Transportation Infrastructure Policy

Policy Statement:

Development of transportation-related infrastructure is a frequent cause of habitat destruction that threatens Florida's native plant diversity. The Florida Native Plant Society supports thoughtful planning for the placement and design of new road corridors, airports, rail lines and other transportation infrastructure that ensures these facilities: 1) are consistent with regional needs and local comprehensive plans; 2) avoid natural areas that support significant biodiversity; 3) minimize habitat fragmentation; 4) will not impede resource management activities (e.g., prescribed burning) on nearby natural landscapes; 5) incorporate mitigation measures commensurate with the full scope of environmental impacts; and 6) are part of a long-term strategy to reduce transportation-associated carbon emissions.

Background:

Florida's population is expected to double in the next 50 years. If the development required to accommodate that increase in population follows the same pattern as the development that preceded it during the previous 50-year period, then it will not take the form of compact population centers supporting a mixture of land uses. Rather, it will be diffuse and decentralized, concentrated along linear roadways and characterized by a segregation of land uses that perpetuates dependence upon the automobile as the only practical mode of transportation.

The development of transportation-related infrastructure, especially roads, is a major driving force behind urban sprawl, and associated habitat destruction that threatens Florida's natural areas and biodiversity, including native plant diversity. The environmental impacts of transportation infrastructure often extend far beyond its physical footprint. They are manifested primarily in the induced development that follows the opening of a new or expanded road corridor that facilitates the development of new residential subdivisions and commercial centers.

The rationale for development of new transportation corridors has historically centered on addressing perceived deficiencies in the existing network. In the case of roads, congestion usually serves as the evidence of a deficiency in capacity. However, the relief provided from the expansion or addition of roads is typically temporary owing to the induced development discussed above. If the addition of capacity made the transportation network more efficient and reduced congestion, then such statistics as total miles traveled

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and total travel times would decline; however, the amount of driving per person has increased by roughly 250 percent over twenty years and the rate of increase in vehicle miles traveled was three times that of population growth.

The transportation bill passed by the state legislature in 2006 made several changes to the Public Private Partnership Statute (Section 334.30, F.S.) that encourage real estate development as a means to finance toll road construction. Private donations of right-of-way and the private construction of roads can now be used as mechanisms to meet transportation concurrency requirements, regardless of consistency with adopted long-range transportation plans or comprehensive growth management plans. These provisions effectively allow new road construction to be justified on the basis of real estate speculation and development potential, rather than need, and are contrary to the basic principles of growth management. Responsible growth management must require that transportation infrastructure implement, rather than drive, land use decision-making. Prior to considering proposals for new roads, state and local governments should first agree on a sustainable vision for the affected region consisting of a future land use and conservation strategy that defines where to develop and where to conserve.

It is critically important that the development of transportation corridors - when they are consistent with transportation needs and long-range planning - be linked with the conservation of significant natural areas that will be traversed by the corridor or affected by spin-off development that can reasonably be expected to follow construction of the corridor. Real estate speculation in areas surrounding new transportation corridors often produces a rapid escalation in land values. Such market forces, which are directly attributable to development of the transportation infrastructure, often make it impossible for land conservation programs to compete with speculators in the acquisition of such lands. To counter these market forces, the acquisition of lands identified as priorities for conservation should be considered a prerequisite to development of the transportation corridor and no less essential than the acquisition of required right-of-way.

When the development of a transportation corridor is needed and clearly in the public interest, then design features and provisions that will minimize impacts to native flora and fauna should be incorporated. Habitat fragmentation impacts can be reduced using wildlife underpasses of sufficient height and width to encourage passage by larger mammals, incorporating hiding areas for smaller species, and ensuring they are located strategically in areas used by the target species. Hydrologic impacts can be minimized by bridging wetlands and waterways that cannot be avoided through careful siting of the corridor and by ensuring that good water quality conditions will be maintained. The resource management needs of nearby conservation lands, even those that are not directly traversed by the corridor, should be anticipated and accounted for by including provisions that allow for temporary closures of the transportation corridor to accommodate prescribed burning of fire-adapted natural communities. Maintenance of transportation rights-of-way must ensure they do not serve as a source of introduction for invasive, non-native species, by eliminating such species from the right-of-way and ensuring they are not used as landscaping material.

Conclusions:

Future decisions about the placement and design of new road corridors, airports, rail lines and other transportation infrastructure must be preceded by thoughtful planning that addresses the following concerns:

1) The expansion of existing transportation infrastructure and the construction of new infrastructure should not be permitted unless it is consistent with regional needs and local comprehensive plans. Transportation infrastructure should be designed to implement, rather than direct, future land use decisions and must address genuine transportation needs. The promotion of economic development should not be accepted as a rationale for the construction of new transportation infrastructure.
2) New transportation corridors should be sited so they avoid natural areas that support significant biodiversity, or exemplary and viable occurrences of natural plant communities. Transportation corridors should not be placed through lands that are dedicated to conservation, whether publicly or privately owned. Generally, the expansion of existing transportation corridors is preferable to the creation of new ones as a strategy for minimizing impacts to native flora and fauna.
3) The development or expansion of transportation corridors should be designed to minimize habitat fragmentation. Design features that minimize disruptions to the movement and natural dispersal of native flora and fauna, including the installation of wildlife underpasses, should be accepted as standard practice, and include the retrofitting of existing roadways and other infrastructure whenever major improvements or expansions are implemented. Wetlands and waterways that cannot be bypassed by transportation corridors should be spanned by bridges minimize fragmentation and hydrologic impacts. Native wildlife species play critical roles in the life history of native plants (e.g., reproduction and dispersal) and barriers to wildlife movement should generally be considered the equivalent of barriers to plant dispersal in Society deliberations.
4) Transportation infrastructure should not be permitted to impede or compromise resource management activities (e.g., prescribed burning, control of invasive non-native species) on nearby natural landscapes that have been committed to conservation. Where roads traverse such landscapes, or are sufficiently close to pose a conflict with reasonable land management needs and activities, said resource management should be recognized as in the public interest and be permitted to occur through reasonable, periodic closures of the road to traffic, or through other reasonable measures. The control of invasive, non-native species occurring in a transportation right-of-way should be the responsibility of the transportation entity having jurisdiction over the road and be conducted in a manner that prevents transportation corridors from serving as a vector for the dispersal of such species onto neighboring lands.
5) Measures to mitigate or compensate for environmental impacts resulting from the construction or maintenance of transportation infrastructure should be commensurate with the full scope of the impacts. Mitigation should offset not only the habitat lost as a direct result of construction activities, but also any projected habitat loss that can be reasonably attributed to “spin off” development resulting from construction of the infrastructure. The acquisition of all lands proximate to the infrastructure that have been proposed for acquisition through Florida Forever, or any publicly financed land conservation program, should be a prerequisite for the approval of any new transportation project to compensate for the inflation in land

values that follows the construction of new roadways and inhibits the ability of land acquisition programs to compete with development interests.

6) Dependence on the automobile drives most transportation planning in Florida and lies at the root of most of the environmental impacts associated with meeting our transportation needs, including the carbon emissions that cause climate change. Florida's long-term transportation planning must incorporate strategies that will reduce dependence on the automobile and the combustion of fossil fuels by providing and promoting alternatives, including a variety of mass transit options.