State Modal System Plans as Technical Issue Documents—A New Role

Douglas S. McLeod

Traditionally state modal system plans deal with the physical arrangements and needs of modal networks and are dominated by short-term work programs. However, in the development of Florida's modal system plans, statewide direction setting issues for each respective mode are also analyzed, leading to specific recommendations for policy, procedural, or statutory changes. As an example, the Florida Highway System Plan addressed nine major highway issues facing Florida: (a) state, regional, metropolitan and local plans coordination, (b) highways as a growth management tool, (c) level of service standards, (d) right-of-way protection/advanced acquisition, (e) access management, (f) traffic analysis procedures, (g) major site improvement developments, (h) modal linkages, and (i) hurricane evacuation. Task teams were formed to analyze and make recommendations on each issue. Using modal system plans as umbrella documents to address statewide transportation issues helps the Florida Department of Transportation to better determine its role in the different modes and the overall state planning process. Recommendations also lead to more cost-effective use of the Department's resources and can help drive program budgets leading to project implementation. The system plans are proving to be important decision-making documents.

Traditionally transportation modal system planning deals with the physical arrangements of modal networks with emphasis on the whole system rather than individual parts. Frequently state modal system plans reflect network needs and are dominated by short-term (five-year) work programs. However, Florida's modal system plans are unique for three reasons. First, the modal system plans are being developed in a policy framework based on policy direction from the Strategic Transportation Plan (1), the State Comprehensive Plan (Chapter 187, Florida Statutes), and the Florida Transportation Plan (2). For instance, Florida's proposed controlled access and interregional highway systems in the Florida Highway System Plan (FHSP) (3) are based on the policy of "preserving and enhancing interstate and interregional mobility."

Second, the modal system plans are crucial to the Department's planning process. The modal system plans provided initial input into the development of the Department's Strategic Transportation Plan. Furthermore, they are not final products; rather they help drive program plans and budgets and, ultimately, project implementation. Projects do not form the system plans; the plans drive the development of projects.

Third, and most important, the Florida modal system plans are the primary instruments in which statewide direction setting issues are analyzed and addressed for each respective mode. For example, the Florida transit system plan (4) is the umbrella document for the most important direction setting issues and needs facing Florida's transit systems. Addressing direction setting transportation issues is not unique to Florida. What is unique is that they are addressed in a comprehensive fashion in the respective modal system plans or on a piecemeal basis.

The Strategic Transportation Plan is the Florida Department of Transportation's direction setting document emphasizing strategies, reforms, and facilities needed. The Florida Transportation Plan encompasses the Department's Functional Plan of the State Comprehensive Plan. The transportation modes section of the 1986 Florida Transportation Plan requires the development of transportation modal system plans. In 1987 the Department was developing the following modal system plans: aviation, bicycle and pedestrian, highway, rail, and transit. Each modal system plan is to include the following:

- 1. Goals and policies consistent with the Florida Transportation Plan;
- 2. A determination of statewide needs and issues based on the movement of people and goods;
 - 3. An analysis of financial resources;
 - 4. A functional classification process;
- 5. An analysis of institutional, physical, operational, and financial linkages with other transportation modes; and
- 6. An analysis of the roles and responsibilities of state and local governments and the private sector in provision of transportation services.

This paper shows how the Florida modal system plans and, more specifically, how the FHSP serves as a decision-making issue document. The FHSP process is discussed and major findings and recommendations from the issue analyses are presented. The focus of this paper is not to provide a detailed discussion of any one of the issues in the FHSP; rather the major issue findings and recommendations are used to illustrate how important modal system plans can be to the transportation planning process.

FLORIDA HIGHWAY SYSTEM PLANNING PROCESS

Two major components make up the Florida Highway System Plan. First is the highway system needs section covering the state's controlled access, interregional, regional, and urban systems. This is the more traditional section of a statewide highway system plan dealing with the physical arrangement

Florida Department of Transportation, 605 Suwannee Street, Tallahassee, Florida 32399-0450.

and interrelationship of the state's highway system. Second is the highway system issue section, which is the subject of this paper.

