Changing Institutional Structures to Improve the Coordination of Land Use and Transportation in the Research Triangle

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Introduction

When Sandy Ogburn, Assistant to the General Manager at Triangle Transit Authority (TTA), first arrived in the North Carolina Research Triangle region from Philadelphia, she planned to stay only two years. However, because of “the slower pace of life, all the amenities in the region, and the beautiful blue color of the sky,” she and her family have made the Triangle home for over 25 years. During that time, Ms. Ogburn has been an active member of the Triangle community, serving as a member of the Durham City Council, as chair of the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO) Transportation Advisory Committee, and as chair of the TTA Board of Directors.

Unfortunately, recent trends may threaten the high quality of life that has attracted people, like Ogburn, and businesses to the Triangle in the past. Traffic congestion and air pollution problems that have plagued other fast-growing metropolitan areas have come to the Triangle. According to the North Carolina Department of Environment and Natural Resources (NC DENR), the Research Triangle region experienced eight Code Red (“unhealthy”) and twenty-three Code Orange (“unhealthy for sensitive groups”) ozone days in 1999 (NC DENR 2000). Automobile emissions are a major source of this pollution, and an inefficient regional transportation system contributes to the emissions problem by exacerbating traffic congestion. Traffic volumes on Interstate 40 at the Wake-Durham county line increased from about 71,000 vehicles per day in 1990 to over 101,000 vehicles per day by 1995 (Eisenstadt and Hoar 1995). Commuters often spend an hour traversing the 10-mile stretch of Interstate 40 between Research Triangle Park and Raleigh. The region’s congestion problem has increasingly drawn press coverage, with helicopter traffic reports and live views from traffic cameras broadcast each night on the local news.

Ms. Ogburn attributes much of the blame for the Triangle’s worsening congestion to a lack of coordination between the region’s land use and transportation decision-makers. She stated in a recent interview, “We [in the Triangle region] are quickly going the way of many large metropolitan areas by not acting regionally. Air pollution does not stop at the county line. It’s not a Durham problem. It’s not a Raleigh problem. It’s our problem as a region.” She suggests also that the economic viability of the Triangle, which is dependent on the region’s quality of life, will be damaged when agencies and municipalities act individually. Over the past few years, businesses have begun to question moving to and staying in the Triangle because their employees are frustrated with air pollution and traffic congestion problems. Ogburn warns, “Ultimately, without regional coordination, our quality of life will be diminished, and the Triangle will become a less desirable place to live. People will search for greener pastures—literally” (Ogburn 2000).

Air pollution and traffic congestion are one result of land use and transportation decisions that are made by individual municipalities, such as Raleigh, Durham, Chapel Hill, and Cary, without consideration of their effects on the region as a whole. These four cities and nearby communities compose the Triangle region of North Carolina (Figure 1). The major
employment center of the region. Research Triangle Park, and the Raleigh-Durham International Airport are located in the center of the “triangle.” Malls, sporting events and most jobs are within an hour’s drive of almost any household in the region. Because Triangle residents travel between all communities in the region to take advantage of social, cultural, employment, and other resources, it makes sense to use regional approaches to planning and share the costs and benefits of development.

Figure 1: Regional Traffic Congestion
Source: WRAL

Purpose and Methodology
This paper argues that the lack of coordination between localities with land use decision-making authority and regional agencies with transportation decision-making power causes the Triangle region to develop unsustainable land use patterns and transportation systems. The purpose of this paper is to:

- suggest general keys to success for cooperative regional governance structures;
- evaluate the effectiveness and feasibility of alternative institutional frameworks for regional coordination in comparison to the current land use and transportation decision-making structures in the Triangle; and
- recommend five institutional changes that could be adopted separately or in combination to improve regional coordination in the Triangle region.

Two sources of opinion, responses to a brief questionnaire from five regional agencies located in different parts of the country (Alabama, California, Illinois/Iowa, North Carolina, and Oregon) and academic literature on interjurisdictional cooperation, suggest keys to success and guide the evaluation and recommendations.

Taking a Regional View
Proponents of regional coordination of land use and transportation development cite numerous planning issues that are the result of the balkanization of local governments within a region and a lack of concern about the impacts of development and regulation policies on other jurisdictions (MSRC 1993; Chapralis 1994; Pincetl 1994; Baldassare, et al. 1996; Leo, et al. 1998; Rusk 2000). Research has identified several problems that relate specifically to coordinating land use and transportation between jurisdictions:

- Inefficient regional development patterns determined by land use choices made at the local level tend not to support higher densities in locations that will optimize the efficiency of regional transportation systems (Porter 1997; Rusk 2000).

