www.hsmv.state.fl.us>.

It is important to note that pedestrian fatality (injury) rates in Volusia County have been worse than statewide average Florida rates for eight (8) of the ten years of available data. In addition, bicycle fatality (injury) rates in Volusia County have been worse than statewide average Florida

rates for four (4) of the ten years of available data. The total raw number of injuries and fatalities in Volusia County over the ten year period was:

Injuries: 2,371 pedestrians and 1,987 bicyclists
Fatalities: 175 pedestrians and 30 bicyclists

However, the pedestrian and bicycle injury rates in Flagler County have been lower than the statewide average Florida rates for the last ten years. But, the fatality rates have been higher than the State average in some years. The total raw number of injuries and fatalities in Flagler County over the ten year period was:

Injuries: 134 pedestrians and 84 bicyclists
Fatalities: 12 pedestrians and 5 bicyclists

The Volusia County MPO has designated a Pedestrian and Bicycle Coordinator to address safety and planning issues and to work towards improving the conditions faced by these travelers. The coordinator accomplishes this through the active involvement in, and participation with, several organizations. Planning efforts and technical reviews are completed through the Bicycle/Pedestrian Advisory Committee (BPAC). This group reviews and prioritizes project applications and determines the evaluation criteria for bicycle/pedestrian related facilities. The MPO adopted its Bicycle/Pedestrian Plan on January 25, 2005. The Plan, included in Appendix G, created a GIS database that brought together all existing and planned facilities in the area. The Plan included the existing and the planned connections to schools, parks, city centers, libraries, and other similar destinations.

Safety promotion, education, and injury prevention goals are emphasized through involvement in the Volusia County Community-Wide Traffic Safety Teams and the Volusia/Flagler Safe Kids Coalition. These organizations sponsor bicycle rodeos, pedestrian road shows, and other community events that seek to increase public awareness of transportation safety issues.

In addition to these activities, the MPO Bicycle and Pedestrian Coordinator maintains an ongoing dialogue with county and municipal planning agencies, local advocacy groups, representatives from Volusia County schools, and other organizations that share a common interest in providing a safe environment for non-motorized travel. In doing this, the MPO supports federal transportation policy aimed at increasing non-motorized transportation while simultaneously reducing injuries and fatalities. The coordinator also promotes the continued expansion and upgrade of existing sidewalks, bike paths, bike lanes, and trails that accommodate the various needs and desires of the bicycling and walking community. The MPO completed a Bicycle and Pedestrian Safety Study in December 2005. The study, included in Appendix H focused on safety issues at ten (10) elementary school sites. The study includes detailed discussion of the issues and recommendations common to the ten (10) sites in the study. The State of Florida, under the “Safe Routes to Schools” program, will receive federal funds for safety improvements at select school locations. Estimates from the Federal Highway Administration for the state are:

2005	\$1.0 Million
2006	\$4.4 Million
2007	\$5.8 Million
2008	\$7.2 Million

2009 \$9.0 Million

The FDOT District office anticipates that the Volusia County MPO may get one new project under this program every two years.

Guidance provided by the Federal Highway Administration (FHWA) in interpreting the bicycle and pedestrian elements of SAFETEA-LU legislation states that “to varying extents, bicyclists and pedestrians will be present on all highways and transportation facilities where they are permitted.” It goes on to say that “it is clearly the intent of SAFETEA-LU that all new and improved transportation facilities be planned, designed, and constructed with this fact in mind.” Efforts made throughout the Volusia County MPO area in the planning and development of bicycle and pedestrian facilities both as a sub-component of other road improvements, or as stand-alone projects, clearly demonstrate the recognition of these requirements.

In addition to the guidance provided by SAFETEA-LU for state highway projects, the Volusia County Comprehensive Plan addresses bicycle and pedestrian facilities on County maintained roads. The County’s plan states that as improvements are initiated “every effort will be made to include sidewalks, bike lanes, and/or paved shoulders to accommodate the mobility needs of both bicyclists and pedestrians.”

The amount of funding allocated towards the construction of bicycle and pedestrian facilities is also an indicator of the sincere efforts to integrate bicycle and pedestrian facilities into mainstream transportation planning. In 1997 the Volusia County MPO dedicated only 3% of its Surface Transportation Program (STP) Extra Urban (XU) funding towards bicycle and pedestrian facilities. Understanding the need to create real multimodal travel opportunities, the MPO supported an increase in the STP “set-aside” to 5% in 1998. The Volusia County MPO Board raised the level again in the following year to 12.5%. And finally, the Volusia County MPO Board raised the level again in 2005 to 30%. While the amount of funding in this category varies, the approximate total of 30% of the MPO’s XU funds is \$1.2 million annually (which is matched 50/50 with local governments for an approximate annual total of \$2.4 million in federal and local funds).

In addition, funding on the state level is available through a safety set-aside that reserves 10% of the State’s STP apportionment to address safety improvements to the transportation infrastructure. Historically, in Volusia County, the Community-Wide Traffic Safety Teams have identified and recommended projects that receive funding through this program. FDOT also provides financial support through the Transportation Enhancement Program (TEP). Projects selected for the TEP are prioritized by the MPO, where the MPO has a policy that only bicycle/pedestrian projects are eligible for TEP funds. Volusia County government also allocates a portion of the local funds available for the road program to bicycle and pedestrian facilities. This allocation is approximately \$500,000 annually.

During the long-range planning horizon the Volusia County MPO will continue to enhance the safety and convenience of non-motorized forms of travel. To accomplish this, it will be important for the Volusia County MPO to update the Bicycle and Pedestrian Comprehensive Plans to include clear and attainable goals and objectives. These plans will provide a logical framework for the continuation of successful programs and strategies as well as the incorporation of new techniques that will improve the overall environment for all travel modes.