Rethinking the Florida Transportation Concurrency Mandate

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Note: The views expressed in this paper are solely those of the authors and do not necessarily represent the views of the Florida Department of Community Affairs.

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The Transportation Concurrency Problem

There is an old warehouse district near an abandoned railroad track located roughly two miles from a medium-sized city's downtown. The district is characterized by narrow streets, wide sidewalks, mature trees, and architecturally distinct structures. A local developer believes the district is ripe for redevelopment and, working with planning staff, they have begun the process of acquiring several structures in the district with plans to renovate them as restaurants, shops, art galleries, and loft apartments. Another developer announces her intention to acquire an older, largely vacant parcel in the district with plans to put in a new project that blends with the redeveloped structures and will ultimately triple the overall size of the development.

However, analyses of the traffic impacts from these projects on local roads yields the finding that the roads in the district do not have the capacity to handle the increased traffic at the city's adopted level of service. The roads have an established Level of Service (LOS) of E; the roads are currently operating at LOS D. Analysis indicates that the increased trips associated with the proposed redevelopment and new development would result in a LOS of F. Further analysis suggests that a new lane in each direction along each of two major arterials that service the area would be required to meet the city's stated LOS for these roads.

Under the state's concurrency mandate the city has the responsibility to ensure that the level of service does not fall below the stated minimum LOS. What can the city do? Under transportation concurrency, the system effectively provides three options:

- 1) Add road capacity to meet the concurrency requirement,
- 2) Address concurrency through other transportation options, or
- 3) Deny the development permit.

So, what would be the likely effect of these various options?

Scenario 1. Road Capacity is Added

Under the first scenario, the city adds new lanes to the existing roads, in the process condemning buildings, ripping out street trees, eliminating bike lanes and tearing out sidewalks. However, these additions to road capacity come at the expense of much of the area's charm, with the result that the area becomes much less of an attractive, dense, urban district than before. In addition, more people begin to use these expanded roads to take advantage of the new capacity. The district is more congested than ever and LOS levels on the roads fall below the city's standard, despite the investment of millions of dollars in new lanes. The net result of this process is a less attractive district and roads that are still congested.

Scenario 2. Pursue Other Transportation Modes

Under the second scenario, the city allows the developers to build bus stops and lane pullouts to help meet concurrency. The rationale is that the presence of these bus stops and pullouts will lead to increased transit ridership. Ultimately, the bus stops that are provided are high quality, with roofs, benches, message boards that report when the next bus will arrive, and sidewalks that connect the bus stops to the surrounding development. However, when the development opens, ridership on these buses is almost non-existent. A subsequent examination reveals that the buses run once an hour and connect with downtown, which is two miles away, after running through a dilapidated and poor residential neighborhood. While the transit infrastructure is of high quality, bus stop accessibility to other activity centers is poor. The transit system has almost no impact upon travel modes for those traveling to or from this new development and traffic problems only increase in the area.

Scenario 3. Development Permits are Denied

Under the third scenario the city decides it cannot afford either roads or transit and they deny the development permits, despite their potential value in the revitalization of the warehouse district. The developers ultimately decide to invest in a greenfield development well beyond the city limits at a freeway interchange where a rural highway (with abundant capacity) meets an interstate highway. The developers create a faux downtown development featuring chain stores, big box retailers, and apartment complexes. Over time, this development serves as a magnet for even more development, creating a new suburban node where one previously did not exist.

Taking Stock of the Current Situation

While clearly this is a simplified version of events that lie at the intersection of transportation planning and the (re)development process, this illustration generally captures the options available to local governments in Florida as they struggle to implement the state's transportation concurrency mandate. As detailed above, transportation concurrency is a policy that can yield "perverse outcomes", such as when developers are pushed to suburban, greenfield

sites when growth management more generally is aimed at just the opposite outcome. In addition, while transportation concurrency is simple in concept, it is widely understood that it is remarkably complicated in its implementation. More than twenty years have passed since the Florida Legislature passed the transportation concurrency mandate and all evidence suggests it is time for a summary evaluation and rethinking of transportation concurrency as a policy for managing growth.

Given this, the purpose of this paper is to comment upon the viability and utility of transportation concurrency as an approach for managing growth and for contributing to desirable development outcomes. A review of the transportation and land use literatures finds that many analysts have critiqued Florida's concurrency mandate. Some critiques have focused upon the failure by the Legislature to provide adequate funding for infrastructure (e.g. Ben-Zadok and Gale, 2001, Nicholas and Chapin, 2007), while others have noted that transportation concurrency has likely contributed to sprawl rather than promoted compact development (e.g. DeGrove, 1992; Downs, 2003). This paper summarizes these literatures, highlights fundamental problems with transportation concurrency as a policy, and details potential alternatives in the design and implementation of transportation concurrency as an approach for promoting desirable land use and transportation outcomes.

The Florida Planning Context

In 1985 the state of Florida passed one of the most innovative growth management programs in the history of the United States (Ben-Zadok and Gale, 2001; Pelham, 1992). Florida's Growth Management Act (Florida Statutes Chapter 163, Part II, 1985) called for state oversight of local planning efforts, required consistency between formerly disconnected local plans, and outlined a very detailed process for resident input into local planning decisions. In many ways, this legislation represents the high water mark for state mandated planning, as Florida's approach cemented comprehensive planning and the planning process at the core of all local, regional, and state land use decisions.

One centerpiece of Florida's landmark 1985 growth management legislation was the concept of concurrency. At its core, concurrency is a state requirement that development is not to proceed unless infrastructure capacity and specific urban services are in place to service the new development. Concurrency was intended to help address major infrastructure problems facing the

state, especially increasing road congestion. As the state has added approximately 300,000 net new residents per year since 1970, local and state road infrastructure has become increasingly plagued by congestion. The concurrency mandate was intended to either force governments to provide infrastructure necessary to support growth or to provide a state-sponsored mechanism to allow governments to slow development permitting until infrastructure was in place to service new development.

While ambitious in scope and at the vanguard of state planning and growth management legislation, concurrency has not solved Florida's infrastructure problems, nor slowed growth in the state (Ben-Zadok, 2005; Chapin, 2007a). Road congestion remains a major problem in the state and other infrastructure challenges remain, including shortfalls in potable water supplies and solid waste management. Despite its apparent shortcomings, the Legislature has remained committed to the general concept, although substantial revisions have been made over the years to make transportation concurrency more workable for local governments.

Florida's Transportation Concurrency Mandate

Generally speaking, concurrency is implemented by local governments in the following way (Chapin, 2007b). Local governments develop a comprehensive plan that includes goals, objectives, and policies for managing growth. These plans describe the local government's "concurrency management system" (CMS), a system that "ensure(s) that issuance of a development order or development permit is conditioned upon the availability of public facilities and services necessary to serve new development" (Chapter 9J-5.0055). As part of the CMS, local governments:

- *identify adopted level of service standards* for the six types of facilities required by Chapter 163;
- *develop a Capital Improvements Element* that illustrates how the adopted LOS standards will be achieved and maintained through infrastructure investments or improvements in service provision;
- lay out a system for monitoring public facilities and testing for concurrency; and
- *adopt land development regulations* (LDRs), included in which was a provision that development orders are not to be issued unless adequate public facilities are in place at the time of issuance.