- Inefficient transportation system leading to poor connectivity between roads and transit systems across jurisdictional boundaries. Less direct transit routes result in fewer transportation mode choices for residents, and awkward road connections result in more air pollution and time spent in traffic (Porter 1994; Baldassare, et al. 1996).

- Individual local development choices result in greater dispersion of jobs throughout a region. Low-skilled jobs become less accessible to workers with little money to spend on transportation (Pincetl 1994; Rusk 2000).
- Interstates and other freeways make "greenfield" sites at the edge of metropolitan areas accessible and attractive for development. As a result, central city lots and buildings that are served by roads, sewer, utilities, schools, and other services are abandoned for these new sites that are not served by infrastructure and public services and may be sensitive environmental areas or productive farmland (Porter 1997).

Critics of regional cooperation state that there is a lack of concrete evidence linking political fragmentation to specific problems. Detractors also point out that larger governments are inefficient, and that small local governments provide citizens with increased choice, more responsiveness and a greater chance for public input in land use and transportation decisions (Pincetl 1994; Baldassare, et al. 1996; Porter 1997).

Movement Towards Regional Strategies in the Triangle

Recent initiatives show that there is receptiveness towards using regional strategies to coordinate land use and transportation decisions in the Triangle. In 1972, the Triangle J Council of Governments (Triangle J COG), one of 18 North Carolina COGs, was formed as a voluntary organization of municipal and county governments from the six counties of the region (Figure 2). The Greater Triangle Regional Council (GTRC), a coalition of developers, environmentalists, farmers, neighborhood activists, business owners, university representatives, and chamber of commerce members from the region, was formed in 1993 to provide a private perspective on the region’s problems (Warrick 1993). GTRC helped to develop a series of "smart growth" principles for the Triangle region (Leavenworth 1999). The principles include:

- Design new and preserve existing neighborhoods and communities to foster walkability, safety and a sense of place:
- Promote different mixed-use centers of various scales for each city, town and crossroads in the Triangle to serve as centers of civic, social, cultural, and economic life, and as transportation hubs:
- Create a seamless, regional, multi-modal transportation system which interlinks new and existing residential, employment, commercial, and recreational areas;
- Promote development patterns and designs that take advantage of and support regional and neighborhood transportation systems;
- Preserve more natural areas and open space and provide for their interconnection at local and regional levels; and
- Coordinate land use development and transportation infrastructure and services to help achieve each of these principles.

There has also been state support for linking land use and transportation at the regional level. The North Carolina Commission to Address Smart Growth, Growth Management, and Development Issues ("Smart Growth Commission") is developing recommendations that it will present to the state legislature in January 2001 (Goschall 2000). One of the recommendations the Smart Growth Commission is considering is for the state to allow localities to voluntarily form regional governments. Under this arrangement, the voluntary regional governments will adopt regional smart growth plans, and if members adopt local smart growth plans consistent with the regional plan, the localities in the region could have access to a "smart growth toolbox" (Stradling 2000). This would allow Triangle communities to use a series of state supported smart growth policies, such as transfer of development rights or impact fees on new development, without a formal act from the state legislature. Regions that require consistency with a regional smart growth plan would also be eligible for state funded incentives to implement regional planning efforts. This type of initiative could result in a regional forum to unite land use and transportation development decisions in the Triangle.
Keys to Success for Regional Coordination of Land Use and Transportation

Modeling regional strategies after successful regional initiatives in other parts of the country could help ensure the success of regional initiatives in the Triangle. Responses from the five regional agencies and other academic research suggest there are several critical elements to creating a regional institutional structure that fosters integrative decision-making (Table 1). These elements fall under two main evaluative criteria, feasibility and effectiveness. A regional structure’s effectiveness is the extent to which the organization is able to get results by implementing land use and transportation development tools and decisions. A regional structure’s feasibility is the degree of difficulty in maintaining the necessary institutional arrangements from political, legal and technical perspectives. Equity, or the ability of agencies to include all regional stakeholders in land use and transportation decisions, is an important component within this category. Regional institutions must be equitable in order to maintain the support of grassroots and other public interest groups.

The literature shows that regional governments are most effective when agencies:

- Integrate a number of tools to create a comprehensive regional development program (Lassar 1991; Leo, et al. 1998);
- Establish concrete, understandable, common goals for communities within the region (Porter 1997);
- Establish joint advisory committees to address land use and transportation issues;
- Promote active communication and collaboration between jurisdictions; and
- Emphasize implementation of plans and programs.

