6

Rule Chapter 14-94

6.1

APPLICABILITY OF STANDARDS

Applicable to FDOT planning

Applicable to Florida Intrastate Highways

FLORIDA'S PLANNING LEVEL OF SERVICE STANDARDS

FDOT's Statewide Minimum Level of Service Standards for the State Highway System were adopted by Administrative Rule in 1992 (Rule Chapter No. 14-94) and are shown in Table 6-1.

The area and roadway types in the level of service standards match well with FDOT's Generalized Tables appearing in Chapter 4 of this Handbook; however, subtleties exist on delineation of areas. The first part of Section 3.4 of this Handbook addresses area types.

The indicated levels of service designate the lowest quality operating conditions acceptable for the 100th highest volume hour of the year, from the present through the planning horizon, generally up to 20 years. The 100th highest hour approximates the typical weekday peak hour during the peak season in developed areas. Thus, it can be thought of as the typical drive during "rush" hour in an area's peak season.

The standards are to be applied to FDOT's planning activities. The level of service standards in this Handbook are based on the 100th highest hour for planning purposes. The 30th highest hour, or design hour, remains effective for design purposes and must be used in the review of new or modified interchanges on limited access facilities.

Florida Statutes, 163.1380(10), require local governments to adopt the level of service standards for the Florida Intrastate Highway System (FIHS). Local governments establish the adopted level of service standard on all non-FIHS roadways in their comprehensive plans. These standards can differ from FIHS and FDOT's recommended standards.

CONCEPTS OF UNDERLYING STANDARDS The standards include the following major concepts: • the different level of importance of the Florida Intrastar Highway System and other state roads, • the different roles (i.e., mobility versus access) provided	
 the different level of importance of the Florida Intrastat Highway System and other state roads, the different roles (i.e., mobility versus access) provided 	
Highway System and other state roads,the different roles (i.e., mobility versus access) provided	
 by state facilities (i.e., Florida Intrastate Highway Systeversus other state roads), the direct correlation between urban size and acceptane of some highway congestion as a tradeoff for other urba amenities, urban infill as a desirable objective, the presence of infrastructure concurrent with the impa of development, local flexibility in setting standards in and around Transportation Concurrency Management Areas and Transportation Concurrency Exception Areas, recognition of the interaction between highways and exclusive transit systems serving commuters, recognition that many state facilities are constrained because they cannot be expanded because of physical opolicy barriers, and recognition that the operation of many state facilities d not meet the standards and are not programmed for improvement in FDOT's 5-Year Work Program. 	d m ce in ict
6.3	
EXAMPLE PROBLEMS By September 2002, FDOT intends to have example proble dealing with its level of service standards posted on its website http://www11.myflorida.com/planning/systems/sm/los/default.http://www11.myflorida.com/sm/los/default.http://www11.myflorida.com/sm/los/default.http://www11.myflorida.com/sm/los/default.http://www11.myflorida.com/sm/los/default.http://www11.myflorida.com/sm/los/default.http://www11.myflorida.com/sm/los/default.http://www11.myflorida.com/sm/los/default.http://www11.myflorida.com/sm/los/default.http://www11.myflorida.com/sm/los/defa	:

Table 6 – 1
STATEWIDE MINIMUM LEVEL OF SERVICE STANDARDS
FOR THE STATE HIGHWAY SYSTEM ¹

	Rural Areas ²	Transitioning Urbanized Areas ³ , Urban Areas ⁴ , or Communities ⁵	Urbanized Areas ⁶ under 500,000	Urbanized Areas over 500,000	Roadways Parallel to Exclusive Transit Facilities ⁷	Inside Transportation Concurrency Management Areas ⁸	Constrained ⁹ and Backlogged ¹⁰ Roadways
Intrastate ¹¹							
Limited Access Highway (Freeway) ¹²	В	С	C(D)	D(E)	D(E)	D(E)	Maintain ¹⁵
Controlled Access Highway ¹³	В	С	С	D	E	E	Maintain
OTHER STATE ROADS ¹⁴							
Other Multilane	В	С	D	D	E	*16	Maintain
Two-Lane	С	С	D	D	E	*	Maintain

Level of service standards inside of parentheses apply to general use lanes only when exclusive through lanes exist.