The Florida Department of Transportation is a highly decentralized organization. The Department's Districts are directly responsible for the transportation planning and implementation of projects in their areas and, in general, collectively are responsible for coordinating projects for the state. To a large extent the Department's Central Office assists in the coordination effort and is responsible for the development of minimum policies, standards, and guidelines. Thus, in Florida, District input is essential to address overall statewide issues. In September 1986, Central Office staff visited each District to discuss major highway issues facing the State. The issues were briefly discussed, and in October 1986, eight issues were selected to be analyzed in the first edition of the FHSP. District and Central Office Steering Committees were formed which by February 1987 added two issues and deleted one of the original issues. The final nine selected issues were the following:

- 1. State, regional, metropolitan, and local plans coordination.
 - 2. Highways as a growth management tool,
 - 3. Level of service standards,
 - 4. Right-of-way protection/advanced acquisition,
 - 5. Access management,
 - 6. Traffic management procedures,
- 7. Developments of regional impact (major site improvement developments),
 - 8. Modal linkages, and
 - 9. Hurricane evacuation.

Task teams were formed to address each issue. Membership consisted of approximately six of the most knowledgeable Department personnel on each issue, and, as appropriate, the membership was supplemented by the representatives of the private sector, leading transportation scholars, and other state representatives as ex officio members. At least one District representative served on each team, and all the Department's

seven Districts had at least one representative directly involved in writing the FHSP. The intent was to bring together representative working groups of Department experts who could effectively analyze major statewide highway issues in a timely fashion.

Each team's major task was to analyze its specific issue by developing technical issue papers and reports. These were summarized into no more than seven pages in the FHSP text. The text of each issue consisted of a problem statement, a goal statement, background and analysis, and recommendations. In addition, the teams recommended policy changes to the Florida Transportation Plan and suggested recommended legislative changes.

TASK TEAM FINDINGS AND RECOMMENDATIONS

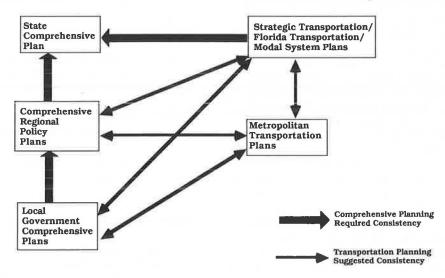
The following are excerpts of the teams' major findings and recommendations.

State, Regional, Metropolitan and Local Plans Coordination

The 1984 Florida Legislature significantly revised Florida's transportation planning statutes to enhance the policy and planning activities of the Department. The Florida Transportation Plan and the Florida Highway System Plan are directly linked to the legislation. The creation and operation of transportation planning organizations, Metropolitan Planning Organizations (MPOs), for all urbanized areas is also mandated in Florida statutes.

The 1984 Legislature also passed the State and Regional Planning Act (Chapter 186, F.S.) which required the development of the State Comprehensive Plan, State Agency Functional Plans, and Comprehensive Regional Policy Plans. Chapter 163, Florida Statutes, requires the development of Local Government Comprehensive Plans, including traffic circulation elements.

Local Government Comprehensive Plans must be consis-



Source: Bureau of Multi-Modal Systems Planning, Florida Department of Transportation, 1987.

FIGURE 1 Relationship of comprehensive and transportation plans.

tent with Comprehensive Regional Policy Plans (prepared by regional planning councils) which in turn must be consistent with the State Comprehensive Plan (Figure 1). State Agency Functional Plans, and more specifically the Department's Florida Transportation Plan, must also be consistent with the State Comprehensive Plan. However, Florida's growth management and comprehensive planning legislation provides only an indirect link between regional and local comprehensive plans and the Florida Transportation Plan and other related transportation plans.