It also shows that regional initiatives are most feasible when agencies:

- Solicit public involvement in the land use and transportation process (Carlson and King 1998);
- Take a bottom-up approach to developing regional plans, work with local jurisdictions as much as possible, and allow local implementation of regional strategies (Baldassare, et al. 1996);
- Understand traditional institutional barriers to regional coordination, such as local home rule authority (Porter 1997);
- Obtain state support for regional cooperation (Porter 1997; Carlson and King 1998); and
- Define a clear objective (such as reduction of regional air pollution, reduction in regional traffic congestion, or better management of regional infrastructure) that requires regional coordination to be achieved (Chapralis 1994; Porter 1997).

Current Institutional Arrangements

The Triangle’s current institutional structure has many of the attributes that should lead to successful regional coordination as mentioned above. Yet, an alternative institutional arrangement may be able to achieve greater effectiveness while maintaining feasibility.

Established Institutional Arrangements

The initiatives of the GTRC and other proponents of regional cooperation have promoted this concept within the Triangle’s established institutional framework. However, these initiatives may not be successful if the
current power structure for land use and transportation decisions remains in place.

Currently, four government agencies influence regional transportation and land use planning in the Triangle. Triangle J COG plays a role in facilitating agreements between localities, providing data and suggesting principles for land use and transportation development. The region has two separate Metropolitan Planning Organizations, the Capital Area MPO (CAMPO), which represents areas around Raleigh, and the Durham-Chapel Hill-Carrboro MPO (DCHC MPO). Both MPOs have the power to develop transportation implementation programs and to distribute state and federal transportation funds. Finally, the Triangle Transit Authority has been given the responsibility of planning and operating a regional transit system.

Despite the existence of these regional governments, current institutional arrangements dictate that land use planning and development decisions remain firmly within the administrative purview of municipal and county government. Local governments have the power to:

- Develop comprehensive land use plans;
- Enact zoning ordinances/establish zoning districts;
- Raise taxes and acquire land; and
- Create subdivision and transit-oriented development guidelines.

In contrast, regional governments play a more ancillary role without a great deal of decision-making power. For example, TTA has limited power to acquire land within and around the right-of-way of its future regional rail corridor. TTA has encouraged local municipalities to zone a high-density mix of land uses in areas near future rail stations in its Station Area Development Guidelines (TTA 1998), yet it can do little if municipalities such as Cary or Chapel Hill decide to zone areas near future stations as low-density residential. Hence, local land use decisions will have a significant impact on the efficiency of the future rail system as a whole.

Triangle J COG provides data to municipalities that may have small staffs or budgets so that all parts of the region can achieve a basic level of land use and transportation planning. Yet, membership in Triangle J is not mandatory, and localities such as Siler City and Wilson Mills are not represented. Under its voluntary structure, Triangle J COG can:

- Mediate land use and transportation disputes between localities;
- Provide land use and transportation data to all municipalities in the region;
- Develop model ordinances for localities; and
- Establish regional land use and transportation principles.

Finally, while COGs like Triangle J may develop regional principles, they have no power to implement their recommendations (Municipal Cooperation Guide 1993). Therefore, their plans are often “ignored almost at will by member local governments” (Porter 1997). For a regional agency to have true land use and transportation power, it must be given statutory home rule powers, there must be an express grant of powers to the agency through a state constitutional provision for regional governments, or there must be specific state or federal legislation that allows the consolidation of local municipalities to form regional governments (Richardson 2000).

**Alternative Institutional Arrangements**

The Research Triangle could improve regional coordination of land use and transportation development by adopting a different structure of regional governance. Experiences from other regions in the United States provide examples of successful interjurisdictional arrangements. Table 1 shows how the effectiveness and feasibility of regional initiatives could be affected or improved under alternative arrangements to the present regional government structure in the Triangle.

Table 1 describes six regional governance structures that are currently used in regions of
Table 1: Institutional Arrangements to Coordinate Land Use and Transportation Planning

