Transportation Issues and Street Design

Treasure Coast Regional Planning Council

Indian River - St. Lucie - Martin - Palm Beach

TRANSPORTATION SYSTEM ISSUES

During the Davie/Hollywood/Seminole Nation Charrette, a number of transportation system issues were identified. These generally fell into one of two broad categories: improving the functionality of the street system and improving the aesthetics of the highways and streets serving the community.

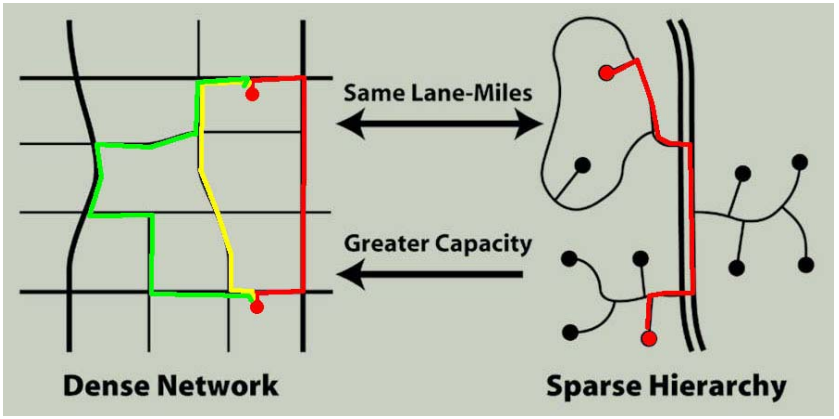
FUNCTIONALITY

Functionality issues included the lack of internal connectivity within the study area and between the study area and connectivity to surrounding neighborhoods. Connectivity issues were raised at three levels: the connectivity to surrounding neighborhoods and destinations by the primary arterial (SR 7, Griffin Road, and Stirling Road), connectivity within the study area provided by the system of smaller streets and alleys, and connectivity between adjacent businesses.

The study area is served by a very limited network of primary arterials.

Generally, the Davie/Hollywood/Seminole Nation study area remains in large parcels that have been developed with a limited and inadequate system of primary arterial roads. Griffin Road exists as the only east-west connection between I-595 and Stirling Road, and there are no alternative north-south routes to SR 7 between the Florida Turnpike at the western border of the study area and I-95 to the east. Because of limited access, the Florida Turnpike and I-95 can not be considered alternatives to SR 7 except for regional and super regional trips. Although Griffin Road and I-595 provide strong linkages to the Ft. Lauderdale/Hollywood International Airport and Port Everglades to the east, the Florida Turnpike acts as a barrier complicating the connection of the study area to important destinations to the west such as the South Florida Educational Complex, which includes Nova Southeastern University, Florida Atlantic University, University of Florida, McSatter, and Broward Community College. The limited number of east-west and north-south arterial streets guarantees existing streets will be congested and large enough to act as barriers. These large roads separate businesses that occur on one side of the arterial from those that occur on the other side and therefore undermine the formation of a strong sense of place.

The limited level of connectivity that exists at the arterial level continues at the level of smaller streets and alleys. There is a limited grid system of public streets in the study area. Many of the existing streets end in cul-de-sacs and fail to provide interconnection between adjacent properties. In many cases, it is impossible to move short distances north or south without using SR 7. Lack of connectivity and travel alternatives exacerbates congestion on the existing road system and forces trips onto the few through streets.



The advantages of a continuous dense network of streets: greater capacity, many alternative travel routes, and less congestion.

A dense network of streets has many advantages over a sparse hierarchy of streets that do not adequately interconnect. The dense network provides alternative routes between destinations. The network reduces congestion by distributing traffic across many alternative routes. It provides greater capacity with the same number of lane miles of asphalt. Networks also reduce average trip lengths between destinations with reductions in fuel consumption, travel time, and air pollution.

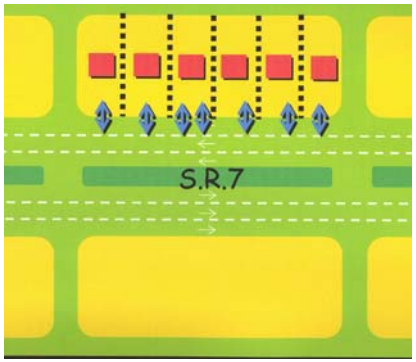
With traffic congestion, oftentimes the recommended solution is expansion of the street cross section and number of travel lanes. Unfortunately, adding additional lanes to an existing arterial is not efficient and rarely solves the problem. The efficiency decreases on a per lane basis as roads are widened. Widening can also lengthen vehicle trips due to the need to restrict turns as roads become very large.

Besides being an expensive and inefficient, widening roads beyond four-lanes can create a barrier within the community contributing to blight and reducing pedestrian activity. Widening of roads beyond four lanes gives priority to vehicle trips at the expense of pedestrians and ignores the fact that large portions of the population are children, senior citizens too old to drive, poor that can not afford to a car, and people with handicaps that prevent them from driving.

