

Corridor Preservation Best Practices

Hillsborough County Corridor Study

Prepared by:



Kristine M. Williams, AICP
Robert Frey, AICP
Center for Urban Transportation Research

April 3, 2003

Table of Contents

Introduction.....	3
Benefits of Corridor Preservation	3
Contemporary Challenges.....	4
Florida’s Legal Context.....	4
Florida’s Corridor Management Legislation	5
Reservation Period	6
Corridor Preservation In The Comprehensive Plan	7
Palm Beach County.....	7
St. Lucie County	9
Indian River County.....	10
Broward County.....	11
Orange County	12
Corridor Management Ordinances	12
Identifying Right-of-Way Needs.....	14
Determination of Alignment	15
Right-of-Way Dedication	16
Mitigation Measures	20
Right-of-Way Acquisition	24
Early (Strategic) Acquisition	26
Option to Purchase.....	27
Valuation of Acquired Property.....	27
Land Banking.....	28
Voluntary Platting or Donation.....	28
“Clean Take Line”	29
Corridor Preservation and NEPA	29
Preserving Transit Corridors	30
Conclusions.....	31
References	33

Introduction

Hillsborough County is in the process of developing a countywide Corridor Plan for the purpose of preserving and managing transportation corridors. The Corridor Plan will identify new arterial and collector roadways needed to support the adopted future land use plan, as well as strategies to implement the adopted transportation plan. The intent of the plan is to ensure that County will be in a position to provide future transportation facilities when needed.

This report addresses the right-of-way preservation aspects of the plan. Right-of-way preservation is the coordinated application of measures to obtain control of or protect the right-of-way for a planned transportation facility. In Florida law, right-of-way preservation is addressed in the context of corridor management, which is defined as the “coordination of the planning of designated future transportation corridors with land use planning within and adjacent to the corridor...” (Chapter 163.3164(30)).

The report begins with an overview of the benefits and issues in corridor preservation practice. It proceeds with the statutory and legal context for right-of-way preservation in Florida. Finally, the report reviews corridor preservation best practices and provides case examples of various techniques from local right-of-way preservation programs.

Benefits of Corridor Preservation

Corridor preservation provides numerous benefits to communities, taxpayers, and the public at large. Preserving right-of-way for planned transportation facilities promotes orderly and predictable development. As communities grow and metropolitan areas expand, land must be set aside for the transportation infrastructure needed to support development and to maintain a desired level of transportation service. The decisions each community makes regarding the location and design of this transportation network will have a lasting impact on growth patterns, community design, and modal alternatives. For these reasons, effective corridor preservation is critical to accomplishing a wide range of community planning objectives.

Another obvious benefit of corridor preservation is that it minimizes damage to homes, businesses, and the corresponding costs of acquiring right-of-way when improvements are made. Right-of-way costs often represent the single largest expenditure for a transportation improvement, particularly in growing urbanized areas where transportation improvement needs are the greatest.

Corridor preservation also reduces adverse social, economic, and environmental impacts on people and communities. The social and economic costs of relocation can be high for some communities, particularly low-income, ethnic, or elderly populations and small businesses that cater to a local population. In addition, where viable transportation corridors are foreclosed by development, roadways may need to be relocated into more environmentally sensitive areas, thereby increasing adverse impacts on the environment.

The private sector benefits from greater clarification of public intentions regarding the location, timing of roadway improvements, and the desired level of access control. This reduces the risk associated with the timing and phasing of development projects. Advanced notice of public corridor preservation intentions also enables developers to plan projects and site-related improvements in a manner that is more compatible with the planned transportation functions of the corridor.

Contemporary Challenges

Although transportation infrastructure is necessary for urban development, preserving right-of-way for future projects is difficult in today's development environment. Citizens and stakeholder groups have substantial power to block or delay a transportation project and may choose to exercise that power for a variety of reasons. These reasons range from neighborhood or environmental concerns to protection of property rights. Given such volatile and potentially conflicting concerns, common ground can be difficult to find and legal challenges are not uncommon. Adding to the tension is the inconsistencies in the transportation planning process between the state, metropolitan planning organization, and local governments.

Legal and political concerns have caused many agencies to take a conservative approach to right-of-way preservation that focuses on widely accepted or less controversial methods. The most accepted technique is fee simple purchase of land for transportation right-of-way. Most local agencies also employ basic policy tools, such as building setbacks from road rights-of-way, and many have subdivision regulations that provide for dedication of local subdivision roads. Local agencies also attempt to obtain voluntary donations or dedications of right-of-way for planned improvements on a case-by-case basis during the land development process.

However, a variety of other tools are available to preserve right-of-way and mitigate hardship on property owners. These include density credits, regulatory controls, options to purchase, interim use agreements, land banking, and purchase of development rights. What is lacking in most communities is a systematic program for preserving right-of-way and managing access that uses the full range of governmental powers and tools to their maximum advantage. Below is an overview of changes in Florida transportation and growth management law that provide the foundation for a more systematic, proactive approach to corridor preservation that is grounded in local comprehensive plans and codes.

Florida's Legal Context

In 1988, "Transportation Corridors" legislation authorized FDOT and local governments to designate transportation corridors for protection by recording an official map. Local governments were then required to withhold development permits in the mapped corridors for a five-year period through a centerline setback requirement (1).

In 1990, the Florida Supreme Court ruled that these right-of-way protection provisions were unconstitutional and a violation of due process, *Joint Ventures v. Florida Department of Transportation*, 563 So. 2d at 625, 626 (Fla. 1990). One reason was the onerous nature of the five-year blanket moratorium on development within mapped rights-of-way, which could be extended for another five years without a purchase commitment from the State. In addition, the stated purpose of the statute was to freeze or otherwise hold down land values in anticipation of condemnation. FDOT had also argued that allowing development permits to be issued in mapped rights-of-way would increase the cost of future land acquisition if the state were to initiate condemnation proceedings.

Weighing eminent domain law and the potential 10-year reservation period with no purchase commitment, the Court concluded that the statute was "a thinly veiled attempt to acquire land by avoiding the legislatively mandated procedural and substantive protection" and a deliberate attempt to "depress land values in anticipation of eminent domain proceedings." The decision resulted in a halt to FDOT corridor protection actions, as alternatives were explored.

•
•
•
•
•
•
•
•
•
•

In 1993, another landmark corridor preservation case was decided by the Florida courts, with decidedly different consequences. In *Palm Beach County v. Wright*, the Florida Supreme Court was asked to consider whether a County's thoroughfare plan map and policies were also unconstitutional. The thoroughfare plan was adopted as part of a local comprehensive plan, under the requirements of the Florida Growth Management Act. Any land use activities in the mapped corridors that would impede development of the future transportation network were prohibited by the comprehensive plan.

The Court upheld the constitutionality of the County thoroughfare plan map, distinguishing it from the state official map in *Joint Ventures* for several reasons. These included the following:

- Adequate transportation facilities must be provided concurrent with the impacts of development under Florida law (concurrency) and this avoids the need to curtail development, thereby benefiting affected property owners (2);
- The map has a foundation in a state mandated comprehensive plan, which includes objectives for right-of-way preservation, consistent with Rule 9J-5 of the Florida Administrative Code;
- By meeting the statutory objectives of planning for future growth and development, the thoroughfare plan map is an invaluable planning tool and a proper subject of the police power; and
- Local governments may amend their plan twice per year under Florida law and this provides flexibility for mitigating hardships that may be incurred by affected property owners.

Florida's Corridor Management Legislation

In 1995, the Florida legislature amended state transportation planning law (Chapter 337, F.S.), and the "Growth Management Act" (Chapter 163, F.S.), to greatly expand the local role in right-of-way preservation. The policy shift was designed to encourage closer coordination between the FDOT and local governments on preserving right-of-way for planned facilities. It was also a logical outgrowth of the *Palm Beach County v. Wright* opinion supporting corridor management efforts in the context of local comprehensive planning and growth management programs.

The intent of the amendments was to coordinate transportation and land use planning through local comprehensive plans for a variety of legitimate public purposes. As noted in the amendments:

"Transportation corridor management means the coordination of the planning of designated future transportation corridors with land-use planning within and adjacent to the corridor to promote orderly growth, to meet the concurrency requirements of this chapter, and to maintain the integrity of the corridor for transportation purposes." §163.3164, F.S.

Rather than designating corridors for preservation in the Florida Transportation Plan, the amendments called for designation of state highway corridors in local comprehensive plans. The amendments also replaced the term "corridor protection" with "corridor management" to reflect the desired emphasis on providing for compatible development along designated corridors, as opposed to strictly limiting development.



Local governments were authorized to adopt transportation corridor management ordinances to manage development in and along designated corridors. The new statute called for transportation corridor management ordinances to include the following:

- Criteria to manage land uses within and adjacent to the corridor;
- The types of restrictions on residential and nonresidential construction within the corridor;
- Uses that are permitted within the designated corridor;
- A public notification process for notifying affected property owners of the corridor designation; and
- An intergovernmental coordination process that provides for the coordinated management of transportation corridors with the plans of adjacent jurisdictions.

Local governments were directed to notify the FDOT before approving any rezoning, building permit, subdivision change, or other permitting activity that would substantially impair the future viability of the corridor for transportation purposes. The intent of this provision was to provide FDOT an opportunity to determine whether to purchase the affected property or initiate eminent domain proceedings. Early monitoring of corridor development activity would also provide FDOT an opportunity to identify problems and negotiate acceptable alternatives.