Under this system, local LOS standards represent the backbone of the concurrency approach to be implemented by local governments. Adopted LOS standards "indicate the capacity per unit of demand for each public facility" (F.A.C. Chapter 9J-5.0003). They represent the amount of infrastructure that is to be provided by the public sector per demand unit for a given system. Given this direction, most local governments have adopted LOS standards for the required facility types. When combined with a measure of the available capacity in a given system, then, adopted LOS standards dictate how much development can be accommodated in a jurisdiction at a given point in time.

It is generally understood that transportation facilities (especially roads) are the most important element to the state's concurrency approach (Ben-Zadok, 2005; Ben-Zadok & Gale 2001; Nicholas & Steiner, 2001). Given the state's tremendous backlog for road construction and the increasing demand for road infrastructure, most commentators recognized that the implementation of road concurrency would be the element that most affected the success of the larger concurrency mandate. DeGrove (1992, 17) notes that transportation concurrency was the item that DCA most often found local comprehensive plans not in compliance with in their review of local comprehensive plans.

Transportation concurrency in Florida typically takes the form of transportation LOS standards outlined by the Transportation Research Board in their *Highway Capacity Manual* as interpreted in the Florida Department of Transportation's (FDOT) *Quality/Level of Service Handbook*. Under this approach, levels of service are assigned to roadway segments or classes of roadways, using the scale A-F. LOS "A" roads experience free flow and no congestion problems, whereas LOS "F" roads experience stop and go traffic amidst heavy congestion. To arrive at these designations, transportation planners tend to look at three factors, each observable and measurable: average travel speed, traffic density, and road flow rate (Rosenbloom, 1988). These quantitative measures are assessed and then translated into a qualitative LOS rating.

It is important to note that transportation is unlike the other infrastructure elements/urban services that are included in the concurrency mandate. First, the field of transportation planning has an established and standardized approach for measuring trip generation by land uses. Developers are usually required to undertake a traffic impact analysis for any proposed development and the methodology to generate the results of this analysis is generally the same across the country. Second, there is a generally agreed upon procedure for determining a road segment's given LOS. In contrast, nationally established methods for measuring system demand and standardized procedures for determining LOS levels do not exist for the other systems.

Third, because transportation concurrency was the linchpin behind the state's concurrency mandate, it has received a great deal more attention from the Legislature, from DCA, and from FDOT over the years. The state has enabled a number of options for areas of jurisdictions experiencing major traffic congestion or road construction backlogs that are years away from being addressed. Lastly, the state has provided much more guidance to local governments as to minimum LOS standards for transportation infrastructure. At the time that concurrency began to be implemented in 1989, local governments were subject to existing FDOT LOS standards for roads (Ben-Zadok, 2005). In 1992, FDOT adopted a set of Statewide Minimum Level of Service Standards for roads that were part of the state's highway system. Florida statutes require local governments to adopt the state's minimum standards for the Florida Intrastate Highway System (FIHS) (Florida Department of Transportation, 2002). However, it is important to note that local governments can adopt their own LOS standards for non-FIHS roadways; they are empowered to deviate from FDOT recommended standards for these roads.

Previous Research into Transportation Concurrency

In one of the earliest reviews of Florida's concurrency approach, Pelham (1992, 974) writes that the state's approach was visionary because it "integrate[d] local capital improvement programming with the local land development regulatory process". While noting the innovativeness of this approach, Pelham discusses major issues with this concurrency approach, including a lack of infrastructure funding by the state, difficulty in establishing and enforcing transportation concurrency, and the overall struggle in translating a vague legislative concurrency mandate into a workable concurrency approach that can be implemented by local governments. Pelham (2001) revisited the topic of concurrency, again emphasizing the important, and largely unmet, funding obligation of the state. In a more recent review of Florida's growth management approach, Nicholas and Steiner (2000) also conclude that a lack of infrastructure funding has hampered concurrency since its inception.

Ben-Zadok and Gale (2001) provide a detailed overview of Florida's often troubled attempts to develop, implement, and refine their concurrency policy. The authors trace the emergence of concurrency as a truly innovative piece of public policy, but one which has been continually challenged by implementation problems. In particular, Ben-Zadok and Gale link the failure of concurrency in Florida to uneven support from elected officials, especially in the area of infrastructure funding. They conclude that concurrency was an overly ambitious concept, one that has required substantial fine-tuning to make the policy politically feasible and workable as a day-to-day policy for managing growth. In a more recent piece, Ben-Zadok (2005) again discusses the evolution of Florida's concurrency policy, detailing the role concurrency played as the "second face" of the state's growth management approach.

Beyond these broad policy reviews, several scholars have focused upon Florida's attempts to craft a workable and successful transportation concurrency policy. An early review of Florida's growth management approach noted that transportation concurrency and compact urban development were in tremendous tension in the early 1990s, as a lack of available road capacity pushed development from urban areas in cities to greenfields in the suburbs and beyond (DeGrove, 1992).

Probably the most eloquent critic of transportation concurrency is Anthony Downs. In a direct attack upon transportation concurrency, Downs (2003) argued that road concurrency is doomed to failure for two key reasons: 1) governments cannot build their way out of congestion and 2) growth will continue to come to Florida and the state is powerless to halt this growth. For example, Florida cannot close its borders to new residents, as immigration policy is the domain of the federal government.

Our literature search found only a small number of publications that attempt to capture concurrency policy at the operational level. Two studies focus specifically on the Florida experience. Audirac, O'Dell, and Shermyen (1992) surveyed roughly half of Florida's local governments to assess the implementation of the concurrency mandate at a very early stage in the process. Their study found that many local governments were still coming to terms with the state's concurrency mandate, with many governments still working to translate this mandate into a workable system. Stuart (1994) offers a detailed review of the concurrency management systems of Lee and Broward Counties, two of Florida's most populous counties, in the process yielding suggestions for improving these jurisdictions' concurrency approaches. In addition, an excellent *Planning Advisory Service* report by White (1996) provides an overview of the concept of concurrency, as well as a brief overview of how it is practiced in several jurisdictions in Maryland and Florida.

The Florida Department of Transportation (FDOT) has also funded several policy reports that have investigated local government experiences with concurrency. For example, a study by Ewing (1996) was one of the first to link transportation LOS standards with land use configurations and urban design features. Steiner and Waterman (1999) investigated traffic congestion along major corridors in several major urban centers and found declining levels of service along these corridors. Some of this applied research work has found itself in peerreviewed outlets, as an article by Guttenplan, Davis, Steiner, and Miller (2003) provides a methodology for the development of multimodal performance measures to be used when local governments undertake one of the many options available to meet the concurrency mandate in urbanized and still growing areas.

More recently DCA has commissioned a *Transportation Concurrency Best Practices Guide* (2006) by the Center for Urban Transportation Research at the University of South Florida. This report documents the transportation concurrency practices of a number of local governments and makes recommendations for developing and maintaining an effective transportation concurrency management system. It is expected that this technical assistance document will help local governments to bring their transportation concurrency practices more in-line with the generalized process outlined above.

Taken as a whole, this research reveals that the state of Florida initially crafted and then struggled to implement one of the most innovative land use-transportation planning policies the country has seen. On the positive side, transportation concurrency has made traffic impact analyses an important part of the development review process and local governments no longer permit development activity in the absence of infrastructure concurrency. However, at a larger level, this policy has a number of fundamental shortcomings that suggest that a thorough rethinking of the policy is in order. These shortcomings are detailed below.

