
SCOPE OF STUDY

The purpose of this study is to determine what steps our community can take to improve traffic flow and minimize traffic congestion.

To fulfill the purpose, this study:

- reviews national studies and dialogue about transportation
- reviews the findings, conclusions and recommendations from all recent local studies
- reviews the scope of pending studies

- identifies barriers that impede use of alternative modes of transportation
- examines successful approaches from other communities
- recommends steps our community can take to improve traffic flow and congestion

This study did not include a thorough review of:

- the movement of freight
- traffic incident management
- Sarasota 2050, the proposed amendment to the *Sarasota County Comprehensive Plan*

HIGHLIGHTS

Major Problems

- Inefficient roadways due to traffic light signalization, inadequate signage and road design.
- Traffic congestion problems are strongly linked to land use design and growth management practices. Transportation concurrency standards are inadequate and the coordination and enforcement of these standards are inconsistent.
- Coordination is a challenge because of numerous organizations and jurisdictions making transportation decisions. Differences in organizational boundaries exacerbate the problem.
- Public transportation accounts for less than two percent of all transportation in the county and currently is not a viable transportation option in most instances.

Recommended Solutions

- Develop a coordinated, bi-county, traffic signalization system using advanced Intelligent Transportation Systems (ITS) applications and explore appropriate applications of ITS technologies throughout Sarasota County and contiguous counties.
- Local governments should do more to prevent additional congestion in any land use planning. Strategies include coordinated timing of any development or redevelopment with the availability of appropriate infrastructure, access management plans, traffic calming, establishing better connectivity of road network, and adherence to strong concurrency rules.
- Improve coordination through the expanded role of the MPO and the development of coterminous boundaries for state agencies working on the related issues of transportation and land use management.
- Develop a regional transit authority to provide transit services in Sarasota, Manatee and Charlotte Counties. This authority should encourage, expand and develop incentives for a public transportation network to serve the entire population.

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FORWARD

This report represents the work of a volunteer group of Sarasota County citizens that met once a week from July 2001 to February 2002 to study the issue of traffic flow and congestion in Sarasota County. All were free to request as much background material as necessary. Based on the findings of facts offered by written materials and guest speakers, these final conclusions and recommendations were developed. Every effort was made to ensure that this report is unbiased and reflects the group's understanding of the issues. Each person was free to discuss his or her point of view. A consensus was reached and we are pleased to present you with the results of our work. We hope that each Sarasota County citizen will make an effort to understand and embrace this report as a tool to better the lives of all citizens.

FINDINGS

Findings represent the information received by the study group. They are derived from published materials, from facts reported by resource people and from a consensus of the study group's understanding of the opinions of resource people.

Note: Sarasota County refers to the entire county; the unincorporated county refers to that area under the jurisdiction of Sarasota County Government.

OVERVIEW OF TRAFFIC CONGESTION

Across the country the delays and frustration of traffic congestion plague scores of cities and towns. The value lost in motorist delay, decreased economic productivity, increased traffic accidents, increased fuel consumption and increased pollution comes to about 15 cents per vehicle mile.

Demand has soared over the past two or three decades; more vehicles are on the road as more people are driving and driving more often. The average mileage traveled is 10,000 passenger miles per person annually. Most people who have the ability to drive and can afford a car have one. Factors that have contributed to this increase in demand include greater participation by women in the labor force, and a society with many individuals in their peak travel years placing a high value on use of time. The single-occupant vehicle (SOV) becomes the preferred mode of travel as it offers the flexibility to move travelers where and when they want to go.

The technical measure of traffic congestion is the reduction of average speed relative to that possible under free flow conditions; the driver stuck in traffic may feel differ-

ently. The true measure may be related more to "frustration per mile." A number of resource speakers meeting with the study group asked how the study group was defining congestion. They stated that the definition of congestion would influence the solutions sought. If one is counting cars, the strategies will be aimed at reducing cars. If one defines congestion as delay and travel time, the solutions may focus on more road lanes, controlled curb cuts and efficient management of accidents and other incidents.

Several resource speakers emphasized that land use management is inextricably related to traffic congestion and that separating these issues will ultimately decrease the community's quality of life. Regardless of how traffic congestion is defined, resource speakers stated that land use management is an essential strategy in its control.

NATIONAL PERSPECTIVE

Traffic growth is outpacing our population and employment growth. Nationally, population increased by 22 percent from 1976 to 1996. In the same period, the number of licensed drivers increased by 34 percent and the number of miles driven went up by 77 percent. Currently, travel

growth has slowed to an annual increase of about .5 percent, after increasing at an annual rate of 3 to 4 percent for a number of years.

The average driver spends the equivalent of a full work-week stuck in traffic each year. From 1982 to 2000, traffic delay due to congestion increased by 236 percent per person. Congestion costs Americans 78 billion dollars a year in wasted fuel and lost time. This figure has increased 39 percent since 1990. Currently, the average cost of congestion per person has reached \$625 annually.

In the United States, transportation is the second highest category of household spending (19 percent after housing.) It costs about 41 cents per mile to own and operate a vehicle, not including the environmental or hidden costs. Transportation spending accounts for 11 percent of the nation's economic activity.

Nationally, public transportation makes up only six percent of the total transportation expenditures. Since 1995, the transit ridership has increased by 21 percent (compared with an 11 percent increase in driving), and ridership is at the highest level in more than 40 years. Increased traffic congestion has been a factor in getting people out of their vehicles to alternate modes of travel.

Indirect Costs of Driving and Traffic

The public's basic perception is that driving is cheap. The cost of purchasing a vehicle is the same regardless of how many miles you drive. However, driving has a number of indirect costs that the average driver does not consider.

The environmental costs of driving include air, water, visual and noise pollution. The greenhouse effect is caused primarily by carbon dioxide, and one-third of the carbon dioxide in our atmosphere comes from automobiles. Motor vehicles are the largest source of air pollution, contributing 47 percent of the nitrogen oxides, 39 percent of the hydrocarbons, and 66 percent of the carbon monoxides in our air. These pollutants result in illnesses, premature death, reduced agricultural productivity and damage to materials such as buildings and statues.

Vehicles also adversely affect the nation's water supply, primarily by stormwater runoff. Pollutants such as oil, gas and antifreeze deposits as well as chemicals from tire and brake wear end up in our sewers, waterways and aquifers. Damage estimates from stormwater runoff are unavailable.

Noise pollution from a busy roadway can have significant impact on health and property values. Last available estimates in 1989 claim that property values in urban areas were lowered by nine billion dollars because of noise, even with noise barriers in place.

Traffic congestion contributes to the increase of vehicular accidents and emergency vehicle delay. Motor vehicle accidents result in lost wages, property damage, pain and suffering, travel delay, and medical and legal costs. The National Highway Traffic Safety Administration reported that the total economic cost of motor vehicle accidents was 150.5 billion dollars in 1994. Economic cost components included productivity losses, property damage, medical costs, rehabilitation costs, travel delay, legal and court costs, emergency service costs, insurance administration costs, premature funeral costs and costs to employers.

Public health is also affected by traffic and congestion. A number of studies have shown that individuals making long commutes are at a higher risk for illnesses including high-blood pressure, sleep deprivation and depression. During the 1996 Olympics, officials in Atlanta took steps to limit auto traffic in the city. Their efforts resulted in a 22.5 percent decline in the volume of morning rush and the number of children suffering asthma attacks in Atlanta also declined sharply.

Another hidden cost is the loss of land. It is estimated that more than 60,000 square miles of land is paved in the United States. Some researchers estimate that in a typical U.S. city, almost half the land is used for vehicles.

There is also cost to the economic growth in the nation. As traffic congestion increases, slower delivery of goods and services will lead to increased costs for consumers. Trucks transport 72 percent of the estimated \$7 trillion worth of goods and services shipped nationwide. An additional 12 percent is transported by courier services, bringing the proportion of all goods shipped over roads to 84 percent. Commercial truck travel has increased by more than 37 percent from 1990 to 1999. The U.S. Department of Transportation (DOT) projects that freight deliveries will double by the year 2020 in most parts of the country. The health of our economy is increasingly tied to the efficiency of goods movement across the country, primarily on roads and highways.

These facts tell us that the cost of driving is actually very expensive, and costs continue to increase. One article cited Stanley Hart, transportation consultant, who stated that most American cities have two unsatisfactory transportation sys-

tems: a failed and abusive automobile/freeway system and an inadequate and bankrupt public transportation system. The taxpayer subsidizes both systems, which fail because of demand. The freeway system fails because of too much demand and the public transportation system because of too little.

STATE OF FLORIDA

From 1990 to 2000, Florida's population has increased by 23.5 percent. In the same time period, the 2000 Florida Census shows the number of people driving increased marginally from 77 to 79 percent. The population in Florida is forecast to increase by 21.3 percent by 2015.

Currently, Florida has 6.5 million workers over the age of 16. A U.S. Census Bureau survey found that only 11.1 percent carpool, 2.1 percent take public transportation and 2.04 percent walk to work. Over 84 percent are traveling in single occupant vehicles (SOVs).

In 2000, 71.47 million tourists visited Florida. Over the next ten years, tourism is expected to double and it is estimated that 10 to 20 percent of all vehicle miles traveled are tourist related. National surveys of tourists indicate that Florida roads are considered to be some of the best maintained.

SARASOTA COUNTY

Sarasota County may not have the traffic congestion problems of a larger metro area such as Orlando or Miami, but our traffic congestion is getting worse and is projected to continue to do so over the next 25 years. One resource speaker explained that it's all relative to what we are willing to tolerate and what kind of quality of life we want to maintain. The question is, "Are we willing to do what it takes to minimize congestion or at least make sure it doesn't get worse?" The public's desire and willingness to change policy, infrastructure or travel behaviors and make that corresponding investment must be understood.

In the 2001 Citizen Opinion Survey by Sarasota County Government, 29 percent of the respondents ranked traffic/transportation first or second as the most important issue in the community following water and population growth/new development.

The following facts define or contribute to traffic congestion in the communities of Sarasota County:

- From 1990 to 2000, Sarasota County has experienced a 17 percent increase in population and a 42 percent increase in vehicle miles traveled. Thus vehicle miles traveled have increased at twice the rate of population growth. Our annual population growth rate of 1.7 percent is greater than the national average of 1.31 percent and less than the annual growth rate in Florida of 2.4 percent.
- Some areas of the county are expected to continue an even higher growth rate; North Port estimates a growth rate of 5 to 10 percent annually, excluding annexation.
- The 25-year estimate of population growth for Sarasota County is 52 percent to 468,000; the projection for Manatee County is 87 percent to 436,000. According to the 2000 Census, Sarasota County has 569.9 persons per square mile. This projected population growth would increase density to 818.2 persons per square mile. In comparison, Hillsborough County currently contains 950.5 persons per square mile.
- Seventy percent of drivers at rush hour are traveling for reasons other than commuting to or from employment and school.
- According to a 2000 survey conducted by the U.S. Census Bureau, the average travel time to work is 19.2 minutes for Sarasota County residents. This compares to 24.3 minutes, the average in Florida and nationally for counties of 250,000 or more residents.
- Only nine to ten percent of roads in Sarasota County are not meeting the accepted Level of Service (LOS) for that road. It is noted that this percentage rate is lower than many counties in Florida. (Refer to Table 1 for LOS definitions.)
- Our tourist economy results in wide seasonal swings in the number of cars on the roadway at any given time. The Sarasota Convention and Visitors Bureau estimated an average of 182,550 monthly visitors during the peak months of January through April 2000 with a peak of 216,000 in March. Also, tourists are unfamiliar or less familiar with the roadways and businesses. This unfamiliarity can contribute to traffic delay and accidents.
- Gulfstream and U.S. 41 is an example of one of our most congested intersections. The volume of traffic is 5,800 vehicles at peak hour and the majority is travel-

Table 1. Levels of Service (LOS)

Levels of Service: Definitions of Operating Conditions	
LOS A	Motorists are unaffected by the presence of others in the stream of traffic. Freedom to select desired speeds and to maneuver within the stream of traffic is extremely high. The general level of comfort and convenience is high.
LOS B	Freedom to select desired speeds is relatively unaffected, but there is a reduction in the freedom to maneuver within the stream of traffic. The level of comfort and convenience is less, because the presence of others in the stream of traffic begins to affect individual motorist behavior.
LOS C	Motorists become significantly affected by the interactions with others within the stream of traffic. The selection of speed is affected, and maneuvering within the stream of traffic requires substantial effort on the part of the motorist. Comfort and convenience declines noticeably at this level.
LOS D	Speed and freedom to maneuver are severely restricted, and a poor level of comfort and convenience is experienced by the motorist. Small increases in traffic will generally cause operational problems at this level.
LOS E	Operation conditions are at or near capacity. All speeds are significantly reduced. Freedom to maneuver is difficult. Comfort and convenience is extremely poor, and motorist frustration is generally high.
LOS F	Operating conditions at this level are forced or have broken down. This condition exists wherever the amount of traffic approaching a point exceeds the amount that can traverse the point. Queues typically form at such locations. Operations are characterized by stop-and-go waves; vehicles may proceed at reasonable speeds for short distances, and then be required to stop in cyclical fashion. Comfort and convenience are extremely poor, and frustration is high.
<p>These definitions are general and apply primarily to roadway facilities having uninterrupted traffic flows, such as freeways. For each type of roadway facility, levels of service activities are based on one or more operational parameters or "measures of effectiveness." Basic measures of effectiveness used to define levels of service for different types of roadway facilities include: (a) average travel speed; (b) density; (c) delay; and (d) volume.</p>	

Source: Sarasota County Comprehensive Plan, Transportation Chapter

**Table 2. Change in Average Daily Traffic Volume
1991-2000**

Roadway	1991 Volumes	1998 Volumes	2000 Volumes	1991 to 2000 Percent of Change
Bee Ridge Rd (near I-75)	29,291 vpd*	42,500 vpd	47,000 vpd	60.50%
Beneva Rd (near U.S.41)	20,465 vpd	15,354 vpd	15,011 vpd	-26.70%
University Pkwy (near Lockwood Ridge Rd)	21,545 vpd	35,677 vpd	39,974 vpd	85.50%
Jacaranda Blvd (near U.S.41)	10,102 vpd	14,091 vpd	14,236 vpd	40.90%
Interstate 75 (south of Bee Ridge Rd)	50,700 vpd (1992) (1991 not available)	68,067 vpd	75,967 vpd	49.80%
*vpd = vehicles per day				

Source: Sarasota County Government, Transportation Planning

ing traveling to/from the islands (35 percent to the island and 46 percent from the island during peak hour volumes).