Although the FDOT initiated this program in 1995 and the State of Florida Transportation Plan recommends corridor preservation techniques be used to procure right of way they have not moved forward in its implementation.

Reservation Period

The length of time that transportation right-of-way is reserved should be reasonable and based on a public commitment to acquire the right-of-way at some time in the future. However, given the high growth rates in many areas of Florida it is wise to preserve transportation corridors as far in advance as possible, so needed corridors are not blocked by development. In addition, it can take as much as ten years or more from concept to construction, during which time a corridor may be no longer viable.

In addition, as indicated in the *Palm Beach County v. Wright* case, courts do not rely solely on the duration of the reservation in evaluating the legitimacy of local corridor preservation programs. Daniel Mandelker, in a landmark analysis of highway reservation laws, notes:

“Just how short a reservation period must be is not clear...The inclusion of remedial provisions that mitigate the burden of a reservation on a landowner should help resolve the uncertainty problem and support the use of highway reservation early in the planning process (3).”

Local governments in Florida are encouraged to identify right-of-way needs through the planning process, and to implement those corridors with adequate remedial provisions aimed at mitigating hardship on property owners. The right-of-way identification maps are often

linked to the Metropolitan Planning Organizations (MPO) Long Range Transportation Plan and local transportation plans needed to support adopted future land use plans. During development review, techniques such as density transfers, setback waivers, and interim use agreements can be used to preserve development rights and ensure that the right-of-way area remains clear of major structural improvements. This combination of factors, differentiates contemporary Florida programs from the traditional official map and development moratoria exemplified in *Joint Ventures vs FDOT*, and suggests the viability of longer reservation periods based on long range planning horizons or even build-out plans.

Corridor Preservation In The Comprehensive Plan

In determining the validity of local regulatory actions, courts review whether the action is consistent with and based upon a local comprehensive plan. Therefore, it is essential that local corridor management programs have a strong foundation in the comprehensive plan. The *Palm Beach County* case clarified that corridor preservation under Florida law begins with the designation of transportation corridors in the state-mandated local comprehensive plan, and is supported by goals, objectives and policies that are adopted in accordance with Chapter 163 and Rule 9J-5, FAC.

Corridor management programs should also be tied to valid public purposes as indicated in Florida law (§163.3164, F.S.), which are “to promote orderly growth, to meet the concurrency requirements of this chapter, and to maintain the integrity of the corridor for transportation purposes.” Programs or regulations with an unclear purpose or that are aimed primarily at reducing right-of-way acquisition costs have been deemed unconstitutional.

Transportation corridors are designated for preservation in the transportation element of the local comprehensive plan. The plan should identify transportation projects expected to be completed in the planning horizon, particularly those projects that are part of the MPO cost-feasible plan, the state transportation improvement program, and the local capital improvements program. Some communities also take longer-term approach and designate future transportation corridors that are not “financially constrained,” including corridors in the MPO “needs” plan and other collector or arterial roadways deemed locally important to the efficiency of the transportation network.

Right-of-way needs for each planned transportation facility will need to be determined, based upon typical (or corridor specific) cross-sections, and then mapped. This map effectively designates a corridor for preservation and should be part of the comprehensive plan or a thoroughfare plan that is referenced in the comprehensive plan. Goals, objectives and policies for corridor preservation and access management should be included in the transportation element of the comprehensive plan to establish the strategic and policy intent of the community. Below are examples of how communities in Florida address corridor preservation in their comprehensive plans.

Palm Beach County

Palm Beach County first developed a Thoroughfare Right-Of-Way Identification Map (map) in the mid-1970’s as a component of the transportation element of the County’s comprehensive Plan. The map identifies the network of roadways required to meet future traffic demands and is primarily composed of a grid system of roadways with an approximate spacing of 1-mile in the eastern portion of the County with a much looser pattern of connected roadways in the western portion of the County (Figure 1).

Although rudimentary traffic modeling was employed, the map was primarily developed based on local knowledge of existing and anticipated growth patterns. Roadway corridors



identified on the map are not classified according to their functional use, but are instead identified by the right-of-way width required to preserve the corridor (example: 80' roadway width requirements are identified by a dashed line on the map).



Figure 1: Palm Beach County Thoroughfare Right-of-Way Identification Map

The map and its import are further addressed in the objectives and policies of the Transportation Element of the Palm Beach County Comprehensive Plan. Objective 1.4 states that the County will provide for the identification and acquisition of existing and future rights-of-way and that right-of-way acquisition must be done consistent with the adopted Thoroughfare Right-Of-Way Identification Map. Supporting policies direct the County to construct the traffic circulation network consistent with the County's adopted Thoroughfare Right-Of-Way Identification Map. For example, Policy 1.4-d states that,

“The County shall require conveyance of roadway, intersection and interchange rights-of-way consistent with the adopted Thoroughfare Right-Of-Way Identification Map when there is a rational nexus between the required dedication of land, the needs of the community, and the impacts of the transportation network due to the development (4).”

More specific policies are included as well. Policy 1.4-e sets the geometry by the number of lanes for all at-grade thoroughfare intersections. It goes further to state that the County Engineer can waive the requirement where it is determined that it is not required. Several policies deal with specific roadways. For example, Policy 1.4-q directs the protection of the rural character of roadways outside of the urban area and establishes the Rural Parkway concept.

The Florida Supreme Court affirmed the constitutionality of the Thoroughfare Right-Of-Way Identification Map in *Palm Beach County v. Wright*, 612 So. 2d 709 (Fla. 4th DCA 1993). The court's affirmation was based primarily on the County's need to provide adequate transportation facilities to achieve the concurrency requirements of Florida's growth

management law, the foundation of the map in the comprehensive plan and the flexibility afforded the local government to amend the map on two occasions every year.

St. Lucie County

St. Lucie County enacted its corridor preservation program in 1990. Corridors designated for preservation are identified in the St. Lucie County Protection Map (Figure 2).



Figure 2: St Lucie County “Right-of-Way Protection Map”

The St. Lucie County Comprehensive Plan Transportation Element, Objective 2.1.3 states that the County “shall maintain a thoroughfare right-of-way protection plan for the major roadway network based upon the Transportation Element and the Future Land Use Element of the comprehensive plan.” Policy 2.1.3.1 prohibits the “encroachment of development and required setbacks into established present and future rights-of-way and, within the law, requires dedication of right-of-way through development orders issued by the County.” Policy 2.1.3.2 calls for the county to “review all proposed development plans for impact on the future land use plan and assess the capacity needs of each project as it relates to the thoroughfare right-of-way protection plan by requiring a traffic impact analysis...”

Policy 2.1.3.3, refers to the adopted Right-of-Way Needs Map and establishes minimum right-of-way standards to be used in implementing the thoroughfare right-of-way protection plan.

Policy 2.1.3.4 states that roadway corridors on the thoroughfare right-of-way protection plan that are outside of the County urban service area (excluding Florida Intrastate Highway System (FIHS) corridors) “shall not be widened or constructed until it is demonstrated to the County that the roadway construction is required to meet the development impacts of the area.” Policy 2.1.3.5 mandates that the County review the right-of-way identification map twice per year.

Another important component of the St. Lucie County method of addressing right of way is the connection between the St. Lucie County MPO and the local governments. The MPO has assumed a proactive role in encouraging local governments in the region to preserve planned transportation corridors. Objective 1.6 of the St. Lucie MPO 2025 Long Range Transportation Plan encourages, “local governments to develop a Transportation Corridor Management Plan (Right-of-Way or Thoroughfare Plan Map) based on local government comprehensive land use plans and the Long Range Transportation Plan.” This is supported by Policy 1.6.1, which states “Additional consideration shall be given to improvements, projects and actions that provide for protection and advance acquisition of future right-of-way needs for the transportation plan.”

To put that policy into effect, the MPO established as one of several evaluation criteria used to assess proposed transportation projects. The following qualitative evaluation criteria are applied to new projects:

- Is the proposed project located along any designated corridor for the right-of-way protection as described in the appropriate comprehensive plan?”
- If the proposed project is located along a designated future transportation corridor, it is given a point toward the total evaluation score.

Indian River County

The Indian River County Thoroughfare Plan was adopted in 1990 as part of the Transportation Element of the Indian River County Comprehensive Plan and covers only that portion of the county within the Urban Services Boundary. The Thoroughfare Plan identifies the County’s additional estimated advanced right-of-way needs for roadways and is based entirely on the MPO 2020 LRTP model and traffic analysis. The 2020 model was developed using a standard transportation modeling approach. The plan outlines timeframes, locations and amounts of right-of-way required to meet the projected infrastructure needs based on 20-year land use projection in the county.

Indian River County does not have a future right-of-way protection map. However, the comprehensive plan indicates that there is a need for such a map. Instead, the County keys its corridor preservation policies to the 2020 Long Range Transportation Plan.

Objective 4 of the Transportation Element directs the County to protect right-of-way. Transportation Policy 4.1 defines what Indian River County recognizes as part of the roadway to be accommodated in the right-of-way. According to Policy 4.1, “right-of-way must accommodate the travel way, roadside recovery areas, bicycle and pedestrian facilities, drainage facilities, and utility lines.” Additional, policies call for the acquisition of additional rights-of-way at intersection and landscaping and that the county shall use available funding, such as one cent local option sales tax revenue, to pursue advance right-of-way acquisition.

