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Regionalizing Public Transportation Services

Final Report

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16. Abstract

There are two problems to be addressed in this study, both involving the integration of public transit systems on the regional level. The first problem is the integration of single-county rural transit systems into multi-county regional transit systems. The second problem is the integration of urban fixed-route/complementary paratransit systems and county demand-responsive transit systems.

This study will identify barriers to integration of transit systems at the regional level, evaluate best practices from North Carolina and other states, describe incentives to encourage regional integration or transit systems, and develop recommendations for policy and legislative changes to facilitate the implementation of regional transit systems.

The research envisioned for this study is comprised of four primary tasks. Those tasks involve:

1. Gathering and synthesizing information on best practices in the provision of public transportation on the regional level in other states and regions.
2. Identifying opportunities and constraints affecting integration of city/county public transportation systems.
3. Identifying opportunities and constraints affecting integration of rural public transportation systems.
4. Developing recommendations from information gathered and synthesized in the three previous tasks for NC DOT activities to encourage integration of transit services on the regional level and for policy recommendations for modification of federal/state/local regulations to facilitate such integration.

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Executive Summary

A. Introduction

The purpose of this research study was to gather information on, and develop preliminary plans for methods to facilitate delivery of public transportation at the regional level in North Carolina. This study identified barriers to the integration of transit systems at the regional level, evaluated best practices from North Carolina and other states, and developed recommendations for programmatic and legislative changes to facilitate the implementation of regional transit systems in both metropolitan and rural areas of the state.

B. Why Regionalize?

As regions grow in population and geographic area, the demand for transit trips becomes more regional in nature, and transit organizations need to effectively respond to this demand. The creation of a regional transportation agency can offer a number of important benefits:

1. Benefits to Riders—A primary rationale for creating a regional transportation agency is to provide better service to a region's riders. A multi-county transit agency can more efficiently and effectively accommodate trips that cross county lines, which are common for purposes of medical services, employment, training programs, and special employment programs such as sheltered workshops. An adequately funded regional agency may also be able to hold fares at a more affordable level, and be better able to provide rider benefits such as a centralized travel information center.

2. More Effective Regional Planning—The functions of Metropolitan Transportation Planning Organizations (MPOs) and Rural Transportation Planning Organizations (RPOs) are facilitated when there is a regional transportation agency that can develop a comprehensive regional plan for public transportation operations and investment.

3. Ability to Address Regional Transportation Problems—A regional transportation agency can provide a more effective mechanism for addressing such important regional problems as traffic congestion and air pollution.

4. Adequate Funding for Public Transportation—A regional transportation agency can be created with its own dedicated funding source. This can result in a more coordinated or integrated fare systems, and new service in unserved or underserved areas. Dedicated funding can also insure that the transit system can provide matching funds for state and federal grant opportunities.

5. Transportation and Land Use Planning–An effective regional transportation agency can enable more integrated and balanced land use planning.

6. Operational and Administrative Economies—A regional system can provide many operating benefits such as eliminating duplicate routes from overlapping transit system boundaries, coordinating schedules, and achieving operational economies of scale. Equally important, there are opportunities to realize significant savings and efficiencies by consolidating administrative functions into a single agency. Administrative savings are especially prevalent among small and rural multi-county transit systems. In addition to potential savings in labor costs, there are also opportunities to develop and implement more efficient and effective marketing, fare, and other programs at the regional level. Savings may be reinvested in transit systems to improve the quality of their services.

7. Building Rail Systems—A major advantage of a regional transit agency in an urban area is its ability to plan, design, fund and build a regional rail system.

8. Coordination or Consolidation with Special or Rural Public Transportation Services—A regional transportation agency is able to more efficiently provide human service agency transportation, or to coordinate with the service provided by these agencies.

9. Develop Specialized Professional Staff—By centralizing administrative functions, a regional or multi-county agency is more likely to be able to meet the expense of and develop more specialized professional staff.

10. Improved Efficiency and Effectiveness of the Department of Transportation—Given a lower number of local transit systems, the state DOT experiences a reduced administrative burden. A smaller number of transit systems can also make organizing and implementing special projects easier and more effective for state DOT staff.

C. The Current Situation

Transit Systems in North Carolina

There are four principal types of public transportation systems that currently operate in North Carolina:

- Human service transportation – Human service transportation systems operate in six North Carolina Counties. These transportation systems provide transportation to eligible human service agency and elderly clients.
- Community transportation -- There are 78 community transportation systems in North Carolina that provide transportation to the general public, as well as to eligible human service agency and elderly clients. All are single-county systems except for six multi-county systems.
- Urban transit -- There are seventeen metropolitan transit systems operating in North Carolina. Four metropolitan transit systems have consolidated or are consolidating their urban and rural public transportation services.
- Regional transit -- There are two regional public transportation authorities in North Carolina, the Triangle Transit Authority (TTA) and the Piedmont Authority for Regional Transportation (PART). Although the Charlotte Area Transit System (CATS) is not a regional transit system by name, the system provides services that are regional in scope-commuter express services from adjoining counties. All three of these systems have a dedicated funding source, such as a sales tax or rental car tax, that are permitted by state transit legislation.

Transportation Grant Programs

Major rural public transportation grant programs include the federal TEA-21 Section 5310 and Section 5311 programs which are incorporated into the NC Community Transportation Program (CTP), the Rural Operating Assistance Program (ROAP), and the Rural Capital Program.

Metropolitan transit grant programs include the federal TEA-21 Section 5303, Section 5307, and Section 5309 programs, and North Carolina State Maintenance Assistance Program (SMAP), State Capital Match Program, and Rideshare Program.

Federal transportation legislation permits transferring certain funds between transportation programs. State and local officials can choose to transfer funds from programs administered by the

FHWA, such as Congestion Mitigation and Air Quality Improvement (CMAQ) and Surface Transportation Program (STP), to the FTA for transit projects.

North Carolina Legislation

There are three North Carolina statutes that permit the creation of regional transportation authorities. The Public Transportation Authority Act (PTA Act) was passed in 1977 and has been used to create several of the multi-county *rural* authorities such as the Choanoke Public Transportation Authority. The Regional Public Transportation Authority Act (RPTA Act), passed in 1989, was used to create the Triangle Transportation Authority (TTA). The Regional Transportation Authority Act, passed in 1997, was recently used to create the Piedmont Authority for Regional Transportation (PART).

D. Case Study Findings

ITRE conducted case studies of 35 transit systems from 13 states plus North Carolina, comprising 15 metropolitan area systems and 20 rural systems. The study gathered information on the current state of regional public transportation systems, as well as policies and procedures to emulate and those to avoid. Information from the North Carolina case study sites also provides a basis upon which further regional coordination/consolidation may be developed.

Rural Multi-County Transit System Findings

Organizational / Institutional

1. State Legislation Promoting/Mandating Regional Transit Systems: Many of the case study site states have legislation that requires some level of regional transit consolidation or coordination. Those states with such legislation tend to have more regional transit systems, and a higher overall level of public and human service transit consolidation.

2. Flexible Legislative Provisions: Legislation may allow regional systems to be governmental systems that are organized through intergovernmental agreements, or to be private non-profit agencies.

3. Relationships Among Constituent Organizations: Contracting and agency membership are the two principal types of relationships that can be established to create multi-county transit services. Case study site and state department of transportation spokespersons favored organizational relationships in which the counties and agencies become members of a regional transit system. This membership gives counties and agencies greater control over service quality, costs, and short- and long-term development because their board representative(s) are constantly involved with and vote on service issues. Membership tends to provide a higher level of long-term stability than contracts.

4. Degree of Local Control: A perceived loss of control is a common issue or fear that may become a barrier to the consolidation or coordination of transit services. Human service agencies and county governments appear to be reluctant to trust transit service to an agency that is administered or operated from another county or town.

5. Governing Board Representation: There is a common governing board structure in place at a majority of the case study systems in which the governing board typically had one elected official or county manger from each county and major municipality (above a threshold population).

6. Governing Board Autonomy: The majority of the regional transit systems in this study began as part of a regional human service agency. The board for a regional human service agency is generally not able to focus as deeply on a single program such as transit as can a board dedicated to that specific activity.

7. Communications Among Transportation System Member Agencies: Clear communications and an open governing process were common ingredients to successfully forming and operating regional transit systems.

8. Local Champion: The importance of leadership in initiating and sustaining multi-county systems cannot be overemphasized.

9. Contiguous Boundaries with Human Service Agency Regions: Human service agencies are often organized on a multi-county, or regional level, and these regional boundaries may not match those of a regional transit system. The results of these boundary differences can be increased administrative costs, lost opportunities to contract with regional human service agencies, and operations service gaps. Regional transit and human service boundaries that do not match can also cause some systems to lose contracting opportunities. This difficulty in bidding on human service transit contracts can also leave service gaps in the transit system service.

10. Degree of Local Control: In some cases, influential human service agencies have either blocked the formation of a regional public transportation system, or significantly decreased the efficiency and effectiveness of the transit service by supporting alternative transit operations.

11. Effective Coordination with Urban Transit Systems: Although a few of the case study transit systems coordinated services with adjoining urban transit providers, most of the systems had only low levels of such service coordination.

12. Labor: The case study sites did not identify any notable problems with labor unions or differing pay rates.

13. Relationships Between Transportation and Human Service Organizations: Many of the case study sites began transit operations as part of a human service agency but eventually separated from the agency to become a public transit system. The transit service divisions sometimes found that service innovation, efficiency, and effectiveness was constrained by the umbrella agency work rules, shifting resources, policies, and budgets.

Funding

1. Regional Level Planning: State DOTs have contributed to the formation of regional transit systems through their provision of technical assistance and the application of funding for planning purposes.

2. Funding Incentives: Funding incentives that favor regional and multi-county transit systems can be very effective. In some cases, the case study sites believed that state DOT and human service grant funding for capital, planning, and administration were more favorable once they formed a multi-county transit system. In other cases, state legislation or state DOT policy directs funding specifically to regional transit systems or authorities.

3. Funding Distribution: Some transit systems receive public transportation and human service grant funding and contracts on a regional rather than a county-by-county basis. A regional funding distribution allows a transit system more flexibility to apply the funding to areas and services that have the greatest need.

4. Intermingling Funding Sources/Streams: Having the flexibility to intermingle program funding throughout the entire service area is important. Many of the interviewees in this study also desired greater flexibility to intermingle the different public transit funding for administrative,

operations, and capital expenses. Those interviewees who served a small urban area, or had a small urban area adjacent to their service area, also wanted the flexibility to intermingle urban and rural grants.

5. Dedicated Funding Source(s): A dedicated funding source is especially important to a regional transit system because the guaranteed revenue reduces the likelihood that the lack of local funding becomes a barrier for communities to work together in a regional transit system. If the funding is targeted only to regional or multi-county systems, it provides a very strong incentive for forming such transit systems.

6. Equity in Local Contribution: The amount and equality of local contributions appeared to be an issue mostly in systems that did not use formulas based on service consumption, or had poorly defined contribution formulas.

7. Competitive Contracts: In some states, the transportation procurement process of human service agencies creates considerable competition among different regional transit systems. Competition often results in lower-cost, higher quality service, however, the temporary nature of competitive contracts can deter the formation of progressively more efficient regional transit systems.

8. Lack of Fully Allocated Cost Accounting Practices: Case study site contacts stated that in many instances, human service agencies perceived that their costs to transport clients are less than those proposed by public transit systems. There is an inability or disinterest at some human service agencies to properly calculate their fully allocated costs (FAC) for delivering transit services.

9. Inability to Implement Authorized Funding Mechanisms: Legislation enabling regional transit systems often permits municipalities or counties to collect a variety of taxes to fund transit. However, these taxes are infrequently implemented because local elected officials, authority board members, or voters have not approved such measures, or in some cases the state legislature never approved the necessary appropriation.

Administration

1. Resource Savings: There was a universal belief among case study site contacts that regional transit systems can offer administrative efficiencies compared to single-county systems[1]. The staff of the transit offices at the various state DOTs believed that having regional and multi-county transit systems helped to reduce their administrative burden to manage grant funding and regulatory programs, and organize and deliver technical assistance.

2. Conflicting Reporting Requirements: Some regional transit systems must use a variety of billing formulas, data, and cycles, generate different report formats, and maintain multiple types of eligibility records for their customers. This problem appears to occur less frequently among transit systems that contract with human service agencies, such as Medicaid and Area Aging Program, on a regional rather than a county-by-county basis.

3. Non-Uniform Regulations, Policies and Procedures Throughout the Region: The regulations, policies, and procedures can become complex for a regional system. Implementing standard procedures for call-taking, billing, and reporting throughout a region (or, statewide) facilitates the administration and operational processes of the system.

[1] Cited by representatives from: RIDES Mass Transit District, 10-15 Regional Transit Agency, Kennebec Valley Community Action Program, Choanoke Public Transportation Authority, Kerr Area Transportation Authority, Santee Wateree Regional Transportation Authority, East Tennessee Human Resource Agency, Capital Area Regional Transportation System, Heart of Texas Council of Governments, Potomac Valley Transit Authority.

4. Multiple Administrative Units: A few multi-county systems are required to use the administrative support services of each of the member counties, effectively reducing administrative benefits of the multi-county system by creating substantial administrative paperwork burdens.

5. Regional Administrative Entities: Several states, such as Texas, Florida, Kansas and Illinois, incorporate regional entities, such as state DOT district offices, into the administration of rural transit systems.

Operations

1. Availability of Specialized Professional Skills: Larger public transit systems are often able to hire staff with greater specialization in areas such as marketing, accounting/finance, operations, administration, or maintenance.