- Currently, five percent of the land in North Port is available for non-residential purposes. This is below the average of 17 percent cited by the American Planning Association for cities with populations less than 100,000. The North Port population has doubled in the past ten years from 11,973 in 1990 to 22,797 in 2000. The population is growing younger with a median age of 40 compared to the median age of 50 for Sarasota County. A younger population has different travel patterns and transportation demands. Since only five percent of the land is available for non-residential purposes, the vast majority of the workforce commutes to workplaces outside of their city of residence. North Port comprises 7.1 percent of the population in Sara-

sota County and 11.1 percent of vehicle miles traveled.

- The cost of a 10-second delay at the corner of U.S.41 and Stickney Point Road with a daily traffic volume of 70,000 vehicles is \$700,000 annually in wasted time and fuel.

Sarasota County experiences approximately a three percent increase in traffic volumes per year. However, there are areas where volumes increase at a much higher rate, and some roads show no change or decrease. As an example, University Parkway has experienced a five to ten percent increase in traffic volume depending on which segment of the road is examined. Table 2 shows the percentage of change in average daily traffic volume at sample roadways throughout the county. During the same approximate time period, 1990-2000, Sarasota County experienced a 17 percent increase in population and a 42 percent increase in vehicle miles traveled.

Table 3. Sarasota County Government Functional Classification of Roads

Classifications and Definitions	Examples of Classification
Freeways/Expressways are controlled access facilities with grade separated intersections providing for interregional and/or interstate travel at high operating speeds. Typically, expressways accommodate high volumes of traffic.	I-75 (University Pkwy to DeSoto County Line) SR 681(Venice Connector) (I-75 to US 41)
Major Arterials facilitate relatively long trip lengths at moderate to high operating speeds with somewhat limited access to adjacent properties. They generally serve major centers of activity in urban areas and have the highest volume traffic corridors.	Bee Ridge Rd (US 41 to I-75) Jacaranda Blvd (I- 75 to Center Rd)
Minor Arterials provide somewhat shorter trip lengths than major arterials and generally interconnect with and augment major arterial routes at moderate operating speeds. There is greater access to adjacent properties than on a major arterial.	17th St (US 301 to Lockwood Ridge Rd) Jacaranda Blvd (Center Rd to Englewood Rd)
Major Collectors collect and distribute significant amounts of traffic between arterials, minor collectors and local roads at moderate to low operating speeds. Major collectors provide for more accessibility to adjacent properties than arterials.	Webber St (US 41 to Cattlemen Rd) Venice Ave (Gulfwater to US 41 By-Pass)
Minor Collectors collect and distribute moderate amounts of traffic between arterials, major collectors and local roads at relatively low operating speeds with greater accessibility than major collectors.	Gulf Gate Dr (US 41 to Beneva Rd) Blackburn Pt Rd (Casey Key Rd to US 41)
Local Roads generally provide access to abutting properties. Local roads possess relatively low traffic volumes, operating speeds and trip lengths and minimal through traffic movements.	Gateway Drive Shamrock Blvd (West of US 41)

Source: Year 2020 Future Thoroughfare Plan, Sarasota County Comprehensive Plan

In Sarasota County, land use and planning relative to traffic flow are characterized by the following:

- Roads are not interconnected, resulting in an interruption of traffic flow.
- Limited number of north/south and east/west arterials and collectors (Refer to road classifications Table 3).
- Signage is often inadequate.
- Many neighborhoods and gated communities with limited entrance and exits.
- Frequent curb cuts and driveways are evident on U.S. 41, Route 301, Bee Ridge Road, Fruitville Road, Clark Road, and Venice Avenue. (A “curb cut” is an opening for a driveway or access connection.)
- Workers live outside of the county. While the majority of these commuters travel from Manatee and Charlotte Counties, others commute from Pinellas, Hillsborough and Lee.
- The population is concentrated at the far west of the county along the coast.
- Older neighborhoods are adversely affected by cut through traffic.
- Interstate is used for local travel because of a lack of a parallel road network.
- Arterials and collectors tend to be used as local roadways. 56 percent of the travel occurs on only 34 percent of the collector and arterial roads. (Refer to Table 3 for road classifications.)

One measure of travel delay is Level of Service (LOS). This measurement is used to assess the quality of traffic flow on a road and is tied to distance and the speed of traffic flow. LOS uses levels ranging from A through F in measuring vehicular travel delay, with A being defined as the most free-flowing and F, the most congested. (Refer to Table 1 for definitions of Level of Service categories.) Some examples:

- Example of Level “C”: Traveling over a half mile segment of the road with an average speed of 24 mph with

a 30 second delay at a traffic signal.

- Example of Level “D”: Traveling over a half mile segment of a road at 17 mph average with a 50 second delay at a traffic signal.

Most urban or suburban areas adopt a level of “C” or “D” for roadways. The unincorporated county adopted an LOS of “C.” A community can either maintain a given Level of Service or conclude that the LOS can’t be maintained. Currently, nine to ten percent of roads in the unincorporated county are not meeting the accepted LOS for that road. Some of these roads are classified by county government as either backlogged or constrained, meaning that they are operating below the adopted LOS and the needed improvements are delayed significantly or face constraints (i.e., physical, environmental or policy) that may never allow the improvement to occur. Table 4 shows the average actual LOS for arterial and collector roadways throughout the unincorporated county. The data is collected on different segments of a roadway as the LOS may vary across the different segments of any roadway. The majority of these roads are classified as “A,” “B” or “C.”

**Table 4: Sarasota County
Percentage of Roadway Segments at Each Level of Service
(Average)**

Level of Service	Percentage of Arterial and Collector Segments
A	8%
B	20%
C	41%
D	14%
E	4%
F	13%

*Source: 2000 data, Sarasota County Government,
Transportation Planning*

ISSUES AND STRATEGIES THAT INFLUENCE TRAFFIC FLOW AND CONGESTION

LAND USE MANAGEMENT

It is accepted that land use and transportation are tied together, and thus one must always balance growth with transportation resources. If we allow more development through

out the county than the roads and intersections are designed to handle, we will have congested roads and intersections. Design controls on development, such as mixed use and street layout, will also affect the extent of traffic congestion a development may produce.

Florida Statutes give local governments the responsibility of establishing long-range general policies and coordinating a plan for the general development of the community. A comprehensive plan is an official public document adopted by a local government as a guide to the decisions about the physical development of the community. Transportation and land use are two of the functional elements included in a plan.

Growth Management

Just as land development creates a demand for transportation, the development of transportation options can be a catalyst for further land development that was not originally envisioned. Land development may occur in the span of only a few years; transportation systems and infrastructure take much longer periods of time (often 12 to 13 years for a typical roadway project) to be completed. These time lags contribute to more traffic congestion from new growth areas.

As mentioned, the estimated population growth in Sarasota County is 52 percent over the next 25 years. This growth would increase our density from 569.9 persons to 818.2 persons per square mile. As a community makes choices about growth, part of the challenge is maintaining a balance between the ease of mobility and livability in a community.

Sarasota County Government is developing the Sarasota 2050, a proposed amendment to the *Sarasota County Comprehensive Plan*. Analysis of the traffic impacts of the proposed developments in the amendment indicate that many roads, including east-west arterials, will experience higher traffic volumes than if the land was developed under the current comprehensive plan. Regardless of whether this amendment is approved, land use planning must include consideration of the impact on traffic flow and congestion.

Community and Street Design

Traditionally, streets have served many purposes in addition to moving vehicles; people use streets as gathering places to talk, play, walk and bicycle. Since the advent of

the suburbs after WWII, roadways have become increasingly dedicated to moving vehicular traffic. Today, streets often divide rather than integrate neighborhoods; they become single purpose arteries, emphasizing vehicles over people.

The design standards used for development over the past sixty years originated in the 1930s through the Federal Housing Administration (FHA) and the American Association of State Highway and Transportation Officials (AASHTO). The FHA determined basic subdivision layout that encouraged cul-de-sacs and limited through traffic. The AASHTO designed street standards with the primary criteria based on the time it would take to evacuate and clean up after a nuclear war. Some of these standards are still used to make decisions about planning and design today. According to the U.S. Department of Transportation, 37 percent of the recent national rise in vehicle miles traveled (VMT) can be attributed to spread-out patterns of development.

In the early 1980s, the concept of “neotraditional planning”, known as **New Urbanism**, began to develop based on the types of communities that were built in the early 1900s before cities were designed to accommodate automobiles. This concept incorporates a series of land management precepts that some consider to be effective strategies against urban sprawl. Principles of neotraditional design include:

- creating a network of streets and blocks
- developing mixed uses
- treating streets as public amenities
- orienting new development to the street
- supporting alternative transportation modes such as bicycles, pedestrians and public transportation

Many communities are realizing the impact of a widened road and want to address transportation to meet their needs in a way that is consistent with the character of the community. A chain of impacts occurs when a road is widened - capacity is added and the road becomes more convenient, thus more people use it. Sometimes it divides the neighborhood. Also, the land use arrangement will influence how the street network is developed in the future and it will impact the way commuters chose to travel.

A street’s design must match its function. A balanced **network of streets** will allow for more movement of people in vehicles without widening roads and thus providing greater capacity. A connected road network can result in:

- fewer vehicle miles traveled
- decreased congestion
- alternative routes for short, local trips
- improved accessibility of developed areas
- reduced demand on major thoroughfares
- facilitation of walking, bicycling, and use of transit
- more environmentally sensitive layout of streets and lots
- safer school bus routes
- a better sense of community from interconnected neighborhoods

On the other side of the issue, interconnectedness may produce cut through traffic, which can adversely affect neighborhood peace, quiet, safety and property values. Also, a street network grid can increase traffic speed. In order to foster appropriate speeds on different roadways, traffic calming measures integrated in the street design will help maintain the desired roles of each street. Traffic calming needs to occur across entire street systems in order to avoid traffic just shifting from the “calmed” street to another. Portland, Oregon provides an example of success with this approach. Since first initiating traffic calming measures in the mid-1980s, only two of several hundred Portland projects required measures on adjacent parallel streets because diverted traffic exceeded an acceptable threshold.

There are various **traffic calming designs** and in choosing the right one, it’s important to consider the particular traffic calming *need*. Designs control either traffic volume or speed, and some measures control both. Used effectively, the traffic calming designs will add value to the neighborhood. In the Netherlands, residential streets containing traffic calming measures have been found to have property values that are 10 percent to 15 percent higher than streets without.

Other strategies in neo-traditional planning include **mixed-use development** and **increased densities**. Mixed-use developments contain a mix of office, residential, retail and commercial areas arranged in a way that enables people to walk or ride a bicycle from their homes to their shops or offices. Increased densities and smaller lots for residences help support mass transit and improve the walkability of the community. Those who prefer the larger lots and design of traditional suburban neighborhoods or lower density sometimes oppose these concepts.

Land use management decisions are often difficult to implement. Robert Cervero, planning professor at the University of California, suggests the following reasons:

- Land use decisions are usually made by local government, while most transportation decisions are made at the state or regional level.
- Land use planning doesn’t precede and guide transportation decisions. Roads are often built to open up new areas for development rather than serve existing development areas. While Florida has been at the forefront of comprehensive planning, often transportation decisions are made in spite of a community’s comprehensive plan.
- Land-use plans are long-term and not in sync with the short-term political environment of two to four year terms of office.
- NIMBYs (Not In My Backyard) and LULUs (Locally Unwanted Land Uses). Some individuals oppose the alteration of traditional suburban design. Developers and bankers may be reluctant to build neotraditional developments because the ideas are new and seem untested, despite successes around the country.

Access Management

Access management and corridor management programs control and regulate the location, spacing and design of public street and driveway connections to the roadway, as well as subdivision and site design practices. Strategies to manage corridor access can improve operational efficiency at a minimum cost and also help connect land use and design to the transportation needs of the community.

The Center for Urban Transportation Research, College of Engineering, University of South Florida, published “**Ten Ways to Manage Roadway Access in Your Community,**” which outlines steps that contribute to this strategy:

- Lay the foundation for access management in the local comprehensive plan. The plan should contain goals, objectives and policies that relate to access management. The local transportation plan should classify roadways according to function and desired level of access control. Allow for a wide variety of street types with varying design standards.

- Restrict the number of driveways per lot.
- Locate driveways and connections away from intersections. This reduces the number of conflicts and provides for more time and space as vehicles turn or merge.
- Connect parking lots and consolidate driveways. Internal connections allow vehicles to move from one business to another without having to re-enter the roadway.
- Residential access occurs through neighborhood streets rather than from a major roadway.
- Increase minimum lot frontage on major roadways in order to allow for an increased separation of their access points.
- Promote a connected street system.
- Encourage internal access to outparcels at shopping center developments. This will require an integrated traffic circulation and access plan for the complete development site.
- Regulate the location, spacing and design of driveways.
- Coordinate with the Florida Department of Transportation.
- Minimize access points within the functional areas of the intersection (i.e. the turn lanes, queue storage area, etc.)
- Separate access points so that they do not impact one another
- Interconnect parcels (allowing movement between parcels without use of the roadway system)

In the unincorporated county, many arterial and collector roadways function as local roadways because of the structure, location and frequency of the access points. A greater number of access points will result in reduced travel speed on a roadway. The west sections of Bee Ridge Road carry roughly the same traffic as University Parkway, but University Parkway operates with a higher travel speed. One reason is the limited access nature of University Parkway.

Concurrency

Concurrency is a concept adopted by the Florida Legislature in 1985 with the passage of the Growth Management Act. It requires that each city and county adopt Level of Service standards for its roads, infrastructure and facilities (i.e., storm water management, water, sewer, solid waste, parks and recreation) and prohibits approval of any development, which would degrade those facilities below those standards. In other words, if a development would overcrowd a road below the adopted Level of Service (LOS) standard, it may not be approved until the necessary improvements are in place “concurrent” with the traffic impacts of that development. An unintended consequence of concurrency to the development pattern is that sprawl may be induced by forcing developments to seek out capacity at the fringes of areas with infrastructure.