<table>
<thead>
<tr>
<th>Institutional Arrangement</th>
<th>Description/Powers</th>
<th>Potential to Improve Land Use and Transportation Coordination</th>
<th>Example(s)</th>
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</thead>
<tbody>
<tr>
<td>Voluntary Cooperative</td>
<td>Regional councils of governments or public/private regional organizations that foster communication or settle disputes between jurisdictions, provide data and technical expertise, and set regional goals</td>
<td>+/-</td>
<td>Triangle J Council of Governments (Triangle Region); South Alabama Regional Planning Commission; Bi-State Regional Planning Commission; Puget Sound Council of Governments (a)</td>
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<tr>
<td>Arrangement Between Local</td>
<td></td>
<td>+</td>
<td>Atlanta Regional Commission (b)</td>
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<tr>
<td>Governments</td>
<td>Agency collects annual dues from all municipalities in region to hold regional public meetings or develop advisory regional plan</td>
<td>+</td>
<td>Triangle Transit Authority (Triangle Region); Bay Area Air Quality Management District; New Jersey Pinelands Commission; San Francisco Metropolitan Transportation Commission (c)</td>
</tr>
<tr>
<td>Single-Purpose Regional</td>
<td>Regional Public Service Authority or Regional Environmental Conservation Agency providing a specific service to region, such as air quality, sewer, airport, or transit management; often have implementation power over specific service</td>
<td>+/-</td>
<td>Washington D.C. Metropolitan Area Transit Authority (d)</td>
</tr>
<tr>
<td>Agency</td>
<td>Regional transportation agency, with land use personnel or developers on staff, may have power over land use development in transportation corridors or near transit stations</td>
<td>+</td>
<td>Durham-Chapel Hill-Carrboro MPO or Capital Area MPO (Triangle Region); MPOs in all urban regions of the United States (e)</td>
</tr>
<tr>
<td>Multidisciplinary Agency</td>
<td>Agency mandated by federal legislation to coordinate transportation planning and allocate federal and state transportation funding throughout regions of over 200,000 residents</td>
<td>+</td>
<td>Portland Metro Council Twin Cities Metropolitan Council (f)</td>
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<tr>
<td>with Joint Mission of Land</td>
<td>Single government body with complete land use and transportation planning, regulation and implementation control over entire region; officials may be elected under state-granted Home Rule power or appointed from localities</td>
<td>++</td>
<td></td>
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<tr>
<td>Use and Transportation</td>
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<tr>
<td>Coordination</td>
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<td>Single Metropolitan Planning Organization</td>
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Status Quo Institutional Arrangement=land use authority at local level; voluntary regional council of governments; transportation authority split between two MPOs; one single-purpose transit agency

KEY: ++=major positive change from status quo for given criterion; +-=minor positive change from status quo for given criterion; +/- =no improvement or mixed evaluation for given criterion; -=-minor negative change from status quo for given criterion; --=major negative change from status quo for given criterion

SOURCES:
(a) Porter 1992; Atkins 1993; MRSC 1993; Pincetl 1994; Porter 1994; GTRC 1997; Porter 1997; Rusk 2000
(b) GTRC 1997
(d) TCRP 1998
(e) Atkins 1993; Pincetl 1994; Rusk 2000
(f) Atkins 1993; Rusk 2000
the United States. The institutional arrangements are not mutually exclusive. For example, the Triangle region has a voluntary cooperative agreement between local governments, a single-purpose regional agency, and two metropolitan planning organizations. The rating of a regional institution’s effectiveness represents the positive or negative change, in comparison to the Triangle’s current structure of governance. With respect to the extent to which the region is able to achieve coordination of land use and transportation by using regional development tools. The rating of a regional institution’s feasibility represents the positive or negative change, in comparison to the Triangle’s current structure of governance, with respect to the degree of difficulty that the institution will have implementing land use and transportation decisions from a political, legal and technical perspective. The institutional arrangement ratings are not taken from the perspective of any of the Triangle’s regional organizations, local governments or business or environmental interests; they are based on evidence that is presented throughout the paper on the success or failure of these institutions in other regions of the United States.

Evaluation of Institutional Arrangements

Currently, the Triangle Region has a voluntary cooperative arrangement between local governments (Triangle J COG), a single-purpose regional agency (TTA), and two separate MPOs, CAMPO and DCHC MPO. The effectiveness and feasibility of regional coordination of land use and transportation may be improved if one or several of the alternative institutional arrangements are adopted. Implementing a more comprehensive regional strategy may be the best way to coordinate land use and transportation development in the Triangle.

Effectiveness and Feasibility

As stated earlier, the effectiveness of an institutional arrangement is based on the degree to which the region’s governing powers can be used to coordinate land use and transportation development. Several agencies in the Triangle have stated missions to coordinate land use, transportation or both across the region; however, land use planning power is currently held by individual local and county jurisdictions within the Triangle region. Therefore, an alternative institutional structure could be more effective for coordinating land use and transportation systems.

Based solely on effectiveness, creating a government agency that would cover a large geographic area would appear to be an easy solution to improve coordination of land use and transportation development in the Triangle region. Empirically, however, the feasibility of inter-governmental arrangements tends to decrease as the size of their jurisdictions increases. Land use control is a “ferociously jealously guarded local power” (Pincetl 1994). Resistance to regional government comes both from public policy and public sentiment.