2. Variety of Transportation Services: Rural regional transit systems are more likely to develop and implement fixed-route, deviated route, and other types of service in addition to traditional demand-responsive service. This can be attributed to economics of scale, and a greater likelihood of having staff with specialized operations planning skills. Serving a multi-county area can also facilitate testing and implementing new types of services.

3. Maintenance: Regional transit systems may be able to realize economics of scale by operating fewer maintenance facilities and/or employing fewer staff than several transit systems each serving only one county. Potential economies should be investigated on a case-by-case basis to account for local conditions. Special maintenance skills, such as those required to maintain diesel engines, may be beyond the capabilities of small transit systems.

4. Inter-Regional Transit: Transit operations on the scale of a regional system can facilitate the planning, operations, and coordinators' of inter-regional transportation services.

5. Adherence to Non-Productive Operations Practices: As single-county transit systems develop into regional systems, some systems retain operations practices that are not efficient or effective at the larger scale of operations

6. Distributed vs. Centralized Operations: The case study sites exhibited a variety of operations models, ranging from a completely centralized operations system to having an operations center in each county.

Metropolitan City-County Transit Systems

Organizational/Institutional

Key findings involve use of one of three types of organizational/institutional models, governing boards, geographic area served, enabling legislation, and general public vs. human service transportation.

1. Organizational Models—Three basic types of transit models were studied:

- City- or County-Dominated systems are primarily focused on traditional fixed-route bus service within the city. In general they do not provide human service transportation other than the ADA (Americans with Disabilities Act) required complementary service for the disabled. Organizationally, they are usually a department of city government. Service outside the boundaries of the political jurisdiction is usually both limited and provided on a contract basis.

- Consolidated (or Unified) systems are usually the next stage in the evolution of city- or county-dominated systems when a different organizational form is needed to bridge the multiple political jurisdictions or organizational boundaries involved. This usually takes the form of an independent transportation authority with its own governing board and geographic boundaries that include multiple political jurisdictions. Often some kind of taxing authority is also provided for operating funds and/or capital needs. A variation of an authority is a system that has consolidated by some kind of interlocal agreement. Consolidated systems can be organized around county boundaries or the urbanized area.
- "Federated" (or Composite) systems are usually an umbrella organization that is created to provide more comprehensive regional service, planning, coordination, and/or funding. Existing transit operations under the umbrella agency remain somewhat autonomous, often having their own governing boards.

2. Governing Boards—A governing board needs to be sufficiently representative of the various political jurisdictions and stakeholders in order that the various interests feel sufficiently represented (or protected). A careful balance has to be achieved between adequate representation and manageable size. A related issue is how to give the constituent groups or areas a proportionate vote on the board that represents their relative "importance" in the region, whether this is measured in terms of population, taxes contributed, service received or transit usage. Some elected transit boards in the country have agendas that are mainly political, introducing too much politics into such decisions as where services are provided, where rail lines are built, and what should be the fare structure. A particularly difficult issue is how to structure a board where geographic areas or political jurisdictions have the ability to opt in or out of the authority.

3. Geographic Area—Sometimes the legislation governing regional transit authorities allows areas within the boundary to opt out of the authority, or for areas outside the boundary to opt in. There are generally two methods used to opt in or opt out: the issue is put before the voters; or, a decision is reached by the relevant political jurisdiction, e.g., by a city council or county board.

4. Enabling Legislation—The case study sites demonstrated four different ways of establishing city-county transit systems:

- No legislation. The system was established as a department or unit of city or county government.
- Interlocal or intergovernmental agreement. These more regional systems were formed by legal agreements between political jurisdictions as permitted under state law.
- Generic enabling legislation. These authorities or districts were formed under general state enabling legislation pertaining specifically to transit systems.
- Specific state legislation. Some regional transit authorities were formed under legislation directed specifically to that authority.

5. General Public vs. "Human Service" Transportation—In general, the city-county transit systems do not provide "human services" transportation directly. It is usually provided through a subsidiary or private contractor.

Funding

There are four key issues related to funding:

1. Sufficiency—Is there enough funding?

2. Funding "equity"—Are sub-areas or jurisdictions receiving benefits commensurate with the funds they provide?

3. Dedicated funding—Is there an assured source of funds as opposed to uncertain annual appropriations from state or local sources?

4. Funding program structure—Are there problems or constraints caused by the structure of funding programs (e.g., the separation of funds into categorical programs such as urban/rural, or operating/capital)?

Funding is a key issue for regional transit systems because most systems earn well below one-half of their operating expenses from the farebox. Most transit systems receive some federal funds, both operating and capital. The experience is varied when it comes to state funding. In Texas, for example, the large "metropolitan" systems do not receive state funds, whereas smaller urbanized area systems do. In other states such as Illinois, Michigan, New York, North Carolina, and Florida, some state operating and/or capital financial assistance is usually provided. Local funds come from a variety of sources such as a tax on retail sales, payroll and self-employment, vehicle registration, and automobile rentals.

When there is not a dedicated source and a transit system must seek annual appropriations from local or state governments, three types of problems are created:

- Political compromises may result in the implementation of transit services with little operational justification.
- The unpredictability of the annual appropriations makes it more difficult to do long-range planning and implementation for the system.
- Lack of a dedicated funding source can also increase the difficulty to secure multi-year capital grants from the federal or state governments because the local share cannot be assured over time.

An important issue in regards to funding is assuring jurisdictions within the region that they are getting a "fair share" of services in exchange for the taxes they are providing.

Administration

There are opportunities for administrative savings and efficiencies if such functions are consolidated in a single agency, especially where these functions can be consolidated into a single physical facility. In addition to possible savings in labor costs, there are also advantages in terms of more efficient and effective programs.

Operations

Some of the systems offered transit services in addition to fixed-route services such as small community-based systems using smaller buses and operating as dial-a-ride or deviated fixed-route services. Several systems also offer "park-n-ride" facilities, and carpooling and vanpooling services. A few of the systems offer rail service and a small number of the systems provide human service transportation.

E. Regionalization Issues

1. Creation: How should regional transportation authorities be created? Who should be involved? Whose approval should be required?

2. Governance: What should the governing board of a regional public transportation agency look like? How many members should it have? How large does it need to be to adequately represent the region and the key stakeholders? How large is too large? Who should appoint the members? Who or what should they represent? A related issue is whether there should be a separate advisory committee of some kind that would represent important stakeholders such as riders, elderly or disabled persons, or citizens.

3. Organizational Form: There are a number of choices to consider in regard to the appropriate organizational form for a regional agency. Regional systems were created by one of three general legal means:

- Interlocal or intergovernmental agreement as permitted by generic state law.
- Generic enabling legislation that allows any area in the state to form a public transportation authority or district.
- Specific state legislation that applies only to a particular regional area.

4. Funding: Three key funding issues include:

- Should the agency have its own dedicated taxing ability or funding source?
- How to insure that there is a perception of funding equity, i.e., that what sub-areas are receiving in transit service is in some rough proportion to the taxes they are paying? Similarly, to what extent does the agency have the discretion to use its funds where they are most needed as opposed to where they are generated?
- If the agency is to have a dedicated local funding source, what type of tax or funding source is best? Some important criteria when considering taxing sources are whether the tax trends well with inflation, whether it is easy to collect, and whether it will raise sufficient revenue.

The structure of transportation grant programs can cause problems. The federal grant program has separate funding programs for urban and rural service. If a regional agency offers both types of service and it receives federal funding for each, it must follow FTA cost allocation procedures to use the same vehicles for both types of service. In addition, the funds cannot be intermingled and have to be accounted for separately.

Regional systems that provide human service transportation face an additional funding-related problem. Most of this type of transportation is provided through service contracts with a variety of human service agencies. The database and reporting requirements for such services can become quite complex. This task becomes even more difficult if the transit system is not able to standardize the trip cost data and report formats among the agencies.

5. Geographic Area: There are two common ways of defining a region's boundaries. One approach is to use the borders of the county(s) that are part of the region. The other approach is to use the borders of the "urbanized area". Each approach has advantages and disadvantages. The first approach has the benefit of being easy to define. In addition, it usually also provides some room for the urbanized area to expand without crossing over the borders. Particularly for the urbanized area type of agency, another issue often encountered is providing for sub-areas to decide whether or not to join the agency when it is created. Another factor in defining regional boundaries is to consider the boundaries of other important agencies.

6. Direct Service Operations vs. Coordinating vs. Contracting/Brokering: Public transportation agencies can be involved in providing transportation service in one of four basic ways. Some agencies may utilize more than one of these methods:

- Operating the service directly

- Using a private contractor to operate the service
- Coordinating the service provided by other organizations
- Acting as a transportation broker

7. General Public vs. Human Service Transportation: An important issue is whether a regional transportation agency should operate human service transportation as well as for traditional transit service for the general public. There are several key problems with providing human service transportation that make it difficult for a traditional urban transit organization to provide it. On the other hand, rural transit systems often depend on human service transportation to provide needed funding revenue and higher trip densities that result in more efficient service.

8. Urban vs. Rural Service: There are sometimes rural transportation services operating in an urban regional transportation agency's service area. If a regional agency is organized around urban area boundaries, it will likely have to coordinate to some degree with services provided in nearby rural areas.

9. Equity between systems that do not elect to regionalize versus those who do regionalize: If the state or local government reduce a regional system's funding by the amount of staff savings that result from coordination or consolidation actions, there may be less incentive for participating systems to consolidate.

10. Phased versus one-time implementation of regional transit systems: One of the issues to be considered is whether to provide the ability for a regional transit system to start small and then add territory at a future time as appropriate. An alternative is to require that a region start off at some minimum threshold size that will serve the region well into the future.

F. Recommendations

Programmatic Recommendations

Organizational/Institutional

1. Regional Consultants -- Hire and train one regional coordinator, who would report directly to the PTD Director, and serve as a resource consultant to the Assistant Directors for Community and Metropolitan Transportation.

2. Uniform Human Service Agency Procedures: A recommended first step to accomplish statewide human service transportation standards is the development and use of a standard report format for Medicaid, Work First, and other transportation programs administered by the Department of Social Services. The current reporting system used by the Division of Aging, called ARMS, can serve as a model. It is recommended that state level agencies enforce use of standard formats to be reviewed and approved by the Human Service Transportation Council. In some cases, state agencies have enacted standards but the local agency, such as a county level office, has attached additional requirements. A second step to the development and use of uniform statewide standards is to develop and implement a standard procedure for human service agency clients' trip reservations.

3. Coordination and Consolidation of CTIPs: The PTD should coordinate or consolidate the Community Transportation Improvement Plan (CTIP) process among counties that appear to be good candidates for forming a regional city-county or multi-county transit system. At a minimum, the CTIPs for community transportation systems that are located in areas identified as being potential regional transportation systems should be conducted and completed at the same time, be

completed by the same consultant, and provide at least one scenario for a consolidated transit system.

Funding

1. Transitional Funding: Planning funds will be required to develop a coordination/consolidation plan for each new regional transit system. Planning funds will also be required to develop and evaluate potential inter-county routes and services. Administrative funds will be required to train and develop staff for changing job responsibilities. It is not recommended that administrative funding for staff positions be reduced, but instead be maintained at current levels, at a minimum. Regionalization offers an opportunity to incorporate personnel with additional skills under both centralized and distributed methods of organization.

Regional and multi-county transit systems may require additional capital funding for the consolidation of operating and maintenance facilities, consolidation or coordination of call taking, scheduling, routing, or dispatching functions, linking or consolidating of existing radio systems, or purchase of new types of vehicles.

Operating funds will be required to implement new and/or modified services and to develop and implement appropriate intra-regional routes.

2. Funding Incentives: The PTD can implement funding policies and procedures to favor regional transit systems through the adoption of:

- Preference for discretionary funds
- Preference for increases in programmatic funds
- Preference for facility and technology funds
- Provision of some/all local match for a limited period to encourage lone single-county systems to join an adjacent multi-county system.

3. Effective Use of Large Urban, Small Urban, and Rural Area Funding: The PTD will need to provide guidance and training to local public transportation systems, and should actively promote the revision of federal rules and regulations to better accommodate regional transportation system needs. A set of guidelines should be developed to assist transit system managers to develop allocation procedures that meet their service and organizational structures to ensure adherence to federal and state policies and procedures.

Operations

1. Operations Training and Technical Support: The management, staff, and operations personnel of regional public transportation systems will need training and technical support to adjust current practices and to develop new policies and procedures to efficiently and effectively accommodate service change requirements.

2. Extra-Regional Coordination: The proposed PTD regional oversight program consultant could be responsible for taking the lead to develop super-regional coordination strategies, in concert with the regional transit systems, and PTD rural and metropolitan program staff.

3. Distributed vs. Centralized Operations: Neither the centralized or distributed operations model offers clear advantages in all situations. Each region should be evaluated according to local characteristics and preferences, and the more appropriate model for local conditions should be adopted.

Legislative Recommendations

Changes to Federal and State Legislation and Policies

1. Federal Transportation Legislation: Different ways to mitigate the impacts of federal 13c labor protection clause in transit legislation could be explored such as:

- Phasing out its requirements over a period of years.
- Exempting certain small operations or special purpose services.
- Providing special funding that would offset its financial impacts.

2. Coordination with Various Human Service Programs: TEA-21 does not seem to create undue constraints or burdens on the development of regional transportation systems. Many of the problems cited stem more from state and local needs, policies and politics, than from TEA-21. Determine if the current requirement in TEA-21 that such coordination be addressed to the extent feasible could be strengthened to require that a formal plan for coordinating these services be developed in each area as a condition for receiving certain federal funds.