Poor access design has a significant impact on the transportation network and is often the problem when congestion is noted. When developing a site access plan, there needs to be a balance between minimizing the number of access points to a roadway thereby not impeding travel, and maximizing the access points to allow for sufficient ingress and egress and avoid “choke points” because of high traffic volumes. The municipalities throughout the county use the FDOT’s access management standards and additional strategies are outlined in each municipality’s comprehensive plan. Sarasota County Government has used the FDOT’s standards and guidelines for controlling curb cuts for the past five to ten years and is still developing a comprehensive access control plan. Some corridor plans contain access control guidelines and the county government uses access management strategies and guidelines when reviewing developments. The strategies used center on three basic principles:

Florida, Maryland, Washington and Oregon are the leaders in statewide systems for growth management concurrency. In 1993, the Florida Legislature amended the law to permit a city or county, under certain conditions, to amend its comprehensive plan to create alternatives to concurrency, which generally allow more development than would otherwise be allowed. They include transportation concurrency exception areas (TCEAs), which may exempt development from concurrency in a defined area and Transportation Concurrency Management Areas (TCMAs), which may average standards over a large area rather than on particular road segments and intersections. The law also now allows the use of Transportation Demand Management (TDM), which focuses on such strategies as carpooling and park-and-ride lots, as an alternative to concurrency.

The transportation concurrency regulations are not the same for all municipalities and the unincorporated area of Sarasota County. The state mandates that each local jurisdiction adopt Levels of Service (LOS) for its thoroughfares and develop its own concurrency management system for transportation. The comprehensive plan of each jurisdiction, which reflects its vision, goals and objectives, must contain a concurrency regulation. There may be differences from plan to plan, for example, differences in the adopted LOS, the study boundaries required for the traffic analysis, the process for determining when a traffic study has to be done for a development or the study methodology. A jurisdiction cannot be less strict than the state statute, though it can be stricter.

There may be inconsistencies in enforcement from one jurisdiction to the next because of the differences in regulations. There may also be inconsistencies in enforcement when the traffic study of an outside consultant conflicts with staff-generated traffic analysis, and the conclusions of the outside study are accepted.

Currently, the state has an LOS “D” on all state roads, and Sarasota County Government has adopted an LOS “C” for all county and local roads. The TCEA is the only significant difference and this exception must be applied for and approved.

Local TCEA

The only TCEA in Sarasota County is located within the City of Sarasota. The TCEA is bordered by Tenth Street to the North, Mound Avenue to the South, Route 301 to the East and U.S. 41 to the West. The city’s comprehensive plan, *Sarasota City Plan* (1998), outlines the objectives and action strategies for the TCEA. In part the plan states:

The cumulative impact of any new development shall not:

- exceed 15 percent of the Average Annual Daily Traffic (AADT) on the effective date of the plan for roads which are operating at LOS “E” or “F”
- degrade LOS below “E” for roads operating at LOS “D”

LOS shall be calculated for the directional, peak hour LOS on any roadway impacted by the project seeking concurrency. An “impacted roadway” is defined as any roadway where traffic volume from the proposed development exceeds 4.5 percent of that roadway’s maximum service capacity at LOS “D.”

Since 1998, the Sarasota City Commission has twice approved the continuation of the interim standards outlined in the plan. The City Engineering Department has added some strategies and currently reports to the Commission quarterly on the application and effectiveness of the standards.

The January 5, 2000 TCEA Status Report documented the Level of Service conditions and maximum service volume estimates for February 1999. This information formed the benchmark against which the interim TCEA Level of Service requirement can be measured. The interim LOS standards are as follows:

- LOS D was established as the minimum standard for existing roads operating at LOS A, B, or C in February 1999
- LOS E was established as the minimum standard for existing roads operating at LOS D in February, 1999
- Traffic volumes are allowed to exceed the February 1999 Average Annual Daily Traffic (AADT) by 15% for roads operating at LOS E or F in February 1999

The TCEA only affects projects within that area. Any proposed project in the TCEA will be denied if the cumulative total traffic of all developments in the TCEA including that proposed project would exceed the capacity of the affected roadway (at LOS F) by 15 percent or in other words will increase the volume of the roadway 15 percent cumulatively. Once the volume exceeds 15 percent of that baseline figure, the development will be denied. In several areas, the city is approaching this limit. An example:

If 10,000 vehicles was the baseline volume used for a roadway at LOS F, once cumulative traffic of all developments in the TCEA boundary increase to 11,500 at that roadway, no more developments could be approved that add traffic to that specific roadway unless roadway capacity was improved to allow for an increase in baseline volume.

Recent developments in the City of Sarasota, the Ritz-Carlton and the Renaissance, were approved before the TCEA was established and therefore did not benefit from the less stringent standards of the TCEA. These developments were found to be concurrent and were approved with specific improvements required to alleviate project impact. These two projects are currently included in the count when determining remaining capacity.

SUPPLY MANAGEMENT

Supply management strategies center on 1) increasing capacity and the efficiency of the system, and 2) increasing transportation alternatives. These are often the first strategies transportation planners choose. Strategies include:

- more traffic lanes
- new roadways
- improving intersections
- better signalization
- expanding the transit system
- pedestrian and bikeways

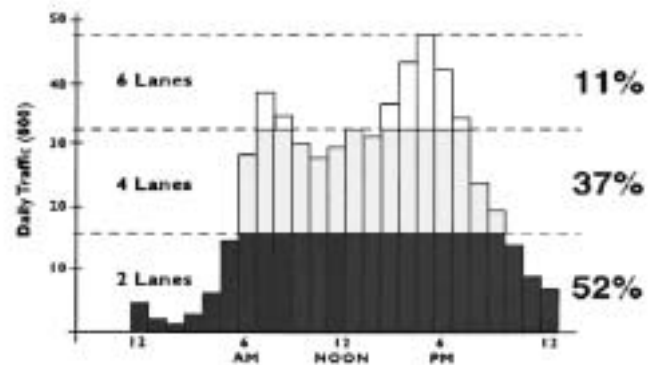
The passage of the landmark federal Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 expanded the options to include bicycle and pedestrian facilities. This act encouraged and sometimes mandated different ways of looking at transportation challenges.

Maintenance of roadways and management of traffic incidents can impact the efficiency of a roadway. Roadway maintenance departments try to minimize traffic flow disruptions by working at off-peak hours and off-season whenever possible. Street sweeping often occurs at night on the busier roadways. When responding to a traffic accident, the first concern of the Sarasota County Sheriff's Department is addressing any injuries. Every situation is different and traffic is stopped and redirected as appropriate. Sarasota County government agencies are currently developing an incident management program for I-75 mishaps. This involves establishing alternate routes, creating appropriate signage, a timing plan for traffic signals along the alternate routes, and coordination with the Sarasota County Sheriff's Department and the Florida Highway Patrol.

Road Capacity

Use of the roadways follows the law of supply and demand just like any other consumable. The amount we consume is based on the price; the lower the price the more we buy. In driving a vehicle, excluding the modest cost of gas and an occasional parking charge, the perception is that the ride is "free" except for the price of the time and inconvenience

Figure 1. Traffic Volume versus Time of Day



Source: Glattig Jackson, *Smart Growth and Smart Transportation*

of the trip. There are few constraints to hamper our demand for "trip-making."

Adding more traffic lanes is an approach that is often used to improve traffic flow. However, increasing capacity by adding travel lanes actually generates additional travel on the roadway. This phenomenon, called "induced demand", may actually increase traffic to an amount greater than what can be handled.

Also, the demand for more lanes may only occur during times of peak traffic volume. Six lanes of roadway may be needed to accommodate traffic volume only 11 percent of the time across the day. (Refer to Figure 1.)

**Table 5: What Does It Cost To Build A Road?
Highway Cost per Centerline Mile (2000)**

	Item	Cost Per Mile
State Rural Road (4 Lanes)	New Construction (Divided) with 5' Paved Shoulders	\$2,482,000.
	Add 2 Lanes (to Existing 2 Lane) with 5' Paved Shoulders	\$1,809,400.
	Annual Routine Maintenance	\$39,900.
State Urban Road (4 lanes)	New Construction with 5' Sidewalk, Curb, Gutter and 10' Refuge Lane	\$3,806,800.
	Add 2 Lanes (to Existing 2 Lane) with 5' Sidewalk, Curb, Gutter and 12' Aux. Lane	\$2,624,300.
	Annual Routine Maintenance	\$57,400.
These figures exclude costs for intersections/interchanges/structures over 20 feet, right-of-way, landscaping, traffic signal preliminary engineering, and construction engineering inspection. Figures are based on general, statewide averages and may not be used for Work Program estimates because they are not job specific.		

Source: 2000 Transportation Costs, FDOT, Office of Policy Planning

The costs of construction, building roads, adding new lanes and purchasing rights-of-way (ROW) are high. Wider roadways also have a community cost in the changed relationship between the road and the surrounding community as vehicles move faster, and pedestrians and bicyclists are less welcome. (Table 5 provides examples.)

A community may choose to reject the strategy of widening the roadways and accept a given level of congestion. As drivers experience an increase in delay and cost of time, they begin to move less and use alternative modes for travel other than single occupancy vehicles. The community of Winter Park, Florida has chosen to forgo widening of roads. It has taken steps to connect existing roads to improve alternate route choices and encourage mixed usage in land use planning as strategies for improvement.

Building new roads has an environmental price tag as well. Such activity destroys vegetation and natural habitat for animals and organisms, and acts as a barrier that may cause wildlife to shift movement patterns and home ranges. Additionally, a road transforms the physical environment by affecting soil density and water absorption, increasing light through the clearing of trees and stirring up dust. The road surface absorbs radiant heat during the day, releasing it at night which attracts heat seeking species to live too close to the roadway.

Intersection Improvement

Increasing the efficiency of the system includes improved intersections. Intersection design is one strategy that will improve the efficiency of traffic flow. Design changes such as improved turn radius, lane alignment and the geometric design of the intersection help vehicles move smoothly through an intersection.

Another way to improve the intersection is through improved **traffic signal management**. More efficient traffic signals have the potential to add 14 percent capacity to the road without widening, because the road runs more efficiently. The Institute of Transportation Engineers notes that there are over 300,000 traffic signals in the United States; updating equipment or adjusting timing could easily improve 75 percent of the intersections. There are 200 intersections under the control of Sarasota County government and numerous others under the jurisdiction of the municipalities within the county. For example, the City of Sarasota maintains 99 signals within the city boundaries.

Traffic signal management is defined as “taking the existing traffic signal equipment already in place and using avail-

able tools, techniques and in some cases improved equipment to more efficiently use our city streets and signal systems.” Traffic signal management can reap a number of benefits:

- reduces fuel consumption and improves air quality
- reduces congestion which saves time for commercial vehicles, emergency vehicles, buses and the public
- reduces the number of severe accidents on city streets by producing smoother traffic flow with fewer stops
- reduces aggressive driving behavior by minimizing red light running
- postpones or eliminates the need for construction of additional capacity

In California, a statewide program was implemented to improve traffic intersection signalization. This program had a benefit/cost ratio of 58:1 and resulted in:

- 7 percent reduction in travel time
- 15 percent reduction in travel delay
- 9 percent reduction in fuel usage

Throughout Sarasota County, steps have been taken to make the traffic signals as efficient as possible within the limitations of the available technology. Preset timings are implemented by FDOT and managed by the county or appropriate municipality, depending on the jurisdiction the traffic signal falls under. Within the jurisdiction of Sarasota County government, there is a coordinated traffic signal system; the current system uses preset timings for different time periods during the day. The City of Sarasota has recently made computer hardware and software improvements which has helped their ability to monitor the signals in their system. By 2004/2005, the city plans to have changed to fiber optics in order to improve further the system’s communication. The majority of the traffic signals controlled by the City of Venice are on U.S. 41. The signals are maintained using timings established by FDOT. Other major systems throughout that area are on county roads and are maintained by the county. FDOT controls the signals on Longboat Key and all but two in North Port.

Sarasota County government has a long-term goal to continually improve its system as technologies advance and coordinate with the City of Sarasota and Manatee County. The Sarasota/Manatee Metropolitan Planning Organization (MPO) is looking carefully at an approach to an integrated signalization system across both counties. A multi-county, regional approach is critical to coordinated traffic signalizing.

Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) is another set of tools to consider in attempting to improve or prevent traffic congestion. ITS is “the application of technologies involving information processing, communications, control and electronics to improve our transportation system by saving lives, time and money.” ITS provides the ability to collect and circulate real time travel and traffic information. When armed with real time information that is accurate and reliable, a traveler will use the information to make better travel decisions that will result in the avoidance of unnecessary congestion.

Each MPO is required to develop an ITS element to their Long Range Plan in order to be consistent with the National ITS architecture. This national “generic architecture” has been developed for ITS subsystems in order to create some compatibility between local, state and national systems. There is a national movement to develop the usage of a telephone number (511) for national real-time travel information.

The cost of this technology tends to be less than traditional transportation improvements; however, there is also an ongoing cost of maintenance and upgrades and technicians require higher skills. All applications should be regional and regularly maintained. Each region must examine the factors that contribute to its congestion and then determine which ITS strategies are most useful. ITS applications include:

- real-time signalization adjustments
- advanced traveler information
- increased efficiency of public transportation systems
- improved pedestrian and bicycle environments at intersections
- traffic incident and accident detection and management
- electronic toll collection

Based on the symptoms of congestion in Sarasota County, the primary application of ITS is an integrated advanced traffic control system. However, if a road is already over capac-

ity, investing in an advanced traffic control system may be ineffective if the geometry of the road is not right. This approach has to be coupled with the adequate geometry of the road and access control. One approach to developing an integrated system is to rank the corridors by degree of congestion and focus applications based on those rankings. Currently in Sarasota County, corridor ranking has not been done in relation to advanced applications of ITS technology.

There are several other ITS applications that are appropriate for the congestion issues in our community:

- Drawbridges can benefit from the advanced traffic control systems
- An automatic incident detection and response system could be used to detect non-recurring congestion. This would help avoid delay and traffic backup due to accidents or breakdowns.
- A countywide traveler information system to provide real time traffic information in a timely, reliable and understandable format so drivers could make better decisions regarding trip taking or appropriate routes. This system could be installed when new corridors are being built or when adding capacity to existing corridors.

The 1985 passage of the Growth Management Act in Florida requires that local governments adopt level of service (LOS) standards and maintain those standards as new develop-

Table 6. Potential ITS Benefits

User Service	Range of Reported Benefits
Arterial Management Systems (i) (ii)	8 - 20% reduction in travel time (i) 20 - 43% reduction in crashes (ii)
Freeway Management Systems (iii)	15-50% reduction in crashes
Transit Management Systems (iv)	4 - 9% reduction in required fleet size 12 - 23% improvement in on-time performance
Incident Management Systems	55 - 76% reduction in incident clearance time
Emergency Management Systems	10 - 20% reduction in response time
Notes: (i) adaptive traffic signal system, (ii) red light running enforcement, (iii) ramp metering, (iv) automatic vehicle location/computer-aided dispatching	

Source: Florida's ITS Planning Guidelines, FDOT, June 2000

ment occurs. ITS can contribute significantly to LOS and concurrency management in two ways: 1) ITS can assist with the collection and monitoring of system performance data and evaluate the Levels of Service being maintained, and, 2) ITS can increase the efficiency of the transportation system.

