



Staff Analysis

Overview of Vision Zero & Complete Streets Policies

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CITY OF GAINESVILLE STAFF ANALYSIS

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Title: Overview of Complete Streets Policies & Transportation Safety Snapshot

Sponsor (i.e., Name of Commissioner or Department): Public Works Department

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Summary of Issue

During the January 15, 2015 City Commission meeting regarding the item “What Now for Transportation” the City Commission discussed the implications of existing city policies regarding multi-modal, lane capacity and complete streets concepts and whether the current policies reflect the vision of the City Commission. This matter was referred to the General Policy Committee for further discussion. In addition, the City Commission requested information about the transportation system safety.

History/Background Information

There has been a growing interest in the implementation of Vision Zero strategies nationwide following the success of the measures in Europe. In 2014 New York City was the first city in the US to adopt policies and develop a vision zero strategy; since then several cities have followed suit and implemented similar programs. Vision Zero has proven to be effective in reducing the incidence of traffic related fatalities and severe injuries. The major premise is that deaths and severe injuries are preventable, and that no loss of life is acceptable. The strategies have a strong engineering emphasis, and complete streets aspects are strongly related as a means to achieve the desired safety results. In addition, the strategies involve broad interdisciplinary coordination, high visibility of efforts and outreach, and clear commitment of local leadership to make Vision Zero goals as a local priority.

COMPLETE STREETS

“Complete Streets” refer to the design and implementation of transportation projects that address the needs of all roadway users, including motorists, pedestrians, bicyclists and transit riders. It intends for the provision of adequate infrastructure to facilitate access, mobility and promote safety of users of all ages and ability levels. Complete streets enhance equity in transportation, promote transportation choice, enhance safety of all users, and support economic development strategies. According to a study by Anderson et.al, a sampling of complete streets projects revealed higher employment, property values, and private investments in the surrounding area

when compared to similar unimproved corridors¹. The implementation of complete streets is prevalent nationwide; according to a survey by Carlson et.al, based on 2014 data from the National Survey of Community-Based Policy and Environmental Supports for Healthy Eating and Active Living (CBS HEAL) and the National Complete Streets Coalition database, over 49% of communities with population over 50,000 have adopted complete streets policies².

The implementation of complete streets is intended to help address the challenges associated with the growth of urban areas, population aging, changes in commuting patterns, and the need to increase physical activity levels to reduce the incidence of chronic diseases. In short:

- Complete streets need to be sensitive to the surrounding context and land uses. The implementation of the various design elements are intended to be flexible depending on area needs. While urban land uses that are more dense and intense may require the implementation of a wider range of options such as sidewalks, bike lanes, bulb-outs to shorten pedestrian crossing distances, and transit stop amenities, these design elements may not be appropriate or needed in a rural and/or suburban setting with little or no pedestrian and transit activity;
- Complete streets add amenities to enhance usability of the transportation system for users of all ages. As the population ages and the ability of older adults to drive ceases or decreases the presence of alternate facilities that enable safe walking and use of transit become more critical to support independence and quality of life;
- Complete streets encourage multimodal transportation. Where transit service exists, complete streets facilitate the integration of modes, and extend the range of transit trips by walking or cycling;
- Complete streets are linked to increased levels of activity which in turn tend to reduce the incidence of chronic diseases. According to the Center for Disease Control and Prevention, “*regular physical activity helps prevent risk factors for disease (such as high blood pressure and weight gain) and protects against multiple chronic diseases (such as heart disease, stroke, some cancers, type 2 diabetes, and depression)... physical activity is associated with improved quality of life, emotional well-being, and positive mental health.*”³ The presence of safe and convenient multimodal facilities encourages walking.

STATE & FEDERAL POLICIES:

The US Surgeon General issued a call to action in 2015 to promote walking and walkable communities in recognition of the health benefits associated with increased levels of physical activity. The initiative specifically highlights the role of the transportation, land use and

¹ Anderson, G., Searfoss, L., Cox, A., Schilling, E., Seskin, S., & Zimmerman, C. (2015). Safer streets, stronger economies: Complete streets project outcomes from across the united states. *Institute of Transportation Engineers. ITE Journal*, 85(6), 29-36.

² Carlson, S., Prbasaj, P., Gayathri, K., Watson, K., Atherton, E., & Fulton, J. (2016). Prevalence of Complete Streets policies in U.S. municipalities, *Journal of Transport & Health*, Available online 17 November 2016, ISSN 2214-1405, <http://dx.doi.org/10.1016/j.jth.2016.11.003>.