Problems Inherent to the Transportation Concurrency Mandate

Collectively, this research indicates that the Florida transportation concurrency mandate has suffered from implementation problems since inception, coupled with a lack of funding to build the roads and other infrastructure necessary to support the state's massive population growth. More importantly for this paper, this research also offers strong evidence that transportation concurrency suffers from a number of important flaws in its design and implementation. These flaws range from big, theoretical issues, like a failure to recognize the fundamental relationship between supply and demand in travel behavior, to smaller issues of implementation, such as a failure to adequately account for and value non-automotive trips in the models. Below we detail the major flaws to transportation concurrency as designed and implemented in Florida.

Issue #1: An Assumption that Traffic Flows are Fixed

Transportation concurrency requires an understanding of the science of traffic flow and travel behavior, which is based upon the law of supply and demand. Unfortunately, the state's current approach to transportation concurrency ignores this science. In effect, transportation concurrency as practiced does not treat traffic flow and travel behavior realistically.

The current approach to concurrency assumes that observed traffic is a fixed amount that can be determined by the trips associated with surrounding land uses. This approach assumes that the amount of traffic generated by surrounding land uses will not increase if the capacity of the road is increased. Thus, under the current modeling approach, the primary way to address congestion is to increase the size of the road. However, this approach ignores the fact that people adjust their behavior to take advantage of new road capacity as it is provided.

Underlying the science of traffic flow and travel behavior is the notion of travel as a <u>derived</u> demand (Meyer and Miller, 2001). People travel because they want to go places to engage in activities that are available at a given destination. The primary constraint on travel behavior is the cost of travel, measured in monetary terms or in time in transit. Decades of research yields a clear conclusion, the lower the cost of travel, the more likely people are to travel (Downs, 2003; Meyer and Miller, 2001; Small 1992). When a transportation network is expanded, through new roadways or added lanes, the cost of travel is effectively reduced and more travel results.

Another useful way of understanding this relationship is to liken traffic on a congested road to water moving under pressure in a pipe. If the size of the pipe is increased, more water will flow through the pipe, yet the pipe remains under pressure. Traffic in an area characterized by congestion behaves the same way; it expands to consume the available capacity. When capacity is added, thus reducing the cost of travel, research has shown quite clearly that people react to these lower costs by:

- adjusting their routes of travel to use the expanded road,
- adjusting their time of travel to travel at more desirable times of day (especially the peak),
- changing their mode of travel (abandoning buses for cars), and/or

• taking trips that they previously did not take before. (Downs, 2004; p. 82-86) This explains why congestion quickly returns to roadways even after substantial increases in capacity along congested road segments. Travel is not a fixed quantity. It expands to take advantage of the transportation capacity provided.

Transportation concurrency operates under a model that assumes that congestion can be addressed through an expansion of the transportation system. Under the Florida model, a local government is expected to build their way out of a congested traffic network. However, the evidence from decades of transportation research suggests that such an outcome is infeasible given the high cost of transportation infrastructure and the indirect negative impacts of these projects on environmentally sensitive lands and urban form. In urban and suburban areas, congestion is a problem that cannot be solved by added lanes, new roads, and other very expensive infrastructure investments.

Issue #2: Congestion May Not Be a Problem to be Solved

Another fundamental flaw in Florida's transportation concurrency approach rests in the assumption that congestion is a "problem" that needs to be "solved". While very few people enjoy sitting in traffic and the economic impacts of heavy congestion across the state can be calculated in the billions of dollars, when viewed holistically congestion is in many ways a desirable outcome.

First, congestion can be understood as one indicator of economic health within a region (Taylor, 2002). Where does congestion occur? Congestion is typically found in the most economically active and healthy places in the state. For example, vibrant downtowns or economically viable main streets in smaller towns are often home to traffic congestion. Even in suburban settings, traffic congestion is often found in "edge cities" and commercial nodes, places where land values are high and economic activity is strong. In contrast, rural areas of the state, those areas that have been identified as lagging the rest of the state along most economic indicators, are not subject to congestion.

Second, when congestion is viewed at a nationwide scale, we find that the most vibrant, healthy metropolitan areas of the nation (for example, Los Angeles, Portland, San Francisco, New York, Atlanta, and Washington, DC) have tremendous congestion problems (Taylor, 2002). Many of these cities are held up as paragons of good planning, with growing and diverse urban economies. While congestion is a factor that residents complain about and planners work to combat, the simple fact is that traffic congestion and urban economic health go hand in hand.

Third, congestion is partly a function of development density; as densities increase, congestion also increases (Taylor, 2002). All other things being equal, traffic congestion will increase as more homes, businesses, and activity are found per developed acre. Under the state of Florida's growth management approach, compact urban development and increased development density are generally held to be desirable goals. If these land use outcomes are achieved, then an increase in traffic congestion would be expected. Under this view, congestion can be viewed as evidence of success in achieving the land use outcomes intended by the growth management act.

Last, traffic congestion can also serve to encourage behaviors that are also deemed desirable under the state's larger growth management agenda. Traffic congestion (or, alternatively, increased travel cost) promotes other transportation behaviors. Congestion can lead to increased transit ridership, greater mode shares for bicycle and pedestrian trips, and even the relocation of households to locations closer to destinations that are important to them, such as their work place. In short, congestion can be viewed as a desirable outcome in that it can support transit systems, more active transportation modes, and better jobs-housing balance.

Issue #3: Localized Analyses, But Regional Impacts

Beyond the fact that congestion is a fact of life in urbanized areas (and often a desirable fact of life at that), the state's current transportation concurrency approach ignores the laws of supply and demand in another fundamental way. As implemented, concurrency typically focuses upon local conditions and local impacts, with little to no attention paid to the regional effects of land use changes. Typically, congestion on a given road segment is viewed simplistically as a local phenomenon that is caused by development in the immediate proximity of the road segment. In reality, traffic on any segment of a road network is composed of a mix of both local and regional trips. However, concurrency analyses often do not capture the regional component of that traffic, although it is the dominant flow on many roads, especially arterials and highways.

Transportation concurrency usually focuses exclusively on local actions—adding a lane, creating a new roadway, improving an intersection, augmenting the transit system, or denying a permit—in an attempt to alleviate congestion on a given roadway. However, these local strategies will have little to no effect on congestion associated with regional travel. Adding new capacity, in fact, is likely to worsen congestion as more regional trips that were taking alternate routes shift to take advantage of the new capacity on new roadways or lanes (Downs, 2004). Similarly, denying local development permits can increase regional traffic in the long run, as development denied in the center may occur in suburban areas, which increases trip lengths.

Issue #4: Implementation Complexity

While simple in principle, in practice transportation concurrency has proven very difficult to implement (Chapin, 2007b). To effectively implement concurrency planners must track both system supply (unused capacity in the transportation network) and system demand (the traffic loads on the network, by source). In many of the state's fast-growing cities supply and demand must be tracked in real time, as new development is being continuously proposed, permitted, and built. When reviewing a proposed development project, the local government needs to know if capacity exists in the network. However, this analysis must take into account existing and committed capacity, trips currently in the system and trips that will be generated by projects that already have been approved.

