Questions from the April 4, 2015 CCNA Meeting
RE: Multimodal Mobility Plan

1) Have you looked at how the state's adoption of a complete streets policy impacts or would help our own policy decisions?

Yes, staff has reviewed the Complete Streets Policy and has incorporated the concept of complete streets into the plan. Presently, the Engineering Design Criteria Manual (EDCM) reflects these ideas in the downtown area. The FDOT is working on an update to their complete streets policy in the form of a manual and when they finish, staff will incorporate these concepts into the EDCM update city-wide. The FDOT expects to have this completed in 2015.

2) There seem to be two messages. Alex talked about small businesses required to do expensive traffic studies and reducing the burden for traffic studies on small businesses. The draft recommendations say to reduce the number of trips per hour trigger points that would require traffic studies, capturing all projects predicted to pay a mobility fee. These two ideas appear to conflict. Can you explain?

For small businesses, a traffic study can be daunting. The cost of the study can be challenging for a small business and the six weeks (average time of a traffic study) of the unknown impacts can deter many of these businesses from considering the City of Sarasota. While a small business use will almost certainly not impact a road operating appropriately, it is hard for them to consider this implication when their financial viability hinges on the outcome. The larger developments typically have the ability to work through this effort and many have experience with traffic studies from previous ventures.

While traffic studies would continue to be required for certain-sized projects, the proposed trip generation threshold to determine when a traffic study is needed would be established for each mobility district. The threshold numbers are based on an analysis of a sample of the last twelve years of development projects where a traffic study was required. The analysis identified at what level traffic generated by the development project was significant enough to impact the road network and require an improvement or proportionate share payment, versus those projects where the traffic generation was not significant and only required payment of the impact fee. Even though these development projects were obligated to perform a comprehensive traffic study, the majority of them were not required to pay for and construct roadway improvements as they did not degrade level of service standards. Furthermore, when a roadway improvement was actually required, most of the improvements recommended by the traffic studies included costly road widening projects, which typically have not been supported by the community. These traffic studies generated little to no benefit to the public, developer or staff, and, in a sense, engendered a false expectation to the general public in that no tangible roadway improvement was required to be constructed.

Based on State Statute, the developer is not responsible for improving existing streets/intersections so they may operate at the adopted level of service; that is the City of Sarasota's responsibility. When evaluating traffic impacts from a development, it is important to note that necessary improvements to restore the roadway level of service standard are assumed to be in place, per State Statute, and the developer would only be responsible for their proportionate share of costs for the additional improvements needed (if any) due to their specific project impacts. With the enactment of this State Statute, rarely is there a project that is required to pay for specific improvements. Most projects will perform a traffic study and still just pay the multimodal transportation impact fee, but for very large projects, there could be significant system impacts. This is why some level of concurrency is being retained. If improvements are needed, then the developer would be required to pay their share of these improvements to address the trips they add to the improved network.

For information, staff has reviewed several recent projects and none of these had a specific improvement required. They will all have to pay multimodal fees, however. Below are examples:

Project Name	***Address***	***Project #***	***Net Trips Added To Network***
Sarasota Flats	*1401 Fruitville Rd*	*15-TSP-02*	*98.95*
The Pines	*1501 N. Orange Ave*	*14-TSP-21*	*332.59*
The Vue	*1 N. Tamiami Trail*	*13-TST-13*	*185.31*

The proposed trip generation thresholds have been developed for each mobility district to set the bar at a level where it is unlikely that if a study were required, the outcome of the study would result in developer obligations above and beyond payment of the multimodal fee. We understand the upper threshold is a concern, as is having only three tier options, so an alternative for consideration to better address these concerns will be discussed.

3) Functioning Grid—please comment on how a grid reduces congestion vs road widening.

In general, the goal of walkability and new urbanism is to have calm, context sensitive multi-modal streets, which means more connectivity at lower speeds for a functional grid. This works well for pedestrians and cyclists while still maintaining efficiencies for vehicles. SmartGrowth America has a detailed summary extolling the benefits of connected streets and it is attached on page 8.

4) If a former store is torn down, it decreases traffic. Now comes the new owner, where a traffic study is required. Does one take into account the difference? Or the total?

The traffic study will allow for full credit of the trips assigned to the former store if it was torn down no more than five years prior. After year five of the structure being razed, the credit is then reduced by 20% per year. This formula is expected to change as it currently incentivizes some dilapidated structures to

remain in place since the trips do not expire if the building is left standing, no matter how long it remains vacant.

5) When are traffic studies done, in summer, "in season," or both? Probably both should be required.

The traffic counts taken as part of the traffic study may be performed at any time and are based upon when the project is submitted for review. The counts are adjusted to reflect peak season as required by utilizing the FDOT seasonal adjustment factors.

6) How do we deal with Beneva and Fruitville? Beneva is a county road maintained by the city and Fruitville is a state road.