There tends to be political support in the Triangle for the status quo regional institutions. Moreover, councils of governments like Triangle J are found in every state and are even needed to qualify for some state and federal funds. Many regional agencies like TTA are created to provide public transit service, and MPOs are mandated federally. Therefore, adopting a new land use and transportation policy-setting structure in the Triangle would alter institutions that are both familiar to residents of the region and used commonly throughout the nation.

Two main legal obstacles affect the feasibility of regional governance to coordinate land use and transportation planning: 1) most state enabling legislation causes land use planning to be executed at the local government level, while its impact on transportation corridors and infrastructure extend across local boundaries; and 2) federal legislation (i.e. Transportation Equity Act for the 21st Century - TEA-21) mandates that transportation planning be executed at the regional government level. Yet regional Metropolitan Planning Organizations do not have the legal power to control land use.

Recommendations

Though each of the following recommendations could be adopted separately, a
comprehensive regional strategy may be the most beneficial for the Triangle region. For example, a regional sales tax may be most effective and feasible if it is administered by a council of governments that all local governments participate in and which has the power to require that local land use and transportation decisions are consistent with a regional plan.


The North Carolina General Assembly could enact a bill requiring that all localities become members of their COGs. Each municipality would be charged an annual fee based on its number of residents. This would provide more resources to Triangle J and also ensure local representation on the council and give all localities and counties in the Triangle a greater stake in the plans and recommendations of the regional agency. The Atlanta Regional Commission (ARC) utilized mandatory membership and a per capita annual fee to successfully develop an advisory regional plan (GTRC 1997). ARC used the annual $0.80 per capita fee to hold public meetings and gather input from citizens to develop the plan. Local planners credited ARC with improving communication among localities and discouraging development with adverse regional impacts (GTRC 1997). In the Triangle, fee revenue could be used to hire more staff, collect and provide additional data, and facilitate disputes between municipalities. Though mandatory membership and an annual fee still would not allow the cooperative agency to implement and enforce land use and transportation decisions, it may provide a greater incentive for localities to pay attention to the land use and transportation guidelines provided by Triangle J. Also, because mandatory participation and annual fee requirements must be mandated by state legislation, this act would send a powerful message to local governments about the importance of regional coordination.

2. Establish a Land Use Division in the Triangle Transit Authority that has power over land use decisions in transit corridors and station areas.

In anticipation of its Regional Rail Initiative, TTA could follow the model of the Washington D.C. Metropolitan Area Transit Authority (WAMTA) by establishing a land use division within the agency. Under this arrangement, TTA could ensure that land uses within transit corridors and near transit stations are transit-supportive. Specifically, by working with local officials, the agency could encourage higher density and a better mix of land uses to support ridership on the regional system. Further, official corridor and station land use plans could be created by TTA, or localities could be required to comply with TTA land use guidelines. These changes would improve the overall success of transit in the Triangle region.

WAMTA’s land use division develops advisory land use plans for transit corridors and areas near transit stations. Although WAMTA could not establish zoning regulations, its joint land use-development division worked closely with local jurisdictions to foster appropriate rail station area development patterns when planning the Washington regional rail system (TCRP 1998). A similar arrangement could work in the Triangle region. Ideally, individual localities would give up some local control over land use around rail stations so that TTA could establish mixed use zoning in transit station areas and corridors and mandate local consistency with station area development guidelines. However, even if TTA’s land use power was limited, or if another regional governmental agency was granted land use authority, a land use division could advocate for a mix of land uses and moderate to high residential and commercial densities developed near stations in Durham, RTP, Morrisville, Cary, and Raleigh. These land uses would help support high ridership levels when trains begin to run in 2007. Unfortunately, there would most likely be strong political resistance to TTA having all transit corridor and station area land use authority.
3. Merge the Raleigh and Durham MPOs.

With the support of local municipalities, the two MPOs could be consolidated into one agency that would coordinate transportation planning and programming for the entire region. Under a consolidated MPO, all municipalities within the Triangle would be able to work with a single organization towards a single regional vision. Ideally, this would result in the funding of projects that extend beyond current jurisdictional boundaries to the region as a whole, such as transit connections between Raleigh and Durham.

The Bi-State Regional Planning Commission operating in the Quad Cities region has jurisdiction over four distinct cities: Davenport, IA, Bettendorf, IA, Rock Island, IL, and Moline, IL. The commission transcends municipal, federal and geographic boundaries to serve communities on both sides of the Mississippi River. Like these residents of Iowa and Illinois, who make a large number of trips among the Quad Cities, residents of Chapel Hill and Durham make a large number of commuting and social trips to Cary and Raleigh and vice versa. Therefore, a single MPO arrangement might also be effective in the Triangle.