³ Center for Disease Control & Prevention (2015). <https://www.cdc.gov/physicalactivity/walking/call-to-action/>

community design sector in promoting walkability by designing and implementing infrastructure that is safe and accessible, and by carefully considering the placement of land uses that interconnect and support walking.⁴

The US Department of Transportation issued a policy statement in 2010 that recognizes the health, safety, environmental, transportation, and quality of life benefits associated with walking and cycling, and the need to incorporate safe and convenient walking and biking facilities as equal with other transportation modes. The statement indicates that transportation agencies have the responsibility to improve conditions and opportunities for walking and cycling, and encourages transportation agencies to go beyond minimum standards to provide safe and convenient multimodal facilities.⁵

The Fixing America's Surface Transportation Act (FAST ACT) adopted in 2015 states that the design of transportation facilities “*shall consider access for other modes of transportation*”; encourages provision of safe and adequate accommodation of all users of the transportation network; and recognizes the need for design flexibility to meet environmental needs.⁶

At the state level, the Florida Department of Transportation is developing a complete streets policy and a complete streets implementation plan *that will allow for the implementation of safer, context-sensitive roadways by “putting the right road in the right place”*. The plan and policy are expected to be completed by the end of 2017.⁷

Staff reviewed the Comprehensive Plan to identify pertinent policies related to the concepts of multi-modal, lane capacity, Complete Streets and Context Sensitive Design. The existing City of Gainesville policy language is provided in Appendix A.

GAINESVILLE SAFETY SNAPSHOT

Based on the available crash data from Signal4 Analytics, over the last ten years (2007 to 2016) there were 36,251 total crashes recorded along public roads within the City of Gainesville. A preliminary snapshot of the trends is provided below; Figures 1 and 2 depict the trends normalized by population.

- 1,458 crashes involving cyclists (890 crashes) and pedestrians (568 crashes);
- 10 cyclist fatalities and 19 pedestrian fatalities;
- 57 fatalities associated with all other vehicular crashes;
- 35% of vehicular fatalities involved alcohol consumption;

⁴ Center for Disease Control and Prevention: [Calling on Transportation, Land Use & Community Planners](#).

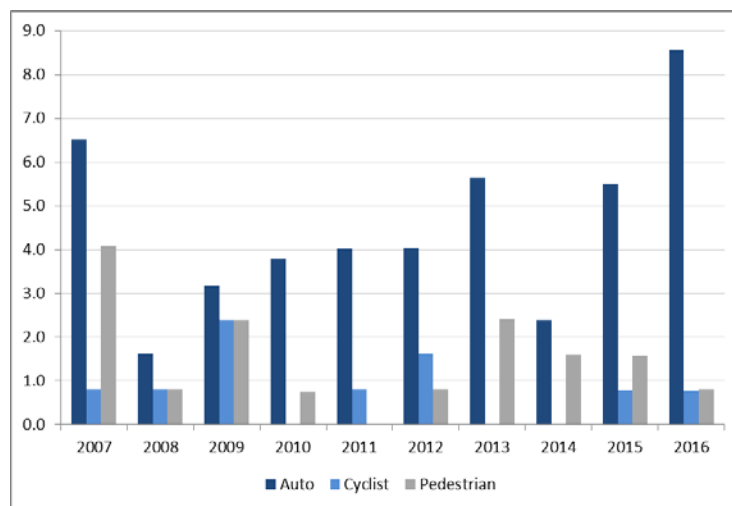
⁵ [Federal Highway Administration, Bicycle and Pedestrian Program](#)

⁶ Federal Highway Administration, [FAST ACT](#)

⁷ [FDOT Complete Streets](#) policy and implementation plan

- approximately 70% of all fatalities involving a cyclist or pedestrian occurred during nighttime;
- 50% of fatalities involving a cyclist or a pedestrian occurred at intersections;
- 58% of crashes involving pedestrians and 70% of crashes involving cyclists occurred at intersections;
- 60% of crashes involving pedestrians and 52% of crashes involving cyclists occurred along major corridors (state-owned system);
- 3% of pedestrian crashes resulted in fatalities and 89% resulted in injuries;
- 1% of bicycle crashes resulted in fatalities and 83% resulted in injuries;
- 4% of bike crashes involved alcohol consumption;
- 13% of pedestrian crashes involved alcohol consumption.