Beyond the fundamental problems raised by Issues #1-3 above, transportation concurrency is a policy that has proven very difficult to translate into a workable program. To be implemented appropriately, concurrency requires a great deal of data, updated frequently, and a high degree of staff technical capacity to analyze the data, run the models, and interpret the findings. The performance to date by local governments in implementing transportation concurrency lends support to the conclusion that this policy may be too complicated and too data intensive to be implemented successfully by many local governments. While wealthy, urbanized cities and counties jurisdictions may have the technical expertise and data available to implement this policy, many jurisdictions in the state have struggled to implement other aspects of the state's growth management approach, leaving few resources and little technical capacity to address the transportation concurrency mandate.

Issue #5: Valuing Non-Automotive Trips

Complicating matters further is that transportation concurrency analyses typically do a poor job of accounting for non-automobile trips (Steiner, 2007). These analyses often do not recognize that users have transportation choices; trips can be met through walking, riding a bike, automobile, carpooling, and/or use of a transit system. The models that have been developed to support these concurrency analyses typically focus solely on automobile trips. While the vast majority of trips are made by private autos, in some areas of the state (especially the state's heavily urbanized centers) non-automobile trips are a significant and important share of all trips.

On a related front, most local governments utilize LOS standards that do not reflect these transportation choices. Instead, LOS standards are typically based solely upon the capacity of roads to accommodate trips by users of those roadways (cars, buses, trucks, motorcycles, etc.), balanced by the number of these users on the roadways. There is usually no accounting for non-automotive trips and often inexact accounting for transit-based trips.

Taken together, both the models used to analyze the concurrency impacts of a project and the level of service standards set by local governments focus almost exclusively upon one mode of travel. Consequently, non-automobile trips remain under-valued and the state's long-term goals of promoting a variety of transportation options and of supporting an urban form that promotes bike/ped and transit trips are much less likely to be realized in development outcomes. While efforts to develop multi-modal transportation districts (MMTDs) offer some hope in this regards, the very small number of MMTDs and the difficulty in establishing these districts have to date limited the utility of this approach.

Issue #6: Promotion of Sprawl

At its core, the Florida growth management model is intended to achieve several desirable outcomes:

- 1. promote planning and longer-range thinking by local governments;
- 2. protect and conserve environmentally sensitive lands;
- 3. meet infrastructure needs in a timely and economically viable manner;
- 4. encourage local, regional, and state governments to work together to solve problems related to growth and development; and
- 5. promote an urban form that supports the above outcomes.

Generally speaking, concurrency was designed primarily to address item #3 on the list. More specifically, transportation concurrency was intended to link new development directly to the transportation infrastructure required to support this development. Local governments were no longer supposed to permit new development in the absence of the infrastructure required. Ideally, this would promote better capital budgeting practices and a transportation infrastructure system that reflected local development trends.

Unfortunately, the implementation of transportation concurrency has been hampered since day one by a lack of funding. The Legislature's lack of commitment to fund infrastructure at levels identified by their own committees as essential to the implementation of concurrency has left most local governments in the state with insufficient funds to provide a transportation system sufficient to support growth in a manner that achieves other growth management goals.

In practice, transportation concurrency has promoted development in those areas that the state least desires it, in the suburbs and in the exurbs. Transportation concurrency forced developers to chase road capacity and this capacity was much more likely to be found in non-urban areas. This sprawling development pattern has devastated environmentally sensitive lands, promoted lower densities, and limited the development of truly multi-modal transportation systems. Transportation concurrency has also hampered redevelopment efforts in the state's larger cities and sometimes even limited revitalization efforts along main streets in smaller towns.

In effect, then, transportation concurrency has proven to be one of the staunchest obstacles to achieving many of the other goals of the state's growth management system. Long-range planning now focuses largely upon transportation (road) infrastructure, the preservation and conservation of sensitive lands is often subsidiary to transportation needs, and a compact, dense, mixed-use urban pattern is more easily achieved on greenfields than brownfields. *Issue #7: Putting Road Expansions into Regional and Local Contexts*

The primary objective of removing congestion from a road is not a good way to decide whether or not to expand a road. History shows that congested roads will remain congested even after substantial investments in road widenings or other improvements. This is not to be construed, however, that no road should ever be expanded. The expansion of a roadway brings both costs and benefits to a community and region. Costs are obvious, benefits less so once it is realized that congestion will not go away. However, even if the road is congested, there is more traffic moving on it, which means more social and economic interaction in the area.

Within a highly congested region, the demand for travel may be so high in some areas that the economic and social benefits of expanding certain roads outweigh the economic, social, and environmental costs (Downs, 2004; Small, Winston, and Evans, 1989). In some cases, probably a small minority, the benefits from the increased economic and social interaction will outweigh the increased social and economic costs of the roadway expansion. Determination of whether this is true for any particular road can only be made through a regional transportation analysis. Unfortunately, these cost-benefit decisions cannot be determined through the existing concurrency framework. Aside from some sophisticated, network-wide analyses that occur in a few high planning capacity jurisdictions (profiled in the CUTR report), or in the case of many DRI projects, most transportation impact studies do not reflect the regional nature of transportation systems and traffic flows, nor do they evaluate the full range of economic, social and environmental costs and benefits of these projects.

Issue #8: Coordination Problems at the Land Use-Transportation Planning Nexus

A final major problem relating to transportation concurrency rests in the lack of coordination between the future land use elements and transportation elements of local comprehensive plans. Evidence indicates that many jurisdictions have established a future land use pattern (reflected in their future land use map or FLUM that can accommodate the projected population of the jurisdiction many times over. As a result many FLUMs allow for a scattershot, sprawl-oriented development pattern, a pattern that would tax even the most efficient of transportation networks. In contrast to the future land use element, the transportation element is typically sized to more accurately reflect the projected growth of a community. This mismatch between the land use element and the transportation element presents difficulties for planners and other local officials as they undertake the capital budgeting process and review development proposals for their transportation impacts. Because the FLUM allows for far greater development, often at low densities, transportation investments often get spread across a wider landscape. As a consequence transportation systems end up being more expensive to build and more expensive to maintain. From a concurrency perspective, this mismatch between the land use and transportation regulatory regime causes difficulties in projecting existing and expected

traffic loads and existing and expected system capacities. The accuracy of these supply and demand figures is critical to successful implementation of the transportation concurrency mandate.

Refinements to Transportation Concurrency 1990-2007

Before detailing a range of options for addressing some of the fundamental shortcomings to the transportation concurrency, it is important to recognize that this policy has received substantial attention from the Legislature. Since 1990, the Legislature has created a number of transportation concurrency policy options, almost all aimed at jurisdictions that continue to experience major traffic congestion and/or road construction backlogs that are years away from being addressed. Among the most important of these refinements to transportation concurrency are:

- Transportation Concurrency Management Areas (TCMAs), created in 1992, which allow for the development of areawide LOS standards to address concurrency issues in urban centers;
- Transportation Concurrency Exception Areas (TCEAs), created in 1993, which allows local governments to establish a boundary within which transportation concurrency is effectively waived;
- Long Term Concurrency Management Systems (LTCMS), also created in 1993, allow local governments to establish a longer-term strategy (with up to a 15 year time horizon) for addressing concurrency within established urban areas;
- Multi-Modal Transportation Districts (MMTDs), created in 1999, in which local governments can pursue alternative modes of transportation when permitting development, while still satisfying established LOS standards.