Some systems encounter problems utilizing the vehicles purchased under the large urban, small urban, and rural grant programs, and in accounting for the funds used in combined operations. This problem might be resolved by permitting some blending of the funds. An alternative solution would be to allow a certain percentage of rural funds to be used for urban service and vice versa.

3. Regional Transportation Legislation: In formulating design criteria for a regional public transportation agency, delineate some broad objectives or principles that describe its intended purpose and function. A list of such objectives is recommended below:

Organizational/Institutional

1. Creation: It is recommended that RTAs be created with the approval of the affected county boards, and also by the city councils of the principal municipalities in the region. It is further recommended that enabling legislation provide for three different "tiers" of RTAs. The *first tier* would include the three largest regions in the state (Charlotte, the Triad and the Triangle). The *second tier* regions are areas that currently have an urban public transportation system. The *third tier* regions are either smaller, non-MSA urban areas of less than 50,000 in population that have small urban transit operations (Boone and Wilson), or more rural areas that mostly provide rural and/or human service transportation.

2. Legal Form: It is recommended that RTAs be created as public "authorities." This is the primary mechanism that has been used for this purpose in North Carolina to date, particularly for the larger urban systems. It is also the prevalent approach used elsewhere in the country.

3. Territorial Jurisdiction: It is recommended that RTAs be organized geographically by county boundaries.

4. Immediate vs. Phased Regional Implementation: Disallow single-county authorities if they are within the territory of existing or prospective regional transit authorities. Allow single-county authorities but limit their powers if within a multi-county region. These options will allow the state to maintain some control over the size of regional transit systems. It is also recommended that RTAs have a means to expand their territorial jurisdiction

5. Governance: It is recommended that:

- The governing board be structured in a way that reflects the populations of the key political jurisdictions involved.
- The composition of RTA boards should be left to the discretion of the appointing authorities (i.e., key local governments).
- At-large members should be appointed by the Governor or Secretary of Transportation to represent the region as a whole.
- Consideration should be given to including a non-voting member from the NCDOT PTD on RTA boards.
- Terms of board members should be sufficiently long so that they are able to develop knowledge and experience (e.g., four years or more), and that staggered terms be considered in order to provide continuity. Compensation should be on a per diem basis.

6. County-by-County vs. Region-Wide Approval of RTAs: A region-wide referendum to create an RTA is preferred, as this provides one opportunity for all residents to cast their vote, and creates a single authority without any lapses in coverage of the region. If this option is likely to result in a small majority of voters in one or more local sub-areas being able to veto a regional transit system, then the option of creating an RTA that does not include the areas that do not elect to participate in it may be utilized in order to form a regional authority.

7. Transportation Advisory Board: In addition to the formal governing board, it is recommended that each RTA create a Transportation Advisory Board that the governing board is required to meet with on a regular basis. This board should include members who represent riders, citizens, the transportation disadvantaged, and other important stakeholders in the regional transit system.

Funding

1. Dedicated Funding: RTAs should be given the power to generate their own local funding through a dedicated funding source, such as a tax levy, and that the authority have the ability to levy the tax in stages.

2. Funding Equity: It is recommended that an RTA have at least some discretionary funding that it can use to respond to critical needs, and that not all funding is simply directed to sub-areas of the region by legislated formulas. Another approach that could be explored is creating a mechanism for some local funds to be returned to local jurisdictions that are not receiving a proportionate share of transit services.

3. Dedicated Funding: A suggested approach for determining the level of authority to impose tax levies for dedicated funding is as follows:

- *If the Board is composed entirely of elected officials*, allow certain limited special taxes, such as the vehicle-related taxes that TTA and PART can currently impose, to be approved by the board. (An additional taxpayer protection could be to require that an *extraordinary* majority of the board approve such a levy). *If the board is not entirely composed of elected officials*, require that the governing board of any affected county also approve the tax levy.
- Require that more general, broad-based taxes such as a sales tax, property tax or gas tax be submitted to the voters for approval.

4. Revenue Recovery Ratio Requirement: The issue of a revenue recovery ratio requirement should be explored. One area for further study would be whether a required revenue recovery ratio should vary depending on the type of service being operated or on the nature of the area being served.

5. State Public Transportation Funding Appropriation: In order to provide greater flexibility in meeting the changing needs of public transportation in the state, particularly as more and more systems regionalize and combine, it is recommended that the consolidation of some or all of these categories into fewer line items be explored.

Administration

In addition to the general power to provide public transportation services, certain additional powers should be considered for RTAs:

- *Eminent Domain* to give RTAs the ability to acquire land that may be needed for future rail lines, park-n-ride facilities, or consolidated operating and maintenance garages.
- *Special Security Force* to give the RTAs the power to provide and maintain (or contract for) a security force that can supplement the police forces of local jurisdictions in protecting the security of their riders and facilities.

Operations

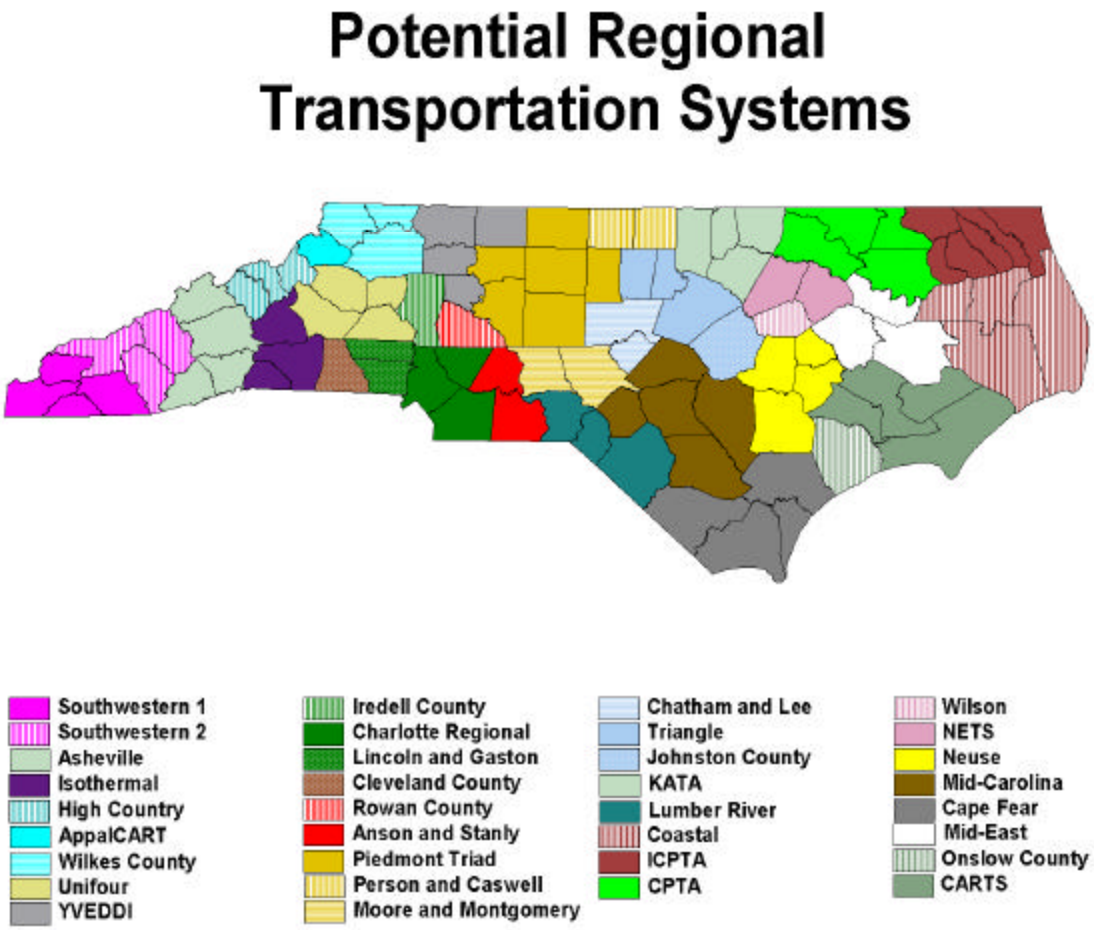
RTAs should have the ability to operate, contract for, broker or subsidize public transportation services including all forms of regional surface transportation such as bus, rail, water, vanpool, carpooling, taxi and "human service" transportation. They should also have an ability to provide extraterritorial trips, especially those relating to medical needs, within some reasonable geographic limit from the authorities' territorial borders.

Potential Regional Systems

Regional community transportation systems and metropolitan transit systems should include geographic areas that share common economic, employment, political, and social characteristics. To determine potential boundaries for regional community transportation systems and metropolitan transit systems in North Carolina, ITRE staff reviewed the boundaries for the following organizations:

- Rural Transportation Planning Organizations (RPOs)
- Metropolitan Transportation Planning Organizations (MPOs)
- Councils of Government (COGs)
- NCDOT Highway Divisions
- Regional partnerships for economic development
- Proposed 511 Traveler Information System "Regions"

In addition to this review, ITRE analyzed regional commute patterns based on *Quik-Commute* from the State Library of North Carolina. The results of this review and analysis are presented on the map on the following page.



In addition to multi-county rural and city-county regional transit systems, there are three potential large metropolitan transportation systems in areas previously referred to as *Tier 1* regions. Each of these has already formed a regional transportation system, either through state legislation or interlocal agreement:

- The Triangle Transit Authority (TTA) in Wake, Durham and Orange Counties
- The Piedmont Authority for Regional Transportation (PART), initially formed in Alamance, Davidson, Forsyth, Guilford, Randolph and Rockingham Counties, but with authority to expand to 12 contiguous counties
- The Charlotte Area Transit System (CATS) in Mecklenburg County

F. Recommendations for Next Steps

ITRE staff envision this report serving as an initial information source that may be provided to state and local stakeholders for review and comment. The research staff recommends that the PTD develop an action plan to accomplish the following activities:

- Distribute the study final report to selected North Carolina Community Transportation System and Metropolitan Transit Systems
- Conduct follow-up activities to receive initial comments from transit system managers.
- Prepare information for distribution to key stakeholders—all North Carolina transit system managers, elected officials (county and municipal), planners, MPO/RPO staff, Chambers of Commerce, etc.
- Distribute this information to key stakeholders throughout the state.
- Plan, conduct logistics for, and develop presentation/handout materials for regional meetings. Such meetings could be conducted in the Eastern, Piedmont, and Western parts of the state.
- Conduct regional meetings to receive comments from stakeholders.
- Conduct further study of the potential roles for RPOs with regional transit systems. For example, might an RPO become the lead agency for a regional transit system?
- Incorporate findings into Action Plan—purpose, goals, and key activities (what, who, when).
- Prepare informational materials for NC legislators (as appropriate).
- Distribute materials to NC legislators (as appropriate).
- Invite expressions of interest from existing transit systems to consolidate into one or more regional transit systems.
- Determine appropriate technical and financial assistance that will be required to support the development and implementation of one or more regional demonstration systems.
- Select one or more demonstration sites to become regional transit systems.
- Gather operating and financial statistics on existing transit systems that will become part of one or more regional systems, to allow comparison of "before" and "after" data to determine administrative and operational efficiencies gained as a result of regionalization.
- Provide technical and financial assistance to the affected transit systems before, during, and following the transition to a regional entity.
- Gather operating and financial statistics on existing transit systems that became part of one or more regional systems, to allow comparison of "before" and "after" data to determine administrative and operational efficiencies gained as a result of regionalization.

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Regionalizing Public Transportation Services

I. Introduction

The purpose of this research study was to gather information on, and develop preliminary plans for methods to facilitate delivery of public transportation at the regional level in North Carolina. There are two aspects to the development of effective and efficient integration of public transportation at the regional level. One aspect is the desire to improve customer service through improved access to public transportation services from various providers throughout a region. A second aspect of coordinating and consolidating public transportation services involves the administration and funding of those services.

This study identifies programmatic and legislative actions to facilitate the coordination and consolidation of public transportation services at the regional level in both metropolitan and rural areas of the state. Metropolitan areas involve the coordination and consolidation of fixed-route/complementary paratransit systems, county-operated demand-responsive transit systems, and in some cases, overarching regional transit systems. Rural areas involve the coordination and consolidation of single-county community transportation systems, and in some cases, small urban transit systems into multi-county regional systems.

This study identified barriers to integration of transit systems at the regional level, evaluated best practices from North Carolina and other states, and developed recommendations for programmatic and legislative changes to facilitate the implementation of regional transit systems.

A. Methodology

The yearlong study began with a preliminary review of the literature, the results of which were presented in the first deliverable. ITRE staff then conducted an extensive search of transit system Web sites to gather preliminary information on potential national case study sites. After evaluating this preliminary information, a list of six metropolitan city-county transit systems, and 15 rural multi-county case study sites were selected in consultation with North Carolina Department of Transportation (NCDOT) staff. A telephone interview protocol was developed for use in telephone interviews.

Telephone interviews were conducted with representatives from each of the case study sites and corresponding state department of transportation staff. This provided information on regionalization activities from both the local and state perspectives. Findings from the rural multi-county case study sites were summarized and presented in Technical Memorandum #1, and those from the metropolitan city-county case study sites in Technical Memorandum #2.

B. Organization of the Report

This report provides an overall summary of the research study. This report identifies the benefits of regional and multi-county public transportation, followed by reviewing the current status of North Carolina transit systems, programs, and legislation. The report continues with a synopsis of the case study findings, including opportunities and constraints of regional organization and operations. The report then presents recommendations on programmatic and legislative activities to advance the coordination and consolidation of public transit systems in North Carolina in both rural and metropolitan areas. The report concludes with suggestions for subsequent activities for local transit systems, state DOT staff, and legislators.