Broward County

The Broward County Trafficways Plan was developed in the early 1960's by the Broward County Area Planning Board (now the Broward County Planning Council) and adopted under the Board's enabling legislation. Unfortunately, like in Palm Beach County, there is no documentation available describing the methodology used to develop the Trafficways Plan. It is essentially a countywide transportation "build-out" plan, representing the ultimate roadway network needed to serve future land use in Broward County (Figure 3).

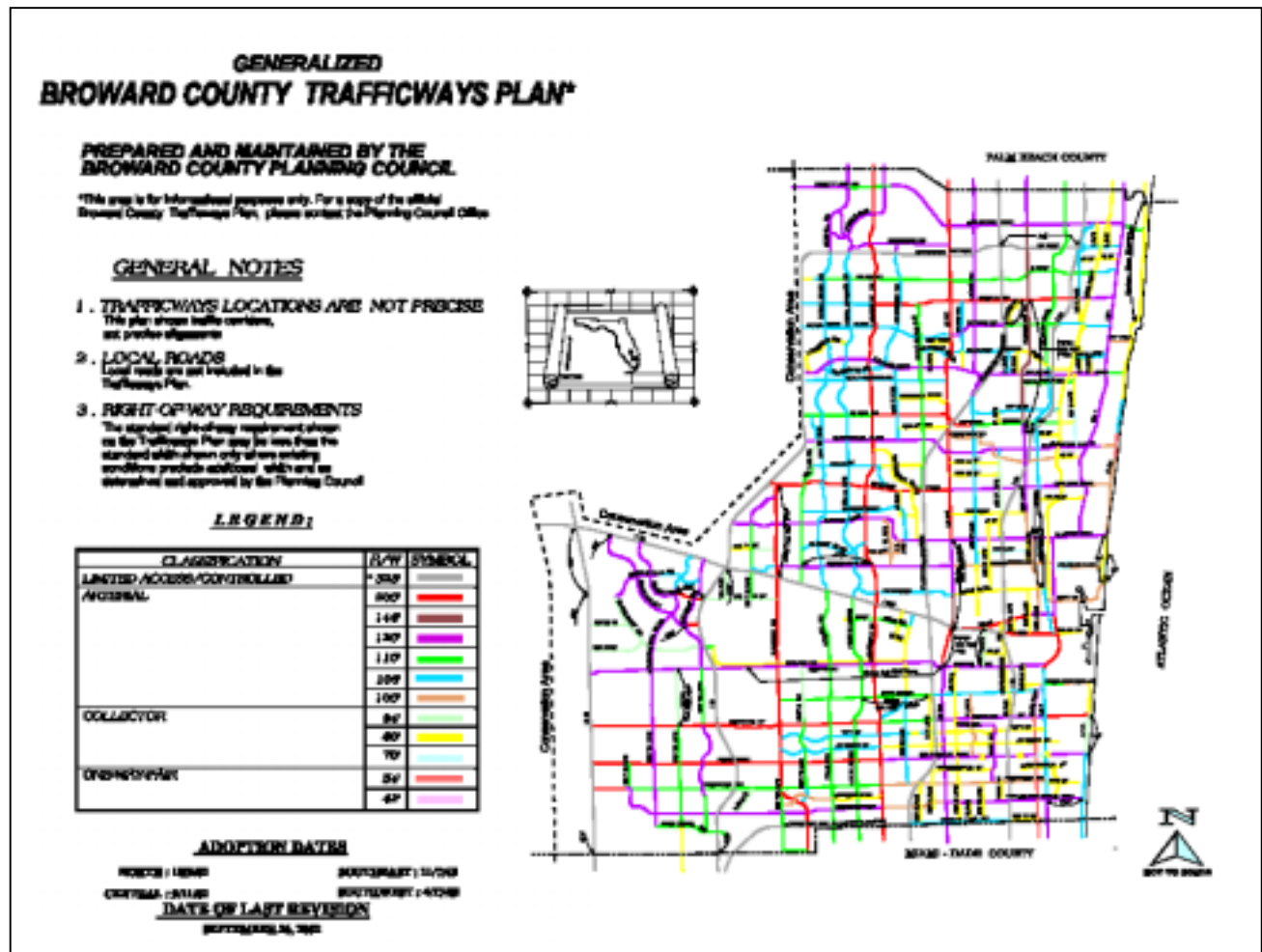


Figure 3 – Broward County Trafficways Plan

The Trafficways Plan is maintained by the Broward County Planning Council, which is comprised of one County Commissioner selected by a majority vote of the Commission, two members appointed by each County Commissioner from their respective seven districts (one elected municipal official and one elector), and one county school board member. A unit of the local government, the Broward County Board of County Commissioners, FDOT, or the Broward County Planning Council, may initiate amendments to the Trafficways Plan.

The Trafficways Plan is implemented through the local development review processes and through separate local ordinances. Parcels required to plat, and in some cases those exempt from platting, must dedicate, by deed or easement, right-of-way consistent with the Trafficways Plan. Planning Council staff review plats and other development proposals to ensure that proposed uses are consistent with the effective land use designation and the

Trafficways Plan. Staff also provide technical assistance to local governments and citizens in interpreting the countywide platting requirements.

The Council also considers requests for waivers of the right-of-way dedication requirements of the Trafficways Plan. Council's review of waivers focuses primarily on the specific characteristics of individual parcels of land and the corresponding impacts of proposed developments.

Planning Council staff believe that the right-of-way dedication process is not challenged by the development community for a number of reasons including: the long standing nature of the practice, a recognition that some development would not occur without the infrastructure provided by the process due to concurrency issues, that there is significant development representation on the Planning Council board, that the Trafficways Plan is amendable and because there is an established waiver process and fairly administered waiver process.

Orange County

Orange County does not have a systematic corridor preservation program. It does, however, undertake corridor identification activities that may prove useful to the Hillsborough County effort. Orange County recently adopted a Ten-Year Long Range Roadway Plan into the Transportation Element of the Comprehensive Plan. The plan consists of needed corridor projects over the ten-year timeframe of the plan. Additionally, funding mechanisms are identified for each identified project, including state funding, county funding using conservative projections of current revenue sources and "public/private" funding opportunities in which the county expects to leverage limited county funds with private funds primarily from large scale developers.

Orange County has also undertaken two sub-area transportation planning studies for the purposes of identifying transportation needs (primarily in terms of additional roadway capacity) over a 20 year planning horizon. The sub-area plan for Southeast Orange County has been completed and the Plan for Southwest Orange County and Southeast Lake County is underway. These plans are based upon a sub-area modeling effort involving the modification of the adopted regional model with a finer grained 20-year land use scenario (smaller TAZs, increased links, etc.). Also, a fairly extensive public involvement process has been employed that includes several public workshops, newsletters, websites and more.

The result has been identification of needed future transportation corridors in the sub-area. These corridors are prioritized in terms of those corridors that should receive preferential funding. The sub-area plans also identify potential funding sources, but fall short of identifying a specific strategy for funding the development of each identified corridor. The one sub-area plan that has been completed thus far has primarily been used to solicit funding assistance from the MPO and FDOT during the standard transportation programming process.

Corridor Management Ordinances

To carry out the transportation plan, local governments must adopt certain measures to manage corridor development. These include measures to avoid development in the path of a planned transportation improvement and to manage roadway access as development occurs. Ordinances for right-of-way preservation generally include, but are not limited to, the following (5):

- Restrictions on building in the right-of-way of a mapped transportation facility without a variance;

- Criteria for right-of-way exactions and a process for determining the amount of right-of-way dedication that is roughly proportionate to the impact of the proposed development (6);
- An option for clustering developments by reducing setbacks or other site design requirements to avoid encroachment into the right-of-way;
- Allowances for some interim use of transportation right-of-way for uses having low structural impact through an agreement that requires the property owner to relocate or discontinue the use at their expense when the land is ultimately needed for the transportation facility;
- Allowances for on-site density transfer from the preserved right-of-way to the remainder of the parcel;
- Allowances for impact fee credits for transportation right-of-way dedication; and
- Procedures for notifying the state transportation agency of development proposals that would substantially impair the viability of the future transportation corridor.

A comprehensive local access management policy or ordinance would also include most, if not all, of the following regulatory components (7,8,9):

- Access connection spacing standards for each roadway classification;
- Requirements for joint and cross access, driveway consolidation, interparcel connections, and unified access and circulation plans (including regulations for shopping center outparcels);
- Policies and guidelines relative driveway location and design, including driveway radius/flare, throat length and width, corner clearance, and sight distance considerations;
- Policies and guidelines relative to nontraversable medians and median opening spacing standards and review procedures, where applicable;
- Criteria for managing access in the vicinity of freeway interchanges, where applicable;
- Traffic impact assessment requirements and procedures, that are keyed to access management requirements and provide for mitigation where needed in the context of a development proposal;
- Redevelopment or “change in use criteria for bringing existing situations into conformance when there is a change in use; and
- Special requirements for older developed areas or nonconforming situations.

Below is an overview of key regulatory components of corridor preservation ordinances. These include identifying right-of-way needs, determination of alignment, dedication



provisions, acquisition provisions, and variances and mitigation criteria. Selected examples from communities researched are also provided.