Combining the two MPOs is legally feasible because the state legislature has already passed a law to allow the Durham and Raleigh planning organizations to merge. CAMPO, however, opposed the merger (The Chapel Hill News, 7/12/00), possibly out of concern that local interests would not be represented by a larger agency. For example, Chapel Hill may have less power to receive funding for sidewalk improvements and its system of bikeways if the MPO must also address the needs of towns like Cary and Smithfield.

4. Give the Triangle J Council of Governments authority over land use and transportation development.

If the state legislature and the governor are persuaded by the North Carolina Smart Growth Commission to enact legislation that would require or allow the formation of regional agencies, Triangle J COG could obtain authority over land use and transportation development.

The agency would be able to create a smart growth plan and require that localities comply with its land use and transportation development provisions or develop a negotiated process of cross-acceptance (Godschalk 2000). With this structure in place, Triangle J would receive incentives for creating plans, and localities in the region could levy impact fees on new developments, set up tax increment financing districts, or establish transfer of development rights programs.

Modeled after the Portland Metro Council and Twin Cities (Minneapolis-St. Paul) Metropolitan Council, this type of regional body (with supporting state legislation) could coordinate its regional land use plans with the regional transportation system and in effect oversee the Durham and Raleigh MPOs and TTA. The agency would not only be able to achieve the land use and transportation coordination goals lobbied for by the Greater Triangle Regional Council, it could also:

- Establish a regional tax or mandate regional cost-sharing;
- Adopt regional zoning ordinances to establish minimum and maximum development density, mixed land uses, and transit-oriented or traditional neighborhoods;
- Write subdivision and transit-oriented development regulations to require facilities for walking and bicycling;
- Acquire land for public buildings and public right-of-way;
- Review developments of regional impact and plan and site regional public facilities;
- Establish an urban growth boundary; and
- Levy bonds to provide infrastructure in transit corridors or provide tax incentives for businesses to locate near transit corridors or hubs.

The Twin Cities Metro Council mandated that the plans of all 189 cities and towns in the region be consistent with its regional systems plans (Lassar 1991). As a result, it has been credited with guiding 93 percent of development...
in the region between 1980 and 1990 to areas designated in its comprehensive plan, saving $1 billion in infrastructure costs (GTRC 1997). Portland used its regional zoning authority to set minimum density targets of four to ten dwelling units per acre for all 27 of its municipalities (Porter 1997). Similarly, King County, WA proposed a measure that would require a minimum of 15,000 jobs to be contained within one-half mile of 14 high-density urban centers in order to support its transit system. Opposition surfaced, however, when projections showed that the transit system would reduce traffic by only two percent (Porter 1994).

Regional authority over land use decisions would most likely come from the state legislature. As shown by the success of the agencies in Portland and the Twin Cities, regional cooperation mandated by state statute may be the most legally and politically feasible way to create an effective growth management program (Porter 1997; Rusk 2000). Though municipalities may resent this top-down approach, a statutory mandate could help counter opposition from local proponents of home rule authority. Thirteen states, including Florida, Georgia and Tennessee, have statewide growth management laws that integrate transportation and land use planning and development (Godschalk 2000). Recommendations of the Smart Growth Commission may persuade Raleigh lawmakers to enact legislation that would allow a regional coordinating body with similar powers to be created in the Triangle.

In California, the Joint Exercise of Powers Act (California Government Code Section 6500-6599.1) allows two or more public agencies to "jointly exercise any power common to the contracting parties." The legislation permits the creation of new government entities and can give regional agencies powers such as the authority to issue revenue bonds to pay for streets, roads, bridges, or mass transit facilities and vehicles (Carlson and King 1998). A similar act of the North Carolina General Assembly could provide these development management tools to a regional government in the Triangle.

Formal regional governance powers are more difficult to establish. Local officials may not be willing to cede a regional group control over decisions that could keep them from implementing some of their own plans. For example, though the review of developments of regional impact (DRI) is required in the Twin Cities and Atlanta, local governments resisted DRI review in Palm Beach County, FL, leading to the demise of the Palm Beach Countywide Regional Council (Porter 1997). When regional governance was proposed in San Francisco, some anti-growth groups perceived that regional authority would undermine their grassroots support. At the same time, proponents of growth thought that taking power away from local governments would reduce the number of sites open for development within the region (Porter 1997). Even within the area covered by the successful Twin Cities Metro Council, 90 percent of localities were opposed to the idea of regional governance when it was first proposed.