II. Why "Regionalize"?

As regions grow in population and geographic area, they encompass more and more political jurisdictions--first the central city, next the suburbs, and then perhaps exurbs, "edge cities" (former suburbs that have developed their own political, economic and commercial base and have grown independent of the central city), and "satellite" cities (cities that are separated from the central city by low-density suburban or rural areas). Sometimes, separate urbanized areas have grown together forming a region that may have several major urban centers (as has happened in the Research Triangle area of North Carolina where the urban areas of Raleigh, Durham, Chapel Hill and other regional cities and towns have begun to converge). As this process of growth has unfolded, travel, both by automobile and by transit, has become more regional in nature and often crosses multiple political boundaries.

A similar phenomenon has occurred in rural areas. The economies, business markets, and government services of towns and counties have become more integrated with one another and the major cities. As a result, the demand for transportation more frequently requires trips to cross multiple county and town boundaries. A regional medical center, for example, provides services for clients who live within a region that might be comprised of up to a dozen counties, and major employers can draw workers from several adjacent counties.

The need to regard transportation as a system has long been recognized in regard to automobile travel. Roads cannot stop (or change greatly in nature) at political boundaries. For this reason, counties, states and the federal government have stepped in to develop roads that meet regional, state and interstate needs. Streets, roads and highways are planned, funded, constructed and maintained as an interconnected system.

Increasingly, the same need exists in relation to public transportation. As regions develop, transit trips become more regional in nature and transit organizations need to be able to respond. New service needs to be provided in developing urban, suburban and rural areas. Trips between the city, suburbs, towns, and unincorporated rural areas need to be accommodated. The creation of a regional transportation agency can offer a number of important benefits that are summarized below.

A. Benefits to Riders

A primary rationale for creating a regional transportation agency is so that better service can be provided to the region's riders. If provided with adequate funding, new service can be provided in developing urban and suburban areas. If separate transit systems already exist in the region, e.g., a city bus system and a suburban bus system, or a separate system serving rural areas of different counties, the fares, routes and schedules of the two systems can be more easily coordinated or integrated. For example, rather than having to transfer to another vehicle at the city or county line and pay another fare, a rider may be able to stay on the same vehicle and pay only one fare.

A multi-county transit agency is able to more efficiently and effectively accommodate trips that cross county lines, trips that are quite common for purposes of medical services, employment, training programs, and special employment programs such as sheltered workshops. If the origin and destination of a rural transit trip is in two different counties that are serviced by separate transit systems, these inter-county trips require expensive, specialized human service transportation, or the inefficient transfer of clients from one van to another at the county borders.

An adequately funded regional agency may also be able to hold fares at a more affordable level. Transit authorities are not able to cover their costs from the farebox alone and without public subsidy fares can become quite high and/or service must be reduced.

A regional agency is better able to provide such rider benefits as a centralized travel information center where riders can obtain information on how best to get to where they want to go. It can also more effectively administer such regional programs as joint marketing, producing a regional travel map and route schedules, or certifying disabled persons for special dial-a-ride transit service. Another benefit is that a properly structured and funded regional agency can better provide non-traditional transit services such as carpooling assistance, vanpooling, or special services such as dial-a-ride service for elderly or disabled riders.

B. More Effective Regional Planning

Due to federal law and regulation, planning for public transportation and highways in metropolitan areas is now performed or coordinated by Metropolitan Planning Organizations (MPOs) as a condition for receiving federal funds. In addition to the MPOs, North Carolina law permits the creation of Rural Planning Organizations (RPO) among three or more counties. The RPOs function in a similar manner to the MPOs. There are already several RPOs chartered in the state with additional RPOs at the development stage. The MPO and RPO functions are greatly facilitated when there is a regional transportation agency that can develop a comprehensive regional plan for public transportation operations and investment. Moreover, with the increased need for developing a more balanced, multimodal transportation system, such an agency can provide a much stronger and more effective voice for an appropriate balance between highway and public transportation investments.

C. Ability to Address Regional Transportation Problems

A regional transportation agency can provide a more effective mechanism for addressing such important regional problems as traffic congestion and air pollution. Obviously, neither of these issues stops at political boundaries. Solutions are much more likely to be found at the regional level. To the extent that a regional agency is able to give people an alternative to the automobile and increase public transportation ridership, traffic congestion and air pollution are lessened. Moreover, public officials are recognizing that just building more streets and highways can't solve traffic congestion problems. A regional agency can work more effectively with regional highway officials to design and implement joint transit/highway improvements such as high-occupancy vehicle lanes and park-n-ride facilities.

Air quality is becoming an important issue in many regions for reasons beyond its obvious impact on public health. If a region is not meeting federal air quality standards, it faces a serious threat of losing federal highway funding. Furthermore, air quality problems are not isolated to only urban areas. Many mountainous, rural areas are losing their vistas and "view sheds" to smog, and the loss of these vistas means the loss of an important cultural and tourism asset.

D. Adequate Funding for Public Transportation

An important opportunity exists if the regional transportation agency is created with its own dedicated funding source. This can result in the following benefits:

- As discussed above, a regional agency, if adequately funded, can provide such rider benefits as coordinated or integrated fare systems, or new service in unserved or underserved urban, suburban or rural areas.

- It insures that the agency can provide matching funds for state and federal operating and capital grants.
- It can eliminate the need to solicit annual funding from the various local jurisdictions that are served, a process that can be both uncertain and difficult.
- The increased certainty of the local funding source can greatly facilitate long-range capital investment and service planning, and motivate cities, towns, and counties to join a regional system knowing that all participants will be able to contribute their fair share of financing.
- The stability created by an assured source of funds can even improve the ability of the agency to hire and retain qualified professional staff.

In addition to providing a dedicated funding source, a regional agency can more effectively compete for "flexible" federal transportation grants that can be used for either highways or public transportation.

E. Transportation and Land Use Planning

There is increasing recognition of the important link between transportation and land-use planning. Transportation affects land use and vice versa. The construction or improvement of a road or highway enables or promotes the development of certain kinds of automobile-related land use, which has typically been relatively low in density. The construction of a passenger rail line encourages the development of a different kind of land use, which may involve higher density of residential use, and may incorporate residential, commercial, and other uses within proximity of rail stations. Conversely, a certain type of land use can encourage or permit a certain type of transportation. For example, a residential development of single-family dwellings on one-acre lots will not facilitate the provision of transit service because the resulting low density does not create enough demand to support transit.

The great tendency, and some would say the great problem, has been that the preponderant use of automobiles in our society has led to undesirable and inefficient use of land, i.e., urban "sprawl". Land use planning has historically been mainly concerned with land uses that accommodate the automobile. As urbanized areas continue to grow, and land becomes increasingly scarce and expensive, many people are advocating greater use of public transportation in order to allow higher density and therefore more "efficient" land uses. An effective regional transportation agency can enable more integrated and balanced land use planning.

F. Operational and Administrative Economies

A regional system can provide many operating benefits as well. Duplicate routes or portions thereof can be eliminated thereby allowing the vehicles and drivers to be used elsewhere. Schedules of intersecting bus and paratransit van routes can be better coordinated. This coordination is especially valuable for public transit systems and human service agencies that must transport clients to regional medical centers that may be 50 to 100 miles away.

Some economies of scale can be realized by consolidating operating and maintenance facilities, and by developing uniform driver training and/or passenger safety and security programs. Systems for communicating with operating personnel, vehicles or the public can be consolidated. Savings and efficiencies can be realized by standardizing vehicles and equipment, thereby allowing

smaller parts inventories, more "interoperability" of equipment, and purchasing items in larger quantities.

There are also opportunities for administrative savings and efficiencies if such functions are consolidated in a single agency. It makes more sense, for example, to have a single purchasing department, information systems department, or personnel department, than to have several such departments in multiple agencies in the same area. This is especially true where these functions can be consolidated in a single physical facility.

Administrative savings are especially prevalent among small and rural multi-county transit systems. For example, a four-county transit system might have three administrative personnel, including a director, an administrative assistant, and finance technician. Conversely, four single-county transit systems with only a director and administrative assistant would employ a combined total of eight staff.

Most of the contacts from the case study sites believed that multi-county transit systems were more efficient than single-county systems. They believed that a proportionally smaller number of administrative staff could effectively manage and administer a system that operated in multiple counties, and that the consolidation of trip reservation functions, and vehicle dispatching, operations, and maintenance was more efficient in a multi-county system, as well. In order to check this assertion, the project team performed some simple analysis of community transportation systems' operational statistics to compare the cost basis of single- and multi-county transit systems in North Carolina. The average units cost of trips, service hours, and service miles were computed for single-county transit systems (68 Systems) and multi-county transit systems (six systems) for Fiscal Years 2001 and 2000. These three unit measures are the most commonly used measures when computing and comparing transit cost performance. Average costs were computed using total costs in each fiscal year, and administrative costs only for Fiscal Year 2001 because these costs figures were not available for Fiscal Year 2000. The results are summarized in Figure 2-1.

Figure 2-1: Comparison of Single- and Multi-County Cost Performance[2]

Performance Indicator	FY 2001		FY 2000	
	Single County	Multi-County	Single County	Multi-County
Total Expenses/Trip	$9.25	$9.01	$8.14	$7.81
Total Expenses/Service Hour	$25.52	$23.43	$23.39	$21.97
Total Expenses/Service Mile	$1.44	$1.21	$1.33	$1.06
Admin Expense/Trip	$1.37	$1.37	N/A	N/A
Admin Expense/Service Hour	$3.79	$3.57	N/A	N/A
Admin Expense/Service Mile	$0.21	$0.18	N/A	N/A

The multi-county transit systems consistently produce a lower cost per trip, service hour, and service mile except for the average administrative expenses per trip in Fiscal Year 2001, which are equal. There are certain hazards in analyzing data that has been stratified using only a single, general criterion, e.g., by single- and multi-county systems. For example, the single-county transit systems might be more urban in character than the six multi-county systems in North Carolina. This

[2] Information from *North Carolina Community Transportation Systems: FY 2000 Operating and Financial Statistics Report*, and *North Carolina Community Transportation Systems: FY 2001 Operating and Financial Statistics Report.*

urban character might add and subtract from the cost performance. On one hand, urban transit systems tend to have higher labor costs, and the origin and destination of passenger trips tend to be more centrally located in urban systems, resulting in higher vehicle load factors and lower performance costs. A more detailed analysis of this cost data to overcome these limitations is beyond the scope of this project. Nonetheless, it is worth of note that this simple cost analysis supports the belief of the case study contacts that multi-county transit systems are more efficient than their single-county counterparts.

In addition to potential savings in labor costs, there are also opportunities to develop and implement more efficient and effective programs at the regional level. For instance, the RTA in Chicago administers the "Transit Check" program (tax free vouchers for employers to give as an employee benefit) for the region rather than each Service Board having its own program. It also conducts regional marketing that benefits all of the carriers.

G. Building Rail Systems

A major advantage of a regional transit agency is its ability to plan, design, fund and build a regional rail system where such a system is justified by the nature of the region and the level of transit demand. Whether light rail, heavy rail, or commuter rail, rail service is likely to be regional in nature and to cross multiple political boundaries. In most cases, it is an unlikely prospect to fund and build such a system today without some kind of cooperation between multiple political jurisdictions.

H. Coordination or Consolidation with Special or Rural Public Transportation Services.

Human service transportation, which serves the needs of human service agency clients for medical, educational, social, or employment trips, operates in every county in North Carolina. In addition, an increasing number of counties provide transit service for the general public in rural areas. A regional transportation agency is able to more efficiently provide human service agency transportation, or to coordinate with the service provided by these agencies. This can provide many economies in the use of vehicles, drivers and maintenance personnel and facilities.

I. Developing Specialized Professional Staff

By centralizing administrative functions, a regional or multi-county agency is more likely to be able to justify and develop more specialized professional staff. A small, transit operator is often limited in its ability to hire professional staff such as legal, financial, planning, purchasing, human resources and marketing specifications. This limitation is especially prevalent among small, rural transit systems whose administrative staff often includes only a director and one administrative assistant. A regional agency with its larger size and more adequate funding can do so. This allows it to provide more sophisticated staff support and better manage the regional transit system. As mentioned above, it can also provide non-traditional transit programs such as carpooling and vanpooling that are not typically provided by small urban or rural systems.

J. Improved Department of Transportation Efficiency and Effectiveness

State Department of Transportation (DOT) staff are responsible for administering grants to, and ensuring the compliance with federal and state statutes of local public transportation systems.

The fewer the number of local transit systems, the less state DOT staff resources are required for administration. One means to reduce the number of local transit systems is to create regional systems, as has been done through legislation in several states (e.g., Iowa, Kansas, Tennessee) or through encouraging the formation of regional systems at the local level (e.g., Illinois, , Minnesota, Texas). The reduced number of local transit systems in these states has reduced the administrative burden of managing grant funding and regulatory programs, and organizing and delivering technical assistance.

For example, in Texas only 41 rural transit districts serve 254 counties, and in Tennessee eleven regional transit systems serve 95 counties. North Carolina has approximately 84 rural transit systems serving its 100 counties.

A smaller number of transit systems can also make organizing and implementing special projects easier and more effective for state DOT staff. These special projects or tasks might include intrastate and specialized public transportation, such as out-of-county medical transportation to regional medical centers, regional Intelligent Transportation Systems (ITS) activities, "511" Travel Info services, and connections to interstate transit services.

III. The Current Situation

A. Transit Systems in North Carolina

This chapter provides background information on the current status of North Carolina transit systems, funding programs, and state legislation related to transit systems.