The Sarasota/Manatee MPO is in the process of adopting a regional ITS signal system plan to encompass both counties. Two committees of the MPO have recommended a fully integrated system with fiber optics and cameras to the MPO Board. The capital costs range from \$29,359,922 to \$36,278,947. The annualized benefit to cost ratios are between 36.86 and 30.49.

Currently, ITS is being used to some degree in the unincorporated county and is not used in the Cities of North Port, Sarasota, Venice or the Town of Longboat Key. The City of Sarasota's Downtown Mobility Study will investigate ITS use at major intersections, however, not in great detail. The use of ITS technologies must approach our challenges from a regional perspective.

Public Transportation ¹

An analysis of Texas Transportation Institute's Congestion Study indicates that transportation choice has a big impact on how much traffic congestion affects quality of life. Nationally, transit ridership has increased by 21 percent since 1995, the highest it has been in more than 40 years.

Across the nation, there is increased sentiment against building more roads. In November 2000, there were 553 state and local measures on ballots dealing with transportation and growth issues. The Brookings Institution reports that of the initiatives that called for more public transit and alternative types of transportation, 85 percent were approved by their voting publics.

The recent "Moving Ahead" survey by the Federal Highway Administration (FHWA) found that a majority favored investing in more transportation choice. Less than 40 percent of those polled favored more roads; over 60 percent preferred expanding transit, sidewalks and bikeways. These are not the only alternatives to alleviating congestion. Controlling the amount, intensity and timing of growth are also options.

In the 2000 Citizens Opinion Survey by Sarasota County government, citizens were asked what was the best option

to improve the movement of traffic in Sarasota County. (These questions were not asked in the 2001 survey.) Table 7 lists their responses.

In 1979, Sarasota County government assumed operations of the bus system from a private business and began operating Sarasota County Area Transit (SCAT). Currently, SCAT has 26 buses, 3 trolleys and serves 23 routes. Ridership of approximately 1.7 million is estimated for 2001. However, public transit accounts for less than two percent of transportation in the county.

There are three studies currently underway in Sarasota County regarding transit - the Transit Marketing Study, Sarasota County's Strategic Transit Planning Study and the Public Transportation System Analysis. Each study has a discrete purpose.

In April 2001, SCAT contracted with KTM Communications to conduct the Transit Marketing Study. The purpose of this study was to assess the attitudes and image regarding public transportation, and to develop a marketing plan aimed at increasing the demand for transit. This study was designed to discover why people don't use SCAT even though they could or would benefit. Target markets were identified and surveys conducted and interviews with government officials, SCAT officials and business leaders. Potential markets for vanpooling were also explored as well as other strategic partners who may need transit for employees.

Table 7. Best Options To Improve Movement of Traffic in Sarasota County

Options	Percentage Agreed
Improve the synchronization of traffic lights	42%
Spend more money on widening existing roads	32%
Improve mass transit system	26%
Restrict new growth in county	26%
Spend more money building new roads	18%
Improve law enforcement	1%
Other	2%
Don't Know/No Answer	9%

Source: 2000 Citizens Opinion Survey, Sarasota County Government

¹ Public transportation does not include school buses.

The **Transit Marketing Study** was completed in October 2001. Additional services and strategies recommended in the plan included:

- Establish additional Park n' Ride sites to further centralize the transportation corridor
- Coordinate with hotels, restaurants, etc. to assist them in transporting their employees, perhaps as a vanpool service. This is particularly important on the islands on weekends. Some businesses have had to close or scale back because their employees cannot get to work or home when buses do not run.
- Give an annual award to the new community development or redevelopment that has emphasized or seriously considered public transportation in its construction and/or growth plans
- Coordinate transit with festivals and provide event transportation
- Create a "Commuters Choices Week" to encourage use of alternate travel options
- Increase availability of bus schedules and maps
- Develop frequent rider passes
- Provide bus services to selected evening events to enable seniors and disabled populations to attend
- Sponsor bus orientation seminars at Senior Friendship Centers
- Develop a "bus buddy" program for seniors to take the fear out of riding a bus

There are also a variety of strategies a community may consider to increase the efficiency of the transit system. Strategies from other communities include:

- In Maryland, businesses are encouraged to provide commuting benefits. Participating companies are given a tax credit of 50 percent of the amount spent on commuter benefits such as transit passes, tokens and company supported van pools.
- Phoenix, Arizona's policy of providing 24-hour a day, low-cost transit to city neighborhoods was inefficient,

with only a handful of riders late at night. The underused bus routes were put out to bid to taxi companies, and taxi companies put together a shared-ride service, which used subsidy payments formerly allocated to the mostly empty bus routes. The riders pay a reduced fare and make the same trips.

- In Norfolk, Virginia, the suburban areas were not densely populated enough to justify traditional, fixed route service. Two routes serving low-density parts of the city were contracted out to a taxi service that uses 12-passenger mini-vans resulting in more frequent and cost effective service.

Currently, the **Strategic Transit Planning Study (STPS)** is conducted to examine what could or should be accomplished with the limited resources available, and examines the relationships between transit, general transportation issues, and land use. Sarasota County has contracted with the consultant firm, Glatting Jackson, to conduct the STPS. This study focuses on the "why" rather than "how" of transit. It aims to identify the policy framework for transit, which will guide the Board of County Commissioners, the Public Transportation Advisory Committee, and our community in planning and making decisions regarding transit.

The study proposes several potential transportation policy frameworks the community may consider:

- Transit as an economic development tool. Express buses would be used to make Sarasota County more attractive to potential employees.
- Transit as a contributor to community mobility. Transit becomes a viable alternative to the private automobile. This would require the highest level in investment.
- Transit services for the "transportation disadvantaged." Reasons for the disadvantage are:
 - Economic – individual does not own a car
 - Unable to operate a vehicle due to advanced age or health, too young or physically unable because of a disability

Currently Sarasota County has a high level of investment in serving the "transportation disadvantaged." Based on the most recent available data from the 1990 Census, six

percent of the households in Sarasota County do not own a vehicle. SCAT Plus estimates approximately 25,554 individuals, eight percent of the county's population, are unable to transport themselves and are dependent on others or mass transit for transportation.

Part of the Strategic Transit Planning Study involves a peer review of the SCAT operating efficiencies and service effectiveness including comparison to other systems in similar jurisdictions.

The **Public Transportation System Analysis (PTSA)** is a project of the Sarasota/Manatee MPO and is conducted by the Renaissance Planning Group. The study's purpose "is to identify an effective strategy to maintain and enhance the region's mobility using the full range of transit modes that reflect financial resources, land use objectives, physical and socioeconomic characteristics and community preference." Project partners include SCAT and the transit service provider in Manatee County, MCAT. The PTSA will integrate the other initiatives currently underway in Sarasota and Manatee Counties into a strategic plan for public transportation. Extensive public involvement is part of the study's approach. The key tasks of the study are:

- a market assessment to determine which public transportation service options are feasible
- development and evaluation of alternatives for different geographic areas
- an analysis of financial resources and funding options
- creation of a public transportation system plan

The study is focused on how to alleviate the two billion dollars in unfunded roadway needs projected in Sarasota and Manatee Counties over the next 20 years. The study is identifying traffic choke points and will select preferred strategies, investments and policies to reduce traffic congestion and improve personal mobility for all public transportation users. The study will also address ITS as it relates to improved transit system performance, e.g., more efficient operations through electronic fare payment or prioritized traffic signals. There are conflicts between bus signal priority and timing the traffic lights for maximum automobile efficiency, but both are elements of ITS. The study was completed in the spring of 2002.

Bicycles and Pedestrians

In addition to transit, bike paths, sidewalks and multi-use trails expand the travel mode choices available in a community. According to the Surface Transportation Policy Project, walking is the second-most-popular form of trans-

portation in the country after driving. A quarter of all trips are less than a mile, but 75 percent of these are by vehicle. In the United States, ten percent of all trips are done by walking or biking, as compared to 54 percent in Italy and 49 percent in Sweden. (According to the National Personal Transportation Survey in 1990, 63 percent of all U.S. automobile trips are less than five miles.)

Alternate modes of travel must be made attractive in order to entice individuals away from using a car. Issues that impact walking or cycling are the lack of safe, comfortable and connected routes and the stigma that bicycles and walking are considered by some to be less adequate modes of transportation. Walking is an alternative for only a small number of trips because of the layout of our neighborhoods and the distance of residential areas to businesses. Changes in land use patterns are necessary in order for walking to increase as a viable transportation alternative. Many U.S. cities are incorporating more bicycle lanes and multi-use trails. According to SCAT, approximately 4,613 bicycles, on average, are transported each month on buses throughout the county.

The Bicycle/Pedestrian Citizen's Advisory Committee and the Transportation Planning Department of Sarasota County Government developed the **Bicycle and Pedestrian Plan for Sarasota County**. The plan promotes the development of connected sidewalks and a connected and integrated bicycle route network. Many of the comprehensive plans of the municipalities address bicycle and pedestrian enhancements. Coordination is achieved by working closely with the MPO and the Bicycle/Pedestrian Citizen's Advisory Committee to implement pedestrian and bicycle planning on a countywide basis. Each municipality is requested to have a representative on this Advisory Committee. A Master Trail Plan for Sarasota County is also in development.

Bike lanes and sidewalks are included on all new arterial and collector roadways. Two million dollars a year for 20 years has been set aside for retrofitting sidewalks and about one million dollars annually for new bike lanes on existing roads. This funding results in roughly 3.5 to 4 miles of new sidewalks and 1.25 to 1.4 miles of bike lanes annually.

Creating a detailed pedestrian and bicycle network can be expected to exacerbate conflicts between pedestrians, bicyclists and motor vehicles because the transportation network will be shared by all modes and not just the vehicle. As an example of potential conflict, increasing the walk time provided at cross walks will improve conditions for pedestrians and cyclists. However, this will increase the delay for the motorist.

Table 8. Types of TDM Strategies

Influence Travel By	Strategies
Mode	Carpools, vanpools, transit, bike, walk
Time	Flextime, staggered work hours, compressed work weeks, high occupancy vehicle (HOV) lanes
Frequency	Linked trips (i), trial use of alternative modes
Trip Length	HOV lanes, land use design, telecommuting
Convenience	Preferential parking for carpools, vanpools
Regulation	Employee commute options, trip reduction ordinances (TROs) (ii), developments of regional impact (iii)
Route	Congestion pricing (iv), intelligent transportation systems (ITS)
Cost	Parking pricing, congestion pricing, transit subsidies
(i) Combining trip purposes which reduces the number of trips (ii) Regulatory mandates that require employers to reduce the number of automobile trips during peak commute hours through TDM strategies marketed to their employees (iii) Large-scale developments and requirement of TDM techniques (iv) The imposition of fees in differential rates, varying by time of day and location depending on the level of congestion, on road users in congested zones or traveling on congested roads.	

Source: Managing Our Way Through Congestion, Florida's Commute Alternatives System Handbook

DEMAND MANAGEMENT

Transportation Demand Management (TDM) is defined as a set of strategies that focuses on increasing the efficiency of the current system by influencing travel behaviors. TDM increases the passenger capacity of the transportation system by reducing the number of vehicles on the roadway during peak travel times. A number of different strategies are used to influence mode choice, timing, frequency of trip, trip length, cost and route traveled. The Institute of Transportation Engineers states that regional efforts of TDM programs can result in a three to five percent reduction in vehicle trips. This reduction is much higher at the employment site. Recent estimates for Hillsborough County are four to eight percent in their long-range TDM plan.

TDM strategies are designed to:

- reduce the number of vehicles on the road
- increase the number of people in each vehicle
- change the time the car is on the road. (Example: lowering toll price just before and after peak congestion period.)

- eliminate the use of a vehicle by walking or riding a bike
- change the route via advanced traveler information systems
- encourage the use of public transportation

In order to address congestion through TDM approaches, a community needs to look at all the reasons for vehicle trips. In typical rush hour traffic congestion, travelers commute for purposes other than going to work. One resource speaker noted that determining the different consumer markets (based on trip purposes) is useful when attempting to change a consumer's pattern of travel or mode choice. Different strategies will work for different market segments.

Currently, there are about 200 vanpools operating in Florida. Locally, few hotels participate in organized "transportation pooling" to get staff to and from their place of employment. Sarasota Memorial Hospital has operated a voluntary carpool program for the past seven years; currently 42 vehicles participate averaging 2.7 passengers per vehicle. Staff or volunteers may participate. Incentives for carpoolers include parking on-site, free meals and discount movie tickets for a local theater. Also, Sarasota Memorial

Hospital has mandatory vanpooling for some of its employees. However, this involves transportation from off-site parking facilities to the hospital. Employees still drive their own cars to the off-site parking facilities.

Factors that contribute to the success of TDM approaches are cost, time, convenience and safety. Resource speakers provided numerous lessons learned and best practices in TDM:

- Involve employers. The employer's motivation is related to decreased turnover and the "bottom line".
 - Work with large employers (50 or more employees) because they may influence travel behavior through work hour adjustments and tax benefits (commuter choice option).
 - Businesses are motivated by the benefits of recruitment and retention rather than the benefits of congestion or trip reduction.
 - Provide financial incentives (i.e., transit benefits, van pool subsidies, walk or bike to work bonuses).
- Fiscal alignment of policies is needed. There is still a big gap between tax-free benefits for parking and transit or vanpool use. For policy at the federal level, an employer can give an employee \$180/month for parking but can only give \$65/month tax-free to employees who ride the bus or vanpool. The tax-free amount for transit and vanpooling will increase to \$100 per month in 2002.

Employers expect public agencies to be consistent in their messages, requirements and actions. For example, businesses have to build parking spaces when developing but now the message is "don't use them." Employees are encouraged and given incentives to ride the bus, however, the transit system is later under funded and can't provide the service. Experience has shown that it works better when the business community is involved in understanding the problem and working together rather than responding to federal mandates.

Transportation Management Organizations

The FDOT has established the Florida Commuter Assistance Program to promote the use of TDM strategies in the public and private sectors. Strategies emphasized through this regional program include carpooling, vanpooling, bicycling and use of public transit. The Florida Commuter Assistance Program supports the formation of Transporta-

tion Management Organizations (TMOs). These public/private partnerships are designed to apply TDM techniques to address mobility issues within a prescribed geographic area.