Identifying Right-of-Way Needs

Right-of-way needs for planned corridors reflect the functional classification of the roadway, any adopted roadway design standards, and typical roadway cross sections. Ideally, each roadway would have a defined future cross section, which would form the basis for the minimum right-of-way standard. However, few communities have developed and assigned cross sections for all of their system roadways. One that has is the City of Orlando, which has developed a broad range of cross-sections and assigned them to each roadway segment in its adopted Thoroughfare Plan, along with the functional classification, number of lanes, and access level.

In the absence of more specific data, many communities use generalized right-of-way widths that reflect typical cross sections. For example, right-of-way standards in the St. Lucie County Land Development Code provide the minimum right-of-way width by roadway functional classification, with variations only for swale drainage versus curb and gutter cross sections.

Table 1: St. Luce County Land Development Code, Minimum Right of Way Requirements

Roadway Type	Minimum Right of Way Width
Principal Arterial – Rural	242
Principal Arterial – Urban	130
Minor Arterial/Major Collector	130
Minor Collector	100
Subdivision Collector Roads	80
Local Roads (swale)	60
Local Road (Curb & Gutter)	50
All distances expressed in feet. Actual dimensions to be site determined and may be greater or less than expressed minimums given specific site conditions and design requirements.	

Indian River County's Land Development Code (Table 2) includes a minimum right-of-way table that addresses the functional classification, urban versus rural cross sections, number of lanes, minimum lane width, and identifies special corridors that may have different cross sections. (Indian River County Land Development Code, Section 952.08(1)(e))

•
•
•
•
•
•
•

Table 2: Indian River County Minimum Right-of-Way Widths

Street Types	Min. Right-of-Way Width		Minimum Lane Width
	Urban	Rural	
Principal arterial			
6LD	130	240	12 ft. wide inside lanes
4LD	100	200	14 ft. wide outside lanes as required
Right of Way Widths Specific to U.S. 1 Corridor			
8LD	200	--	
6LD	130	240	
4LD W/frontage roads	140	240	
Minor arterial			
4LD	100	200	12 ft. wide inside lanes
2LD	100	100	14 ft. wide outside lanes where required
Collector streets	80	80	12 ft.
Subdivision collector roads	60	60	12 ft.
Local, Minor or Residential Streets (with swale drainage)	60	60	10 ft*/11 ft**
Local, minor or residential (closed drainage, curb and gutter)	50		10 ft*/11 ft**
Marginal access roads	40	40	11 ft/12 ft***
* Single-family subdivision roadway or residential site plan with less than 1,500 ADT			
** Where in conjunction with commercial site plan project			
*** When in conjunction with heavy commercial or industrial development			

Determination of Alignment

In administering the right-of-way preservation program, one practical consideration is how to determine the alignment of planned corridors that do not have an engineering study. For existing roads, most communities follow the existing centerline, unless a better alignment can be demonstrated or there are natural or man-made constraints. Right-of-way identification maps and ordinances also include language stating that the alignments shown on the maps or in tabular form are intended to depict general roadway corridors and the actual alignment may differ depending on project design or site conditions.

For example, the Palm Beach County Thoroughfare Right-of-Way Identification map states that the “Proposed facilities indicate corridor needs only. Location to be determined by specific corridor and design studies.” St. Lucie County added a statement in their code that although the actual alignment may differ, the final road alignment will be within 660’ of that stated on the map unless the developer can demonstrate that an alternative centerline alignment “is potentially less harmful to the environment, would displace fewer residents and



businesses, or is more technically or financially feasible (St. Lucie County Land Development Code, Section 7.05.03(D)(2)).

Another approach observed in local practice is to refer to section lines when determining potential alignments. Planning for roads on section lines is common practice in many Florida counties. Section lines are used for future roads, ¼ and ½ section lines are used to determine alignments for new roads built by developments. For example, the St. Lucie County Land Development Code provides that planned roads on ¼ section lines will follow the section lines unless the developer can demonstrate a less intrusive alignment. If the County chooses to require a planned road that is not along a ¼ section line, the Board of County Commissioners shall determine the centerline and assume all costs involved with the alignment. (St. Luce Land Development Code, Section 7.05.00 (D)(2). If the BCC does not establish the centerline during the timeframes stipulated in the code (Section 7.05.00 (D)(2)(b)), the County waives the rights to “all right of way dedication which otherwise may have been imposed on the development ...” (Section 7.05.00 (D)(2)(b)).

An important issue is how much of the required right of way will be taken from each side of the road. In St. Lucie and Indian River Counties, the County Engineer ensures that the right-of-way comes from both sides of the road, if possible. However, in cases where there is a constraining factor such as a drainage canal, railroad, or if more than one-half the right-of-way has previously been provided by the opposing development, dedication may be required only on property from one side of the corridor.

For example, the Indian River County Code states:

“Wherever a road right-of-way deficiency exists, the deficiency shall be made up by acquisition of equal amounts of land from each side of the existing right-of-way, except where:

- a. A drainage district canal right-of-way or a railroad right-of-way abuts one side of the existing road right-of-way; or
- b. At least one-half (1/2) of the required road right-of-way has been provided by the property on the opposite side of the existing road right-of-way; in which case, the entire road right-of-way deficiency will be made up by acquisition of land from the project site. (Indian River County Code of Ordinances, Section 952.08(1)(a)

Right-of-Way Dedication

Right-of-way dedication is the conveyance of property needed for future transportation right-of-way from a private owner to the public. Subdivision regulations provide for dedication of land for roads needed to serve that development and any site-related improvements. However, mandatory dedication of right-of-way for thoroughfares is subject to constitutional limitations. For a community to require an exaction from a development there must be an “essential nexus” between the impacts of the property and the permit conditions (10). In addition, the amount of the exaction must be roughly proportionate, both in nature and degree, to the impacts of the regulated activity (11).

Some communities do not require any right-of-way dedication for road improvements without compensation, others routinely require dedication of all needed right-of-way, and still others have made an effort to assure that such dedications are roughly proportionate to the impacts of the proposed development. Whether a community will require total dedication of thoroughfare rights-of-way appears to be related to the political and economic culture and the opportunities that present themselves during negotiations.

•
•
•
•
•
•
•
•

For the purposes of administering dedication requirements, local governments generally differentiate between transportation improvements that are deemed site-related, such as right-turn lanes or subdivision streets, and those that are not directly site-related, such as traffic signalization, intersection turn lanes, or thoroughfare right-of-way for capacity enhancement beyond the impacts of the development. Site-related improvements are subject to dedication and need not be compensated. Any dedication of right-of-way deemed non-site-related is subject to compensation in some fashion. Developers may be compensated through impact fee credits, density credits, fee simple payments, or some combination of methods. For example, the St. Lucie County Land Development Code, Section 1-17-33.1(C) (2) states:

“Site-related transportation improvement. No credit shall be given for any site-related transportation improvements or site-related right-of-way dedications, unless it can be shown to the satisfaction of the county administrator through appropriate technical documentation that the site related improvement or right-of-way dedication provides for roadway capacity enhancements in excess of the impacts of the proposed development. Site-related transportation and right-of-way improvements, include, but are not limited to:

- a. All driveway connections, turn lanes, and other site specific access improvements connecting the property defined in a final development order to any adjacent impact fee eligible roadway.
- b. All driveways, roads and attendant support systems including but not limited to drainage facilities, mitigation areas, etc., within, or immediately adjacent to, the defined limits of the approved final development order.”

Rough Proportionality

The concept of rough proportionality was first introduced in the *Dolan vs. City of Tigard* Supreme Court decision. The U.S. Supreme Court weighed a city action requiring dedication of land for a pedestrian/ bicycle pathway as a condition of permit approval to expand an existing hardware store. Questioning the constitutionality of the condition, the court transferred the burden of proof to the city to demonstrate a “rough proportionality” between the impacts of the development and the nature and degree of the exactions. The court allowed that the relationship need not be “precisely quantified,” but held that “the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development...beyond a conclusive statement that the dedication “could offset some of the traffic demand generated by the development (12).”

There are various methods to address this issue. As noted above, some communities establish that a certain amount of thoroughfare right-of-way is site-related and must be dedicated without compensation. For example, Indian River County requires dedication of the first sixty feet of right-of-way and the property owner is compensated for any additional right-of-way required. County staff indicate that the 60 ft. standard is based on the amount of right-of-way necessary for a local road and to bring the road right-of-way up to the standards in the comprehensive plan and land development code. This is initially stated in the Indian River County Comprehensive Plan in the following policy:

Transportation Policy 4.2: The County shall continue to eliminate existing right-of-way deficiencies, preserve existing right-of-way, and acquire future right-of-way for all collector and arterial roadways as necessary to meet the right-of-way width standards in Table 4.7.2 of this element. These standards will be met by requiring appropriate land dedication through the plat and site plan review and approval

processes. Dedication for right-of-way, exceeding local road standards, shall be compensated through traffic impact fee credits, density transfers, or purchase.

In addition, the Indian River County Land Development Code implements this policy through Section 952-08(1)(b).