Transit Systems in North Carolina

There are six distinct types of public transportation systems that currently operate in North Carolina: human service transportation, community transportation, urban transit, regional transit, vanpool and carpool programs, and intercity buses. This section provides a short description of each type of public transportation, and brief information on the number of existing systems and the range of operations sizes. Amtrak and state-owned intercity passenger trains and state-operated passenger ferries are considered public transportation and certainly complement the transit systems in many areas of the state. However, these transportation modes are not relevant to the presentation of this report, and therefore are not covered.

1. Human Service Transportation: Human service transportation systems work with local human service agencies to transport clients for medical, educational, employment, recreational, or other needs. They do not directly serve the general public. Human service agencies that are participating in the transportation system must designate that a client is eligible, and must have established a process for receiving and paying an invoice for the trip costs of the client. There is rarely a client fare, although many senior citizen clients whose transportation is financed using Aging Program funding (i.e., Home Community Care Block Grant with contains a large portion of federal Title III funding) are encouraged to make donations.

Core agencies that utilize human service transportation include:

- County social service departments serving Title XX, Work First and Medicaid recipients;
- Agency on Aging programs serving older adults in nutrition, adult daycare, senior activity centers, and medical and recreational transportation programs;
- County mental health departments serving sheltered or vocational workshops, and mental health programs; and,
- County health departments, and;
- Private, non-profit agencies such as veterans' organizations and nursing homes.

Many human service transportation systems serve only the clients of their particular organization. In some cases, two or more agencies have consolidated or coordinated their transit services through a lead agency to maximize use of resources and operations efficiency. This coordination effort can occur among different types of human service agencies in a single county, or among the same or differing types of agencies in two or more contiguous counties. Most of the six multi-county transit systems in North Carolina began operations as a consolidation of the client transportation programs of several counties whose social service or mental health departments had already consolidated their service delivery. The agencies directly provide the transportation service or contract operations to the public transit agency, a local transportation firm, or taxicab operator. Given the many ways in which government and private human service agencies organize transportation services, the number of human service agency transit systems in North Carolina is not known.

Compared to public transportation, human service transportation often includes a different mix of transportation modes and types of assistance. In addition to the use of traditional transit buses and vans to transport clients, these agencies offer gas vouchers to reimburse clients for their private transportation expenses, purchase and distribute taxicab and transit tokens to clients, and in certain cases provide money to repair private vehicles, to acquire needed automobile insurance, or to pay other private vehicle expenses. Funding has been used in a variety of other ways, including the purchase of used automobiles for the private use of clients.

The government social service agencies are administered at the state level by the North Carolina Department of Health and Human Service (DHHS) and at the local level by county social service, mental health, and public health departments. There is no regional administrative structure between the state and local level except some limited regional offices for vocational rehabilitation and regional council of government offices (COG) that generally administer local funding for the Home and Community Care Block Grant (Aging program).

Most of the funding programs used for human service transportation, such as Title XX, Home and Community Care Block Grant, and Work First, use block grants. As a result, expenditures on client transportation reduce the level of funding available for other services financed by the block grant, and vice-versa. However, Medicaid, usually the single largest human service transportation program, is an exception. Medicaid is not a block or other type of grant, but rather an entitlement in which eligible clients (e.g., not all Medicaid clients are eligible for transportation services) must receive services and the providing agency must be reimbursed for those services according to specified guidelines. As the number of Medicaid recipients or demand for Medicaid transportation increases, program expenditures increase without regard to any grant limit, etc.

Given the need to coordinate transportation services among human service and community transportation systems, the Human Service Transportation Council (HSTC) was established in 1991 by Executive Order of the Governor for the purpose of instituting statewide human service transportation policy. The HSTC meets three to four times per year and is comprised of representatives from the North Carolina Departments of:

- Transportation;
- Health and Human Services;
- Environment and Natural Resources;
- Administration;
- Public Instruction;
- Commerce;
- The North Carolina Head Start Association; and,
- The North Carolina Association of County Commissioners.

The primary function of the HSTC is to address problems, concerns and opportunities regarding the provision of human service transportation, and provide policy recommendations for service enhancement and coordination. The increasing level of transportation coordination among public transit and human service agencies, and the growing use of funding programs with "fewer strings attached" have augmented the importance and influence of the HSTC.

2. Community Transportation Systems: Community transportation systems provide transportation for human service agency clients and members of the general public in rural areas. These systems were previously referred to as Section 5310 systems (Elderly and Persons with Disabilities) and Section 5311 systems (Non-urbanized Area Formula, or General Public) program. However, as permitted by federal transportation legislation, North Carolina has created a single program called Community Transportation by combining funding from both programs. These

systems integrate the two types of services using the same fleet of vehicles, and often have agreements or contracts with human service agencies to provide Medicaid, Senior, Work First and other human service client transportation that is reimbursed at an established rate.

There are 78 community transportation systems in North Carolina. All are single-county systems with the exception of the six multi-county systems described in other sections of this report. One system, AppalCART, also operates as a small urban system because it provides services for rural areas of Watauga County and also operates fixed- route service in the city of Boone. Most community transportation systems provide at least some rural general public transportation. However, six systems do not provide general public transportation, and therefore are often referred to as human service transportation systems.

Most community transportation systems provide demand-responsive transportation services, which must be prearranged by an individual, group or human service agency. Demand-responsive transportation systems usually transport passengers between their residence and destination (i.e., curb-go-curb and door-to-door service). Deviated fixed- route service may also be operated, in which vehicles deviate from defined routes and schedules to pick up and drop off clients at their home, destination, or a bus stop.

Most North Carolina community transportation systems directly provide their services. However, some systems contract service provision to a private or public transit operator, or in some cases broker services to several contract operators that offer different modes and levels of transportation to more appropriately match specific service needs with operations type.

In terms of system service levels, North Carolina has a wide range among the 78 community transportation systems. Tyrrell County, one of the smallest systems, provided 13,312 passenger trips using two peak hour service vehicles in FY 2001. In the same year, Mecklenburg County and AppalCART provided 412,690 and 619,627 passenger trips using 31 and 25 peak hour vehicles, respectively. Figure 3-1 provides service levels for five categories of rural public transit systems in North Carolina. These are not official categories, but have been developed using passenger trips as the only criteria for purposes of illustrating the variety of system sizes.

Figure 3-1: North Carolina Rural Public Transportation Systems: Service Levels, Fiscal Year 2001[3]

Category	Number of Systems	Passenger Trips	Peak Vehicles	Service Miles	Service Hours	Miles per Trip
1	8	12,735 – 26,820	2 - 8	29,704 – 216,354	1,820 – 11,808	2 - 14
2	31	32,565 – 59,544	7 - 17	105,882 – 471,557	7,350 – 29,543	2 - 11
3	21	64,244 – 99,316	10 - 30	358,313 – 931,355	23,950 – 53,177	4 - 10
4	12	100,902 – 144,784	11 - 34	338,314 – 1,389,317	19,603 – 71,405	3 - 11
5	6	213,381 – 619,627	26 - 76	482,477 – 2,468,950	36,093 – 138,976	1 - 8

[3] Information from *North Carolina Community Transportation Systems: FY 2001 Operating and Financial Statistics Report.*

3. Metropolitan Transit Systems: Urban transit systems in North Carolina provide traditional fixed-route and demand-responsive services, and are increasingly referred to as metropolitan transit systems. Fixed-route service typically uses buses and operates according to a set schedule. Demand-responsive service requires prospective riders to request service in advance by calling to schedule a specific pickup location, boarding time and destination within the system's service area. The federal Americans with Disabilities Act of 1990 (ADA) mandates that urban transit systems that offer fixed-route service must provide complementary paratransit services for people with disabilities who are unable to use the fixed-route system. All of North Carolina's metropolitan transit systems offer demand-responsive services to meet this requirement.

Some North Carolina metropolitan transit systems offer services unlike these traditional modes. For example, the Greensboro Transportation Authority (GTA) offers deviated fixed-route service in the evening that allows clients to request a pick up at bus stops that are not designated as time points. Charlotte Area Transit System and Wilmington Transit Authority, among others, offer shuttle and connector services that operate only in designated neighborhoods and sections of the cities. At least three metropolitan transit systems coordinate vanpool services, and some transit agencies such as Charlotte Area Transit System and Chapel Hill Transit operate park-and-ride lots.

There are seventeen metropolitan transit systems operating in North Carolina. Charlotte Area Transit System is by far the largest North Carolina transit system, providing almost 13 million passenger trips using 163 peak hour vehicles in Fiscal Year 2000. There are five medium-sized urban systems, including those in Greensboro, Winston-Salem, Chapel Hill, Raleigh, and Durham, that provided approximately 1.5 million to 3.5 million passengers trips in the same year, using 22 to 45 peak hour vehicles. Small urban transit systems also operate in Asheville, Boone, Fayetteville, Gastonia, Greenville, Hickory, High Point, Rocky Mount, Salisbury, Wilmington, and Wilson. Figure 3-2 provides service level information for all the North Carolina urban transit systems.

Figure 3-2: North Carolina Urban Public Transportation Systems: Service Levels for FY 2000[4]

System	Passengers	Peak Vehicles	Service Miles	Service Hours
Salisbury	163,787	3	130,278	9,569
Hickory	166,347	4	169,984	11,691
Greenville	190,624	4	178,688	13,115
Wilson	201,662	4	158,212	10,490
Rocky Mount	271,765	4	182,081	13,198
Gastonia	483,991	6	296,931	20,949
Triangle Transit	619,520	36	1,357,432	61,472
High Point	831,164	12	388,656	28,518
Fayetteville	1,027,512	19	829,276	60,076
Asheville	1,132,340	12	575,391	42,173
Wilmington	1,159,024	12	512,257	39,228
Greensboro	1,588,682	22	918,429	70,418
Winston-Salem	2,712,180	43	1,362,276	121,618
Chapel Hill	2,916,276	45	1,261,476	93,537
Raleigh	3,248,980	43	1,706,928	132,198

[4] Information from *North Carolina Operating and Financial Statistics for Urban, Regional, and Small Urban Public Transportation Systems, FY 2000. Note: information for fixed-route service only; paratransit service information not included.*

System	Passengers	Peak Vehicles	Service Miles	Service Hours
Durham	3,557,570	29	1,823,735	136,771
Charlotte	12,941,217	163	6,637,460	480,449

**Note: Statistics in the table are for fixed route services only; does not include paratransit services.

Three major approaches to operations and management exist among North Carolina's urban transit systems. Several cities, including Raleigh, Winston-Salem and Greensboro, contract the operation of all their vehicles to outside management companies. Others, like High Point and Greenville, operate their vehicles directly. And still other cities use a combination of direct and contracted operations, maintenance and management. Publicly operated transit systems do not employ unionized workers because state law prohibits public agencies in North Carolina from collective bargaining. However, in cases where public systems contract with a private management company for day-to-day operations, the management company frequently may bargain with unions that represent drivers and other workers.

4. Consolidated City-County Transit Systems: Four metropolitan transit systems have consolidated or are consolidating their urban and rural public transportation services:

- The Piedmont Wagon Transportation System provides general public service for the City of Hickory, Catawba County, and several small towns, and human service transportation for Catawba County.
- Rocky Mount Transit provides service for the City of Rocky Mount and the Nash Edgecombe Transportation Service (NETS).
- The City of Goldsboro and Wayne County have consolidated their urban and rural transit services into the Goldsboro-Wayne Transportation Authority, operating as Gateway.

The financial characteristics of urban transit operations vary by the size of the system. Generally, state funding represents one of the smaller portions of total operating revenues. However, for smaller systems that have relatively small local contributions and limited federal funding, state funding makes up a greater proportion of total funds. With some exceptions, approximately equal percentages of federal funding, fare receipts, and local assistance provide most revenue for urban transit operations.

5. Regional Transit Systems: While there are two regional public transportation authorities in North Carolina, the Triangle Transit Authority (TTA) is currently the only regional system operating transit services in the state. The Piedmont Authority for Regional Transportation (PART) is to begin intercity transit services in October 2002. TTA operates fixed- route bus service within the Research Triangle metropolitan region to connect Raleigh, Durham, Cary, Chapel Hill and nearby suburbs with the Research Triangle Park, Raleigh-Durham International Airport, and other employment centers. TTA also operates commuter shuttle services within Research Triangle Park, vanpools, ridesharing services, and park-and-ride lots. TTA bus routes, which are designed to primarily serve commuter demand, connect with the region's three urban transit systems operated by Raleigh, Durham and Chapel Hill.

TTA is working toward regional commuter rail service scheduled to begin operation in 2007. The first phase of the commuter rail system will use existing railroad rights-of- way to connect Durham, Research Triangle Park, Morrisville, Cary, Raleigh and North Raleigh. Long-term proposals extend service to suburban areas, Chapel Hill, and the Raleigh-Durham International Airport.

Most of TTA funding originates from local revenues, including passenger fare receipts and a motor vehicle registration fee of $5 per vehicle collected within the system's three-county primary service region of Orange, Durham and Wake counties.

In 1997 the North Carolina General Assembly approved enabling legislation to form a regional transportation authority in the Piedmont Triad Region of North Carolina. In 1998, the Piedmont Authority for Regional Transportation (PART) formed a Board of Trustees who developed work and business plans, and assembled staff to begin the planning of PART transportation activities. The authority is a government agency with all the powers of a city or county except for the power to regulate land use or to set tax rates. PART's jurisdiction includes the counties of Guilford, Alamance, Randolph, Forsyth, Davidson, and Rockingham, and the cities of Greensboro, Winston-Salem, High Point, and Burlington. There are three urban transit systems currently operating in this jurisdiction, including the Greensboro Transit Authority (GTA), Winston-Salem Transit Authority (WSTA), and High Point Transit, and each county has a community transportation system operating in their rural areas. The Piedmont-Triad International Airport Authority also operates in this service area.