SCAT in conjunction with Manatee County Area Transit (MCAT) will take the lead in re-activating the Commuter Assistance Program for Sarasota and Manatee Counties. Efforts will be directed by an advisory committee representing the employers and business community and will be focused to respond to employer needs and economic development. The Commuter Assistance Program should be viewed as the umbrella organization under which the transit systems, TMO's and other programs are coordinated.

The City of Sarasota has a Transportation Management Organization, which began October 1, 2001. The TMO is a partnership between the City of Sarasota, the Florida DOT and the Downtown Association of Sarasota. The TMO was originally envisioned for the downtown core of one square mile. It is anticipated that the TMO will expand to the city limits and ultimately develop a relationship with the county. Initial tasks included conducting a background scan, examining available data, conducting focus groups and identifying key mobility issues. A plan and implementation strategies will develop from the initial research.

FUNDING ISSUES

TEA-21

The Transportation Equity Act for the 21st Century (TEA-21) was signed into federal law in 1998. This act authorized highway, highway safety, transit and other surface transportation programs for the next six years. The Highway Trust Fund (HTF) is the funding source for most of the programs in TEA-21. The primary source of revenue for the HTF is federal motor fuel taxes.

The TEA-21 legislation includes some pieces relevant to the study of traffic congestion:

- Guarantees \$198 billion in surface transportation investment over a six-year period, 1998 through 2003
- Balances investment in highways, transit, intermodal projects, and technologies such as ITS; \$42 billion is authorized for transit
- Assures state and local flexibility in the use of funds. Publicly owned bus terminals and Intelligent Transportation Systems are among the possible uses.

- Streamlines the metropolitan and statewide transportation planning processes and includes freight shippers and transit riders as stakeholders
- Gives states and others greater flexibility in meeting the matching requirements for federal grants
- Helps communities meet national standards for healthy air. Increases the funding for the Congestion Mitigation and Air Quality Improvement Program
- Increases tax-free employer-paid transit benefits
- Expands provisions to make bicycling and walking safer and more viable ways of travel

MOTOR FUEL TAXES

The gasoline tax is the primary source for federal funding of road building projects. Additionally there are some federal “user fees” for heavy users such as trucks and trailers, which also contribute to this funding. In Sarasota County, the consumer pays a total of 51.5 cents in federal, state and local taxes on every gallon of gas purchased. A portion of this, the federal Fuel Excise Tax of 18.4 cents per gallon, goes to the federal Highway Trust Fund. These monies are disbursed back to each state through the TEA-21 legislation. Florida is considered a “donor state” which means that Florida receives 87 cents back from every dollar paid through this tax; this revenue goes from the federal Highway Trust Fund to the State’s Transportation Trust Fund.

In the last fiscal year (2000-2001), it is estimated that 1.289 billion dollars was authorized and designated to Florida from the federal government.

Some of the state taxes are distributed to FDOT; others are distributed back to local government. FDOT receives 91 percent of the tax revenue designated, and this is placed in the State Transportation Trust Fund. The remaining nine percent of tax revenue is distributed to state general revenue and does not come back to transportation. Some of its uses are not related to transportation. Table 9 lists the recipient agencies of the money diverted from the State Transportation Trust Fund.

In the last fiscal year (2000-2001), the FDOT received \$799,700,000 from the State Fuel Sales Tax and \$418,400,000 from the State Comprehensive Enhanced Transportation System (SCETS) tax. State law requires that half of the revenue to FDOT be used for the Florida Intrastate Highway System (FIHS) projects, which maintain major regional roadways such as SR 70, U.S. 17, and I-75. The other half is used for maintaining roads and building new roadways as well as enhancements such as bike paths, sidewalks and road widening. The priority of the State of Florida is to maintain the road system.

Typically, if a project involves a state road the federal government will pay 80 percent of the cost and the state will pay 20 percent. If the project is not on a state road, the

federal government pays 80 percent and state and local governments will split the remaining percentage evenly.

The MPO prioritizes the FDOT funds for Sarasota and Manatee Counties. Sarasota County receives a portion of the revenue generated from state taxes and collects its own local taxes. Projected revenue of approximately 17.1 million dollars is generated from these taxes at the rate of 15 cents per gallon (excludes

Table 9. Money Diverted from the Transportation Trust Fund by the State Used for Non-Transportation Purposes (\$ in Millions)

Use	1999/00	2000/01	2001/02	2002/03
Education	104.0	104.0	106.6	108.9
General Revenue Fund Transfers	44.1	38.9	39.4	40.5
General Revenue Service Charges & Administrative Charges	129.2	68.3	29.1	30.7
Tourism & Trade	26.7	27.3	27.8	28.6
Dept. of Environmental Protection/Game and Freshwater Fish Commission/Fish and Wildlife Conservation Commission	8.8	8.8	8.8	8.8
Agricultural Emergencies	6.3	7.1	7.6	8.1
Grand Total	\$319.1	\$254.4	\$219.4	\$225.6

Source: FDOT 9/21/01 Based on 3/1/01 Records

the 5 cents tax approved locally in 4/2000). This money is received directly by the county and is placed in the County Transportation Trust Fund; it is used for operating expenses.

Sarasota County Area Transit (SCAT) receives the majority of its federal funds directly from the Federal Transit Administration (FTA). The FTA formula grants are restricted to capital expenses, the maintenance of capital equipment, and services related to the Americans with Disabilities Act (ADA). SCAT also receives some federal funds that are channeled through the FDOT and the MPO. This includes the federal enhancement funds and the flexible surface transportation funds that can be allocated by the MPO to either highway or transit projects.

SCAT's operating funds are provided by the FDOT and Sarasota County government. The state operating support is provided through the Florida Transit Block Grant Program, a formula-based program that allocates funding based upon population, transit service provided, and ridership amounts. FDOT also provides project specific funding through its Service Development, Urban Capital, Commuter Assistance and similar grant programs. Local funding from Sarasota County government is the main source for operating support. SCAT has been successful in obtaining several discretionary and competitive federal and state transit grants.

There are a number of grant programs that may help a community supplement and stretch its money. The Transportation Outreach Program (TOP) is a grant program that selects projects state-wide². This is above and beyond the normal work program projects. For the most part, Sarasota County government does a good job of getting dollars through applications for these grant programs.

There is some discretionary funding through the Federal-

² The TOPS program is currently being revised by the State Legislature and is awaiting final action by the Governor.

Aid Discretionary Grant Programs. These programs are funded by the money going to the federal government as outlined in the Transportation Equity Act of the 21st Century (TEA-21).

In Florida, there is an annual deficit in transportation funding. Locally, the "Year 2025 Financially Feasible Transportation Plan" of the Sarasota/Manatee Metropolitan Planning Organization (MPO) estimates that there is a bi-county shortfall of over two billion dollars between projected available resources and the needed road improvements through 2025. The MPO projections are based on simulations using a validated model which uses current development information and assumptions of where development will occur. This model identifies future transportation deficiencies and examines the effectiveness of alternative improvements in resolving such deficiencies.

In Sarasota County, the plan shows a shortfall of over one billion dollars. This includes roads that are the responsibility of all jurisdictions. If one includes additional revenues from recent increases in taxes on gasoline, phone bills, and property by Sarasota County government to pay for road improvements, projected revenues increase to \$564,000,000 (\$286,300,00 local plus \$277,000,000 state and federal) for a deficit of \$918,799,433.

**Table 10. Year 2025 Financially Feasible Transportation Plan
Sarasota/Manatee MPO**

Region	Improvement Needs	Total Projected Revenue	Deficit
Sarasota County	\$1,482,799,433	\$471,851,512	\$1,010,947,921
Manatee County	\$1,501,060,463	\$486,131,437	\$1,014,929,026
Combined Region	\$2,983,859,896	\$957,982,949	\$2,025,876,947

Source: Year 2025 Financially Feasible Transportation Plan, Tables 6.1 and 6.2

One resource speaker from the Center for Urban Transportation Research (CUTR) stated that transportation is suffering from under-investment at all levels, locally, state-wide and nationally. He stated that part of the problem is that the consequences of this under investment are not immediate. As traffic congestion continues to increase, excess capacity (i.e., travel shift from peak to off-peak, from arterials to side streets) in the system will be used up. At some point, we will reach the tipping point where a modest

increase in demand will result in an accelerated increase in travel delay because we have used up the excess capacity in the system.

The shortfall also illustrates that we can't build our way out of traffic congestion. A variety of strategies, including a cultural shift placing less emphasis on the single occupant vehicle, will be required to maintain or alleviate traffic flow issues.

OTHER TAXES

Telecommunications tax in the unincorporated Sarasota County began as a local option; effective October 1, 2001 these taxes are under the state's jurisdiction through the Communications Tax Simplification Act. The county tax is 6 percent and applies to the unincorporated areas of the county; each municipality's telecommunications tax rate may differ. The Board of County Commissioners has chosen to dedicate the revenue generated, estimated at \$5.5 to 6 million in 2001, to fund capital improvement projects and transit in the unincorporated areas of the county. In both the City of Sarasota and the City of Venice, the current telecommunications tax rate is 5.6 percent and the funds have historically been used as part of the General Fund, funding Police, Administration, Engineering, Streets and Highways and other General Fund departments. The Town of Longboat Key does not have a telecommunications tax. The City of North Port has a telecommunications tax rate of 6.22% and the revenue is used in the General Fund.

The Board of County Commissioners has expressed interest in using ad valorem taxes if necessary in support of capital improvement projects. Tax revenue of up to .25 mill has been used to support specific projects in the 2020 Thoroughfare Plan; this is reviewed annually.

County government is examining the best methods and potential strategies to fund road programs in order to get maximum use of bonding capacity.

IMPACT FEES FOR NEW DEVELOPMENT

Sarasota County government collects road impact fees on new development. This money is collected within the county and stays here. The county is

divided into seven districts: the City of North Port, City of Sarasota, City of Venice, Town of Longboat Key, and three districts in the unincorporated parts of the county. Road impact fees are currently collected in five of the seven districts. The Town of Longboat Key has recently been approved and an agreement with North Port is still pending. It is estimated that 7 to 7.5 million dollars was collected in the last fiscal year. The revenue from transportation impact fees is placed in the county's Capital Improvement Program (CIP) and is used for new road capacity only. The revenue generated in a district must be spent in that district on projects that add road capacity. Currently, the unincorporated county's road impact fees on new homes are 87 percent, (62 percent if adjusted for CPI inflation) of what they were ten years ago. Factors that have contributed to this include:

- Adjustments resulting from revised calculations and more current data in motor fuel and sales tax credits
- Adjustments made after a 1994 trip generation study showed that the number and length of vehicle trips taken by Sarasota County residents were generally lower than national averages used to calculate road impact fees
- An increase in the county's estimate of an average road's capacity, adopted as part of a 1997 Comprehensive Plan update (RU-34)
- In 1999, six particular projects were selected for right-of-way acquisition cost estimates, rather than the four recommended by county staff (which would have produced higher costs and higher impact fees)
- An increase of the gas tax credit from five to twenty years, done at the discretion of the county

Table 11. How To Pay for New Transportation

Revenue Source	Fairest Way To Pay for New Transportation Percent Agreed	Most Unfair Way To Pay for New Transportation Percent Agreed
Impact Fees	28%	8%
Gas Tax	23%	13%
Property Tax	9%	27%
Tax on Telephones	2%	24%
None of the Above	26%	7%
All of the Above	2%	10%
Don't Know/No Answer	11%	11%
Percentage totals may exceed 100% due to rounding.		

Source: 2000 Citizens Opinion Survey, Sarasota County Government

Each jurisdiction also reviews the impact a development may have on current levels of service, identifies improvements needed, and requires the developer to mitigate those impacts.

Table 11 shows responses in the 2000 Citizens Opinion Survey by Sarasota County government regarding ways to pay for new transportation. (The 2001 Citizens Opinion Survey did not focus on transportation.)

ROAD BUILDING - A COMPLEX PROCESS

FDOT follows an annual cycle and works with the MPO to develop priorities for funding. This cyclical process results in the update of the Work Program document, which shows five years of planning and the different phases of project funding. Every year, a new “fifth year” is added to the document. Ultimately, the legislature adopts the tentative Work Program. In order to determine project funding, FDOT must follow rules and “instructions” that direct how money may be spent. There are approximately 200 active fund categories for roadway and transportation projects through the Work Program.

Road building and improvement projects are lengthy and expensive. It takes FDOT approximately twelve to thirteen years from the start of securing funding through planning and building. The projects in the Work Program have distinct phases:

- Planning phase (2-3 years)
- Project Development and Environment Study (PD & E) phase—initial design of roadway (2-3 years)
- Final design – sets exact widths, Right-of-Way widths etc. (2-3 years)
- Right-of-Way (ROW) acquisition phase (2-3 years)
- Construction phase (2-3 years)

Currently, the timeline for projects by Sarasota County government is

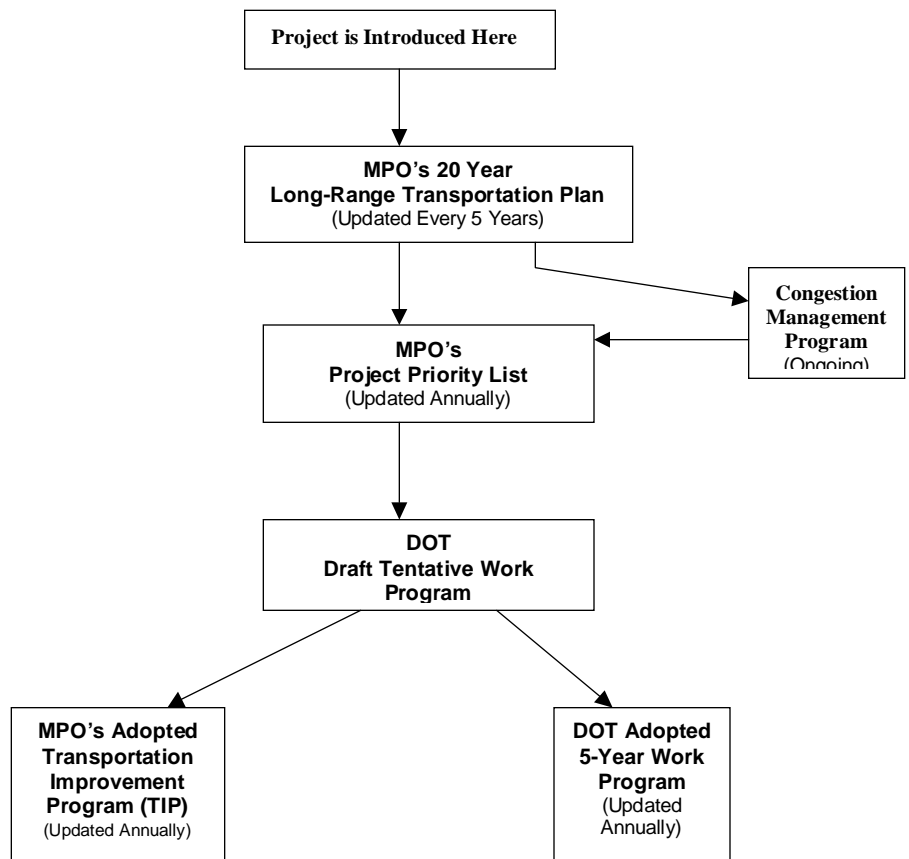
three to six years.