For an overview of these approaches see CUTR (2006) and Steiner (2007).

Taken as a whole, these refinements generally offer more flexibility in the application of transportation concurrency, especially within urbanized areas. These policies represent an attempt to address the emerging evidence in the early 1990s that transportation concurrency, when implemented as directed by the statute, actually was inhibiting redevelopment in central cities and promoting suburban sprawl. Additionally, the most recent major refinement, MMTDs, represent an attempt to encourage local governments to encourage and account for non-

automotive trips in the concurrency review process. However, while each of these refinements has its merits, for the most part they have been rarely utilized by local governments in the state. As of early 2007, the most widely utilized of this set of approaches, the TCEA approach, has been employed by roughly twenty-five jurisdictions in the entire state (approximately 4.5% of the state's 567 local governments). In contrast, there are only a handful of TCMAs and the first MMTDs are just now working their way through the state's system of review and comment.

An Overview of the Principal Transportation Concurrency Alternatives

Given the problems inherent to transportation concurrency's design and implementation and the limited effectiveness of the policy refinements of the last fifteen years, we have been asked to think more broadly about transportation concurrency as a policy approach. Our review of the transportation and land use planning literatures, our knowledge of the state's growth management system, and the design of the state's transportation concurrency mandate suggest to us that the state has three principal alternatives when it comes to this policy approach:

- 1. *Continue with the current approach*, but only after considering further refinements to this approach,
- 2. *Repeal the transportation concurrency mandate* and allow local governments greater discretion in making transportation planning decisions, or
- 3. *Develop a more robust, long-range and regionally coordinated approach*, one that stands a much better chance of addressing a broader range of land use and transportation goals.

Below we summarize these three options and then offer an evaluation of the strengths and weaknesses of these different alternatives. In a subsequent section we also summarize key refinements that should be made to the current system, refinements that would address several of the issues identified earlier in the paper.

Alternative #1: Retain the Current System

The first alternative for the state is a classic "do nothing" alternative. Under this alternative, the state's transportation concurrency mandate remains in place, local governments continue to undertake concurrency reviews for proposed development projects, and transportation impacts continue to be a (often <u>the</u>) primary factor in development approval. We

believe that the continuation of the current system should be predicated upon some key refinements which are detailed in a later section. Even given these refinements, though, the current system will continue to be plagued by many of the issues raised earlier in the paper.

It is worth noting that although retaining the current system runs counter to much of the material presented in this paper, this alternative does have some things to recommend it. First and foremost, a major overhaul to the state's transportation concurrency policy, whatever form it may take, will be controversial, politically charged, and almost certain to engender a great deal of opposition from the variety of interests concerned about land planning and development in Florida. Second, at its best the transition period from the current policy regime to a new policy regime will be complicated and disorderly. Third, the experience of the state when the DRI process was eliminated in the early 1990s suggests that generally understood, but flawed regulatory regimes are sometimes preferable to well-intentioned, but unclear new policy regimes. As a consequence, any change to the fundamental attributes of the transition plan, and a detailed and clearly articulated new policy regime.

Alternative #2: Repeal the State Transportation Concurrency Mandate

A second major alternative is the repeal of the state mandate that local governments test for transportation concurrency. Transportation concurrency would be left to the discretion of local governments. Some local governments likely would continue transportation concurrency planning practices and administration, others would not. Local governments could then permit development that would result in congested roads if they felt that doing so would meet other desired ends. No longer would available capacity in the transportation system be required as a prerequisite to development approval.

Clearly this alternative would require a major change to state statute, with legislative approval for such a major change serving as the primary obstacle to this option. However, the repeal of the transportation concurrency mandate would address several of the shortcomings of the current system. First, the de-emphasis of transportation system capacity in the development review process would enable local governments to think more holistically about the impacts of proposed projects. For example, local governments would be allowed to permit for greater traffic congestion in the pursuit of higher densities and the development of urban settings. Second, transportation concurrency would no longer be an unintended catalyst of sprawl, as urban centers would no longer be uncompetitive due to a lack of capacity on their roadways. Third, this alternative would potentially provide for an easier and less costly administrative process, one based less upon appropriate methods for counting traffic and more upon generating development that contains a fuller range of desirable attributes. However, given that local governments would be left with much more discretion regarding transportation analyses, the repeal of the transportation concurrency mandate would need to be coupled with some direction to local governments regarding the form and content of transportation impact analyses.

Alternative #3: A Regionally Coordinated Land Use & Transportation Planning Process

The third alternative for the transportation concurrency mandate centers upon the development of a process that is even more detailed and more future-oriented than the current one. Additionally, this process would differ from the current one in that it would proceed at the regional level. Evidence and experience indicate that local governments are too small a unit for transportation concurrency to be implemented effectively, which suggests that a regional transportation concurrency approach is necessary for effective implementation of the mandate.

We envision that this approach would build upon the long range transportation planning process that is undertaken by Metropolitan Planning Organizations (MPOs) pursuant to federal and state law. The long range transportation planning process requires MPOs to adopt a vision of land use development at a future date, typically with a 20 year time horizon. Planners then define alternative multimodal transportation systems to serve this development pattern. Using transportation demand models, staff analyze the desirability of each transportation alternative based on various criteria, including levels of congestion, capital and operating costs, environmental costs, community impacts and other criteria that the MPO deems important. Ultimately, after a period of public comment the MPO selects the alternative with the most favorable set of tradeoffs.

Under this approach the travel demand modeling process would be used to estimate the transportation impacts from each unit of new development. How might this process work? As a prerequisite to undertaking the modeling process, development units, such as households or square footage for a particular type of commercial development, would be identified. Travel demand models would then be used to forecast both the number of additional development units

and the additional highway and transit traffic expected over the planning time horizon across the transportation system. Regional planners would use these forecasts to determine the additional transportation system loads associated with each unit of expected new development. As a result, a developer would know, without having to commission their own transportation impact study, the regional transportation impacts associated with a proposed development. All of this assumes that the proposed development would be consistent with the long-range land use and transportation plan used as the basis for the travel demand modeling process.

This process has several favorable attributes, making it a stronger foundation for the implementation of the state's transportation concurrency mandate. First, the process involves interested parties in a dialogue about the trade-offs related to different levels of development intensity, transportation system design, and levels of congestion. Essentially, the political process in the region decides on a balance between the types and intensity of development that it wants, the environmental protection that it wants, and the extent and modal composition of the transportation system. Second, under this approach concurrency analyses are undertaken at the regional level; planning staff can model the impacts of proposed development projects through the entire regional system. Third, the demand modeling process relies upon the interaction of transportation supply and demand to realistically portray how travelers adjust their behavior as they experience increasing congestion, as they encounter roads with added capacity, or as they encounter the choice of using other modes of travel.

To make this approach workable would require the merger of the MPO transportation planning process and the land use planning process as currently carried out at the local jurisdiction level. This merger, while likely difficult, would provide for the integration of transportation and land use planning at a regional scale. This approach would also require a regional entity with the power and capacity to undertake this work. Unfortunately the state's track record with regional planning reveals only moderate success, with the rise and fall of regional planning councils (RPCs) serving as one of the shortcomings of the state's growth management approach. As such, this alternative would require a renewed and substantial commitment to a regional planning approach. One alternative for establishing a lead regional agency would be to have MPO boundaries expand to cover the entire state. Another alternative might be to merge MPOs with the RPCs, the state's water management districts, or both. Whatever form the regional agency takes, the success of regionally-based coordination of land use and transportation planning would rest in large part upon the power, resources, and capacity of these regional bodies.