Other political obstacles to establishing governments that cover wide geographic areas include the fact that suburban voters traditionally oppose regional governments, as well as federal funding cuts to regional agencies in the early 1980s. Regional governments’ power to use land use and transportation management tools may also be impeded by the political climate. For example, municipalities in the Twin Cities region may begin to lobby against tax-sharing if they see excessive revenue losses. And although Portland Metro’s home rule powers include taxing authority, the agency has not used the power to date because of the negative public attitude toward taxes (Steele 2000). Opposition to regional authority is found in the Triangle as well. Steve Ford, staff writer for The Raleigh News and Observer, commented, “Our counties, and in some cases towns within those counties, are still too competitive and jealous of local prerogatives to agree to cede real power to a regional body” (Ford 1999). Regional bodies are perceived by residents and localities to have a more difficult time providing information to, and addressing the concerns of, individual citizens than local governments (Pincetl 1994; Porter 1997).

Yet, when development and infrastructure are planned poorly and the public perceives a
crisis, regional governance becomes more politically feasible. Environmental protection and local growth regulation are now high-profile issues in metropolitan areas. Because of traffic congestion, automobile pollution, and a projected $10 billion funding shortfall for new freeways, secondary roads, mass transit, high occupancy vehicle lanes, and pedestrian and bicycle facilities over the next 25 to 50 years (Stradling 2000), many Triangle residents and business leaders, as well as the mayors of Cary, Chapel Hill and Durham, support a regional tax for transportation improvements. Though a majority of the members of the Raleigh Chamber of Commerce do not support increased taxes, the leaders of the Chamber would support new local taxes that could help relieve traffic (Stradling 2000). Precedent for regional taxation in the Triangle was set when TTA established a five percent tax on car rentals in Durham, Orange and Wake Counties in 1997 that generates $6 million per year. A regional sales tax would allow greater funding of a coordinated, region-wide transportation system (Hyman 2000).

Several other programs have overcome business and citizen concerns. In the New Jersey Pinelands, a transfer of development rights program administered by a regional government has been successful in protecting environmentally sensitive lands while focusing higher-density development in areas with high transportation accessibility (Porter 1997). The Atlanta Regional Commission and Twin Cities Metropolitan Planning Commission use their power to review DRI’s to ensure that local projects do not have an adverse impact on the region as a whole (GTRC 1997). Though the public and developers in these regions worried that the development process would be hindered by additional reviews, the new Commission’s existence seems to be an effective incentive for developers to think regionally. To date, no projects have been delayed in the Twin Cities (Lassar 1991).

Portland has successfully adopted subdivision guidelines requiring pedestrian and bicycle facilities and the establishment of minimum standards for transportation performance throughout the region (Porter 1997). Finally, the New Jersey Pinelands and Twin Cities have both been able to create tax incentives for businesses to locate near transit hubs (GTRC 1997; Porter 1997). These are some of the tools that would be possible under a regional framework in the Triangle.

5. Levy Regional Sales Tax to be Administered by Triangle J Council of Governments.

If TTA and the two MPOs were contained within Triangle J, the agency could be given the authority to administer a regional sales tax. The Regional Transportation Alliance, a group of business and government leaders organized by the Greater Raleigh Chamber of Commerce, and the mayors of Cary, Chapel Hill and Durham will lobby the state legislature in January 2001 to allow the region to vote on this type of tax. A regional sales tax could help fund transit planning and improvements, such as TTA’s Regional Rail Initiative, station area plans, bus shelters, and land acquisition in transit corridors. It could also provide funding for highway, sidewalk and bicycle system construction and maintenance throughout the Triangle region.

The RTA has also given its support to GTRC’s efforts to establish a regional land use strategy and transportation initiatives. Policies backed by the RTA include merging the Durham and Raleigh MPOs, implementing TTA’s Regional Rail Initiative, and encouraging the state to allow the region and localities to increase transit funding through a regional 5-cent gas tax or local sales tax. According to the Institute for Transportation Research and Education at North Carolina State University, sales taxes could raise $65 million annually for the region (Paik 1999).

The local sales tax initiative follows the model of Charlotte/Mecklenburg County, where legislation allowed the region’s voters to approve a sales tax that raises $1 million per week for mass transit (Hyman 2000). A regional body with taxing authority in the Triangle would provide the region with more transit funding than is currently available for the entire state (the legislature has capped NC DOT statewide transit funding at $5 million annually). The tax would also allow residents of Chapel Hill and
Cary to help pay for roads that they use when visiting Durham and Raleigh.