Beneva is a County road maintained by Sarasota County and as noted Fruitville is a State Road. Sarasota County does not have any plans to widen Beneva Road and the State does not have any plans to widen Fruitville Road. Both Sarasota County and the State are working to make the traffic signals on these corridors operate more efficiently.

7) Did I understand correctly? The traffic study on Fruitville & Beneva Roads showed it was a failed intersection. How, how can they widen Fruitville Road?

This question really gets to the point of the discussion and is precisely why changes are being proposed. If we continue to have an adopted LOS C for Beneva Road and a LOS D for Fruitville Road, then we need to determine how we make these roads operate at this higher LOS. There are ways to have that happen, but most of them would be very expensive, require property acquisition for additional right-of-way needs, and could make the area less pedestrian friendly by constructing an even wider roadway. If the LOS here is not adjusted, then the City of Sarasota (not the developer) would be legally required to make most of the necessary roadway improvements in order to meet concurrency.

8) How are service levels determined? Define levels A-F. Then, what is a failed road/ intersection?

There are different measures based on consideration for a road, a signalized intersection or a non-signalized intersection and examples of each are included on the following three pages.

LEVELS OF SERVICE

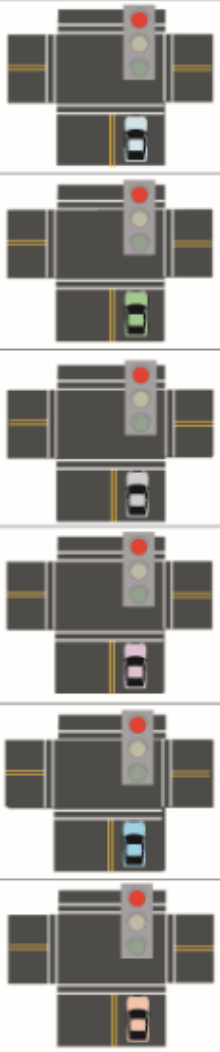
for Two-Lane Highways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
A		55+	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. **No delays**
B		50	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. **No delays**
C		45	Stable traffic flow, but less freedom to select speed, change lanes or pass. **Minimal delays**
D		40	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. **Minimal delays**
E		35	Unstable traffic flow. Speeds change quickly and maneuverability is low. **Significant delays**
F			Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. **Considerable delays**

LEVELS OF SERVICE

for Intersections with Traffic Signals

Level of Service	Delay per Vehicle (seconds)
A	≤10
B	11-20
C	21-35
D	36-55
E	56-80
F	>80



Factors Affecting LOS of Signalized Intersections

Traffic Signal Conditions:
- Signal Coordination
- Cycle Length
- Protected left turn
- Timing
- Pre-timed or traffic activated signal
- Etc.

Geometric Conditions:
- Left- and right-turn lanes
- Number of lanes
- Etc.

Traffic Conditions:
- Percent of truck traffic
- Number of pedestrians
- Etc.

LEVELS OF SERVICE

for Unsignalized Intersections

Level of Service	Flow Conditions	Delay per Vehicle (seconds)	Technical Descriptions
A		<10	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. **Very short delay**
B		10-15	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. **No delays**
C		15-25	Stable traffic flow, but less freedom to select speed, change lanes or pass. **Minimal delays**
D		25-35	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. **Minimal delays**
E		35-50	Unstable traffic flow. Speeds change quickly and maneuverability is low. **Significant delays**
F		>50	Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. **Considerable delays**

9) Alex said we are "partially" retaining concurrency? What does that mean? What are we retaining and what are we getting rid of?

We will still retain a LOS for roads and will require projects of a certain size to do a traditional traffic study. We will propose an adjusted, realistic LOS in the Comprehensive Plan so we have a more accurate threshold in which to evaluate the operation of the network. Continuing to require traffic studies for larger projects will allow the City to measure effects to the system for those projects which might have a network impact.

10) Concerning large projects on the edge of neighborhoods, where two different zones meet: Can we adopt transportation study policies and/or zoning policies that look at the impact on neighborhood roads with the goal of maintaining quality of life for the neighborhood (i.e., not widening roads in single family zones just for a new project on the edge of the neighborhood.)?

Development standards, including height and density, are confined to land use and zoning policies. Part of the Urban Design Studio's ongoing work is to develop a form-based code to address the relationship between building facades and public spaces, the form and mass of buildings, and the scale and types of streets and blocks. Compatible transitions in neighborhood edge areas will continue to be a focus of UDS's work efforts.

Neighborhood roads (local streets) could be evaluated as part of a required traffic study. It is important to note, however, that most local streets in the City can typically accommodate up to 1,000 PM peak hour trips without triggering any sort of mitigation.

The transportation policy being proposed is to consider all modes of transportation in a context-sensitive environment when evaluating and planning for traffic impacts and to adjust the LOS based on changes to State law so that it will no longer dictate widening roads as the sole solution to maintain concurrency. State law effectively prohibits municipalities from denying development projects based on traffic impacts as long as the developer provides a proportionate fair share contribution (or constructs an improvement related to specific project impacts) to accomplish one or more mobility improvements that will benefit a regionally significant transportation facility.