Comparing these Alternatives

When compared and contrasted, these three alternatives each have a unique set of strengths and weaknesses. Table 1 presents a comparison of these different approaches across a set of eight evaluation criteria. In the text that follows we present these criteria and discuss how each alternative performs along these dimensions.

Transportation Repeal the State Regional Approach Transportation to Transportation Concurrency Concurrency Concurrency Criteria **Status Quo** Mandate Promotes the Desired Poor Uncertain Good Pattern of Development **Integrates Transportation** Planning and Land Use Poor Poor Good Planning Promotes the Consideration Poor Uncertain Good of Tradeoffs Takes a Broader, Poor Poor Good **Network Perspective** Recognizes the Science Fair Poor Poor of Travel Behavior Fair Fair Political Feasibility Poor Administrative Ease Poor Good Fair and Cost Disturbance to **Existing Administrative** Good Poor Poor Structure

Table 1. Comparison of Transportation Concurrency Alternatives with Evaluation Criteria

Promotes the Desired Pattern of Development

Transportation concurrency status quo

The current approach to transportation concurrency performs poorly in promoting the desired pattern of development; it places the reduction of traffic congestion as the primary goal of the planning process. Only development patterns that generate low densities of traffic (i.e. sprawled development patterns) are permitted. Development follows road capacity into rural areas.

Repeal the state transportation concurrency mandate

The repeal of the state's transportation concurrency mandate would have an uncertain effect on the promotion of the desired pattern of development, because its effect depends on the decisions made by local jurisdictions. Repeal would enable local jurisdictions to permit infill or denser development that has significant traffic consequences. Some locales may choose to develop, and tolerate the increased congestion that results, while others may choose not to do so.

Regional approach to transportation concurrency

The regional approach to transportation concurrency performs well on this criterion, because it builds on the long range transportation planning process which requires agreement among relevant regional interest groups on the desired pattern of regional development. The transportation system is then structured to serve that development pattern.

Integrates Transportation Planning and Land Use Planning

Transportation concurrency status quo

The current approach performs poorly in integrating transportation planning and land use planning. It makes a local-level effort to link land use change to traffic impacts, but there is no attempt to consider the regional impacts.

Repeal the state transportation concurrency mandate

Repealing the state transportation concurrency mandate would result in no requirement to integrate transportation planning and land use planning.

Regional approach to transportation concurrency

The regional approach performs well on this criterion, because the recommended transportation system has been designed to serve the identified land use pattern. The recommended transportation system and land use pattern emerge through a process of negotiation among different interest groups holding different, often competing values.

Promotes the Consideration of Tradeoffs

Transportation concurrency status quo

The current approach performs poorly in promoting the consideration of tradeoffs. The premise of the current approach is that free-flowing traffic is the primary planning objective. This stance ignores the possibility that some regions may place a higher priority on attaining other policy objectives, including environmental, aesthetic, economic, social, or quality of life factors.

Repeal the state transportation concurrency mandate

Repealing the state transportation concurrency mandate would have an uncertain effect on promoting the consideration of tradeoffs. Local jurisdictions would be enabled to make tradeoffs by permitting denser development that increases traffic congestion but serves other local objectives. Some jurisdictions may choose to do so, while others may not.

Regional approach to transportation concurrency

The consideration of tradeoffs is central to the regional approach. Regions determine the mix of transportation and land use decisions that they desire. Some regions will opt for concentrated land use patterns that feature dense development and more walkable environments, and they will select transportation systems that assign a larger role to non-automotive modes because these objectives are their region's policy priorities. This approach will lead to dense development in some areas and open space in other areas. The roads in densely developed areas will be congested, but there will be lower overall automobile use and much greater use of other modes. Other regions might opt for a transportation system with high automobile carrying capacity, little provision for other transportation modes, and decentralized land use patterns covering a much greater proportion of the region's land area, because these are their region's policy priorities. In both cases, the regional approach has permitted regional actors to make a determination about

the land use pattern and transportation system that best fits with the constellation of interests in their region.

Takes a Broader, Network Perspective

Transportation concurrency status quo

The current approach performs poorly, because it takes a purely local perspective. Traffic impacts are analyzed on local road segments only. There is little meaningful consideration of non-automobile modes and no consideration of either the regional consequences of local land use decisions or the regional traffic flows that impact local road segments.

Repeal the state transportation concurrency mandate

Repealing the state transportation concurrency mandate performs poorly, because it results in the lack of any perspective on transportation planning.

Regional approach to transportation concurrency

The regional approach performs well, because it is a regional approach. It can show how much traffic on each road link is caused by particular local projects. It shows how different local developments impact traffic throughout a region, and it shows how traffic from throughout a region impact roads within a local jurisdiction, even one where all growth is banned. It is also a multimodal approach. The regional approach entails the regional definition of transportation systems and modes.

Recognizes the Science of Travel Behavior

Transportation concurrency status quo

The current approach performs very poorly, because, as noted earlier in the paper, it entails the unrealistic treatment of traffic flows and travel behavior.

Repeal the state transportation concurrency mandate

A move to repeal the state transportation concurrency mandate fares poorly on this criterion. Every person in the transportation system will adjust their travel behavior to maximize their own welfare. They will make decisions about when, how, or whether to travel that are in their individual interests, interests that may not be socially desirable. These negative impacts arise because travelers do not bear the full social cost of their travel decisions. Planning can be seen as a substitute for charging the full social cost of travel, and the repeal of the concurrency mandate may weaken the planning process.

Regional approach to transportation concurrency

The regional approach performs fair on this criterion, because it balances the supply and demand for a transportation system that regional actors specify without determining that this is the socially optimal transportation system. There is always the possibility that a more socially optimal transportation system could be devised, but the process does not automatically generate this optimal decision. Nevertheless, planning decisions inherent to this approach recognize the science of travel behavior, because traffic that is assigned to each link takes into account the interactions among the capacity of the link, the capacity of competing links, and the intensity of demand that might make use of the links. The transportation modeling process thus accounts for the interaction of transportation supply and travel demand.

Political Feasibility

Transportation concurrency status quo

The current approach has the advantage of inertia. It is well established, and all parties are familiar and largely comfortable with its administrative structures and operating principles. However, some groups are dissatisfied with the consequences of the current approach. Many developers complain that the process involves capricious and arbitrary decisions. Some segments of the public complain that transportation concurrency prevents the emergence of desired development patterns, arguing that concurrency encourages sprawled development.

Repeal the state transportation concurrency mandate

Repealing the state transportation concurrency mandate has fair political feasibility. Because of unhappiness with the current approach, there is a powerful constituency in favor of repealing transportation concurrency. However, there is still political effort required to dismantle the current transportation concurrency structure. In addition, many parties are uncertain about the long-term consequences of repeal.