PART has two principal characteristics that set it apart from other regional authorities such as the TTA. First, its mission to provide transportation services is broader than transit. In addition to several transit projects, PART offers vanpool, carpooling, and ride matching services (operating under the name RSVP), and plans to construct up to five regional park-n-ride lots to serve carpooling and transit commuters. The system is presently conducting an "Airport Area Transportation Study," and two separate rail feasibility projects related to a regional rail MIS system and regional intercity rail service.

Second, PART views its mission to fortify the cooperation of transportation and transit agencies in the region, and therefore is unlikely to create a large staff or directly provide many services. The authority tends to work with urban transit systems, community transportation systems, city transportation departments, and other authorities (e.g., Piedmont-Triad International Airport Authority) to initiate and provide services.

In addition to the non-transit services identified, PART plans to initiate several public transportation services within the near future. The authority plans to develop a Web-based service to help area community transportation systems coordinate service trips outside of their service areas, begin operating (through an operations subcontractor) public transportation between the cities of Greensboro, Winston-Salem, and High Point, and to initiate a pilot project for regional out-of-county non-emergency medical transportation.

On April 1, 2002, a 5 percent tax on automobile and motorcycle leasing went into effect for Guilford and Forsyth counties. This revenue supports PART administration and planning functions, provides grant-matching funds, and supports the PART regional bus service to be operated between Greensboro, Winston-Salem, and High Point. Note that funding from member cities and the state support the RSVP vanpool and carpool services administrative costs. The remaining revenue sources are usually directed at a specific project. The Federal Highway Administration (FHWA) awarded PART $3.5M in Congestion Mitigation Air Quality (CMAQ) funds to build five park-n-ride lots, and PART received federal grants to conduct the two rail studies. Funding from member cities and the state supports the RSVP carpooling and vanpooling services, administrative costs. Federal grants support the two rail studies, and PART recently received a grant from the NCDOT to coordinate out-of-county non-emergency medical transportation.

Although the Charlotte Area Transit System (CATS) is not a regional transit system by name, the system provides services that are regional in scope. In addition to serving Mecklenburg County and six suburban towns within the county, CATS provides contract service (Commuter Express) to surrounding counties. These services are provided to: the City of Concord in Cabarrus County; the City of Gastonia in Gaston County; the Town of Rock Hill in York County, South

Carolina; and the Town of Mooresville in Iredell County (currently planned, but not operational). A transit link with Union County is also envisioned. CATS and the City of Charlotte plan to develop five transit corridors. Some of these corridors and their services may extend well beyond Charlotte and into the region. For example, the North Corridor will extend approximately 30 miles from Charlotte to Mooresville in Iredell County. CATS contract services are commuter express services.

6. Intercity Bus Service: Intercity bus service is one of a few remaining examples of privately owned and operated public transportation in North Carolina. Most intercity routes are concentrated in the densely populated corridor from Charlotte to Greensboro and Raleigh, with slightly less-intensive service along major highway routes in eastern North Carolina. Intercity buses provide connections to cities and towns in neighboring states and throughout the United States and Canada. Greyhound Lines Inc. and Carolina Trailways are the two largest intercity bus systems currently operating in North Carolina.

The NCDOT provides operating assistance for a few Carolina Trailways routes in eastern North Carolina that are deemed critical but would be abandoned by the carrier without the financial assistance. Travelers' Aid programs around the state also receive federal funds each year to match 50 percent local funding to purchase intercity bus tickets for travelers in need.

B. Transportation Grant Programs

This section presents information on federal and state transportation grant programs. Rural public transportation grant programs include the federal TEA-21 Section 5310 and Section 5311 programs, and the North Carolina Community Transportation Program (CTP), Rural Operating Assistance Program (ROAP), Rural Capital Program, and Human Service Transportation Management Program.

Metropolitan transit grant programs include the federal TEA-21 Section 5303, Section 5307, and Section 5309 programs, and North Carolina State Maintenance Assistance Program (SMAP), State Capital Match Program, and Rideshare Program.

The section concludes with a brief discussion of federal Congestion Mitigation and Air Quality (CMAQ) funding, and the important advantages a dedicated funding source can provide to a regional transit system.

Rural Public Transportation Grant Programs

1. Federal Rural and Small Urban Area Transit Grant Programs

Elderly and Persons with Disabilities (Section 5310): The goal of the federal Section 5310 program is to improve mobility for elderly persons and persons with disabilities throughout the country. This includes persons living in urban, small urban and rural areas. Section 5310 provides funding for:

- Capital expenses, including vehicles, facilities and real estate.

The program does not provide funding for operational expenses, including salaries for employees' time while engaged in operational functions, drug and alcohol testing, and insurance. North Carolina transfers its entire Section 5310 apportionment to the Section 5311 program.

Non-urbanized Area Formula Program (Section 5311): The principal goals of the federal Section 5311 program are to enhance the access of people in non-urbanized areas to health care, shopping, education, employment and public services, and to assist in the maintenance, development, improvement and use of public transportation in rural areas. Section 5311 provides funding for the same uses listed above for the Section 5310 program plus administrative expenses, but the state must use 15 percent of its annual apportionment to support intercity bus service, unless the Governor certifies that this need is already being met. This program provides the largest portion of the CTP funding.

2. State Rural and Small Urban Area Transit Grant Programs

Community Transportation Program (CTP): The NCDOT Public Transportation Division (PTD) receives applications from local transit systems for the Community Transportation Program (CTP). The CTP provides state and federal capital, administrative and training funding to local transit systems—a large portion of this funding originates from federal grant programs. The PTD combines the funding from the following federal programs into the single CTP application package:

Rural Capital Program: This state program supports transportation expenses for rural general public and human service agency clients. Federal regulations for determining capital costs can be used to determine which costs are eligible for the Rural Capital Program. There is no statute that specifically creates, funds and governs the Rural Capital Program. The North Carolina General Assembly approves funding for the program as part of the annual budget process.

Other state public transportation programs have been used to provide funding for the CTP; these programs include:

- Human Service Transportation Management (HSTM) Program;
- Rural Facility Program;
- Facility Improvement Program; and
- Technology

Combining these state and federal programs into a single grant program at the state level has proven to simplify and streamline the overall application process for both the local systems and the PTD, and to encourage greater transportation coordination among local agencies. In addition, the federal funding is essentially incorporated into a single pool, and as such, provides the PTD with greater flexibility to use the funding more effectively.

The general requirements for eligibility are as follows:

- The applicant must have an up-to-date Community Transportation Improvement Plan (CTIP).
- The applicant must comply with several federal requirements such as the Drug and Alcohol Testing Policy and Program.
- There is to be no more than one applicant per county. If the applicant represents more than one county, then the lead agency, as designated in the CTIP, must be the applicant.

Funding is discretionary and allocated according to the needs of the transit system. For example, the system's current and expected level of service (e.g., number of trips, vehicles, vehicle miles) are determined and administration funding is allocated based on this level. The age of the vehicle fleet and level of service are important in determining capital needs.

The majority of the CTP program funds the administration, capital, and employee development needs of community transportation systems that provide human service and/or rural general public transportation. However, some CTP application funding is provided to:

- Subsidize several Carolina Trailways routes to rural locations;
- Support Travelers' Aid for low-income persons, and;
- Organize community transportation systems where services currently do not exist.

The two principal funding programs for North Carolina rural public transportation systems are the Community Transportation Program (CTP) and Rural Operating Assistance Program (ROAP). These funding programs are a consolidation of several similar state and federal transit grants programs, and are targeted to different transit expenses and recipient agencies. Figure 3-3 compares several elements of these two programs:

Figure 3-3: Comparison of Community Transportation and Rural Operating Assistance Programs

Program & Eligible Expenses	Eligible Recipients	Funding Source
CTP Administrative -- administrative staff salary, especially for service coordination, and other administrative expenses. Capital -- vehicles, equipment and facilities. Training – especially training specified in the CTIP.	Municipalities, other political subdivisions, public or private non-profit agencies, higher learning institutions and certain. Indian Tribal governments.	• Federal Section 5310. • Federal Section 5311. • State Capital Program.
ROAP Operations -- expenses related directly to operations such as driver salary and fuel.	County, which may sub-allocate to transit system.	• Elderly and Disabled Transportation Assistance Program (EDTAP). • Work First Transitional Employment. • Rural General Public (RGP) Program.

Rural Operating Assistance Program (ROAP): The Rural Operating Assistance Program (ROAP) consolidates the application processes for three state-funded rural transit operations programs into a single application. The three programs are:

- Elderly and Disabled Transportation Assistance Program (EDTAP)
- Work First Transitional/Employment Transportation Assistance Program
- Rural General Public (RGP) Program

Although the application process has been consolidated, policies and procedures continue to vary among the three programs. Figure 3-4, *ROAP Policies and Procedures*, presents the principal policies and procedures for each of the three ROAP programs. In the case of regional systems, if one county is willing to be the guardian of the funds, then only that county needs to apply on behalf of the public transportation system. That county is then responsible for the local match and reporting.

Figure 3-4: ROAP Policies and Procedures

Policy	EDTAP	Work First/Employment	RGP
Eligible Recipient	All 100 North Carolina counties.	All 100 North Carolina counties.	Counties whose transportation system provides transportation services to the general public and tribal areas
Goals	Allow these citizens to reside for a longer period in their homes, as opposed to residing in costly care facilities. Enhance quality of life for these citizens, and protect citizens' financial solvency.	Bridge the transportation gap from the time an individual is no longer eligible for TANF until they subsequently establish sufficient income to provide their own transportation. Help the general public from entering public assistance programs because they lack adequate employment transportation.	Offer transportation options to rural citizens who may not be eligible for other funding programs.
Client Eligibility	Elderly person (person 60 years of age or older), and disabled persons. Each county establishes eligibility requirements within these boundaries.	Transitional Work First client or general public employment transportation need. Cannot be currently eligible to receive Temporary Assistance for Needy Families (TANF) benefits.	Individual who is not a human service client and resides in a rural area.
Funding Transfer Among Programs	No. Funding may not be transferred to other programs, including other ROAP programs.	Yes. Funding may be transferred to other ROAP programs as long as there is not demand for this funding among eligible clients.	No. Funding may not be transferred to other programs, including other ROAP programs.
Funding Transfer Among Counties	Yes. Regional public transportation systems may transfer funding among counties in their system.	Yes. Regional public transportation systems may transfer funding among counties in their system.	Yes. Regional public transportation systems may transfer funding among counties in their system.
Funding Allocation	Formula.	Formula.	Formula and discretionary.
Sub-allocation	County has full discretion for sub-allocation.	County may only sub-allocate to Department of Social Services and/or Community Transportation System.	County may only sub-allocate to Community Transportation System.
Eligible Expenses	Cost of trip or tickets for public, private and volunteer transportation.	Cost of trip or tickets for public, private and volunteer transportation. Also gasoline for program-related trips in personal vehicle, and maintenance and repairs to personal vehicle.	Cost of trip or tickets for public, private and volunteer transportation.

Urban Public Transportation Grant Programs

1. Federal Urban Transit Grant Programs

The PTD is responsible for administering three major federal transit programs that are focused on urban systems. These three urban transit programs are:

- Planning Work Program (Section 5303): MPO and/or designated recipients use these funds for transit and thoroughfare planning.
- Urbanized Area Formula (Section 5307) for Governor's Apportionment: Urban transit systems use these funds for capital, operations, and planning expenses.
- Discretionary Capital Program (Bus), Section 5309: Urban transit systems use these funds for capital expenses.

Figure 3-5, *Major Federal Urban Transit Programs: Principal Policies & Procedures*, presents the principal policies and procedures for each of the three urban programs, and enables the reader to view the similarities and differences among the programs.

The urban transit systems are divided into two categories, based on population, that determine the funding allocation and administration procedures:

- Direct Apportionment (DA) – Areas with a population of over 200,000, such as Charlotte, receive funds directly from the FTA. North Carolina also receives a statewide earmark of Capital Investment Program funds, which are made available to urban transit systems for bus and bus facility projects through direct grants with the FTA.
- Governor's Apportionment (GA) – Funds are allocated by NCDOT on behalf of the Governor to urbanized areas with a population of under 200,000.

Figure 3-5: Major Federal Urban Transit Programs Principal Policies and Procedures

Policy	Metropolitan Planning Program (5303)	Urbanized Area Formula Program – Governors Apportionment (5307)	Discretionary Capital Program -- Bus (5309)
Goals	Provide transportation planning funding to urban areas with populations of 50,000+ to develop multi-modal, efficient transportation systems to move people and goods.	Provide capital, operating and planning assistance in urbanized areas to support and expand public transportation.	Provide capital acquisition funding to urban areas with populations of 50,000+ for major capital needs.
Eligible Applicants	Metropolitan Planning Organizations apply to NCDOT, but member municipalities enter into grant contract. NCDOT consolidates into statewide application to FTA.	Public body designated by MPO. In practice, municipalities and authorities throughout the state.	Public bodies: State receives earmark and authorizes municipalities to apply for funding.
Eligible Uses of Funding	Transit and/or thoroughfare planning. Cannot be used for non-planning tasks.	Operations, capital purchases and planning studies.	Purchase and rehabilitation of vehicles and facilities.
General Requirements	Funding tasks must be identified in locally adopted Planning Work Program (PWP) and Transportation Improvement Plan.	Projects must be identified in local Transportation Improvement Plan, and State Transportation Improvement Plan. Must have DBE program.	Projects must be identified in local Transportation Improvement Plan, and State Transportation Improvement Plan. Must have DBE program.
Allocation Formula	State responsible for allocation formula. Currently, the sum of: Hold Harmless amount from FY 1991. Additional 20% of Hold Harmless amount for urban areas with 200,000+ population. Transit Service Hours.	GA systems: Each area "earns" funding for the state based on population and population density, then NCDOT allocates based on PTD recommendations. DA systems: Funds are appointed to urbanized area.	The State is responsible for allocating funds earmarked for NC. Current priority order is: • Replace existing system vehicles. • Complete facilities. • Expand system vehicle fleets. • Start new facilities. Some systems may receive "earmarked" allocation directly from federal legislation.
Allocation Authority	PTD makes recommendation, and NC Board of Transportation approves Resolution.	NC Board of Transportation approves PTD allocation formula for GA areas.	PTD makes recommendation, and NC Board of Transportation approves Resolution.
Application Receipt	Urban areas apply to PTD.	Designated recipients apply directly to FTA.	The state receives an "earmarked" appropriation and allocates funds to urban transit systems that apply directly to FTA.