In November 2001, Governor Jeb Bush authorized legislation to speed up state construction projects as part of the effort to boost Florida’s economy. This bill allows for the combining of phases of road construction projects, expands the number of projects that can be awarded to any one company and eliminates a requirement that rights of way and easements (needed to finish a project) are acquired before the project starts.

In order to be eligible for federal grants such as the Federal Aid Discretionary Program, a project must be on both the State Work Program and the MPO Transportation Improvement Plan (TIP). The process is very complex; a community has to be opportunistic and apply for these grants and leverage local money.

A number of resource speakers stated that funding continues to be a major challenge. Transportation improvements

Figure 2. Getting a Major Improvement Project into the Department of Transportation FDOT 5-Year Work Program



The MPO's Transportation Improvement Program (TIP) and the Department of Transportation's Adopted Work Program must be consistent.

are very expensive; needed improvements are greater than available funding based on current funding patterns. The FDOT supports the position that 100 percent of the monies collected through the Federal Motor Fuel Tax should come back to the State and be used solely for transportation purposes.

COORDINATION

ROLE OF THE MPO

Metropolitan Planning Organizations (MPOs) arose from unpopular state and federal transportation decisions and the need for transportation planning at the regional level that did not disrupt local communities and community values. MPOs are designated in each urbanized area with a population greater than 50,000 and were designed to receive local input on transportation planning and develop consensus on the most cost-efficient approaches for solving transportation problems.

In Florida, the 25 MPOs were also charged with making sure that their long-range plans were consistent with the transportation element of the local comprehensive plans developed by the counties and cities in their region. All transportation planning is coordinated with the MPO. However, the Federal Railroad Administration and the Federal Aviation Administration do not follow the MPO planning process.

The structure of the Sarasota/Manatee MPO includes three county commissioners from each county, representatives from each municipality, the Airport Authority and the Florida Department of Transportation. The FDOT member is ex-officio with no voting privileges. Every local government in the two county area contributes to this decision-making process through a seat on the Board. The three municipalities on Anna Maria Island; Holmes Beach, Bradenton Beach and Anna Maria, are represented on the MPO Board by the Chairperson of the Island Transportation Planning Organization.

The MPO works with the local units of government within its region. Each has its own comprehensive, cooperative and continuing planning process, which reflects the vision and goals of its community. Annually, the MPO solicits projects for consideration from the individual jurisdictions. Then the projects go through a screening and a prioritization process by the MPO Board. This annual cycle is called the Transportation Improvement Program (TIP) Project Prioritization and occurs in coordination with the FDOT

Work Program. The principles which guide the MPO as it considers priorities for the TIP are: preserving the existing transportation infrastructure; enhancing Florida's economic competitiveness; and improving travel choices to ensure mobility. The project priorities in the TIP must be as consistent as possible with the approved comprehensive plans of each unit of local government within the boundaries of the MPO. However, the land development decisions are already made when the transportation issues are considered.

The MPO works closely with the FDOT. If a project is not in the MPO TIP then the FDOT can't build it; it has to be in the FDOT Work Program as well. The FDOT is bound to decisions made by the MPO. However, once a project is in the MPO Plan, there still may be forces, physical or political, that constrain the development of the project.

The MPO works with its two committees, the Technical Advisory Committee (TAC) and the Citizen's Advisory Committee (CAC). The TAC is a 24-member committee comprised of both engineers and planners from the eleven units of local government represented on the MPO and serves the MPO in an advisory capacity on technical matters. The CAC is composed of 27 citizens from across the MPO's region. The CAC is also a review and advisory board, providing citizen input and reaction to transportation issues and assisting the MPO in the creation of goals and objectives for improving the urbanized area transportation system.

The MPO controls and allocates the dollars for transportation improvements. The MPO doesn't have authority to change a land use plan based upon transportation concerns or plans. There are certain state funds that the FDOT controls; however, MPO endorsement of the projects is needed. The FDOT and the MPO have no authority to curb or stop development. The MPO's staff reviews developments of regional impact and comments are sent to the Regional Planning Council, which forwards a conditional approval to the local government and the Department of Community Affairs (DCA).

The MPO's 20 Year Long-Range Transportation Plan is updated every five years. The broad goals adopted for the 2025 Financially Feasible Plan are:

- Movement of people and goods: Provide an intermodal transportation system that safely and efficiently moves people and goods throughout, in and out of Sarasota and Manatee Counties.

- **Coordination:** Coordinate the transportation system and its improvements with transportation planning efforts for all government entities.
- **Environment:** Accommodate the preservation of natural and manmade resources.
- **Management of the transportation system:** Preserve and maximize the use of the existing transportation system.
- **Financial feasibility:** Provide a transportation system that is financially feasible.
- **Public participation:** Establish a proactive public involvement process.

Some of the challenges inherent in this process:

- In Florida, there are 25 MPOs, 8 FDOT districts, 67 counties and 7 regional planning councils whose boundaries are not coterminous. Sarasota County is part of the Southwest Florida Regional Planning Council and Manatee County is part of the Tampa Bay Regional Planning Council. Yet they are served by the same MPO. The FDOT office that serves Sarasota County works with five regional planning councils and five MPOs. Coordinating the planning and implementation are a challenge between these agencies and the local governments.
- The coordination and balance of land use and transportation issues is a challenge. Typically, the MPO receives land use information from local governments; the MPO inputs the current and future development information into the transportation model and determines what the transportation picture will look like based on the land use decisions made. The MPO can't require that different land use decisions be made because of anticipated failure along transportation corridors. The state legislature had a committee dedicated to developing a better system for coordinating land use and transportation planning. This committee produced a report recommending the passage of legislation to mandate the better coordination of land use and transportation. Although it has been studied, no legislation has been passed to address this issue.

ROLE OF LOCAL GOVERNMENTS

The unincorporated areas of Sarasota County and each municipality, the Cities of North Port, Sarasota, Venice, and the Town of Longboat Key, have their own vision and comprehensive plan, which guides all planning including

transportation. Each municipality is somewhat unique in terms of population demographics, volume of seasonal residents, travel patterns of residents, current transportation infrastructure and transportation challenges. Each local government has ultimate responsibility for land use decisions working in coordination with the Regional Planning Council and the State of Florida's Department of Community Affairs (DCA) and responsibility for transportation planning through coordination with the MPO.

The MPO coordinates the goals and objectives of these five comprehensive plans, along with those of Manatee County and its municipalities, in order to develop a plan and project priorities that represent the entire region. A number of speakers stated that coordination was key; all plans need to relate to one another and long-range themes should thread through all. Resource speakers noted that our community could do a better job of coordinating the *implementation* of the projects or strategies in the plans.

Locally, there is commitment to benefit from existing studies and avoid duplication of effort. For example, the Sarasota/Manatee MPO required that the Public Transportation System Analysis (PTSA) be coordinated with other findings from recent studies.

In Miami, the South Florida Regional Transportation Organization (RTO) was created by a three-county interlocal agreement. It is comprised of elected officials, representatives of business organizations, representatives of the MPOs of Miami-Dade, Broward and Palm Beach Counties, and representatives of the Tri-County Commuter Rail Authority (Tri-Rail) and the Florida Department of Transportation. The objectives of the RTO, in part, are:

- to provide for efficiencies in the delivery of existing regional service and to provide improved services with existing resources
- to provide a regional forum for deliberation on surface transportation issues of mutual interest and to provide a regional voice for agreed upon surface transportation policies, plans and programs
- to review funding constraints and opportunities, and provide recommendations on funding

The RTO is exploring the opportunities of creating a regional transportation authority. One advantage of an authority is the ability to generate revenue. As an agency, this authority could work with the three MPOs on a "greater

Table 12. Transportation Studies

The following table lists significant mobility and transportation studies in our community			
Study Name	Key Agency Involved	Purpose	Anticipated Completion Date
Transit Marketing Study	Sarasota County Government	Assess the attitudes and image about public transportation and to develop a marketing plan aimed at increasing the demand for transit. This study was designed to discover why people don't use SCAT even though they could or would benefit.	Oct 2001
Public Transportation System Analysis (PTSA)	Sarasota/Manatee MPO	Identify an effective strategy to maintain and enhance the region's mobility using the full range of transit modes that reflect financial resources, land use objectives, physical and socioeconomic characteristics and community preference.	Apr 2002
Sarasota County Strategic Transit Study (STPS)	Sarasota County Government	Identify the policy framework for transit, which will guide the Board of County Commissioners, the Transit Advisory Committee and our community in planning and making decisions regarding transit. This framework will result in identifying the future policy outcomes for transportation, phased strategies to achieve those outcomes and performance measures for evaluating the improvement strategies.	Jul 2002
FDOT Downtown Mobility Study	City of Sarasota pre-funds and works with FDOT	Develop solutions for relief of congestion on all of the 4-lane roads in downtown area, based on the city's Downtown Master Plan.	June 2003

regional” transportation plan and priorities for transportation improvement projects.

The Southwest Florida Transportation Initiative, (SWFTI), is a privately-funded regional coalition, whose purpose is to advance funding for critical transportation projects in Southwest Florida in order to maintain the area’s strong economy and quality of life. Formed in 1998, SWFTI fosters a regional approach to transportation planning and works in cooperation with area businesses, chambers of commerce, economic development councils, and the Southwest Florida Regional Planning Council to form a unified voice on transportation issues concerning Southwest Florida. In the past three years, SWFTI has helped to secure more than \$750 million in transportation grants and appropriations for the SW Florida region.

Membership includes a broad base of business and community leaders primarily from Lee, Charlotte and Collier Counties. SWFTI’s goals are to:

- Increase awareness of the critical need for additional transportation funding for SW Florida among the local legislative delegation, key members of the Florida House and Senate, the Governor and FDOT

- Build a local and statewide support network among regional business, community organizations and statewide industry organizations that share transportation concerns
- Identify creative funding options and transportation alternatives
- Mobilize the Southwest Florida community into a vocal and highly effective force in the statewide transportation arena
- Secure funding for the six-laning of I-75 throughout Southwest Florida
- Increase the FDOT allocations at the district level so that MPOs can address local priorities

CONCLUSIONS

Conclusions express the value judgments of the study group, based on the findings.

1. Traffic congestion is expensive to a community. It creates

- Health problems through poor air quality from vehicle emissions in a concentrated area
- Environmental pollution through vehicle emissions, storm water runoff from roadways, excessive noise
- Economic harm to businesses that rely on the movement of goods, the delivery of services or the movement of people
- Loss of lives, productivity, and money due to increased traffic accidents and emergency vehicle delays
- Increased costs to every taxpayer who operates a vehicle in terms of higher fuel consumption and lost time

Traffic congestion negatively affects quality of life and should be minimized in our communities.

2. In Sarasota County, traffic congestion results from a variety of factors including:

- Population growth and development
- Increased tourism and seasonal population swells
- Road design
- Lack of north/south arterials and other limited alternative routes
- Inadequate signage
- Lack of coordination of traffic signalization
- An increase in vehicle miles traveled per household over the past ten years
- Unfamiliar drivers with diverse driving skills
- Inadequate concurrency standards, coordination and enforcement
- Lack of coordination in transportation planning with adjacent counties

3. Determining how to minimize traffic congestion requires a community commitment to maintain mobility and livability without compromise. Increased speed should not be promoted where it harms residential neighborhoods nor should roads be widened where it is destructive to the residential neighborhoods affected.

The study of congestion often includes technical measures of traffic delay such as Level of Service, or traffic volume and the number of vehicles per day. It should also include the issues of aesthetics, safety and increasing options for mobility. The character and livability of our community and neighborhoods must be paramount in the design of any strategy aimed at minimizing traffic congestion.

4. The political response to congestion must reflect the public interest and the public will. The public's desire for changes in growth management policies or willingness to change behaviors such as travel patterns, driving modes or funding priorities are critical pieces of the solution that must be fully understood.
5. Traffic congestion is an existing and growing problem in Sarasota County; some roads especially at peak times have fallen below an acceptable Level of Service. Our quality of life is negatively impacted by increased traffic.
6. A major arterial roadway is a high volume traffic corridor. There are few north/south major arterials in Sarasota County. This increases the demand for existing north/south major arterials and results in more use of I-75 as a local roadway. Additionally, a number of east/west major streets such as Webber St. are incomplete and this increases demand on parallel roads.
7. Commuters among other factors impact traffic congestion in Sarasota County. Commuting distances are a critical factor in transportation planning. Commuters travel inter- and intra-county for employment in business corridors.
8. On many roads, the demand for more lanes occurs only twice a day, during the peak hours for commutes to and from the workplace and school.
9. Traffic congestion in Sarasota County is impacted by our seasonal fluctuations; over 182,000 monthly visitors are here during each of the peak months of Janu-

ary to April. Some of this population's unfamiliarity with our community and road system contributes to traffic congestion.