Regional approach to transportation concurrency

Moving to a regional approach represents an enormous change, requires the expenditure of significant political capital, and thus fares poorly on the political feasibility criterion. Such a move requires the reconstitution of the regional transportation planning process to accommodate the concurrency process, including the integration of the local land use planning bureaucracy with the MPO bureaucracy that presently is responsible for regional transportation planning. The move to a regional approach requires the creation and empowerment of a strong regional entity to operate the regional concurrency system.

Administrative Ease and Cost

Transportation concurrency status quo

The current approach entails high costs, and thus performs poorly on this criterion. The expense of transportation concurrency is borne by both public and private actors. Transportation concurrency delays development. It also increases development costs, which are then borne by many segments of the public, including business owners, home buyers, and renters.

Repeal the state transportation concurrency mandate

A move to repeal the state transportation concurrency mandate fares very well on this criterion. It would enable local government to eliminate the administrative costs of the present system and thus allows developers to enjoy lower development costs.

Regional approach to transportation concurrency

The regional approach performs fair on this criterion. The regional approach shifts the administrative burden to regional entities that define the land use and transportation system and determine the impacts of development. The developer is thus relieved from the burden of having to determine their impacts themselves or hiring a professional transportation consultant to do so for them.

Disturbance to Existing Administrative Structure

Transportation concurrency status quo

The current approach entails no change to the existing administrative structure.

Repeal the state transportation concurrency mandate

Repealing the state transportation concurrency mandate represents a potentially significant change to the existing administrative structure.

Regional approach to transportation concurrency

The regional approach to transportation concurrency represents a substantial change to the existing administrative structure because of the need to create stronger regional entities.

Proposed Refinements to the Current Transportation Concurrency Policy Regime

While the alternatives described above in some ways offer substantial improvements to the state's current transportation concurrency mandate, the fact remains that the state has a long history of adjusting growth-related policies in small steps rather than by great leaps. Only rarely has the Legislature passed major changes to the state's growth management system. Given this, it is useful to identify smaller refinements that would offer incremental improvements to the transportation concurrency mandate as currently implemented in the state.

Urban Service Boundaries and Transportation Concurrency Exception Areas

From the perspective of the Department of Community Affairs, probably the most pressing issue with the transportation concurrency mandate is its propensity to promote sprawl. The state's growth management legislation and administrative code speak to several interrelated goals centered upon the promotion of compact development patterns, the minimization of sprawl, and the protection of environmentally sensitive lands. However, there is ample evidence that transportation concurrency works against these core goals.

One possible refinement to the current concurrency approach would be to build upon the growing importance of urban service areas (USAs) as areas within which urban development is deemed desirable. The Department might consider statutory and/or rule changes that would allow local governments to waive transportation concurrency requirements within established USA boundaries. Under this modification, qualifying USA boundaries would effectively become TCEAs, areas of the jurisdiction where the transportation concurrency mandate is effectively waived. This would simplify the development review process in these existing urban and planned urban areas, lower the costs of the development process in these areas, and promote

redevelopment, infill development, and new development within the USA. With transportation concurrency still enforced outside of the USA boundaries, the incentive to chase road capacity in suburban and exurban areas would be tempered by higher development review costs. It is important to note that this would probably require some oversight by the Department as to the size and form of the USA boundaries established by local governments, although DCA already provides some preliminary review of service boundaries as part of their current duties.

Making TCEAs, TCMAs, and MMTDs Viable Options for Local Governments

A related improvement to the current approach would be to take administrative steps within the Department (and work with FDOT to do the same) to make it easier for local governments to pursue the creation of TCEAs, TCMAs, and MMTDs. While each of these overlay district types addresses key issues related to the implementation of the transportation concurrency mandate (promoting sprawl rather than redevelopment and/or non sufficiently valuing non-automotive trips), the process by which these districts are established has proven to be too unworkable. Despite the utility of TCEAs, TCMAs, and MMTDs, too few of these districts have been created, largely because of the energy and time required to get these districts established. Generally speaking, local governments have to gather a very large amount of data, undertake a great deal of analysis of these data, work through the plan amendment process, and eventually satisfy not one, but at least two state agencies. One advantage of this proposed refinement is that it would likely not involve statutory changes, but rather changes in rules and, most importantly, the practices of FDCA and FDOT in reviewing and approving these districts.

Measuring Transit Accessibility

The current approach to implementing transportation concurrency assumes that if a bus stop is physically accessible to a potential user, then transit is a viable alternative means of transportation to the automobile. Under the current model, if a bus stop is present, then the only attention usually paid to transit pertains to the quality of the stop—the presence of a bus shelter, with benches and shading, the provision of schedule information, etc. However, as noted earlier, much more important to potential users of the transit system is the quality of the transit service that is provided, particularly in terms of the destinations that can be reached easily from that bus stop. For this reason, it would be useful if FDCA and FDOT worked together to create a methodology for measuring the quality of the service at each bus stop through a determination of the accessibility that transit provides. This represents a different approach to assessing accessibility than has traditionally been used under transportation concurrency. For largely residential developments, the ability to easily access an array of travel destinations, including jobs, shopping, personal business, and recreation, is of paramount importance. For largely commercial developments, the ability of people in their homes to access the development is the critical measure of accessibility.

Measuring transit accessibility can be challenging, but techniques for doing so are beginning to be developed and promulgated by the Florida Department of Transportation. FDOT's Transit Boardings Estimation and Simulation Tool (T-BEST) is a tool that quantifies transit accessibility across a set of stops (FDOT, 2007a). This and other techniques for measuring transit accessibility draw upon information provided through the transportation demand modeling process.

Multimodal Level of Service

Another recommend refinement is intended to address the finding that the state's current transportation concurrency approach typically under-values non-automotive trips. Traditionally, transportation level of service standards have been derived solely from the level of service experienced by automobiles along a road segment, which is essentially a measure of vehicle speed. However, most transportation corridors serve an array of potential users, of which motorists are only one set. The transportation concurrency system needs to be refined so that planners and public officials better acknowledge that there are other types of users. One way to account for this would be to develop multimodal level of service standards. Under this approach, each segment in the transportation network would receive a set of level of service standards, one each for the set of users on that road segment. For example, a transportation corridor with a roadway, with bike lanes and sidewalks would receive at least three LOS standards, one each for motorists, bikers, and pedestrians. Under this approach, this set of level of service standards would help planning staff, public officials, and the public recognize that any change in a transportation corridor will affect users of multiple travel modes.

Florida Department of Transportation has developed several tools that could be employed to aid in this effort. First, their Quality/Level of Service Handbook (FDOT, 2002) provides a guide to multimodal level of service. Second, FDOT has developed software, LOSPLAN (FDOT, 2007b), that measures level of service for different travel modes using the same transportation corridor. This represents the state-of-the art approach to accounting for level of service changes for all users of a transportation corridor, and it should be used as the basis for measuring a more complete range of transportation level of service.

Eliminating De Minimis Exemptions

The state statute includes a provision that local governments may establish *de minimis* standards for transportation concurrency. The *de minimis* standard represents that level of development below which the transportation concurrency test will not be applied. This concept allows local governments to waive concurrency reviews for development with very little impact on local infrastructure. Generally speaking, a development qualifies as *de minimis* if it does not affect more than 1 percent of the maximum volume of a given roadway at the adopted LOS standard, but only if (1) the roadway does not already operate at above 110% of the adopted LOS capacity, or (2) if the proposed development does not push the roadway's capacity above 110% of the adopted LOS standard.