Yet, the feasibility of taxation remains in question. While leaders of the Raleigh Chamber of Commerce support the 0.5 percent tax, they have stopped promoting it aggressively because only 37 percent of the Chamber’s 5000 members support the tax (Stradling 2000). The region may look to the Twin Cities for an example of a regional tax-sharing program. As a result of this Metro Council initiative, 40 percent of the commercial and industrial tax base of each municipality goes to a regional pool of funds, which helps subsidize infrastructure costs for poorer municipalities. Without the tax-sharing program, the per capita tax disparity would have been 50:1; with tax-sharing, it was only 12:1 (GTRC 1997).

The mayors of Cary, Chapel Hill and Durham also support a region-wide, multi-modal transportation plan. According to The Chapel Hill News, “current planning activity is focused either on a single part of the Triangle, the separate Capitol and Durham-Chapel Hill planning organizations, or on distinct modes of transportation... Nowhere is there in place a region-wide, multi-modal transportation plan. That’s what the mayors want” (The Chapel Hill News, 7/12/00).

Further Support for Regional Solutions

Public support for regional governments is often easier to come by if the organization created focuses on a concrete, narrow regional goal, such as water quality protection, transit provision, or park system management (Belldassare, et al. 1996; Porter 1997). For instance, many Triangle residents perceive that traffic congestion and air pollution reduce the quality of life and viability of businesses in the region (Hicks 1995; Ford 1999; Dyer and Feagans 2000). In 1993, columnist Neal Price cited “longer commuting times, pockets of ugly and mounting traffic congestion, and air pollution high enough to trigger ozone alert days” as negative results of the Triangle’s fragmented leadership (Warrick 1993). These problems have helped build support for the recent regional development management strategy proposals of the GTRC, RTA, and the mayors of Cary, Chapel Hill and Durham. Yet, further support for regional cooperation may not be generated if planners and policy-makers at Triangle J COG, TTA, the Durham and Raleigh MPOs, and local and county governments do not connect what Triangle residents consider critical issues to the inefficient results of local land use authority and regional transportation control.

Between 1950 and 1990, the urbanized population of the Triangle grew less than 300 percent, while the total urbanized area grew by 900 percent (Whisnant 2000). Connecting the local land use decisions that have fostered this lower-density, non-contiguous growth to the regional problems of traffic congestion and automobile pollution can help rally public support for cooperative regional solutions. For example, planners can present concrete data, such as the number of extra automobile trips that are needed for residents of Apex or Hillsborough living in neighborhoods that are not served by public transit or are not within walking distance of commercial centers. In addition, planners can provide information about how much work and family time is lost to commuting when a residence is located five, ten or twenty miles from an employment center. They can also explain how much additional carbon monoxide, hydrocarbon or ozone pollution is created by these trips. Summing emissions increases, additional commuting expenses, decreases in transit ridership, losses of exercise, and time lost over the entire region can be used as a powerful example of the public costs generated by uncoordinated transportation decisions.

Between 1990 and 2020, the population of the Triangle is projected to increase 76 percent, from 700,000 to 1,230,000 (Eisenstadt and Hoar 1995). This growth will be accommodated more efficiently if land use and transportation systems are coordinated over the entire region. If a regional body is dedicated specifically to address issues of traffic congestion and automobile pollution in the Triangle, it may build credibility through small successes. With this credibility, it may be able to obtain broader powers to coordinate land use and transportation development.
Summary
Evidence from other parts of the country reveals the strengths and weaknesses of multi-jurisdictional cooperation and suggests keys to success for regional coordination of land use and transportation development. Evaluating the effectiveness and feasibility of alternative institutional frameworks in the Triangle region demonstrates that land use and transportation coordination could be improved by adopting alternative government arrangements. This paper recommends five specific institutional changes in order to achieve regional gains: 1) merge the Raleigh and Durham MPOs; 2) require mandatory membership in the Triangle J Council of Governments; 3) establish a Land Use Division within the Triangle Transit Authority with power over land use decisions near transit corridors and stations; 4) give the Triangle J Council of Governments authority over land use and transportation development; and 5) levy a regional sales tax to be administered by Triangle J COG.

Sandy Ogburn suggests that the Triangle has made progress toward taking this kind of regional view. The Triangle hosted a World Class Region Conference in 1987, which eventually inspired the creation of TTA and GTRC. Within the past five years, there has been renewed interest in regional planning strategies. “Right now the mayors are interested and the business community is interested,” says Ogburn. But significant shifts in attitudes still must be made: “Although the rest of the world views us as a region, individually we do not view ourselves as a region. Not working as a region impedes sitting at the table and working through problems together.” Adopting an institutional structure that fosters coordinated land use and transportation systems at the regional level can ensure that the quality of life in the Triangle region remains as high as it was when Sandy Ogburn first moved here 25 years ago.

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