Since the adoption of Florida's growth management and comprehensive planning legislation, much of the debate over consistency between agency functional plans and regional and local comprehensive plans has occurred in the transportation arena. The specific issue was who should (or who has the authority to) set level-of-service standards for the State Highway System in a local jurisdiction. The fundamental question as to who sets levels of service could have occurred in education, environment, or other areas. For instance, the specific issue could have been over the question of who should (or has the authority to) set environmental standards for waters of the state in a local jurisdiction. From a planning viewpoint, the general consistency issue is over balancing area-wide planning (e.g., local jurisdiction) with functional planning (e.g., transportation, environmental). From a political perspective, the general issue may be viewed as balancing the desirable concepts of "local government control" with "protection of state resources."

The Department's position was that neither form of planning nor political consideration should take precedence over the other. Interested parties with opposite viewpoints should build flexibility into their positions so that a consensus could be reached. An example of this flexibility is the Department's concept of Special Transportation Areas where the Department may allow a lower quality level of service on important state resources (i.e., the State Highway System) if the overall needs of the local government outweigh the specific need to protect a state highway. The primary concept is to reach a consensus of opinion among the parties when conflicts arise. Success will be measured by how well the concerns of all the parties are met. If this process fails, legislative changes would be necessary.

Major recommendations of this task team included the following:

- 1. Recognition by the Department that area-wide planning performed by local and regional entities is mandated by Florida law, is important, and should be a part of the Department's planning and work program development process.
- 2. Recognition by the Department; legislature; and regional, metropolitan, and local officials that conflicts will occur over construction and operation of the State Highway System within regional, metropolitan, and local jurisdictions. These conflicts should be resolved in a cooperative manner with consensus reached.
- 3. The MPO long-range transportation plans should be one of the primary inputs for the urban component of the Florida Highway System Plan.
- 4. Establish within each District and the Central Office a local government technical assistance work group available to work with local governments in their development of the traffic circulation element of their comprehensive plans.

5. Assist local governments to develop innovative land development regulations, including impact fee ordinances and right-of-way protection provisions intended to protect, preserve, and foster the expansion of the State Highway System.

Highways as a Growth Management Tool

Although a wealth of information exists in Florida that explains what growth management is by discussion and example, a concise legal definition of growth management, especially as it relates to transportation system development, is not clearly stated in Florida law. The team investigated the growth management legislation and determined that the following five major issues form the framework for transportation to serve as a growth management tool:

- 1. Infrastructure concurrent with the impact of development;
 - 2. Coordination of state, regional, and local plans;
 - 3. Attracting desirable development;
- 4. Encouraging development within urban areas and within transportation corridors; and
 - 5. Managing development in coastal areas.

Subsequently, for the FHSP the team defined growth management as "The implementation of state goals and Department policies, objectives, and standards to obtain maximum benefit from environmental, physical, social, and economic use of land by working with local governments to control the timing, nature, and location of growth into preferred development patterns."

The team determined that highway project types that significantly affect land use patterns are those that provide substantially improved access. These types of facilities include the following:

- 1. Interchanges on limited access facilities,
- New highways/bridges to areas with currently severely restricted access, and
- 3. Substantially improved (i.e., unpaved roads to multilane) highways.

Although major in scope, multilaning highway improvements (e.g., two to four lanes) predominantly reflect traffic and land use demands. They are primarily a result of or a reaction to growth rather than facilities that guide or direct growth. "Access" is the key word relating growth management and highways. The three types of highways listed above significantly affect land use patterns by providing access to new areas. On the other hand, capacity improvements increase access to existing areas.

The Department has considerable potential to implement growth management because (a) most major highways that provide new access are state facilities and (b) the Department has statutory authority to construct, operate, and maintain the State Highway System.

The task team made the following recommendations:

1. Thoroughly analyze Department projects that provide new access for secondary (indirect) impacts to ensure coordination with regional and local comprehensive planning efforts. A lesser level of analysis, particularly for secondary impacts, should be acceptable for upgrading established transportation corridors and existing transportation rights-of-way. This latter effort should primarily focus on minimizing direct impacts to adjacent properties.