Under the *de minimis* guideline, within some jurisdictions the development of projects of as many as several hundred residential units may not trigger a transportation concurrency review. In a case such as this, these local jurisdictions have effectively waived transportation concurrency review for projects located along major roadways not currently experiencing congestion. The lack of concurrency review for what may be a large number of potentially sizable projects runs the risk of overloading road segments that are not currently experiencing congestion. The state's suggested *de minims* standard represents a tradeoff between administrative ease, not having to complete transportation concurrency reviews for a large number of smaller proposed projects, and accurate and complete information on available road capacity for the entire system. In 2005 the Legislature addressed this specific issue by requiring local governments to account for and track *de minimis* exemptions.

However, instead of requiring local governments to track the impacts of development that meets the *de minimis* threshold, it makes more sense to eliminate the *de minimis* exemption altogether. As the law currently stands, only larger projects located on heavily-traveled roadways

are required to undergo a transportation concurrency review. In effect, larger developments located in busy urban areas are being penalized, while smaller development (often located at the urban edge) may forgo this process. This equity issue, coupled with the dangers related to the "death by a thousand cuts" of lots of smaller development projects, indicates that the *de minimis* exemption should be significantly scaled back, if not eliminated altogether.

Conclusion

The fact that the Department of Community Affairs has commissioned this white paper indicates some dissatisfaction with the current transportation concurrency regime. In addition, professional planners, development interests, and the environmental lobby have all expressed frustration with a process that is often expensive, sometimes capricious, and likely to yield inefficient and undesirable development outcomes. This paper demonstrates that there is good reason for this dissatisfaction and frustration.

The overall objective of the original concurrency mandate was to create a situation where there traffic congestion would not be a consequence of new development. However, achieving this objective is possible only by allowing low density development in the midst of large arterial roadways and substantial freeway networks. The preferences of Floridians clearly indicate a widespread desire for patterns of urban development that, by definition, will result in traffic congestion. As designed, the current system leads to outcomes that run against other public policy objectives, such as promoting more compact development.

This paper has documented the fundamental flaws in the state's transportation concurrency mandate, flaws that rest in both the design and implementation of the mandate. The paper has presented alternatives to the current regime that address its potential weaknesses and allow policymakers the ability to tradeoff the reduction of traffic congestion against other policy objectives, objectives that lay at the heart of Florida's commitment to manage growth. In conclusion, the land use and transportation literatures, our experiences in working with local governments, and the on-the-ground evidence all indicate that the Florida's transportation concurrency mandate is in dire need of attention from the state government. Beyond minor changes to the status quo, the Department of Community Affairs should strongly consider the utility and viability of transportation concurrency as a means for managing growth in the state.

References

- Ben-Zadok, E. 2005. Consistency, concurrency, and compact development: Three faces of growth management implementation in Florida. *Urban Studies*, *42*(12), 2167-2190.
- Ben-Zadok, E. & D. Gale. 2001. Innovation and reform, intentional inaction, and tactical breakdown: The implementation record of the Florida concurrency policy. *Urban Affairs Review*, 36(6), 836-871.
- Center for Urban Transportation Research (2006). *Transportation Concurrency Best Practices Guide*. Tampa: University of South Florida.
- Chapin, T. 2007a. Growth management or growth unabated? Economic development in Florida since 1990. In *Growth Management in Florida: Planning for Paradise*, by T. Chapin, C. Connerly, and H. Higgins (Eds.). London: Ashgate.
- Chapin, T. 2007b. Local governments as policy entrepreneurs: Evaluating Florida's 'concurrency experiment'. *Urban Affairs Review* 42(4): 505-532.
- DeGrove, J. 1992. *Planning and Growth Management in the States*. Lincoln Institute of Land Policy: Cambridge, MA.
- Downs, A. 2003. Why Florida's principles for controlling new development by regulating road construction do not and cannot work effectively. *Transportation Quarterly* 57 (1), 13-18.
- Downs, A. 2004. *Still Stuck in Traffic: Coping with Peak-Hour Traffic Congestion*. Washington, DC: The Brookings Institution.
- Ewing, R. 1996. Pedestrian- and transit-friendly design. Prepared for the Florida Department of Transportation, Public Transit Office. Tallahassee, FL.
- Florida Department of Transportation. 2002. *Quality/Level of Service Handbook*. Tallahassee: State of Florida.
- Florida Department of Transportation. 2007a. Validating T-BEST Models with 100% APC Counts. Tallahassee: State of Florida. Available online at: <u>http://www.dot.state.fl.us/research-</u>

center/Completed_Proj/Summary_PTO/FDOT_BD549_19_rpt.pdf

Florida Department of Transportation. 2007b.LOSPLAN Software. Tallahassee: State of Florida. Available online at: <u>http://www.dot.state.fl.us/Planning/systems/sm/los/los_sw2M2.htm</u>

- Guttenplan, M., B. Davis, R. Steiner & D. Miller. 2003. Planning level areawide multi-modal level of service (LOS) analysis: Performance measures for congestion management. *Transportation Research Record* 1858, pp. 61-68.
- Meyer, M. & E. Miller. 2001. Analysis of Transportation Demand. In Urban Transportation *Planning: A Decision-Oriented Approach*. New York: McGraw-Hill. Pages 256-264.
- Nicholas, J. & T. Chapin. 2007. The fiscal theory and reality of growth management in Florida. In *Growth Management in Florida: Planning for Paradise*, by T. Chapin, C. Connerly, and H. Higgins (Eds.). London: Ashgate: 209-226.
- Nicholas, J. & R. Steiner. 2000. Growth management and smart growth in Florida. *Wake Forest Law Review 35*, 645-670.
- Pelham, T. 1992. Adequate public facilities requirements: Reflections on Florida's concurrency system for managing growth. *Florida State University Law Review*, *19*: 973-1052.
- Pelham, T. 2001. Restructuring Florida's growth management system: Alternative approaches to plan implementation and concurrency. *Florida Journal of Law and Public Policy*, 12: 299-310.
- Rosenbloom, S. 1988. Transportation planning. In *The Practice of Local Government Planning*, by F. So and J. Getzels (Eds.). Washington, DC: International City/County Management Association: 139-174.
- Small, K. 1992. Urban Transportation Economics. Luxembourg: Harwood.
- Small, K., C. Winston, & C. Evans. (1989) Road Work: A New Highway Pricing and Investment Policy. Washington, DC: The Brookings Institution.
- Steiner, R. 2007. Transportation concurrency: An idea before its time? In Growth Management in Florida: Planning for Paradise, by T. Chapin, C. Connerly, and H. Higgins (Eds.). London: Ashgate: 209-226.
- Steiner, R. & J. Waterman. 1999 (December). The impact of concurrency management and the Florida Growth Management Act on transportation investments. Prepared for the Florida Department of Transportation, Department of Policy Planning. Contract No. BB-866.
- Stuart, G. 1994. Concurrency-management practices in Florida: Comparative assessment. *Journal of Urban Planning and Development, 120*(2), 59-73.
- Taylor, B. 2002. Rethinking Traffic Congestion. Access 21: 8-16.

White, S. M. 1996. Adequate public facilities ordinances and transportation management. Planning Advisory Service Report No. 465. American Planning Association: Chicago.