- 1. The indicated **levels of service** designate lowest quality operations for the 100th highest volume hour of the year in the predominant traffic flow direction from the present through a 20-year planning horizon. The 100th highest hour approximates the typical peak hour during the peak season. Definitions and measurement criteria used for minimum level of service standards are based on the most recent updates of the Transportation Research Board Highway Capacity Manual "Special Report 209". All level of service evaluations are to be based on "Special Report 209," or a methodology which has been accepted by FDOT as having comparable reliability.
- 2. **Rural areas** are areas not included in a transportation concurrency management area, an urbanized area, a transitioning urbanized area, an urban area or a community.
- 3. **Transitioning urbanized areas** are the areas outside urbanized areas, but within the MPO Planning Boundaries. These areas are planned to be included within the urbanized areas within the next 20 years.
- 4. Urban Areas are places with a population of at least 5,000 and are not included in urbanized areas. The applicable boundary encompasses the 1990 urban area as well as the surrounding geographical area as agreed upon by FDOT, local government, and Federal Highway Administration (FHWA). The boundaries are commonly called FHWA Urban Area Boundaries and include areas expected to have medium density development before the next decennial census.
- 5. **Communities** are incorporated places outside urban and urbanized areas, or unincorporated developed areas having 500 population or more identified by local governments in their local government comprehensive plans and located outside of urban or urbanized areas.
- 6. Urbanized areas are the 1990 urbanized areas designated by the U.S. Bureau of Census as well as the surrounding geographical areas as agreed upon by the FDOT, Metropolitan Planning Organization (MPO), and Federal Highway Administration (FHWA), commonly called FHWA Urbanized Area Boundaries. The over or under 500,000 classifications distinguish urbanized areas with a population over or under 500,000 based on the 1990 U.S. Census.
- 7. Roadways parallel to exclusive transit facilities are roads generally parallel to and within one-half mile of a physically separated rail or roadway lane reserved for multi-passenger use by rail cars or buses serving large volumes of home/work trips during peak travel hours. Exclusive transit facilities do not include downtown people movers, or high occupancy vehicle lanes unless physically separated from other travel lanes.
- 8. **Transportation Concurrency Management Areas** are geographically compact areas designated in local government comprehensive plans where intensive development exists or is planned in a manner that will ensure an adequate level of mobility and further the achievement of identified important state planning goals and policies, including discouraging the proliferation of urban sprawl, encouraging the revitalization of existing

downtowns and designated redevelopment areas protecting natural resources, protecting historic resources, maximizing the efficient use of existing public facilities, and promoting public transit, bicycling, walking and other alternatives to the single occupant automobile. Transportation concurrency management areas may be established in a comprehensive plan in accordance with Rule 9J-5, Florida Administrative Code.

- 9. Constrained roadways are roads on the State Highway System which FDOT has determined will not be expanded by the addition of two or more through lanes because of physical, environmental or policy constraints. Physical constraints primarily occur when intensive land use development is immediately adjacent to roads, thus making expansion costs prohibitive. Environmental and policy constraints primarily occur when decisions are made not to expand a road based on environmental, historical, archaeological, aesthetic or social impact considerations.
- 10. **Backlogged roadways** are roads on the State Highway System operating at a level of service below the minimum level of service standards, not programmed for construction in the first three years of FDOT's adopted work program or the five year schedule of improvements contained in a local government's capital improvements element, and not constrained.
- 11. Intrastate means the Florida Intrastate Highway System (FIHS) which comprises a statewide network of limited and controlled access highways. The primary function of the system is for high speed and high volume traffic movements within the state. Access to abutting land is subordinate to this function and such access must be prohibited or highly regulated. Highways included as part of this system are designated in the Florida Transportation Plan. General use lanes are intrastate roadway lanes not exclusively designated for long distance high speed travel. In urbanized areas general use lanes include high occupancy vehicle lanes not physically separated from other travel lanes. Exclusive through lanes are roadway lanes exclusively designated for intrastate travel, which are physically separated from general use lanes and to which access is highly regulated. These lanes may be used for high occupancy vehicles and express buses during peak hours if the level of service standards can be maintained.
- 12. Limited access highways (freeways) are multilane divided highways having a minimum of two lanes for exclusive use of traffic in each direction and full control of ingress and egress; this includes freeways and all fully controlled access roadways.
- 13. Controlled access highways are non-limited access arterial facilities where access connections, median openings and traffic signals are highly regulated. The standards shown are the ultimate standards to be achieved for controlled access facilities on the Florida Intrastate Highway System (FIHS) within a 20 year period. For rural two-lane FIHS facilities, the standard is "C" until such time as the facility is improved to four or more lanes when the "B" standard would apply. Signalized intersections are to be minimized on these facilities within 20 years making an uninterrupted flow standard generally applicable. Controlled access facilities on the FIHS currently not meeting the ultimate standards shall be allowed to remain on the FIHS with a "maintain" status.
- 14. **Other state roads** are roads on the State Highway System which are not part of the Florida Intrastate Highway System.
- 15. **Maintain** means continuing operating conditions at a level such that significant degradation does not occur based on conditions existing at the time of local government comprehensive plan adoption. For roadways in rural areas, transitioning urbanized areas, urban areas or communities, significant degradation means (1) an increase in average annual daily traffic volume of 5 percent above the maximum service volume, or (2) a reduction in operating speed for the peak direction in the 100th highest hour of 5 percent below the speed of the adopted LOS standard. For roadways in urbanized areas, for roadways parallel to exclusive transit facilities, or for intrastate roadways in transportation concurrency management areas, significant degradation means (1) an increase in average annual daily traffic volume of 10 percent above the maximum service volume, or (2) a reduction in operating speed for the peak direction in the 100th highest hour of 10 percent below the speed of the adopted LOS standard. For other state roads in transportation concurrency management areas, significant degradation means (1) an increase in average annual daily traffic volume of 10 percent above the maximum service volume, or (2) a reduction in operating speed for the peak direction in the 100th highest hour of 10 percent below the speed of the adopted LOS standard. For other state roads in transportation concurrency management areas, significant degradation means that amount defined in the transportation mobility element. For constrained roadways meeting or exceeding the level of service standards, "maintain" does not apply until the roadway is operating below the applicable minimum level of service standard.
- 16. * means the level of service standard will be set in a transportation mobility element that meets the requirements of Rule 9J-5.