2. Separate funding for growth management type highway projects (e.g., the interregional facilities, new interchanges for approved developments) and urban highway projects.

Level-of-Service Standards

Keys to the Department's success in implementing growth management intent are to define and apply comprehensive level-of-service standards for the State Highway System and then to work with regional planning councils, MPOs, and local governments in using those standards. Although the impetus to examine level-of-service standards in Florida stemmed from growth management issues, other factors also indicated the desirability of establishing standards. These factors included reviews of major site development improvements, development of new traffic flow, measurement and evaluation techniques (e.g., the 1985 Highway Capacity Manual [5]), and better reporting techniques.

The Department's level-of-service standards for the State Highway System appear in Table 1. These standards, or higher standards adopted through formal agreement by MPOs, regional planning councils, and other local governmental entities, also are to be used by the Department to assist the Florida Department of Community Affairs in the review of Local Government Comprehensive Plans and major site development improvements as they relate to the State Highway System.

The Department's standards incorporate (1) the direct correlation between urban size and acceptance of some highway congestion as a trade-off for other urban amenities, (2) the different roles (i.e., mobility versus access) the state's facilities provide, and (3) local flexibility in determining Special Transportation Areas. Special Transportation Areas may include central business districts and outlying business districts, and

regional activity centers; however, they do not apply to strip development along highway corridors.

The level-of-service standards reflect minimum acceptable levels of service. Desirable levels-of-service are considered to be B in rural areas and C in urban and urbanized areas.

The basic document for capacity analyses is the 1985 Highway Capacity Manual (HCM). With the assistance of William McShane, one of the principal authors of the HCM, a generalized average daily traffic volume table for varying levels of service was developed to accompany Table 1.

The task team made the following recommendations:

- 1. The Department should continue to promote its adopted level-of-service standards to be consistent with the growth management concept of providing "infrastructure concurrent with the impact of development" and to preserve and enhance interstate and interregional mobility.
- 2. By January 1989 the Department should implement levelof-service standards to determine deficiencies and backlogs and to assist in determining project priorities.

Right-of-Way Protection/Advanced Acquisition

The importance of protecting and acquiring needed future right-of-way is demonstrated by the escalating costs and length of time for acquisition. Recent estimates in Florida indicate that right-of-way costs vary from approximately \$100,000 per mile in rural areas of north Florida to \$77 million per mile in urbanized areas in southeast Florida.

Florida lags behind other states in protecting and acquiring right-of-way in a timely and cost-effective manner. Local governments, the state, and the Department rarely undertake right-of-way protection and acquisition for major roads in a comprehensive fashion. Seldom has the Department actively pursued, with staffing or funds, long-range right-of-way protection for its facilities. Exceptions do exist where right-of-way protection and acquisition have succeeded in Florida. Noteworthy is Broward County's Trafficways (right-of-way thoroughfare) Plan which was instituted in 1962.

TABLE 1 STATEWIDE MINIMUM ACCEPTABLE OPERATING LEVEL OF SERVICE STANDARDS FOR STATE HIGHWAY SYSTEM (1)

Roadway Type ^a	Rural/Urban With Population Less than 50,000	Urbanized Areas With Population 50,000 or More	Special Transportation Area ^b
Freeways Rural arterials and extensions of rural principal arterials into and through	С	D	Е
urban areas	C	D	E
Other urban arterials not included above	D	E	E

Note: The operating levels of service designate lowest quality operating conditions for the design hour (peak hour with 20-year planning horizon). They are not design standards. Design levels of service are rural/urban areas: B (desirable), C (acceptable); urbanized areas: C (desirable), D (acceptable). Level-of-service standards for specific areas within the state for planning and analysis of development impacts will be adopted through formal agreement among the Department, Metropolitan Planning Organizations, and Regional Planning Councils when the adopted standards incorporate these statewide minimum standards. To fully evaluate operating conditions, these level-of-service standards will be used in conjunction with intersection volume to capacity (V/C) standards.