Figure 1: Fatal crash rate trends (2007-2016)



Note: Crash rate per 100,000 population.

The number of traffic fatalities increased over the past three years. A closer examination of the fatal crashes between 2014 and 2016 indicates that 81% of fatal crashes involved reckless driving, high speeds, red light running and other behaviors (i.e., failure to yield the right-of-way) not correctable by engineering measures. Cyclist and pedestrian fatalities over the same period amounted to 26% of the total (7 out of 27). Motorcycle fatalities related to reckless driving at high speeds amounted to 33% (9 out of 27) of the total with a noticeable spike in 2016 (58%; 7 out of 12).

Summary

Local policies contained in the City's Comprehensive Plan (last updated in 2013) are consistent with state and federal level policies that support the implementation of complete streets. The policies aim at connectivity of uses and neighborhoods, enhanced transit use with the provision of adequate amenities, increase levels of walking and cycling, reduced congestion by implementation of alternate solutions to road widening, and the provision of mixed land uses that

enable multimodal transportation. The polices envision the implementation of complete streets design elements sensitive to the context in which the project occurs, in order to promote increased quality of life, provide transportation choices, and support a healthy economy. In addition, language in the City's Engineering Design and Construction Manual (last updated in 2015), consistent with the City's comprehensive plan, promotes implementation of complete streets design elements as adequate and feasible. Between years 2010 - 2015 the traffic volumes along major corridors within City limits have increased by approximately 4% while transit trips on city routes have increased by 13%. It appears that the goals to implement transportation strategies to offer a balance of mobility options are achieving the desired outcomes. One unintended consequence with the increase in travel volumes by other modes of transportation may be an observed increase in the number of crashes involving pedestrians and cyclists as the exposure and opportunity for conflict tends to increase as more user types share the road. This issue was discussed at a recent local transportation workshop presented by the Federal Highway Administration (FHWA) where there was discussion about the need to normalize the exposure rates based on volumes of cyclists and pedestrian to accurately compare the impacts of complete streets initiatives.

Additional evaluation is needed to determine the corrective measures to address severe crashes consistent with Vision Zero strategies. City staff should continue to coordinate with the Alachua County Traffic Safety Team to develop strategies and implement solutions. Vision Zero efforts can be strengthened by the adoption of directives that make the efforts a priority. A sample Vision Zero policy is provided in the Appendix for reference.

Figure 2: Bike & Pedestrian Crash Trends (2007-2016)



SOURCE: Population data provided by the City of Gainesville Department of Doing based on Bureau of Economic and Business Research (BEBR) data; Crash data based on Signal4 database.

Options

- A.** Maintain existing policies in the comprehensive plan and City’s design manual, and continue implementation of projects as feasible.
- Pros** No action needed. System connectivity will continue to increase over time.
- Cons** Perception that Complete Streets policies are intended to reduce individual’s ability to choose the automobile as the primary travel option.
- B.** Strengthen and clarify intent of complete streets policies by amending the comprehensive plan language.
- Pros** Intent of language is clarified.
- Cons** Time consuming effort expected to take between 6 to 8 months to complete. Process requires review and approval of the Plan Board and the State reviewing agency; also requires a public hearing and the preparation and readings of an ordinance.
- C.** Strengthen and clarify intent of complete streets policies by amending the land development code language.
- Pros** Intent of language is clarified.
- Cons** Same as Item B above, but length of process is decreased to 3 to 4 months as it does not require State review.
- D.** Repeal the complete streets language.
- Pros** None.
- Cons** Lack of consistency with state and federal policies and guidance. Decrease in system connectivity; lack of alternatives to driving.
- E.** Discuss safety trends and Vision Zero strategies, direct staff to draft a Vision Zero policy and refer the issue to the Alachua County Traffic Safety Committee for input.
- Pros** Targeted efforts to increase transportation system safety.
- Cons** None; funding source is needed to expedite the evaluation and for implementation of recommended actions.

Staff Recommended Option

Discuss existing policies and provide guidance to staff on preferred alternative regarding complete streets and authorize staff to continue with the development of Vision Zero strategies.

Attachments/References

City of Gainesville Complete Streets policy language

FDOT Complete Streets tenets

Vision Zero elements

Sample Vision Zero policy

Presentation