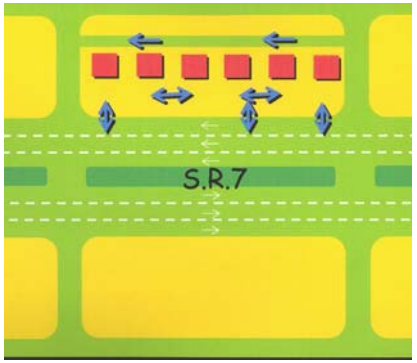
A more efficient solution to widening is creating new through streets that provide alternatives to the use of the limited and congested primary network of arterials. Since the Davie/Hollywood/Seminole Nation study area is far from built out, there are opportunities to provide such alternatives that can be implemented over time. Alternative routes would help alleviate pressure to add additional lanes to SR 7 and other arterials. **Maintaining a maximum cross section of six lanes on SR 7 is critical to the success of revitalization efforts.**

The proposed future condition of SR 7 showing buildings pulled up to the street, wide sidewalks, bricked crosswalks, pedestrian scale lighting, landscaping, pull-outs for bus rapid transit, and maintenance of the existing six-lane street section

Citizens also raised concerns about the need to assure that connectivity is provided between adjacent businesses as the area redevelops. Often parcels are required by zoning codes to provide separations in the form of landscape buffers and walls and separate curb-cuts for access. Multiple curb cuts and separations between adjacent parcels reduce levels of service on the road system and eliminate opportunities for shared parking and business interaction. Better interconnection between adjacent businesses encourages more customer visits and can add economic value. Rather than requiring separation, adjacent businesses should be encouraged to interconnect and share parking and access.



Condition to be avoided
Parcels separated by walls and hedges, limited interconnection between parcels, curb cuts at each parcel, and no opportunity for shared parking.



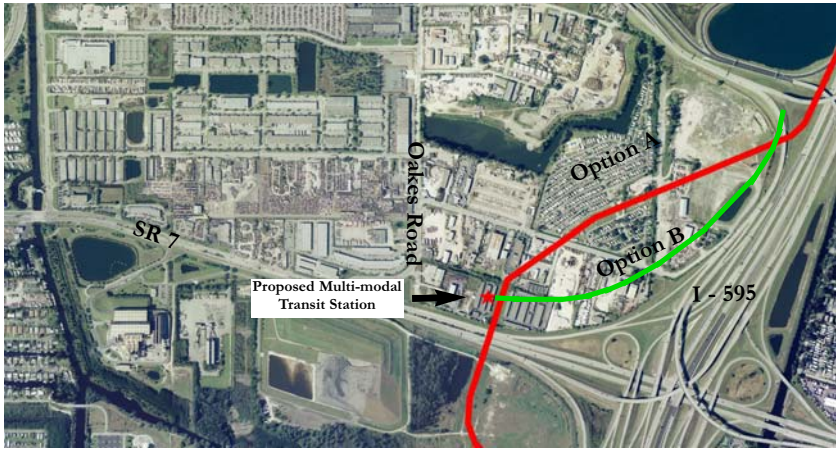
Preferred Condition
No separation between parcels, strong interconnection between parcels, consolidated shared curb cuts, and opportunities for shared parking

Although not yet a major issue within the study area, the east side of SR 7 between Oakes Road and Stirling Road exhibits some of the conditions that should be avoided. Zoning codes should be amended to eliminate the requirements for separation. Instead, the codes should encourage interconnection to assure that this area redevelops without the problems associated with separation.

During the charrette, it was noted that plans were being developed to provide an elevated transit system along the south side of I-595 that would likely cross SR 7 and continue north along the east side of SR 7. This route provides an opportunity for siting a multi-modal transit facility within the proposed Industrial/Research District that will serve the elevated transit line and rapid bus service on SR 7.

The proposed mixed-use Industrial/Research District has the potential for a substantial amount of high

density housing and employment. Provision of a multi-modal transit station within walking distance of the district would enhance redevelopment opportunities and make it a very attractive location for business development. In order to ensure a competitive district, great care and attention need to be paid to creating a pedestrian-oriented environment. Repairing existing sidewalks and creating new sidewalks is a first but critical step towards the vitality of a safe and successful district.



Proposed transit route and multi-modal transit station sited to enhance the redevelopment potential of the industrial/research district.

AESTHETICS

In addition to planning transportation systems, residents also raised concerns during the charrette about the aesthetics of SR 7 and many other streets within the study area. The importance of addressing the design deficiencies of SR 7 is obvious. In its current form, SR 7 is designed as a highway and not the front door and main street to the Davie/Hollywood/Seminole Nation area. SR 7 should be designed to be functional. However, the design should also recognize that SR 7 represents the front door of the community, for it is the first impression that one has of the study area. SR 7 should be viewed as an important public space designed for both cars and people.

Davie, Hollywood, and the Seminole Nation should recognize that design; proportions; and the detailing of all streets, buildings, structures, and fixtures are important aspects that will have lasting effects on the community and add value to the area. Care should be taken to assure that design and aesthetics are given a high level of consideration. The result will be pride in community, strong economic development potential, and high property values.

There are two primary reasons that communities do not get beautiful buildings, roads, and public works projects. First, the primary focus is on the functional aspects of the project such as space requirements or capacity. The impact poor aesthetic design will have on the civic realm and public spaces of the city is oftentimes not considered. A poorly conceived building scars the street and neighborhood for years, discourages potential investors, and inhibits investment in nearby properties.

The second reason for unremarkable public amenities is that there is a narrow view of the project or the project is not properly defined. If SR 7 is perceived as only a structure designed to move a certain number of automobiles, the existing, unsightly SR 7 is the result. On the other hand, if SR 7 is viewed as public space and part of the public realm that must function to move cars that should also should be a beautiful place for people, the result is a desirable address.

When one fails to pay attention to design, an opportunity to improve the city is lost. Good design does not have to cost more. Care should be taken with each expenditure to assure that it furthers to the maximum extent possible the goal of making the community a beautiful and special place.

Existing Condition
View north on SR 7 to Stirling Road intersection.

Future Condition
View north on SR 7 to Stirling Road intersection.