Policy	Metropolitan Planning Program (5303)	Urbanized Area Formula Program – Governors Apportionment (5307)	Discretionary Capital Program -- Bus (5309)
Sub-Allocation	MPO-designated recipient can use funds to contract for planning services, but cannot sub-allocate funds to another entity.	Services, etc. can be purchased from another entity.	Cannot sub-allocate funds to another entity. Can purchase vehicle, facilities, etc. that are used by service contractor to provide transportation services.
Disbursement to Sub-Recipient	Municipality makes Request for Reimbursement to PTD using provided invoice forms.	Only 10 percent state match on certain items.	
Certifications	Must submit appropriate Resolution signed by MPO Transportation Advisory Committee.	Nothing required to be sent to PTD.	
Additional Policies		Specific policies are still evolving and being negotiated with FTA. For example, the transfer of funding between DA and GA systems.	The U.S. Congress may earmark funding for specific North Carolina systems. In this case, the system applies directly to the FTA Regional office for project approval and reimbursement.

2. State Metropolitan Transit Grant Programs

The PTD is responsible for administering several state transit programs that are focused on urban systems. The most significant of these programs are:

- State Maintenance Assistance Program (SMAP): Urban transit systems can use these funds for operating, preventive maintenance, and ADA paratransit expenses.
- State Capital Match Program: Urban transit systems can use these funds mostly for purchasing vehicles and facilities. State Capital Match Program is used for a state 10 percent match to federal grants for purchasing revenue vehicles and building bus and passenger facilities. This program no longer provides a match for items such as computers, shop equipment, spare parts, and passenger shelters.
- Rideshare Program: Urban areas are to use this funding to initiate and administer rideshare programs.

Figure 3-6, *Principal Policies & Procedures for State Urban Programs*, presents the key information for these three programs, and allows the reader to compare the similarities and differences among the programs.

Figure 3-6: Major State Urban Transit Programs Principal Policies and Procedures

Policy	State Maintenance Assistance Program	State Capital Match Program	Rideshare Program
Goals	Provide assistance to regional, urban and small urban areas with transit operations costs for fixed-route and dial-a-ride services that are not covered by federal funding.	Provide funding to match federal grants for urban systems to purchase vehicles and facility assets.	Provide assistance to urban and small urban areas to implement and administer Rideshare programs. Rideshare helps to reduce peak travel congestion and offers a travel alternative to driving alone.
Eligible Applicants	Urban and small urban governments, and other public bodies (authorities) that provide fixed-route transit services.	Urban and small urban governments, and other public bodies (authorities) that provide fixed-route transit services.	Existing Rideshare programs currently include: Charlotte; Triangle Transit Authority and R.S.V.P. (Triad Area). Number of eligible applicants may increase as the Rideshare program merges or increasingly coordinates services with the broader-based TDM programs.
Eligible Uses of Funding	Operating expenses only -- as defined in FY97 Section 5307 program. Thus, preventive maintenance and ADA paratransit expenses, which are defined as capital eligible expenses in federal grants, are SMAP eligible.	Used as local match for federal capital grants. Under certain circumstances, funding can be used for non-capital expense.	Appropriated in biennial budget as part of general appropriation -- there is no line item. Governed by N.C. General Statutes, Article 2B of Chapter 136.
General Requirements	• Local operating assistance amount must be at least equal to the FY93 level of support. (No more SMAP money provided than local grant money) • SMAP funds cannot exceed the total local government funding for transit • Funding cannot be used as match for other state or federal programs. • Cannot cover net operating deficit that is already covered by other grant program, e.g., federal Section 5307.	State funds are available after federal funds are approved and allocated.	Provide assistance to urban and small urban areas to implement and administer Rideshare programs.

Policy	State Maintenance Assistance Program	State Capital Match Program	Rideshare Program
Allocation Formula	• 60% based on passenger and service hour performance criteria. • 30% based on system's share of total local revenues. • 10% distributed in equal shares.	Based on PTD recommendations.	No allocation formula. Rideshare programs apply for funds each year. PTD considers the rideshare system's previous budget, program goals and work plans, service trends indicated in the Ridesharing Statistics Report, state funding, and any available federal funding. Up to 50 percent of non-federal costs to administer the programs are provided by the state.
Allocation Authority	PTD makes recommendation, and NC Board of Transportation approves Resolution.	PTD makes recommendation, and NC Board of Transportation approves Resolution.	PTD makes recommendation, and NC Board of Transportation approves projects.
Application Receipt	All municipalities apply to PTD.	All municipalities apply to PTD.	Systems apply to PTD.
Sub-Allocation	Municipality can use funds to contract for operations services, but cannot sub-allocate funds to another entity.	Municipality can use funds to purchase vehicles, equipment, etc. that are operated by contractors, but cannot sub-allocate funds to another entity.	System cannot sub-allocate funding, but may use funding for administrative contracts.
Disbursement to Sub-Recipient	Funds are disbursed all at once after state budget is approved.	Applicant makes Request for Reimbursement to PTD using provided invoice forms.	System submits Request for Reimbursement.
Certifications	Cover letter and Certified Statement signed by city manager and mayor (except, AppalCART and TTA authority chairs sign).	Municipal resolution for contract.	Resolution submitted with contract.
Policy Authority	North Carolina Board of Transportation approved allocation formula, and Annual Program Guidance developed by PTD Metropolitan Section.		

Federal CMAQ and STP Flexible Funding

Federal transportation legislation permits transferring certain funds between transportation programs--this process is often called "flexing." State and local officials can choose to transfer funds from programs administered by the FHWA, such as Congestion Mitigation and Air Quality Improvement (CMAQ) and Surface Transportation Program (STP), to the FTA for transit projects. While funding can be redirected from many federal highway programs, CMAQ and STP are the two principal programs involved in such transfers. These funds may be redirected to the following transit programs:

- Urbanized Area Formula Program (Section 5307).
- Elderly and Persons with Disabilities Program (Section 5310).
- Non-Urbanized Area Formula Program (Section 5311).

Most recently, as a result of the FY1999/2000 biennial budget legislation, the N.C. General Assembly instructed the NCDOT to affect the transfer of $10 million in flexible FHWA funds to urban transit programs in North Carolina for Charlotte and Triangle Transit Authority (TTA) New Start projects. The requirement to use flexible federal funds to match new start grants is no longer a requirement in the current state budget. Figure 3-7, CMAQ and STP Flexible Funding, provides details on the use of these funds for transit purposes

Figure 3-7: CMAQ and STP Flexible Funding

Policy	Congestion Mitigation and Air Quality Improvement	Surface Transportation Program
Goals of Transfer ("flex")	Provide state and local decision-makers greater flexibility in using federal transportation funding and encourage broader, multi-modal solutions.	Provide state and local decision-makers greater flexibility in using federal transportation funding and encourage broader, multi-modal solutions.
Eligible Applicants	Public bodies in ozone and carbon monoxide (air quality) non-attainment and maintenance areas (as designated by the Environmental Protection Agency).	Public bodies
Eligible Uses of Funding	Several activities eligible under the Urbanized Area Formula Program (Section 5307) that improve air quality.	Any capital expenditure that is eligible under the Urbanized Area Formula Program (Section 5307).
General Requirements	• Funding tasks must be identified in local Transportation Improvement Plan, and State Transportation Improvement Plan. • Although funding transferred to Section 5307, pertinent CMAQ requirements carryover. • DBE required.	• Funding tasks must be identified in local Transportation Improvement Plan, and State Transportation Improvement Plan. • Although funding transferred to Section 5307, pertinent STP requirements carryover. • DBE required.
Allocation Formula	• For funding redirected by General Assembly on statewide level, PTD makes recommendations to NC Board of Transportation	MPO can redirect part of MPO's STP allocation to transit.

Policy	Congestion Mitigation and Air Quality Improvement	Surface Transportation Program
Allocation Authority	• MPO redirects CMAQ funding to transit as permitted in Title 49, U.S. Code, Chapter 53. • PTD makes recommendation, and NC Board of Transportation approves projects.	• MPO redirects STP funding to transit as permitted in Title 49, U.S. Code, Chapter 53. • PTD makes recommendation, and NC Board of Transportation approves projects.
Sub-Allocation	System cannot sub-allocate funding to another entity but can contract for services and lease vehicles and equipment.	System cannot sub-allocate funding to another entity but can contract for services and lease vehicles and equipment.

Dedicated Funding

The city in the service area of the metropolitan transit system provides most of the local transit funding from their general revenues. However, three urban systems (TTA, PART, Charlotte Area Transit System) have dedicated funding sources outside of the local general revenues.

In 1991, the NC General Assembly, subject to County approvals, authorized TTA to levy a vehicle registration tax of up to $5 per registration. This tag tax finances the regional bus operations, ridesharing, and planning programs. In 1997, the General Assembly, subject to County approvals, authorized the TTA to levy a rental vehicle tax of up to 5% of gross receipts. This tax will finance the first phase of the Regional Transit Plan. PART is also authorized to levy these two taxes.

On April 1, 2002, a 5 percent tax on automobile and motorcycle rentals went into effect for Guilford and Forsyth counties. This revenue supports PART administration and planning functions, provides grant matching funds, and supports the PART regional bus service to be operated between Greensboro, Winston-Salem, and High Point.

North Carolina General Statute G.S. 105 - 505 to 510 permits Mecklenburg County to hold a referendum on a tax for transit. In November 1998, the residents of Mecklenburg County approved a one-half cent increase in the local sales tax to fund new transit operations throughout the County. The General Statute requires that the existing funding of transit services, at the 1997-1998 level (FY98), provided by the county, city and towns continue, and that the tax revenues be applied toward new and expanded transit services.

No rural public transportation systems now operating in North Carolina receive funding from a dedicated source.

C. North Carolina Legislation

There are three North Carolina statutes that specifically permit the creation of regional transportation authorities:

- Public Transportation Authorities Act (Chapter 160A, *Article 25;* 1977)
- Regional Public Transportation Authority Act (Chapter 160A, *Article 26;* 1989)
- Regional Transportation Authority Act (Chapter 160A, *Article 27;* 1997)

In general, these statutes allow several counties, or parts of counties, to create a regional transportation authority in order "to operate public transportation systems and to enter into and perform contracts to operate public transportation services and facilities, and to own or lease property, facilities and equipment necessary or convenient therefore."

The Public Transportation Authority Act (PTA Act) was passed in 1977 and has been used to create several of the multi-county *rural* authorities such as the Choanoke Public Transportation Authority and the Kerr Area Transportation Authority. The Regional Public Transportation Authority Act (RPTA Act), passed in 1989, was used to create the Triangle Transportation Authority (TTA) in the Raleigh/Durham/Chapel Hill region. The Regional Transportation Authority Act, passed in 1997, was recently used to create the Piedmont Authority for Regional Transportation (PART) in the Piedmont Triad region (Greensboro, Winston-Salem, High Point, Burlington, etc.).

Although each of the Acts allows the creation of regional authorities, there are some important differences in regard to how they are created, and their governance, territorial jurisdiction and funding.

Creation

A "Public Transportation Authority" may be created by resolution of a "municipality". (The Act defines a "municipality" as a city or town, county, or other political subdivision or authority. It can also be a group of counties.) PART was created by resolution of the city councils in the four largest cities in the authority's territory. TTA was created by resolution of the county boards of Wake, Durham and Orange Counties.

Governance

A Public Transportation Authority may have a board with up to 11 members as determined by the municipality(s) comprising the authority. The governing boards of the municipality(s) appoint the members.

The board of PART is made up 17 members representing a variety of interests: the four largest cities, counties (at least five), MPO(s), airport authorities and two nonvoting ex officio members from the State Board of Transportation appointed by the Secretary of the Department of Transportation.

The board of the Triangle Transit Authority is composed of 13 members. Ten are appointed by the principal municipalities and counties in the region as specified in the Regional Public Transportation Authority Act. The Secretary of the Department of Transportation appoints three nonvoting ex officio members from the State Board of Transportation.

Territorial Jurisdiction

The Public Transportation Authorities law can be used to create an authority in a single municipality, county, or a group of counties. The Act does not limit how many political jurisdictions could be included. The Regional Transportation Authority Act (PART) states that the region must include all or part of at least five counties but could include up to 12. The Regional Public Transportation Authority Act (TTA) specifies three counties.

Funding

Municipalities (including public transportation authorities) are allowed to receive funding from their constituent local governments but if these are insufficient the municipalities are allowed to levy a special tax[5] (or issue bonds) if approved by the voters. None of the municipalities (or public transportation authorities) have exercised this taxing power.