Dedication of thoroughfare plan road right-of-way- Any applicant for approval of a project abutting a roadway designated on the county thoroughfare plan map where the roadway has a road right-of-way deficiency shall sell to the county sufficient land to make up his share of the road right-of-way needed for non-site related improvements. The applicant shall receive, through traffic impact fee credits, or residential density transfers, or direct payments where the county chooses to pay cash, or any combination or other acceptable means of compensation, one hundred (100) percent compensation for the value of the undeveloped condition of the land area dedicated for road right-of-way, which exceeds any area needed to bring the right-of-way up to county local (minor) road standards. Where the county is to purchase land for future right-of-way, the county shall compensate the property owner based upon the "undeveloped condition" of the land. This compensation shall be agreed upon prior to project approval, and the purchase shall occur prior to issuance of a certificate of completion or a certificate of occupancy for the project.

1. Exemptions:

- a. Where one hundred (100) percent compensation cannot be provided through traffic impact credit and density transfers, and where the county chooses not to pay cash, the applicant shall dedicate an amount of land comparable in value to the percent of compensation provided, and the applicant shall be encouraged to setback the balance of the right-of-way deficiency; the location and configuration of said dedication and setback areas shall be approved by the public works director.
- b. Where the applicant's project is considered a minor site plan under the terms of this ordinance, the applicant may in lieu of dedication or sale increase the building setbacks needed to accommodate right-of-way deficiencies.

St. Lucie County requires dedication of any property that is being developed that abuts a road identified on the Thoroughfare Network Right-of-way Protection Plan map. The code states that the amount of right-of-way to be dedicated is determined by the County Engineer using "the Thoroughfare Network Right-of-way Protection Plan, the Traffic Circulation Element, any available traffic information, and any traffic analysis submitted by the applicant." The County Engineer only requires dedication if there is a reasonable connection between the dedication and the anticipated need for the right-of-way by the development. The property owner is compensated for any dedication that is not determined to be site related through fee simple payment or transportation impact fee credits. Site-related transportation and right-of-way improvements, include, but are not limited to:

- a. All driveway connections, turn lanes and other site specific access improvements connecting the property defined in a final development order to any adjacent impact fee eligible roadway.
- b. All driveways, roads and attendant support systems including but not limited to drainage facilities, mitigation areas, etc., within, or immediately adjacent to, the defined limits of the approved final development order.

Overland Park, Kansas is an example of a community that applies a specific methodology for determining the amount of right-of-way dedication. The Thoroughfare Right-of-Way Exaction Process was adopted in 1997 to ensure that new development mitigate its impact on area thoroughfares by contributing right-of-way in an amount proportionate to that impact. The system resembles an impact fee formula, which uses trip lengths, trip rates, and construction costs to determine how much right of way should be dedicated. The process is as follows.

1. **Thoroughfare Cost Impact** - The developments trip ends, the average trip length of the corridor, and the average cost to build one mile of thoroughfare road are multiplied, which produces the “Thoroughfare Cost Impact.”

$$\text{Trip Ends} \times \text{Average Trip Length} \times \text{Cost Per Trip Mile} = \text{Thoroughfare Cost Impact}$$

The trip ends are determined by the size and type of development using trip generation tables provided by the Institute of Transportation Engineers (ITE). The average trip length of each corridor is based on an origin-destination study the City of Overland Park completed. Finally, the City of Overland Park Public Works Department provides the average cost of constructing a mile of standard thoroughfare roadway.

2. **Net Thoroughfare Cost Impact** – The amount of excise tax attributed to the development is subtracted from the Thoroughfare Cost Impact.

$$\text{Thoroughfare Cost Impact} - \text{Excise Tax} = \text{Net Thoroughfare Cost Impact}$$

3. **Value of Right of Way Calculation** – The square footage cost of the additional needed right of way is determined by multiplying the property values by the right of way needed.

$$\text{Right of Way Needed} \times \text{Value Per Square Foot} = \text{Value of Additional Right of Way}$$

The Johnson County Property Appraiser provides the land value of the right of way.

4. **Dedication Determination** – If the total value of the additional right of way is less than the net thoroughfare cost impact, 100% of dedication is required. Otherwise, the percent to be dedicated is calculated as the ratio of the net thoroughfare cost impact to the value of the right of way. Compensation is provided for any additional right of way needed.

The City of Overland Park has found that this results in more than adequate ROW dedication because most projects are commercial or office in nature and land values are determined based on local appraised value as opposed to market value.

The City of Phoenix, Arizona has developed a system for determining requirements for dedications as part of the development approval process that is outlined in their document, "Proportionality-Guidelines Right-of-Way Improvement/Dedications". This system was developed to specifically comply with the principles of proportionality and established by Supreme Court decisions and the appeal procedure contained in Arizona State Law.

Requirements are based not only on proportionality, but also on connectivity. The Guidelines define proportionality to mean, "that the right-of-way requirements placed by the City must be reasonably related to the impact of the proposed development" and connectivity to mean, "that the right-of-way requirement must have a connection to the proposed new development (13)."



The Guidelines establish a "matrix" based on the following categories:

1. Minimum Requirements: Includes street frontage, drainage and utility easements, paving, curb, gutters and sidewalks, streetlights, fire hydrants and water/sewer affecting all established minimum requirements;
2. Health and Safety Requirements - includes ROW, curbs, driveway, paving, and looped water systems affecting safety;
3. Trip Generation - includes ROW, paving or equivalent funds in escrow and street lights as related to the amount of new vehicle activity attributed to the development; and
4. Discretionary Requirements and Requests - includes additional streets, sidewalks, trails, landscaping, transit-related facilities, looped water mains, and traffic signals as specifically related to the development. These items are requested, but not mandatory. A development permit will be issued even if the developer chooses not to comply with these, except where analysis indicates it should be required.

Under the Phoenix approach, developers may request an analysis from the City showing the need for the required improvements. A developer that disagrees may appeal directly to the City first and be heard by a staff member. Further appeals are directed to a Hearing Officer. The matrix method has standardized the dedication process and according to City of Phoenix staff is working. Developments not large enough to require any right-of-way dedication must adhere to minimum setback requirements.

One of the cleanest was to address right-of-way dedication is through an impact fee ordinance that includes right-of-way costs in the formula. Property owners may then be credited for right-of-way that is dedicated to the public for non-site related improvements.

Right-of-way dedication is generally required of all projects requiring a development order, except for single-family residences. Some communities also exempt smaller developments from dedication requirements. For example, the Indian River County Land Development Code allows applications to increase the building setbacks to accommodate right-of-way deficiencies in lieu of dedication or sale if the application is a minor site plan under the terms of this ordinance. Minor site plans are defined as residential projects consisting of three units or less; nonresidential projects of less than five thousand square feet of new impervious surface area; or nonresidential projects adding or replacing two thousand square feet or more of building gross floor area (Section 914.06).

Another situation that demands special attention is when the amount of right of way needed is a very small amount. Indian River County allows the public works director to accept drainage and utility easements in lieu of right-of-way, to make-up for small right-of-way deficiencies up to ten feet (Indian River County Code of Ordinances, Section 952.08(1)(c)).

Mitigation Measures

It is important to gauge the impact of the corridor management requirements on affected properties, and provide measures to mitigate hardship and preserve some economically beneficial use of land. If the right-of-way preservation program would deny all reasonable use of an affected property, then the options should be to purchase, condemn, or issue a building permit.

•
•
•
•
•
•
•
•

Mitigation measures include allowances for interim uses in the right-of-way, on-site density transfers, cluster development, and variances or administrative flexibility in addressing nonconformities posed by the corridor management program. Financial incentives could also be used to offset hardship, such as impact fee credits or tax abatements, wherein the value of the reserved property is deducted from the total amount of assessed value.

Density Credits/Transfers

This technique involves allowing the transfer of development rights from that portion of the site that falls in the planned corridor to the remainder of the development site. Such transfers, also called density credits, result in a greater net density on the developed portion of the site, while keeping the right-of-way clear. In this way, all development rights to the property are preserved. However, this technique is not intended to grant approval to the location of developments in environmentally sensitive or otherwise protected lands within the project site.

Several communities use this technique as a method of compensating property owners for right-of-way dedication. Indian River County, for example, provides residential density transfers as one of several means to compensate property owners for land area dedicated beyond the required sixty feet (Section 952.08(1)(b)).

Transportation Impact Fee Credits

Transportation impact fees are assessed based on the number of new trips a development adds to the transportation network. If a development were assessed impact fees for transportation improvements, the local government could credit the developer for dedicating right-of-way. The value of the dedication would be applied to and deducted from the total impact fees for that project. This effectively combines collecting the fee and purchasing the right-of-way into one transaction.

For example in Palm Beach County, fees paid can only be spent for the purpose of constructing or improving roads on the major road network system. The approved types of improvements that the County can use these funds on include:

- Design and construction plan preparation;
- R-O-W acquisition;
- Construction of new through lanes;
- Construction of new turn lanes;
- Construction of new bridges;
- Construction of new drainage facilities in conjunction with new roadway construction;
- Purchase and installation of traffic signalization;
- Construction of new curbs, medians and shoulders;
- Relocating utilities to accommodate new roadway construction

Palm Beach County allows in-kind contributions to be made against the assessed impact fee. Instead of paying the road impact fee, construction of a portion of the major road network system in addition to any required site-related improvements may be substituted. A cost estimate is provided to the Impact Fee Coordinator and the County Engineer. If the proposal meets the criteria for credit, the County Engineer determines the amount of credit to be given, and the timetable for completion of the proposed construction. (Palm Beach County Land Development Code, Section 10.1)

St Lucie County allows developments to apply for credits against the road impact fee for improvements and/or dedicated land on a road identified in the comprehensive plan or Metropolitan Planning Organization Roads Impact Fee Eligibility Network. The final amount of the credit is determined by the County Engineer and entered into a formal road impact fee credit agreement. The agreement has to be filed prior to the issuance of any credits against the road impact fee an impact fee credit. The circumstances in which road impact fee credits are allowed are: county need, site-related transportation improvements, safety-related improvements, operational improvements, capacity improvements, and right of way dedication. (St. Lucie County Land Development Code, Section 1-17-33.1)

The Indian River County Land Development Code, Section 953.10 provides for impact fee credits for the dedication of non-site related right-of-way. The value is determined based on the date of the dedication at one hundred fifteen percent of the assessed value as determined by the Indian River County property appraiser. If the property owner does not agree with the property appraiser's value, they may request an independent appraisal be completed to determine the fair market value. Credit for the dedication of the right-of-way is given when a credit agreement is completed and the property has been conveyed to the county. Road impact fee credits are not transferable from one project or development to another without County approval.