"Roadway type is based on Functional Classification categories as presented in Chapter 334 F.S. Freeways are limited access facilities.

^bSpecial transportation areas and the levels of service for roadways within them are to be recommended by appropriate local government entities and approved by the Department. Level-of-service standards for such areas may range from A to E to accommodate specific environmental and/or land development issues. Special transportation areas may include central business districts, outlying business districts, approved area-wide DRIs and regional activity centers.

techniques similar to National Cooperative Highway Research Program Report 255 (8) and other appropriate sources.

3. The Department should undertake more research and field work in support analysis of highway capacity and congestion. The factors needing more research include K factors, saturation flow rates, running speeds, and peak hour factors.

Developments of Regional Impact (DRI)

A DRI is "any development which, because of its character, magnitude, or location, would have a substantial effect upon the health, safety, or welfare of citizens of more than one county," The DRI program is a growth management process designed to provide a comprehensive assessment of and decision-making tool for Florida's large scale developments.

The Department's responsibility in this complex process is to provide specialized technical review and comments on the development's impacts on the transportation system. The Department has no statutory or regulatory authority to require compliance with its findings or recommendations. The Department's strongest option, when agreement cannot be reached with local government, is to request the Florida Department of Community Affairs or the regional planning council to appeal the Development Order. The Department does control access to the State Highway System through the driveway permit process, which can provide additional leverage where such access is critical to the development. The Department's most significant asset in the DRI process, however, is the technical transportation expertise of its staff. The value of this expertise is generally recognized by government planners, developers, and professional transportation consultants.

The task team made the following recommendations:

- 1. More emphasis should be placed on the use of computerized regional systems models that have a detailed impact area network and zone system analysis rather than simple manual trip distribution and assignment.
- 2. Each District is recommended to form a Development Review Committee as a forum for multi-discipline development review by District staff.
- 3. Levels of impact analysis should reflect distance from the DRI site. In general, the level of detail of the analysis should be greater when it is performed closest to the site and in the earlier phases of development.
- 4. Arterial analysis should be emphasized more than intersection analysis.
- 5. To determine a developer's proportionate share contribution, the Department recommends a percent trips formula. The formula is understandable, easy to implement, reinforces Florida's growth management legislation, and is equitable. The Department's level-of-service standards should be used in the calculation. Preconstruction donations (e.g., right-of-way) should not generally be credited in the proportionate share contribution. Where preconstruction donations are credited, the proportionate share costs should include all preconstruction costs.
- A statewide standard method of calculating DRI economic impact on the State Highway System should be adopted.
 - 7. Wherever possible, the developer should design and

construct the needed improvements rather than provide funds for use by the Department in constructing such improvements.

8. Training for Department DRI coordinators, management, and other staff should be developed immediately upon finalization of the Department's minimum standards and guidelines. The prompt availability of this training is vital to the effectiveness of the effort to improve DRI review quality and consistency statewide.

Modal Linkages

In the past, inadequate consideration has been given to the physical, institutional, and financial relationships between highways and other transportation modes. Results have included poor timing between airport access improvements and airport terminal facility expansion, unsafe rail/highway grade crossings, inadequate use of transit as an alternative to highway expansion, and failure to accommodate the needs of bicyclists and pedestrians in highway development and improvement projects.