10. Seasonal and peak hour traffic cause excessive traffic volume at multiple key intersections such as Gulfstream and U.S. 41. This situation will only worsen as tourism and the seasonal residential population increases.
11. Land use management is an essential strategy in planning for transportation needs and alleviating traffic congestion. Transportation and land use are inseparable, and good land use design coupled with appropriate limits and timing can minimize travel demand. Accepting or promoting growth without planning and timing strategies that account for and minimize the impact on traffic will lead to increased congestion.
12. Preliminary estimates of traffic impacts of Sarasota 2050, coupled with its pending concurrency redefining and reclassification policy, cause transportation concerns.¹
13. The adoption of "alternative" concurrency standards such as multi-modal standards, area-wide standards or exception areas may increase traffic congestion.
14. Access management is a set of strategies to help traffic connect and flow appropriately in relation to the desired land use and character.
 - In Sarasota County, frequent "curb cuts" coupled with few limited-access roads disrupts traffic flow and contributes to traffic congestion.
 - It is essential to maintain a balance with the optimum number of access points in order to allow traffic to flow with a minimum of disruption.
15. A balanced, connected network of streets allows more movement of vehicles without widening roads. However, a network can lead to cut through traffic in neighborhoods, which will have an adverse affect on neighborhood peace, quiet, safety and property values. Developing a balanced network of streets must be coupled with appropriate traffic calming measures in order to maintain the appropriate roles of each street. The design of a street must match its function.
16. Mixed land use concepts and village concepts are principles of neotraditional community design that may be useful strategies in addressing urban sprawl and the traffic congestion that accompanies it. Such design does not cure the problem, however, since individuals will drive outside their immediate neighborhoods for a variety of reasons. Also, when the village, mixed use form is used to increase land use density and intensity, traffic increases rather than decreases.
17. While the widening of existing roads and building of new roads can improve traffic flow, it also induces demand. Road-building strategies alone do not solve traffic congestion problems and may be cost prohibitive. Road design and intersection design improvements can help minimize congestion by making the existing roads as efficient as possible.
18. Intelligent Transportation Systems (ITS) is a tool that is underutilized throughout the county. The MPO, municipalities and the unincorporated area of Sarasota County are exploring recommendations to improve the current traffic signal system and examining this in the context of two counties, Manatee and Sarasota. The benefits of signalization using advanced ITS to capture real-time traffic information have been documented in other communities with reduction in travel time ranging from 8 percent to 20 percent. Bi-county coordination is essential.
19. While polls and referendums in the United States in recent years show citizen support for public transportation, lack of adequate federal, state and local subsidies for both operational and capital cost of providing public transportation limits the ability to provide an effective and efficient system.
20. Though public transportation accounts for less than two percent of all transportation in the county, it's one strategy whose role may increase. An effective and efficient public transit system would expand its use beyond the current ridership. The expansion and use of public transit will decrease traffic flow and congestion. Education and marketing may help expand its role.
21. Transportation demand management techniques can result in a 3 percent to 5 percent reduction in number of trips taken. Use of flextime and telecommuting can lessen the impact of rush hour traffic; other techniques (such as carpools) are useful for moving more

¹ At the time of issuance of this SCOPE report, the 2050 plan was not yet finalized.

people in fewer vehicles. TDM will contribute to the alleviation of traffic congestion.

22. There is a deficiency in the number and connectivity of countywide sidewalks and bike trails. Greater availability of these options could help lessen the number of vehicular trips taken for certain trip purposes by specific market segments.
23. Most vehicle operators will not use a mode of travel other than operating their own vehicle unless there is some deterrent to driving. There is not much disincentive to driving one's own vehicle in our county.
24. Part of the challenge is changing the travel behavior of the driving public. At rush hour, 70 percent of drivers are traveling for reasons other than commuting to or from employment and school. In order to change behavior, the public needs education on the detrimental effects of traffic and congestion, and the personal and community benefits from choosing other travel modes and rethinking trip-taking behaviors.
25. Road building, improvement and maintenance is very expensive. It is inappropriate for the state to divert transportation funds from the Transportation Trust Fund to non-transportation uses.
26. As a donor state, Florida does not receive its proportional share of taxes paid to the federal government. This contributes to the reduced funding of transportation issues in the state.
27. Sarasota County road impact fees are less than two-thirds of what they were ten years ago. This reduction results in fewer dollars available for road building and improvement.
28. The MPO's Year 2025 Financially Feasible Transportation Plan projects a billion dollar shortfall for Sarasota County, which must be addressed. Securing alternate sources of revenue and the development of a quality public transportation system and other alternatives that provide competitive options to the use of private vehicles must be examined.
29. Planning and building roads is a lengthy process and appears to be inefficient. It takes three to six years (County) or twelve to thirteen years (FDOT) from conception to completion of a road-building project depending on the procedural requirements. This requires even greater coordination with land use decisions and makes it difficult for a community to respond to traffic flow and congestion issues in a timely fashion.
30. There are numerous organizations and jurisdictions making transportation decisions. This makes coordination difficult and systems so complex that the average citizen doesn't know how to impact transportation decisions. There are not effective systems for the community to streamline the process for decision-making. The jurisdictional lines of the various agencies having overview are not coterminous, contributing to the complexity.
31. The MPO is responsible for coordination of transportation planning but has no authority for land use planning. Land use decisions are made without the involvement of the MPO.
32. Some of our transportation problems are "regional" in nature, therefore, some strategies and solutions must occur on a regional level. For example, the absence of a regional approach to public transit has reduced its effectiveness in our community.

RECOMMENDATIONS

Recommendations are the study group's specific suggestions for change, based on the findings and conclusions.

The government agencies and community organizations involved in the management and improvement of traffic flow are dedicated to their charge. These recommendations are designed to help achieve our mutual goal and some recommendations endorse actions already underway.

The phrase "all local governments" refers to the City of North Port, City of Sarasota, City of Venice, Sarasota County Government, and the Town of Longboat Key. The extent to which a recommendation applies and the specific steps to be taken may vary by jurisdiction. The study group respectfully requests that each jurisdiction consider each recommendation in light of local need and conditions.

Additionally, it is the role and responsibility of all residents of Sarasota County to be proactive in seeking solutions to traffic congestion issues. Some of the opportunities for citizen involvement are listed in Appendix A.

The SCOPE Study Group has adopted the following recommendations to reaffirm, support and improve current practices in an effort to alleviate traffic congestion in Sarasota County:

1. The appropriate applications of Intelligent Transportation Systems (ITS) technologies should be explored and pursued further by all local governments and the Sarasota/Manatee MPO.
2. The Sarasota/Manatee MPO should give a high priority to a coordinated, bi-county, traffic signalization system that uses advanced ITS applications.
3. The Sarasota County Board of Commissioners should approach Manatee and Charlotte Counties to develop a regional transit authority to provide transit services in all three counties. This authority should encourage, expand and develop incentives for a public transportation network to serve the entire population without neglecting the needs of the transportation disadvantaged populations – the young, the aged, the poor and the disabled. This authority should continually work to expand public transportation in coordination with new development.
4. The Sarasota/Manatee Commuter Assistance Program should create a jointly funded Transportation Demand Management program for Manatee, Sarasota and Charlotte Counties. This program should work with all governments, chambers of commerce, media organizations, private business employers, etc. to foster the implementation of transportation demand management (TDM) strategies through:
 - Education of the public as to the cost of congestion in terms of our mental and physical health, our economy, environment and overall quality of life
 - Efforts to bring about changes in individual travel behavior that can make a positive and substantial difference
 - Efforts to bring about changes in the way businesses, large and small, think about congestion with a goal of enlisting them in exploring and implementing appropriate transportation demand techniques for their employees, such as:
 - Incentive programs to foster implementation of TDM strategies
 - Vanpooling, carpooling with guaranteed/emergency ride home component
 - Parking management
 - Telecommuting
 - Staggered or flexible work schedules
 - Promotion of the use of carefully planned bike and walking corridors as "alternate modes" of transportation
 - Enlistment of the media to run public service messages to help accomplish the desired changes in community attitudes and behavior
 - Enlistment of governments and organized groups to actively support the efforts at TDM
 - Making TDM a visible and important undertaking of the entire community
5. The Sarasota/Manatee MPO, and all local governments should increase their efforts to incorporate the following strategies in their transportation planning:
 - Encourage and follow through with establishing connectivity of road networks while minimizing the adverse impact of this connectivity on existing neighborhoods

- Use traffic calming measures to ensure the design of the street matches its function in terms of volume and speed of all traffic – vehicular, pedestrian, bicyclist and public transportation
 - Identify poorly designed intersections and develop improvements that consider the needs of pedestrians, bicyclists, vehicles, and public transportation as shared users of the roadway
 - Any new or where feasible, redesigned, roadways and intersections should be optimally designed to reflect the best solution for all travel modes
 - All roadway planning should incorporate bus “bays” where feasible, allowing buses to pull off the roadway while loading/unloading to allow traffic to continue to flow
6. Our state legislative delegation should evaluate and pursue state legislation empowering the Sarasota/Manatee Metropolitan Planning Organization with expanded responsibilities. This would supplement but not eliminate the current authority of local governments and would not create independent taxing authority. Responsibilities would include:
- The same authority for highway and roadway planning and construction now under the current MPO
 - Authority to require the deferment of any proposed land development until such time as transportation facilities can meet the concurrency standards set forth in the laws and regulations
 - Assistance to Sarasota, Manatee and Charlotte County governments in the development of a regional public transportation system as described in Recommendation 3
 - Development of systems to ensure attainment of the maximum funding possible from local, state and federal sources to meet the transportation needs of the counties
 - Support and promotion of the TDM program as described in Recommendation 4
7. Our state legislative delegation should create coterminous service boundaries for the agencies involving transportation and land use planning, specifically, Florida Department of Transportation, Metropolitan Planning Organizations, Department of Community Affairs, and the Regional Planning Councils. Additionally, the Department of Community Affairs should be decentralized with a representative in each of the service areas.
8. All local governments should do more to prevent additional congestion in any land use planning.
- The timing of any development or redevelopment should be coordinated with the availability of appropriate infrastructure
 - When local governments consider the mixed-use form of development, they should do so in a manner that does not increase traffic impacts by weakening controls on the amount, location, density, intensity, and timing of development
9. In order to avoid excessive and premature traffic impacts, the *Sarasota County Comprehensive Plan* should continue its historic limits on the timing of new growth while at the same time planning long-range growth.
10. The state and local governments must plan ahead now for all potential right-of-way needs (i.e. roads, intersections) and thereby prevent the huge expenses involved as well as the disruption of established neighborhoods.
11. All city and county comprehensive plans should specifically require an independent, accurate and verifiable study of all traffic impacts prior to any substantial revisions of growth plans to ensure a fair, unbiased report.
12. All local governments should adopt appropriate access management strategies for all new development and redevelopment. Some examples of best practices include:
- The use of frontage roads and limited access roads whenever feasible and possible
 - Internal access to outparcels at shopping center developments
 - Increase minimum lot frontage on major roadways in order to allow for an increased separation of access points
13. The Sarasota County School District should coordinate its method and location of planned bus stops in conjunction with the county and municipal transportation planning departments in order to minimize impact on traffic.
14. The Sarasota/Manatee MPO should examine alternative methods of public transportation such as water taxis and others.

15. Through the MPO planning process, Sarasota and Manatee Counties should consider a parallel north/south route east of I-75 to improve traffic flow inter- and intra-county, with access limited to major arterial crossings. This should include exploring the option of a toll road with the Florida Turnpike Authority.
16. All local governments should maximize the effectiveness of traffic signage and traffic control strategies especially in high traffic areas. This includes coordination with law enforcement coupled with enforcement of existing regulations.
17. State and local governments should examine current processes in an effort to expedite the planning, designing, funding and building or improving of roadways.
18. All local governments should amend their comprehensive plan development process, regulations and procedures to require staff consultation with the Sarasota/Manatee MPO for review of the traffic impacts of proposed changes in land use or land use plans.
19. Local government should maintain and adhere to strong concurrency rules and standards when setting up new plans for growth or amending existing plans. While we support the expansion of biking and walking corridors, specifically, “multi-modal” and “area-wide” levels of service and other alternative methodologies should be rejected as tools for measuring concurrency. Strict concurrency regulations should be applied before a new project is built.
20. The City of Sarasota should re-study and consider repeal of its transportation concurrency exception area (TCEA) and adopt appropriate concurrency standards to assist with traffic flow in the square mile TCEA that includes Gulfstream and U.S. 41. We also oppose the creation of any further TCEAs in Sarasota County.
21. Sarasota County government should revise its methodology and data as needed to appropriately increase its road impact fees on new development (which for a single family dwelling are now less than 2/3 of what they were ten years ago) in order to pay the full costs of accommodating development impacts. Sarasota County government should also act as needed to require full road impact fees by its municipalities.
22. Our state legislative delegation should work actively to ensure the designation of all state and federal transportation trust fund dollars for transportation purposes only.
23. Our federal legislative delegation should support the position that 100 percent of revenue collected through the federal motor fuel tax should be returned to the State.
24. Our state and federal legislative delegations should seek to:
 - Ensure the expansion of funds for public transportation
 - Increase the flexibility of federal transportation dollars allocated for public transportation
25. Local government leaders should recognize that traffic congestion is a top concern of local residents and should respond to that public will and the public interest by minimizing traffic congestion through their growth management plans, concurrency standards, impact fee rates and other decisions.

Appendix A. Opportunities For Citizen Involvement

17th Street Corridor Study PD&E Study

Corridor Study and PD&E study for 4 lanes from U.S. 41 to U.S. 301

Contact: Sam Frieja, City of Sarasota Engineering Dept., 941/954-4180

City of Sarasota Planning Board

Citizens may voice their opinion on proposed developments during the public portion at the end of each meeting.

Contact: Mark Hess, City of Sarasota Planning Department, 941/594-4195

Community Traffic Safety Team

Their goal is to reduce the number and severity of traffic crashes, (including pedestrians and bicyclists).

Contact: Alex Boudreau, Sarasota County Public Works, Planning, 941/861-0920

Downtown Sarasota Mobility Study

This study will identify measures that the City of Sarasota, FDOT and other agencies can undertake to modify, alter and enhance the area's transportation network to support the implementation of the adopted Downtown Master Plan.

Contact: Sam Frieja, City of Sarasota Engineering Dept., 941/954-4180

Sarasota County Citizen Advisory Committee for Public Transportation

Seven-member committee advises the Sarasota Board of County Commissioners on matters related to public transportation within Sarasota County.

Contact: Jay A. Goodwill, Sarasota County Public Works Transit Services, 941/316-1007

Sarasota County Pedestrian and Bicycle Advisory Committee

This committee advises the Sarasota Board of County Commissioners on matters related to bicycle and pedestrian needs within Sarasota County.

Contact: Alex Boudreau, Sarasota County Public Works, Planning, 941/861-0920

Sarasota County Residential Neighborhood Traffic Management Program

Public meetings will occur within neighborhoods where traffic-calming plans are proposed. Interest should be limited to residents of the neighborhood. There will be newspaper notice and direct mailing.

Contact: Don Galloway, Public Works, Operations and Maintenance, 941/861-0814

Sarasota County Traffic Advisory Council

This council advises the Sarasota Board of County Commissioners and makes recommendations pertaining to traffic, parking, speed regulations, safety and the placing of traffic control devices in the unincorporated areas of the county. Meets monthly; public is invited. Notice in the paper 8 days before each meeting.