Cluster Development

The clustering of structures may be allowed as a method of preserving full development rights, while siting structures so as to avoid encroachment into the corridor. Many communities provide for cluster development in their land development code. Although typically this is an option for planned developments or to promote compact development, it could also be expanded as a tool to help avoid development encroachment in future transportation right-of-way.

For example, the Florida Department of Transportation Model Corridor Management Ordinance states that "the clustering of structures under this provision may include administrative approval to reduce setbacks between buildings within a project site, reduction of buffers within a project site, or variation of other site design requirements. This provision is not intended to reduce perimeter buffer yards designed to ensure compatibility of adjacent uses."

Setback Waivers

Communities have increased setbacks to preserve transportation right-of-way, but this has not been viewed positively from a legal perspective. This is because setbacks are intended for other uses, such as providing a buffer from the noise and pollution of traffic, safety clear zones, and aesthetic purposes or neighborhood compatibility to name a few. Setbacks established primarily for the purposes of protecting right-of-way have been declared unconstitutional, due to the implication that property owners are setting aside land for public purposes without compensation (14).

•
•
•
•
•
•
•
•
•

"Reduction of required setbacks, other than adjacent to the corridor, may be considered, in order to ensure that the location of structures does not encroach into future corridors. A reduction of up to, but not exceeding, 10.0% of the otherwise required setback may be approved administratively, provided such reduction is necessitated solely by the proposed alignment of the corridor. Greater reductions must be reviewed by the *(name of reviewing agency which considers variances)*."

Charlotte, North Carolina uses a “transitional setback” to establish the area between an existing right-of-way line and the proposed right-of-way line in their Thoroughfare Plan. The existing centerline is used to establish the standard building setback as well as the transitional setback. Development is allowed within the transitional setback area, but any such development must be removed at the expense of the property owner when the land is needed for transportation purposes. The Land Development Code language is as follows:

“A transitional setback or yard shall also be established for each zoning district which abuts a thoroughfare that has an existing right-of-way which is not as wide as the right-of-way established for that thoroughfare as illustrated in Figure 12.103. The transitional setback or yard area established for lots abutting thoroughfares can be used for any purpose allowed by the particular zoning district, except for (a) those uses which are prohibited in the required setbacks or yards as established by this ordinance, or (b) to satisfy any minimum parking requirements if parking is not allowed in the setback or yard by the particular zoning district. However, the transitional setback or yard may be used for parking which exceeds the minimum ordinance parking requirements. The area between the existing right-of-way line and the proposed right-of-way line may not be used to satisfy any minimum parking requirement, any minimum open space requirements, any minimum lot size requirements or any other minimum requirements, imposed by this ordinance. At the time that the proposed right-of-way is dedicated or otherwise acquired for roadway purposes, the property owner shall be responsible for the removal of any uses constructed after May 1, 1989, which are within the transitional setback or yard that are not otherwise permitted in the setback or yard by the district regulations. The property owner shall have one (1) year from the date of right-of-way acquisition to remove any such uses.” (City of Charlotte Code of Ordinances, section 12.103(2))

Interim Use Agreements

Allowances for interim uses assure that property owners have some economic use of property until the right-of-way is acquired. This would involve engaging in development agreements allowing property owners to establish uses with low structural investment that can be relocated or discontinued in the future.

Interim uses that may need to be relocated are those directly needed by the development. These may include stormwater retention, parking areas, entry features such as signs or gatehouses, or temporary offices on the site. Applicants must agree to relocate the uses in accordance with the terms and conditions of a development agreement. Relocation sites should be identified and reserved on the approved development plan. In some cases, stormwater retention facilities could be incorporated into the retention facilities for the future roadway.



Interim uses that could be discontinued may include recreational facilities, produce stands, periodic events or sales, plant nurseries or landscape material yards, agricultural uses, outdoor storage yards, outdoor advertising, and golf driving ranges. Allowance for these uses would be subject to a development agreement that the uses will be discontinued at a specific date. This time period may be lengthy, especially for new corridors, and could be extended periodically where needed. Other provisions could address buffering from adjacent uses, impervious surface ratios, and compliance with setbacks.

Tax Abatement

An abatement is the reduction or reprieve from a tax or other payment obligation. There are different ways in which tax abatements can be used in support of corridor preservation. Examples include removing the property from the tax rolls, lowering the tax rate for preserved land, and so on. In Prince Georges County, Maryland, property is reserved for future corridors for up to three years. During this time the property is exempt from all state, county, and local taxes (Prince Georges County Subdivision Regulations, Section 24-140).

San Diego County, California allows encumbrances on land uses to be used in determining the value of property for tax purposes. The County feels that this will allow the property owners to recoup some value in the form of tax benefits. This program is included as part of a Facilities Benefit Assessment District (15). The Facilities Benefit Assessment District is a community's financing plan approved by the City Council. A Facilities Benefit Assessment provides the funds for public facilities projects for a designated area. The amount of the assessment is based on the cost of the public facilities distributed over an area in the community planning area and liens are recorded with the County Assessor's Office.

Variances and Waivers

Special exceptions, waivers, and variances provide the necessary flexibility to the corridor management program. Such flexibility allows communities to work with the unique circumstances of each development site and accommodate reasonable requests for deviation from standards. The ability to address hardships and unique situations also helps to ensure that property owners are not being denied all economically beneficial use of their land. For corridor management, variances are particularly appropriate for dealing with shallow lots, impervious surface requirements, and setback or parking reductions to avoid encroachment.

A variance or special exception is appropriate when the nonconformity is attributable to the corridor management program. Variation from standards could be accomplished on an administrative level, rather than through a formal appeals board, to assist the applicant and streamline the approval process. If compliance would prove impractical or prevent the owner from obtaining any reasonable return on the land, then it may be necessary to issue a building permit or acquire the property. Alternately, it would be reasonable to deny a variance where it can be demonstrated that no substantial injury would accrue to the property owner by placing a building outside of the mapped right-of-way.

Right-of-Way Acquisition

The typical approach to right-of-way acquisition by the Florida Department of Transportation is to purchase the land after project engineering and design studies are complete and prior to construction. Eminent domain law governs this right-of-way acquisition process. Before eminent domain may be initiated for a project involving federal or state funding, environmental documentation under the National Environmental Policy Act (NEPA) must be completed and FHWA must give location and design approval.

•
•
•
•
•
•
•
•

The Florida Turnpike Enterprise and Hillsborough County Expressway Authority have somewhat more flexibility in right-of-way acquisition, as they are not reliant on federal funding for transportation projects. In addition, Hillsborough County has flexibility to engage in early, strategic acquisition of right-of-way for locally funded transportation projects. However, should Hillsborough County acquire land for state highway projects that involve federal funding, it is critical that the County adhere to the procedures and requirements of NEPA and related laws (such as the “Uniform Relocation Act”) so as not to disqualify the project for federal funding. This issue is addressed in more detail below under “NEPA Considerations.”

Interviews with state and local officials from various states identified the following specific issues with regard to right-of-way acquisition:

- Florida’s eminent domain law requires FDOT to cover attorneys fees for eminent domain proceedings along with all reasonable costs incurred in the defense, including business damages or independent property appraisals. This increases right-of-way acquisition costs because it serves as an incentive for property owners and eminent domain attorneys to challenge state offers and seek additional compensation. Attorneys fees are paid in addition to the settlement offer.
- Local governments approve development plans or rezonings on strategic parcels without recognizing future transportation improvement needs, thereby blocking the right-of-way or driving up the cost of future acquisition.
- The traditional acquisition process takes too long from parcel identification to funding. The current timeframe for the purchase can range from thirty-seven to forty-four weeks. This makes it difficult for the State to engage in strategic acquisition of right-of-way if an opportunity arises, as the private market operates much more quickly.
- Advanced acquisition requires a dedicated funding source. It is difficult to divert funds toward future projects, when current projects are often under-funded.
- It is critical to adhere to NEPA requirements when the right-of-way being acquired will be part of a transportation project that involves federal funding. Local governments could generate and provide funds to facilitate acquisition of key parcels on state highways planned for improvement, but acquisition should be done in accordance with NEPA requirements and procedures. It may be best to allow the state transportation agency to carry out the acquisition on the state highway system.

Early (Strategic) Acquisition

Early acquisition (or land banking which is discussed below) can be used for the entire needed right-of-way of a project or for purchase of strategic sections only. It can be done to acquire excess property which can be leased back to the seller until it is needed for the transportation facility or for joint use or joint development opportunities that could provide the public agency with revenue.