The task team made the following recommendations:

- 1. Place more emphasis when planning and developing highway capacity expansion on service airports. Highway improvements should be made prior to or concurrent with air terminal modifications which increase surface transportation requirements.
- 2. Reaffirm the Department policy of setting aside one and one-half percent of highway preservation program funds to finance the adopted program objectives for rail/highway grade crossing improvements, crossing closures, and grade separations.
- 3. Modify Department policy to ensure that transit options will be considered in all corridors identified in state, regional, or local transportation plans where the projected level-of-service is equal to or below the Department's statewide minimums.
- 4. Reaffirm the Department policy of allocating at least 10 percent of state motor fuel tax proceeds to public transportation.
- 5. Accommodate to the extent practicable the needs of bicyclists and pedestrians on all major urban roadway projects as well as other locations where bicycle and pedestrian travel is likely and where such facilities tie into a total urban system.
- 6. Allocate special funds to retrofit substandard state highway facilities in urban areas near community facilities such as schools, parks, community centers, shopping centers, and libraries to accommodate bicyclists and pedestrians where such retrofitting can be reasonably accomplished within existing right-of-way.

Hurricane Evacuation

During a hurricane evacuation a large number of vehicles have to be moved across a road network in a short period of time. The number of vehicles leaving becomes a big problem for an area such as the Florida coast, where there are many urban areas and isolated barrier island communities. The number of evacuating vehicles varies depending on the number of Beyond actual right-of-way donation, the Department believes the most effective way to hold down long-term state highway project right-of-way costs is to identify long-range right-of-way needs for every state facility, coordinate with every county and city on implementing thoroughfare plans, and incorporate the thoroughfare plans into local government comprehensive plans and land development regulations. The process incorporates the concepts of constrained corridors, maximum through-lane standards, ultimate highway buildout, thoroughfare plans, local government comprehensive plans, and land development regulations.

If implemented effectively, the above process is appropriate for right-of-way protection for most state highway facilities; however, some facilities warrant special consideration. The state's interregional system built on new alignment will need corridor studies to begin in order to set realistic preliminary alignments. With the preliminary alignments, local governments can begin to protect the right-of-way and the Department could initiate advanced acquisition of selected parcels. Commencement of the project corridor studies is especially important in urbanized areas. Many of the interregional facilities and some of the state's other major facilities may warrant special land use/development coordination under the Department's proposed transportation corridor program. In the corridor program concept, not only is the state facility considered, but parallel local roads and adjacent development that directly influence the operation of the state facility are also considered. The intent of the program is to bring about a mutually binding state/local/private corridor development program.

The task team made the following recommendations:

- 1. Link the concepts of (a) constrained corridors; (b) maximum through-lane standards; and (c) ultimate buildout with local government thoroughfare plans, MPO plans, comprehensive regional policy plans, and local government comprehensive plans to assist right-of-way protection and acquisition.
- 2. Promote and assist in the adoption of thoroughfare plans in each county and city.
- 3. Develop and implement a transportation corridor program to protect right-of-way and establish coordination between local land use planning and transportation investments.
- 4. Develop a Department policy stating that local governments protecting, acquiring, or donating right-of-way for state facilities will be given preferential treatment in the Department's project priority process.
- 5. Begin, by January 1989, corridor studies on all the State's new interregional facilities.

Access Management

Florida's highway network plays a dual role in providing (a) access to property and (b) travel mobility. Access is a fixed requirement at both ends. Mobility, along the path of such trips, can be provided at varying levels of service. The concepts of access and mobility naturally lead to a hierarchy of highway classes with local streets primarily serving land access, and freeways primarily serving mobility. State facilities, while serving some access desires, should primarily be designed, constructed, and maintained to serve mobility desires. Pre-

serving highway capacity by managing access is one of the best methods of assuring safe and efficient travel.