Contact: Don Galloway, Public Works, Operations and Maintenance, 941/861-0814

Sarasota County Transportation Disadvantaged Local Coordinating Board (LCB)

Local committee of agencies, consumers and interested citizens that oversees the Sarasota County Transportation Disadvantaged Community Transportation Coordinator. Committee is staffed by the MPO and reports to the Florida Commission for the Transportation Disadvantaged. Meets bi-monthly. Open to the public.

Contact: Mike Maholtz, Sarasota/Manatee MPO, 941/359-5772

Sarasota/Manatee Metropolitan Planning Organization (MPO) Citizens Advisory Committee (CAC)

The CAC is a review and advisory committee that provides citizen input on transportation issues and assists the MPO in the creation of transportation goals and objectives for the Sarasota/ Manatee Urbanized Area. Meets on the first Thursday of each month. Meetings are open to the public.

Contact: Mike Guy, Sarasota/Manatee MPO, 941/359-5772

Sarasota Transportation Management Organization

The purpose is to educate and assist with the initiation of transportation demand management programs.

Contact: John Tylee, Downtown Association of Sarasota, 941/951-2656

U.S. 301 Corridor Study PD&E Study

Corridor study and PD&E study for 6 lanes on U.S. 301 from 12th Street north and 4 lanes with transportation systems management (TSM) from 12th Street south.

Contact: Ben Walker, FDOT, 863/519-2656

Appendix B Results of SCOPE Board Review

Note: This table summarizes the results of the SCOPE Board review of the Traffic Flow and Congestion study and explains the study group response.

Reference	Board Feedback	Study Group Response
Findings page 14	The pros and cons of most issues are discussed throughout the report. The “con” side of the physical environmental impact of road building is not addressed. The report discusses the environmental cost of traffic and vehicles but not the impact of road building.	Add the following paragraph to the end of the road capacity section on page 14 of “Building new roads has an environmental price tag as well. Such activity degrades natural habitat for animals and organisms and acts as a barrier that may change shift movement patterns and home ranges. Additionally, a road transforms the environment by affecting soil density and water absorption, increasing light through clearing of trees and stirring up dust. The road surface absorbs radiant heat during the day and releases it at night which attracts heat seeking species to live too close to the
Findings page 22	The TOPS program may be terminated by the legislature and 2 new programs will replace it. Add a footnote to explain this.	Add a footnote on page 22 that states: “The TOPS program is currently being revised by these state legislature and is subject to action by the Governor.”
Conclus. #28	The first sentence implies that with enough money the problem would be resolved.	Delete the words “and resolved” at the end of the first sentence. The conclusion v “The MPO’s Year 2025 Financially Feasible Transportation Plan projects a budget shortfall for Sarasota County, which must be addressed. Securing alternate sources of funding and the development of a quality public transportation system and other alternatives to provide competitive options to the use of private vehicles must be examined.”
Recomm. #4 & #19	Are Recommendations #4 and #19 inconsistent with each other?	These recommendations are not in conflict. #4 supports "carefully planned biking corridors" and #19 maintains that "multi-modal" should not be used to measure concurrency. The study group decided to modify recommendation #19 in order to clarify. The new recommendation is <u>underlined</u> . “Local government should maintain and adhere to strong concurrency rules when setting up new plans for growth or amending existing plans. While we support the expansion of biking and walking corridors, specifically, “multi-modal” and “multi-modal” of service and other alternative methodologies should be rejected as tools for concurrency. Strict concurrency regulations should be applied before a new plan is adopted.”
Recomm. #7	Should the recommendation mention the boundaries we want to occur?	Keep the recommendation as stated. The study group has no basis for recommending service boundaries. An examination of all boundaries should occur at the state level. The study group will remain: “Our state legislative delegation should create coterminous service boundaries involving transportation and land use planning, specifically, Florida Department of Transportation, Metropolitan Planning Organizations, Department of Community Development, and the Regional Planning Councils. Additionally, the Department of Community Development should be decentralized with a representative in each of the service areas.”

Appendix B Results of SCOPE Board Review

Note: This table summarizes the results of the SCOPE Board review of the Traffic Flow and Congestion study and explains the study group response.

Reference	Board Feedback	Study Group Response
Recomm. #8	In order to be consistent, the second bullet should be stated in a positive manner.	The study group changed the second bullet of recommendation #8 to read: “When local governments consider the mixed-use form of development, they must do so in a manner that does not increase traffic impacts by weakening controls on the amount, density, intensity and timing of development.”
Recomm. #9	What is the justification for prescribing this limit as the appropriate timeframe (historical limits = 10 years)?	Keep this recommendation as stated: “In order to avoid excessive and premature traffic impacts, the <i>Sarasota County Plan</i> should continue its historic limits on the timing of new growth while at the same time planning long-range growth.” <i>Study Group Rationale:</i> <ul style="list-style-type: none"> ▪ In the findings, (<i>Land Use Management</i>), the first paragraph states, “...and they must always balance growth with transportation resources. If we allow more development than the roads and intersections are designed to handle, we will have congestion and intersections.” ▪ In the findings, (<i>Growth Management</i>), it is noted that transportation systems take longer periods of time to be completed than land development. ▪ “Historic limits on timing” is the status quo and the study group believes that these limits are valid. The appropriate timing of new growth is integral to maintaining transportation resources. Sarasota County has won awards on its current growth policies.
Recomm. #15	Is this recommendation too specific? Is there adequate specificity in the findings to justify this placement of a roadway east of I-75?	Keep this recommendation as stated: “Through the MPO planning process, Sarasota and Manatee Counties should consider a north/south route east of I-75 to improve traffic flow inter- and intra-county, and provide access to major arterial crossings. This should include exploring the option of a toll road with the Florida Turnpike Authority.” <i>Study Group Rationale:</i> <ul style="list-style-type: none"> ▪ A lack of north/south arterials and increased tourism were noted as factors contributing to congestion in conclusion #2. ▪ The use of the words “should consider” implies that further study would be needed. ▪ The study group recognizes that through-county traffic could be improved with a through route and limited access would help discourage the development that often follows. ▪ East of I-75 is the only area of the county to place a through road with minimal impact on the environment and community character. Any environmental impacts would have been mitigated.

Appendix B Results of SCOPE Board Review

Note: This table summarizes the results of the SCOPE Board review of the Traffic Flow and Congestion study and explains the study group response.

Reference	Board Feedback	Study Group Response
Recomm. #20	Did the study group consider and acknowledge that there were competing public interests in the creation of the TCEA? There is the issue of traffic congestion but also the issue of economic development. Has the study group done an adequate analysis of the effectiveness of the existing TCEA to justify this recommendation?	<p>Keep this recommendation as stated: “The City of Sarasota should re-study and consider repeal of its transportation exception area (TCEA) and adopt appropriate concurrency standards to assist in the square mile TCEA that includes Gulfstream and U.S. 41. We also oppose any further TCEAs in Sarasota County.”</p> <p><i>Study Group Rationale:</i></p> <ul style="list-style-type: none"> ▪ Our study group focused on traffic impacts of the TCEA in a high volume traffic corridor (Route 41). Conclusion #6 notes there are few major arterial roadways (i.e. high volume corridors) in Sarasota County. ▪ Traffic gridlock does not serve sound economic development policy. Traffic congestion has a negative impact on businesses seeking to move goods and services as well as travelers moving through this corridor (Route 41) to patronize businesses throughout parts of our county. ▪ Conclusion #1 outlines the costs of congestion to our community. Within that conclusion, bullet #3 notes that traffic congestion creates “economic harm to businesses through the movement of goods, the delivery of services or the movement of people.” ▪ Conclusion #10 notes that “seasonal and peak hour traffic cause excessive traffic congestion at multiple key intersections such as Gulfstream and U.S.41.” This intersection is at the boundary of the TCEA.
Recomm. #21	Did the study group examine all funding options and conclude that road impact fees were the best choice for increase? The findings do not address the reasons behind the decrease in road impact fees over the past 10 years. Is the rationale appropriate?	<p>Keep the original recommendation, changing “substantially” to “appropriately” in the recommendation. The recommendation will read as follows: “Sarasota County government should revise its methodology and data as needed to appropriately increase its road impact fees on new development (which for a residential development, the road impact fees are now less than 2/3 of what they were ten years ago) in order to properly accommodate development impacts. Sarasota County government should also require full road impact fees by its municipalities.”</p> <p>Add the following to the findings, under <i>Impact Fees for New Development</i> in order to address the factors contributing to the fee change over the past 10 years: “Currently the unincorporated county’s road impact fees on new homes are 87% (62 % if adjusted for CPI inflation) of what they were ten years ago. Factors that have contributed to this include:</p> <ul style="list-style-type: none"> ➢ Adjustments resulting from revised calculations and more current data and sales tax credits ➢ Adjustments made after a 1994 trip generation study showed that the length of vehicle trips taken by Sarasota County residents were generally lower than the national averages used to calculate road impact fees <p><i>(Continued on the next page)</i></p>

Appendix B Results of SCOPE Board Review

Note: This table summarizes the results of the SCOPE Board review of the Traffic Flow and Congestion study and explains the study group response.

Reference	Board Feedback	Study Group Response
<p>Recomm. #21</p>	<p><i>(Continued from previous page)</i></p>	<p><i>(Continued from previous page)</i></p> <ul style="list-style-type: none"> ➤ An increase in the county’s estimate of an average road’s capacity, as per the 1997 Comprehensive Plan update (RU-34) ➤ In 1999, six particular projects were selected for right of way acquisition estimates, rather than the four recommended by county staff (which would have produced higher costs and higher impact fees) ➤ An increase of the gas tax credit from five to twenty years, done at the discretion of the County.” <p><i>Study Group Rationale:</i></p> <ul style="list-style-type: none"> ▪ The study group was not examining road impact fees as a way of securing more funding for more road building. The concern was the issue of new development paying their share of its impact on road infrastructure.

GLOSSARY

AADT – Average Annual Daily Traffic

Arterial - Refer to Table 3 for roadway classifications and examples

AASHTO – American Association of State Highway and Transportation Officials

CAC - Citizen’s Advisory Committee of the MPO

CIP – Capital Improvement Plan

Collector - Refer to Table 3 for roadway classifications and examples

CUTR – Center for Urban Transportation Research

FDOT - Florida Department of Transportation

FHWA – Federal Highway Administration

FTA – Federal Transit Administration

ITS - Intelligent Transportation Systems

LOS - Level of Service, refer to Table 1 for definitions of operating conditions for each level

MPO - Metropolitan Planning Organization

PD&E Study – Project Development and Environment Study

PTSA – Public Transportation System Analysis

ROW – Right-Of-Way

RTO – Regional Transportation Organization

SCAT – Sarasota County Area Transit

SOV – Single Occupancy Vehicles

STPS – Strategic Transit Planning Study

TAC - Technical Advisory Committee of the MPO

TCEA – Transportation Concurrency Exception Area

TCMA – Transportation Concurrency Management Areas

TDM - Transportation Demand Management

TEA 21 – Transportation Equity Act for the 21st Century

TIP - Transportation Improvement Plan

TMO - Transportation Management Organization

TOP – Transportation Outreach Program

VMT - Vehicle Miles Traveled

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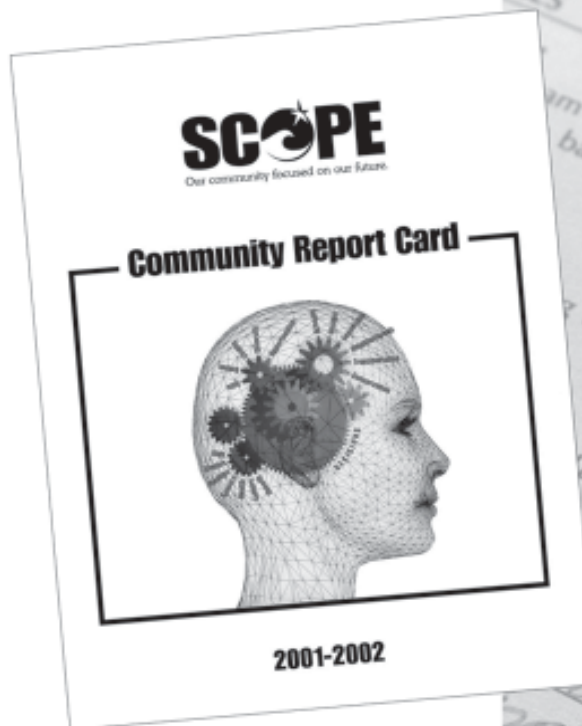
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SCOPE (Sarasota County Openly Plans for Excellence) is a volunteer-driven, nonprofit organization dedicated to improving the quality of life in Sarasota County. The Board of Directors includes members from nonprofit, education, business, government, youth, and civic organizations. Instead of acting as advocates for their sectors, the Board helps us to take a broader look at our community. SCOPE is funded by the people it serves: individuals, business, foundations, government, and United Ways. SCOPE works in three areas: capturing our past, addressing our present, and envisioning our future.

Capturing Our Past

- Collecting data that will be available to all
- Conducting research in categories such as health, learning, civic participation, and the environment
- Publishing a *Community Report Card* to show how we're doing

Addressing Our Present

- Identifying two key issues annually for research, analysis, and solutions
- Monitoring implementation and progress

Envisioning Our Future

- Building community awareness and providing tools for change
- Convening, facilitating, and hosting public dialogue
- Training to build leadership capacity

HOW CAN YOU HELP?

- Submit ideas for two key issues annually
- Join a study group and help create solutions to community problems
- Lend your expertise and data to the *Community Report Card*
- Become a SCOPE committee member
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The *Traffic Flow and Congestion Study Group Report* was made possible thanks to the support of the following individuals, foundations, corporations, and governments...

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Elmer Berkel
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Jay and Veronica Brady
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Wendy & Tom Hopkins
James Isbell
Debra Jacobs & Bill Buttaggi
Mary & Allen Jelks
Cindy & Bob Kiebitz
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Janice Mee
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Sarah Pappas
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Patricia Preston & John Tylee
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Donna & Mac Spencer
Stewart & Marjorie Stearns
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Mr. & Mrs. Philip Tavill
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Mr. & Mrs. Carl Weinrich
Jo-Anne Whalen

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To engage our community in planning for excellence through a process of open dialogue and impartial research, to establish priorities, propose solutions and monitor change to enhance the quality of life in Sarasota County.

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Identifies Priorities Researches Issues Proposes Solutions Creates Action Measures Progress