As noted above, if federal assistance is not being used, the jurisdiction need not comply in advance with environmental study requirements; but if federal assistance is ever envisioned, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, must be followed.

A variety of issues have impeded early acquisition of transportation right-of-way in Florida and other states. Key among these is the need for improved intergovernmental coordination in the transportation and development process. Early right-of-way acquisition should be based on a formal planning process, which provides for communication between governmental units, resource review agencies and the public. Local governments need to work closely with their respective MPO and FDOT District on corridor management and clarify respective agency roles and commitments. These roles and commitments can be formalized through intergovernmental agreements or joint policy resolutions. As stated by Section 337.273 of Florida's 1995 Corridor Management Legislation:

“It is the intent of the Legislature that governmental police powers be utilized to the greatest extent possible by each governmental entity, and by two or more entities through corridor-management agreements, to manage land uses necessary for transportation corridors; that property acquisition by donation, purchase, or eminent domain occur as far in advance of construction need as possible; and that property, needed to manage transportation corridors, be acquired and retained for future use to avoid the public liabilities for health, safety, and welfare heretofore outlined.”

Despite the many barriers, some agencies have found ways to take advantage of opportunities for advance acquisition to help contain their right-of-way acquisition costs. For example, the Kansas Department of Transportation (KDOT) has engaged in strategic acquisition of houses as they came on market within the impact area of an interchange expansion project. In this way, KDOT was able to reduce the number of relocations and personal disruption when the interchange is constructed.

At the local level, some of the communities reviewed for the study (e.g. Indian River County, Palm Beach County), have policies or objectives in their comprehensive plan aimed at earmarking funds for advanced right-of-way acquisition. None of the communities reviewed has established such a fund to date.

Hardship and Protective Acquisition

Early acquisition of key parcels may occur if there is a demonstrated hardship on the property owner (hardship acquisition) or to prevent imminent development in the corridor that would preclude future transportation use (protective buying). Florida's corridor management legislation provides for early acquisition by the Florida Department of Transportation as follows: “Any right-of-way located within a designated transportation corridor may be acquired at any time by the department when the acquisition is determined by the department to be in the public interest to protect the designated transportation corridor from development or when the transportation corridor designation creates an undue hardship on the affected property owner” (Section 337.243, FS).

•
•
•
•
•
•
•
•

Option to Purchase

An option to purchase property is a voluntary contract between a property owner and a buyer, in which the property owner agrees to reserve the property at a given price for a specified period of time, in exchange for a deposit payment on the land. During this time, the buyer is the sole party eligible to purchase the property, and may exercise this option at any time during the contract. If the purchase has not been made during the designated time frame, the property owner is no longer obligated to sell the property to the original buyer.

To help preserve a corridor, the state or local government can negotiate an option to purchase specific property for a set price, and make a deposit on the land for lower cost than would be paid for an outright purchase. This technique is a short-term protection strategy. Options to purchase are financially attractive to the public agency, because they do not require much initial spending, but may help preserve a critical parcel from development. If the property is not needed, there are no additional costs; the purchasing agent may simply let the contract period expire without purchasing the property. The public agency also benefits from assurances that no development activity will occur during the contract period. Additionally, option contracts allow the property to remain on tax rolls until the time of purchase.

Indian River County is one community that has taken advantage of this technique. The case involved the development of a golf course outside of the Urban Services Boundary, but in the natural path on an identified Thoroughfare Plan corridor. Because the golf course was a conditional use, County staff were able to negotiate a settlement with the developer to retain an option to purchase right-of-way up to 30 years from now at current land prices. Also, the developer agreed to develop the site leaving an envelope for the eventual extension of the identified Thoroughfare Plan corridor.

Valuation of Acquired Property

Communities usually have property appraisal procedures that rely on standard valuation techniques, such as:

- **Market Approach –** The Market Approach uses direct comparisons of related comparable sales to the property being appraised. The appraisal generally includes an analysis providing the reasoning for each item of adjustment to comparable sales.
- **Income Capitalization Approach-** The income capitalization approach converts future economic benefits into present values. It involves estimating the value of the subject property using select components of the property's future value such as income, expenses, interest rate, capitalization rate, discount rate, etc. Such appraisals usually need to support their estimate using market information.
- **Cost Approach –** The Cost Approach requires that appraiser estimate the existing market value of property by estimating the cost of reconstruction plus the value of the land minus estimated depreciation. The rationale



behind this approach is that a knowledgeable buyer will not pay more for property than the cost of substitute property with similar characteristics. As with the other property appraisal techniques if the cost approach is utilized, the appraisal report usually contains specific cost data and explanations of depreciation.

Some Florida communities have a standard value established in code based on a certain percentage over the appraised value and give property owners the option for an independent property appraisal at the property owner's expense. For example, St. Lucie County establishes that the value of land for right-of-way dedication is 120 percent of County appraised value. The County allows an independent property appraisal for property owners who decline this valuation method, with the right for a review appraisal. The St. Lucie County Code of Ordinances, 1.7.9.10(a) states:

“At the option of the board, the board may request a review appraisal of the independent property appraisal, provided that in the event the value established by the independent property appraisal exceeds one hundred twenty (120) per cent of the assessed value by more than twenty-five (25) per cent, the board shall require a review appraisal.”

Land Banking

Land banking is the process of purchasing property or acquiring it through land swaps or other means, and holding it for future use. This technique has been used for the past fifty years in both agriculture and environmental conservation. Through land banking, communities can purchase land at current prices and hold the land in perpetuity for use as road projects come on line.

The Lafayette Consolidated Government Metropolitan Planning Organization (LCG) is in the process of creating a unique form of land banking to preserve right-of-way along the I-49 corridor connector, which is a new alignment. The Land Bank is envisioned to be an independent organization with the ability to buy, sell, and maintain real property within the corridor. Although only a concept, the Land Bank is to be an integral part of the ROW acquisition and land development procedures within the corridor. It is envisioned that this entity will have the ability to amass large tracts of land parcel by parcel. Thereby, providing alternative locations for major developments as well as to provide a buffer to maintain existing historic neighborhoods. The LCG is currently negotiating with the owners of a large property who are planning a hotel and convention center. The property is located where an interchange is planned and this is considered to be the first test case for the project.

Funding for the purchase of advance right-of-way is projected to come from either the Federal Aid Highway Project/State of Louisiana Funds and/or the LCG. Critical properties located in the actual ROW will be the first priority for acquisition using these funds. To date, the Corridor Preservation and Management Action Plan has yet to be adopted. The resolution is being prepared and will go before the Parrish Council during the spring of 2003. In March 2003 the FHWA, the Louisiana Department of Transportation (La DOT), and the LCG met to discuss implementation.

Voluntary Platting or Donation

Voluntary platting is when the property owner plats and holds specific parcels in an undeveloped state or donates the land for public use at platting. This occurs when the property owner is convinced that it is in their best interest to expedite the needed transportation improvement. One of the potential benefits of voluntary dedication to the property owner is that dedication in advance of development can be credited against the

current year's income. A benefit to the local government is that the value of the donation can be counted by the state toward the local matching share requirements for federal aid projects.

“Clean Take Line”

The City of Phoenix tries to facilitate future right-of-way acquisition by establishing what it calls a “clean take line” on state roads where a proposed alignment extends through land proposed for development and the state is unable to purchase the right of way. The City requires that the development be designed so that only specific properties or buildings will be taken at the time of ROW acquisition, thus leaving a "clean line" between the remaining buildings and the road.

Corridor Preservation and NEPA

A key state/local coordination issue is to assure that any local acquisition of right-of-way for state transportation projects comply with the National Environmental Policy Act (NEPA) and related requirements and procedures. The Florida Division Office of the Federal Highway Administration (FHWA) was contacted to gain some insight into potential conflicts between the requirements of the National Environmental Policy Act (NEPA) and corridor preservation activities, specifically the preservation of future rights-of-way.

According to FHWA staff, preserving corridor rights-of-way in a manner inconsistent with the requirements of NEPA could jeopardize federal participation in a transportation project. NEPA requires the objective consideration of the possible environmental impacts of a no build scenario, a transportation demand management alternative and more than one build alternative for any transportation project under consideration. There are potential conflicts between early right-of-way preservation actions and the NEPA requirement for objective consideration of multiple project alternatives.

Florida Division staff described an approach that could be taken that would allow corridor right-of-way preservation to occur without jeopardizing future federal participation in a transportation project. This approach involves the completion of a Categorical Exclusion (CE) document for each property acquired through voluntary purchase followed by a full NEPA document for the transportation project itself. The CEs should assess the potential environmental impacts of purchasing the property and preserving it for future use. The full NEPA document should then describe why properties purchased under the original CEs would be used in any preferred alignment based on their potential environmental impacts relative to the other alternatives being considered.

This approach is consistent with the key parcel concept as described in a document appearing on the FHWA website entitled, “Report of the Secretary of Transportation to the United States Congress on Preservation of Transportation Corridors.” The report states that early acquisition of key parcels could be justified, “...where a prime land area is considered critical to any eventual development within a corridor...Key parcel acquisition can ensure that NEPA study options are maintained. It can also directly contribute to development of transportation facilities that have minimum impacts on environmentally sensitive areas.”