Networks of Complete Streets

In many places built since the 1950s, roadway design usually means a system of widely spaced, large arterials fed by smaller roadways that rarely connect with each other. This system concentrates motorized traffic on a limited number of large roads, which causes longer, indirect trips and limits opportunities for alternate routes. Such a network makes it difficult for people who might walk, bike, or take public transportation because the indirect routes lengthen their trips and force them onto roads that are usually not designed for their safety or comfort. Public transportation also has a difficult time serving isolated neighborhoods with only one or two entry or exit points. So, people end up driving, even for very short trips.

Communities that have adopted Complete Streets policies sometimes struggle with retrofitting multi-lane arterials that must carry heavy automobile traffic but are also the only choice for bicycling, walking, and public transportation. Many realize they must look for opportunities to increase street connectivity in order to give people choices when traveling between home, medical offices, schools, shops, and workplaces.

Complete Streets Are Connected Streets

Well-designed, connected Complete Streets make travel more efficient by providing choice not only in modes, but also in routes. Pedestrians and public transportation riders are especially motivated to find direct routes to their destination or their transit stop, and prefer lower-traffic streets. This is much easier to do when the street network is a connected grid of relatively short blocks. Instead of trying to make each street perfect for every traveler, communities can create an interwoven array of streets that emphasize different modes and provide quality accessibility for everyone. Some streets may emphasize vehicles or trucks, while others emphasize pedestrians or public transportation. In more industrial areas, some streets will emphasize access for freight vehicles. Charlotte, North Carolina defines its street network along a continuum from most pedestrian-oriented to most auto-oriented, referring both to the design of the street and to the adjacent land uses. Each street type emphasizes different mixes of modes, but is designed with all potential travelers in mind.

In a complete network, short, local trips can be taken without burdening the arterial systems with more cars. Roads in sprawling communities see up to 75% more travel demand on those arterials than similar arterials in connected networks. People with a complete, connected network of options may opt to reach their destination entirely without driving on arterials, or will instead walk, bike, or take public transportation. One study found that single-family households located in a network of Complete Streets made a similar number of total trips as those in an incomplete network, but made significantly fewer by car, instead opting to walk.

Connected streets can reduce traffic congestion by dispersing traffic and offering travel options. Networks of connected Complete Streets can carry as many travelers as conventional sprawling roadway design, but do not rely on a sparse network of major arterials. Parallel routes within connected networks maintain

this high corridor capacity, while providing different routes to destinations for convenience, variety, or to avoid construction. These choices help all users of the system by reducing travel delays associated with reliance on very few routes.

Connectivity Improves Safety

Grid networks help create a safer road system. A study of 24 medium-sized California cities found that the most cities were those built more recently with unconnected networks that concentrated auto traffic on a few roads and featured far fewer intersections. The more grid-like street networks saw fewer fatal or severe crashes. Gridded networks need not rely on overly-wide roads and have more intersections, lowering drivers' speeds. Yet travel times remain comparable to the conventional network because trip distances are shorter – the routes are more direct – and because timed traffic signals can provide a consistent speed. Pedestrians benefit from additional signalized, safe crossing opportunities at intersections, while both people afoot and on bike benefit from the slower vehicular speeds. Emergency service personnel are able to reach emergency sites more quickly due to the redundancy of the network. A study in Charlotte, North Carolina found that as street connectivity increased, a fire station could reach far more households, and more quickly.

Right-sized Blocks

A network of Complete Streets works best if block size is reduced. Short blocks are important to people on bikes or on foot because they reduce the total distance traveled and provide direct access to properties. A smaller block structure also allows land use to evolve and adapt over time, providing development flexibility. After updating its City Code to achieve Complete Streets, North Myrtle Beach, South Carolina now requires most blocks to be human-scaled, between 300 and 400 feet long. For transit providers, a community of Complete Streets with shorter blocks is easier to serve. Most agencies look for a ½ mile spacing between routes, which is more easily achieved with a grid system, as is easy travel in any direction.

Increase Connectivity with Complete Streets

Some places with Complete Streets policies have included provisions specifically to increase connectivity. For example, Virginia's Complete Streets policy was augmented by a new policy to end maintenance support for new streets that end in cul-de-sacs. Other communities have required new developments to connect into the existing grid in multiple locations. Some built-out communities with a sprawling road system have looked for opportunities to create more non-motorized connections by installing paths that connect cul-de-sacs and other disconnected streets to nearby roads. Even when roads are connected, there may still be a need for connected grids of walking and bicycling networks. The incorporation of Complete Streets into all of Seattle, Washington's plans helps to identify gaps in the network for different modes and prioritizes investment to create complete networks for all modes.

Reaching connectivity through Complete Streets policies directs transportation funding to create complete networks for all modes and helps support the livable communities that people want.