The task team made the following recommendations:

- 1. The Department should help write enabling legislation which would give the Department the power to alter access to the State Highway System for the purpose of safety and roadway functional integrity.
- 2. When reconstructing or widening a roadway, consideration should be given to combining access points to adjoining land use to reduce the total number of driveways directly accessing the highway.
- 3. The Department should develop standards for minimum driveway and signal spacing based not only on safety but also on effects on arterial level of service.
- 4. All major commercial driveway applications should be reviewed by the District Traffic Operations Engineer and Planning before final approval.
- 5. A benefit cost analysis with multiple land use scenarios should be part of a total interchange justification study. Effects on the freeway level-of-service and other goals should also be included in the justification report.
- 6. The Department should set the following specific interchange spacing standards:
- Recommended average minimum spacings for new or future interregional freeways are (a) urban areas, 5 mile spacing; (b) suburban areas, 8 mile spacing; and (c) rural areas, 10 mile spacing.
- Allowed average minimum spacing with appropriate justification (for established freeways) are (a) urban areas, 2 miles; (b) suburban areas, 4 miles; and (c) rural areas, 8 miles.
- Absolute minimums are no new interchanges within 1 mi of an existing or approved interchange.

Traffic Analysis Procedures

Over the past ten years the technology of transportation planning models has changed drastically. More accessible and faster computers as well as the move to microcomputers have revolutionized the models the Department uses. In reviewing the traffic analysis procedures used by the Department, it was found that many of the Department's models and analyses were outdated. The models and analyses are outdated because (a) the great number of available models has made choosing the most appropriate ones more difficult and (b) the great amount of training necessary to become proficient at using any of these models is a large investment.

The task team made the following recommendations:

- 1. Effective January 1, 1988, the definitions for level-of-service and capacity in the 1985 Highway Capacity Manual shall be the standard for the Department's planning work. The procedures and techniques contained in Circular 212 (6) and the 1965 edition of the Highway Capacity Manual (7) are to be considered superseded. Their use will constitute poor practice. Projects scheduled to begin before January 1, 1988, should be discouraged from using these techniques.
- 2. A Florida Design Traffic Manual should be developed by January 1, 1989. This manual should be based on the

residents, intensity of the hurricane, direction of approach, and the number of tourists.

Evacuation of hurricane-vulnerable people is largely a transportation problem. This problem has three major elements: (a) physical capacity—number of lanes, (b) structural—drainage and washouts, and (c) traffic management—signals and managing accidents. Emergency management officials must couple the hazards data provided by the National Hurricane Center with clearance time information calculated from transportation analyses. By considering these sources of timing data, officials can determine when a strong evacuation advisory or order must be issued to allow people time to reach safe shelter.

Many problems surface in the transportation system during hurricane evacuation: congestion, high winds, downed power lines, and sometimes slowdowns due to the collection of tolls on an evacuation route.

The task team made the following recommendations:

- 1. No major roadway improvement (widening or new road) should be built strictly due to hurricane evacuation needs.
- 2. The concept of armoring, protecting, and moving coastal highways for evacuation purposes should be considered only on a case-by-case basis. The random event of a hurricane is such that it is usually cheaper to rebuild roads as needed than it would be to move or rebuild large portions of our coastal highway system.
- 3. The Department should not fund construction or planning for any facility that intrudes into a Federal Coastal Barrier Resource System.
- 4. The Department should eliminate toll collections during a hurricane emergency. Specific language should be added to all new bonding terms of indenture so that suspension of tolls is legal and understood.

CONCLUSION

Nine of the major statewide technical highway issues facing Florida were analyzed in the Florida Highway System Plan. Other major statewide transportation issues are being addressed in Florida's other modal system plans. Analyzing major statewide transportation issues in comprehensive documents rather than piecemeal is being found to be an effective decision-making process. Within the Florida Department of Transportation the addressing of the statewide transportation issues is believed to be best handled in the respective modal system plans. Policy direction is taken from the Department's Florida Transportation Plan and the modal system plans' technical analyses and recommendations feed directly into the Department's programming and budgeting activities.

Other states should consider expanding the role of their modal system plans. Certainly modal system plans should continue to address the issue of preserving and enhancing interstate and interregional mobility by emphasizing the physical arrangement and needs of their transportation networks. However, the usefulness of state modal system plans can be greatly expanded by analyzing other major transportation issues facing the states.

The contents presented in this paper reflect the views of the author and do not necessarily reflect the official views of the Florida Department of Transportation.

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