The approach described above should not be confused with the “tiered” approach in which a NEPA document is completed early in the planning phase for a corridor in which a project is being considered, but alternative alignments have not yet been identified. This approach allows the early identification of environmentally sensitive conditions in the corridor and speeds the completion of alignment specific NEPA documentation later in the process.

Additionally, FHWA staff stressed that the procedures detailed in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (49 CFR 24) must be followed to maintain the ability of federal participation in a transportation project. These procedures deal with the fair treatment of property owners, business owners and residents of property to be acquired and cover such topics as property appraisals, payment for business damages and covering moving expenses.

FHWA staff also stated, and a brief review of the literature on this subject seems to confirm, that rights-of-way preserved using police powers and regulatory mechanisms, such as development exactions, would not necessarily require environmental documentation as described above. Also, right-of-way preservation achieved through the regulatory mechanisms should not jeopardize future federal participation in a transportation project, including the cost of acquisition for the preserved properties.

In short, regardless of the preservation mechanism employed, due caution in ensuring that the preservation activity does not influence the NEPA process will preserve the ability of the federal government to participate in a future transportation project.

Local governments could follow the FDOT ROW Manual or produce their own ROW Manual, which would need to be reviewed by FDOT for compliance with federal procedures. In addition, the FHWA has produced a *Real Estate Acquisition Guide for Local Public Agencies* (<http://www.fhwa.dot.gov/realestate/lpaguide/reag.pdf>) to assist local governments in wading through the complex requirements. The guide strongly advises local governments to work closely with their state DOT during the entire acquisition process “both to expedite acquisition and to assure that all Federal and State requirements are met.”

Preserving Transit Corridors

Passenger rail is making a come back as a mode of transportation as governments have come to realize that passenger rail can help address transportation challenges. However, project costs and construction difficulties are still challenges that need to be addressed. A potential solution is to acquire or use existing railroad rights-of-way. Communities are now moving toward using these existing lies for public transit systems. To accomplish this, communities must negotiate for access/usage rights and provide an operating plan. This concept has a good chance of success because the freight operator’s goals are to preserve sufficient access/usage rights and maximize compensation for the ownership or operating rights to the transit system (16).

In terms of transit, right of way will differ depending on the type of service being provided. There are differences between the types of corridors needed for the operation of the different services. Light rail can operate in the same corridor as vehicular traffic, such as a trolley line. However, heavy-rail has a third rail that is electrified, thus requiring separate right-of-way.

An example of right of way reservation for transit is found in Prince Georges County, Maryland. The Maryland-National Capital Park and Planning Commission (M-NCPPC) has constructed an extension of their existing “Blue Line” transit corridor. The right of way used came from their right of way preservation program. This program provides tax-exemptions for land that is dedicated for preservation. At the time a developer applies to subdivide land, the General Plan or a more specific Sector Plan is consulted. Any land identified for future right of way is required to be dedicated. The state/county provides justification that the right of way will be acquired and the amount of time estimated until acquisition. Upon resolution by the Planning Board, the public reservation is declared and a plat is filed. This public reservation is exempt from all State, County and local taxes during the reservation period (up to three years). The reservation may be extended if all parties are in agreement to the extension.

Another source of information is the Federal Transit Authority (FTA) manages a “Lessons Learned” website addressing mass transit needs. The lessons learned program was developed with the assistance of Federal Transit Administration (FTA) Project Management Oversight Program (PMOP) contractors, transit properties and FTA regional engineers. In regard to railroad right of way, the Utah Transit Authority (UTA) is used as a case study for the purchase of rail right of way. The first lesson was that the UTA started process of right of way acquisition early. As soon as the UTA determined the right of way requirements they contacted the Union Pacific Railroad to discuss building in their right of way. The negotiations lasted over eight years but the UTA acquired the right of way. The lessons that the FTA stated are:

1. Start negotiations early. As soon as the needs are identified negotiations should begins.
2. Allow the railroad to maintain a freight operating easement, which will keep the transit authority from being subject to railroad labor laws.
3. An operating agreement should be included as part of the purchase and sale agreement. This agreement will allow the transit operator control over the operation and maintenance of the railroad right of way (17).

At the local level in Florida, little activity was observed with regard to preservation of non-rail transit right-of-way. The majority of activity has involved objectives and policies in comprehensive plans. St. Lucie County has a specific objective for mass transit right-of-way and several policies. Objective 2.6.2 of the St. Lucie County Comprehensive Plan states that the county will protect future mass transit rights-of-way and exclusive mass transit corridors. In addition, the comprehensive plan provides direction for the Development Review process to review and identify future areas that are compatible with transit. St Lucie County envisions that HOV lanes and park and ride lots may be used on new major arterials and limited access roads.

Indian River County has a specific objective to address right-of-way needs. As part of the objective, they include mass transit in the objective. The actual policy is provided below.

“Indian River County Transportation Objective 4 – Right-of-way Protection By 2010, the county will have secured the ultimate right-of-way needed for all county collector and arterial roads and all mass transit corridors within the urban area where improvements are programmed by 2020.”

In Florida there are rail feasibility studies that have been done in recent years in Central Florida to connect Volusia County to Downtown Orlando and South Florida to extent TriRail up to the St. Lucie County Area, besides the high speed rail studies mandated by the High Speed Rail referendum. The subject of rail right-of-way acquisition is a broad and specialized issue. There are enough distinct issues to warrant a separate research project on best practices with regard to transit corridors.

Conclusions

Corridor preservation is essential to the ability of local governments to plan for future growth. The challenge for local governments is to balance the rights of property owners with the responsibility of providing adequate infrastructure. The communities have been effective in procuring right-of-way in Florida have made right-of-way preservation a priority in their comprehensive plan.



A variety of techniques have been applied to support planning objectives for right-of-way preservation, ranging from setback ordinances to mandatory dedication. Although many jurisdictions have some method of right-of-way preservation in place, no single method works for all situations. Communities that have been most successful are those that have assembled a variety of tools that they can mix and match to the circumstances at hand. For this reason, corridor preservation practice is often characterized as practicing the “art of the possible.”

The following measures can help assure a more successful program:

- Develop a long-range transportation plan with broad community support;
- Set clear priorities and complete projects in a timely manner;
- Establish an advance acquisition funding source;
- Provide a range of mitigation measures to address potential hardship on property owners and to preserve property rights.

It is also helpful to determine desired design objectives and cross sections for transportation improvements in the community as a basis for future transportation right-of-way needs. Having right-of-way data for each roadway and determining desired cross-sections and design objectives helps facilitate administration of and public support for the program by identifying in advance the amount of right-of-way that will be needed and why. Visual maps are also beneficial in clarifying the application of the program. The City of Phoenix staff felt that the Street Classification Map is the best tool they have to explain what is needed to the public. With today’s technology the mapping of high quality right-of-way needs maps is easier and more convenient than ever before.

References

1. Rivkin Associates, Corridor Preservation – Case Studies and Analysis Factors in Decision-Making, Federal Highway Administration, Office of Real Estate Services, 1996.
2. “Concurrency” requires that adequate public facilities and services will be available within a reasonable amount of time to serve the impacts of development. It involves withholding development permission when public facilities or services are not adequate to serve a project, as established by adopted level of service standards, unless the developer provides those necessary facility or service improvements.
3. D. Mandelkar, “Interim Development Controls in Highway Programs: The Takings Issue,” *Journal of Land Use and Environmental Law*, Vol. 4, No. 2, Winter 1989, pp. 167-213.
4. According to Palm Beach County staff, the requirements of this policy are implemented during the development and review process, and are not specifically addressed in ordinance at this time.
5. K. Williams and M. Marshall, *Managing Corridor Development – A Municipal Handbook*, Center for Urban Transportation Research, 1996.
6. In *Dolan v. City of Tigard* (US 1994), the US Supreme Court held that private property owners may not be required to carry a disproportionate share of a public burden. Regulatory exactions, such as mandatory dedication of transportation right-of-way, must be roughly proportional, both in nature and extent, to the impact of the proposed development.
7. K. Williams and V. Stover, *Access Management Manual*, Transportation Research Board, Washington, D.C.: National Academy Press, (in progress, Winter 2002, kfisher@nas.edu).
8. K. Williams and J. R. Forester, NCHRP Synthesis 233, *Land Development Regulations that Promote Access Management*, Transportation Research Board, 1996.
9. CUTR/FDOT, *Model Land Development and Subdivision Regulations that Support Access Management*, 1994, www.cutr.usf.edu.
10. *Nollan v. California Coastal Commission*, (US 1987).
11. *Dolan v. City of Tigard*, (US 1994).
12. K. Williams, *Managing Corridor Development: A Municipal Handbook*, Center for Urban Transportation Research, October 1996.
13. *Proportionality - Guidelines Right-of-Way Improvement/Dedications*, City of Phoenix, 1995.
14. *Develop A Right-Of-Way Reservation/Acquisition System Accommodating All Modes, That Can Be Adopted By Local Governments*, The Kentuckiana Regional Planning And Development Agency, April 1998.
15. *Corridor Preservation: Cases Studies and Analysis Factors in Decision Making*, Rivkin Associates, US Department of Transportation, 1996.
16. “Strategies to Facilitate Acquisition and Use of Railroad Right of Way by Transit Providers,” *Legal Research Digest*, Transit Cooperative Research Program, September 1994.

-
17. Lesson #34 Railroad Right-of-Way Acquisition, Lessons Learned Program, Federal Transit Authority, March 1998.