[5] This "special tax" is a property tax, according to a spokesperson for the Institute of Government.

PART and TTA are permitted to levy two specific taxes, if authorized by the affected county boards (in the case of TTA, approval is required from the TTA's Special Tax Board). These taxes are a vehicle registration fee of up to $5 per registration, and a rental vehicle gross receipts tax of up to 5%. The Triangle Transit Authority is the only transit system that has adopted these two taxes; PART has adopted a vehicle rental tax in Guilford and Forsyth Counties. (Note: In the case of PART, it may create a Special Tax District within its territory that could levy all or part of these taxes. The special district could be a county or group of counties. In no case could the total taxes levied by both the authority *and* the special district exceed the stated limits.)

The three types of regional authorities are compared in detail in Figure 3-8 below.

Figure 3-8: Legislative Comparison—Transportation Authorities (North Carolina)

Key Provisions	Public Transportation Authorities Act (Section 1, Chapter 160A, *Article 25;* 1977)	Regional Public Transportation Authority Act (Section 1, Chapter 160A, *Article 26;* 1989)	Regional Transportation Authority Act (Section 1, Chapter 160A, *Article 27;* 1997)
Creation of Authority	May be created by a "municipality" by resolution or ordinance (see comments below for a definition of "municipality").	Created by resolution of the county boards of the three component counties.	Created by the city councils of the four largest cities within the authority's territory.
Governance	The governing board may be up to 11 members as determined by the municipality(s) comprising the Authority. Members are appointed by the governing board(s) of the municipality(s).	13 members are specified by the Act. The region's three counties and principal municipalities appoint ten of the members, and the NCDOT Secretary appoints three ex officio nonvoting members from the State Board of Transportation. See "Funding" below for information on the authority's Special Tax Board.	The 17-member board is composed of : • The mayor or a city council member from each of the four largest cities • The chair of the MPO(s) • The chair or a commissioner from each county board • The chair of the airport authority in each of the two most populous counties • Two members of the State Board of Transportation appointed by the NCDOT Secretary as ex officio nonvoting members
General Powers and Responsibilities	To operate (or contract for the operation of) public transportation services and facilities, and to own or lease property, facilities and equipment necessary or convenient therefore. This may include any form of transportation for the *general public*, *including* charter service.	To operate (or contract for the operation of) public transportation services and facilities, and to own or lease property, facilities and equipment necessary or convenient therefore. This may include any form of transportation for the *general public* including vanpools and carpools, but *excludes* charter, tour or sightseeing service.	To operate (or contract for the operation of) public transportation services and facilities, and to own or lease property, facilities and equipment necessary or convenient therefore. This may include any form of transportation for the *general public* including vanpools and carpools, but *excludes* charter, tour or sightseeing service.

Key Provisions	Public Transportation Authorities Act (Section 1, Chapter 160A, *Article 25;* 1977)	Regional Public Transportation Authority Act (Section 1, Chapter 160A, *Article 26;* 1989)	Regional Transportation Authority Act (Section 1, Chapter 160A, *Article 27;* 1997)
Territorial Jurisdiction	The boundaries of the municipality(s) making up the authority.	The three counties that meet the specific criteria stated in the Act (Chapter 160A-602).	The authority may be created for the area of any MPO that consists of all or part of five contiguous counties (two of which must each be over 250,000 in population, and the other three must each be 100,000 or more). It shall initially consist of the area included within the MPO(s) boundaries. The area may be expanded to include contiguous areas with the consent of the affected county board, but may not exceed part or all of 12 counties.
Operational Jurisdiction	Up to 30 miles outside the corporate limits of the municipality where the municipality is a town or city, and up to five miles where the municipality is a county or group of counties.	Up to ten miles outside of the territorial jurisdiction of the authority (except that vanpool and carpool service is not subject to that mileage limitation).	Up to ten miles outside of the territorial jurisdiction of the authority (except that vanpool and carpool service is not subject to that mileage limitation).
Funding (local)	May receive funding from its component municipality(s). *If this is insufficient, it may submit to the voters at a special election a proposal to levy a special tax or to issue bonds (the type(*s*) of taxes are not specified).*	The authority is authorized to impose two taxes—a $5 vehicle registration fee, and a 5% tax on vehicle rentals. However, these taxes must be approved by a "Special Tax Board" that is made up of two commissioners from each of the boards of the three counties comprising the authority, and by each of the county boards.	The authority is authorized to impose two taxes—a $5 vehicle registration fee, and a 5% tax on vehicle rentals. However, the affected county boards must delegate consent for these levies.
Other	The authority can issue "certificates of public convenience and necessity" and grant franchises for the operation of buses, taxicabs and other methods of public passenger transportation. It may consolidate with a parking authority if approved by a board ordinance.	The authority has the power of eminent domain. It can issue "certificates of public convenience and necessity" and grant franchises for the operation of buses, taxicabs and other methods of public passenger transportation (with the consent of the relevant local jurisdiction). It may *not* take over any existing transit system without the consent of its owner.	The authority has the power of eminent domain. It can issue "certificates of public convenience and necessity" and grant franchises for the operation of buses, taxicabs and other methods of public passenger transportation (with the consent of the relevant local jurisdiction). It may *not* take over any existing transit system without the consent of its owner.

Key Provisions	Public Transportation Authorities Act (Section 1, Chapter 160A, *Article 25;* 1977)	Regional Public Transportation Authority Act (Section 1, Chapter 160A, *Article 26;* 1989)	Regional Transportation Authority Act (Section 1, Chapter 160A, *Article 27;* 1997)
Comments	"Municipality" in this statute includes "any county, city or town, and any other political subdivision, public corporation, authority, etc. that is authorized to own or operate public transportation systems." This Act was used to create several of the multi-county rural transit systems in the state.	This Act appears to have been specifically designed for the TTA (Triangle Transit Authority). However, it is theoretically possible that other regions consisting of three counties could use this Act if they meet the very specific criteria outlined in Chapter 160A-602.	This Act appears specifically designed to create PART--the Piedmont Authority for Regional Transportation (the Triad area--Greensboro, Winston-Salem, High Point, etc.). Theoretically, other regions could use this Act if they met the specific criteria outlined in Chapter 160A-632.

In addition to statutes pertaining to regional transportation authorities, some communities have used the State Interlocal Cooperation Act (Chapter 160A, Article 20) to create a regional transit agency. This Act allows units of local government in the state to enter into agreements or contracts with each other (or with other states) in order to execute any "undertaking". An undertaking is defined as the exercise of "any power, function, public enterprise, right, privilege or immunity of local government." Charlotte and Rocky Mount, North Carolina have used this method to create regional transportation agencies. The Interlocal Cooperation Act does not provide for the levy of any taxes. Local funding is from annual appropriations from the member governments. It should be noted that the Charlotte system also receives dedicated funding from the proceeds of a ½% sales tax that was approved by the voters in Mecklenburg County. This tax produces about $55 million per year.

IV. Case Study Findings

A. Introduction

ITRE conducted case studies of selected transit systems in North Carolina and throughout the nation to gather information on the current state of regional public transportation systems, as well as to determine policies and procedures to emulate (those deemed to have been successful) and those to avoid (those deemed to have been unsuccessful). Information from the North Carolina case study sites also provides a basis upon which further regional coordination/consolidation may be developed.

The process to select case study sites involved several iterations. First, ITRE staff compiled summary information from electronic and printed sources on 19 urban and 112 rural multi-county transit systems operating in 18 states other than North Carolina. Those sites were evaluated to serve as potential national case study sites by ITRE and NCDOT, PTD staff. Criteria used to select case study sites included: geographic location, transit system size (number of trips provided, vehicles operated, and counties served), governing structure, operations—direct or contracted, and special characteristics with potential application in North Carolina. Final selection included the twenty-one sites located in 13 states as shown in Figure 4-1.

Figure 4-1: National Regional Transit System Case Study Sites

State	Urban City-County System	Rural Multi-County System
Florida	Central Florida Regional Transportation Authority (Lynx)	Big Bend Transit, Inc.
Illinois	Regional Transportation Authority (RTA)	RIDES Mass Transit District
Iowa		10-15 Regional Transit Agency
Kansas		Northeast Kansas Transit Council (Coordinated Transit District #3)
Maine		Coastal Trans, Inc.
Michigan	Detroit Department of Transportation (DDOT)/SMART	
Minnesota		Chisago/Isanti County Heartland Express River Rider Heartland Express
New York	Capital District Transportation Authority (CDTA)	
Oregon	Tri-Met	
South Carolina		Santee Wateree Regional Transportation Authority
Tennessee		East Tennessee Human Resource Agency
Texas	Capital Metro	Capital Area Regional Transportation System (CARTS) Additional specific information from: Alamo Coordinated Transit Heart of Texas Council of Governments Hill Country Transit District South Plains Community Action Association, Inc.
West Virginia		Potomac Valley Transit Authority
13 States	**6 Urban City-County Systems**	**15 Rural Multi-County Systems**

Case study sites were also selected from within North Carolina. All six current multi-county rural community transportation systems were included, as were urban city-county systems representing both large and small metropolitan areas. The North Carolina case study site transit systems are listed in Figure 4-2.

Figure 4-2: North Carolina Case Study Sites

Rural Multi-County Transit Systems	Metropolitan Area Transit Systems
Choanoke Public Transportation Authority (CPTA)—Halifax, Bertie, Northampton, and Hertford Counties	**Capital Area Transit** (CAT)—Raleigh
Craven Area Rural Transit System (CARTS)—Craven, Pamlico and Jones Counties	**Chapel Hill Transit**—Chapel Hill
Intercounty Public Transportation Agency (ICPTA)—Camden, Chowan, Currituck, Pasquotank, and Perquimans Counties	**Charlotte Area Transit System** (CATS)—Charlotte
Kerr Area Transportation Authority (KATA)—Franklin, Granville, Vance, and Warren Counties	**Durham Area Transit Authority** (DATA)—Durham
Rocky Mount-Nash-Edgecombe—City of Rocky Mount, Nash and Edgecombe Counties	**Orange Public Transit** (OPT)—Orange County
Yadkin Valley Economic Development District, Inc. (YVEDDI)—Davie, Stokes, Surry, and Yadkin Counties	**Piedmont Wagon Transit System** (PWTS)—Hickory
	Triangle Transit Authority (TTA)—Raleigh-Durham-Chapel Hill
	Wake Coordinated Transportation System (WCTS)—Wake County

Thus a total of 35 transit systems from 13 states plus North Carolina, comprising 15 metropolitan area systems and 20 rural systems were selected as case study sites. Information on case study sites was gathered through searches of transit system Web sites, from various publications and documents, and from telephone interviews with managers at the case study sites. ITRE staff also conducted telephone interviews with representatives from corresponding state departments of transportation, to gather information on regional transit systems from both the local and state level perspectives.

Summary information for the rural multi-county case study sites and then for the urban city-county case study sites is presented in the two subsequent sections of this chapter. This information is organized according to four general topic areas—organizational/institutional (legislative, governance, and regulatory information), funding, administration, and operations findings.

B. Rural Multi-County Transit System Findings

Key Organizational / Institutional Findings

Organizational/Institutional findings include information relating to state and local legislation related to the development and implementation of rural regional transit systems, the structure of governing and advisory boards, relationships among constituent organizations, issues relating to the level of control exercised by umbrella organizations and/or local human service agencies, and the presence/absence of a local champion for a regional transit system.

1. State Legislation Promoting/Mandating Regional Transit Systems: Many of the case study site states have legislation that requires some level of regional transit consolidation or coordination. The level of required consolidation or coordination varies by state statutes, and by the extent to which the statutory requirements are enforced. On the one hand, Maine, South Carolina, and West Virginia have statutes that loosely designate transit regions and provide encouragement for public and human service transit to consolidate their services within the region. These states tend to have fewer regional transit systems, and those systems generally have a lower overall level of public and human service transit consolidation.

On the other hand, Iowa, Kansas and Texas require that federal and state funding for public transit be provided only to regional transit systems, and do not designate funding for a particular county or agency, but instead designate funding for the regional system. However, the Coordinated Transit Districts (CTDs) in Kansas and Regional Transit Agencies (RTAs) in Iowa often distribute this designated funding to transit systems that provide transit in a single county. Texas statutes also require human service agencies to coordinate transportation services with the regional transit district to the greatest extent possible to maximize the efficiency and effectiveness of transportation services to social service clients. These funding requirements appear to be important for motivating the formation of multi-county transit systems, and the creation of partnerships between the systems and human services agencies. Five of the case study site states do not have legislation pertaining specifically to rural regional transit systems.

For example, Texas legislation provides strong support and incentives for the development of regional transit systems. In 1994, the Texas Legislature designated that all rural public transportation providers in existence at that time shall become incorporated into Rural Transit Districts. These districts have the powers necessary to provide public and human service transportation, e.g., enter into contracts, and are the exclusive recipients of rural public transportation funding in the state. The legislation also requires "social service agencies to coordinate with each [Rural Transit District] to the greatest extent possible to maximize the efficiency and effectiveness of transportation services to social service clients." The transit districts do not have the power to tax. As a result of this legislation 41 rural transit systems serve 254 counties in Texas.

In 1984, Iowa legislation required agencies to coordinate to the "maximum extent possible" to receive state and federal funding, and established transit regions that followed the eighteen existing regional planning areas. The legislation has several clauses that could favorably be called "flexible," or pessimistically be called "loopholes." For example, the legislation requires a single administration for regional transit but permits each county in a region to determine its service and funding levels. The result has been the formation of many separate, single-county operations that are loosely tied together through regional grant administration. A clause that permits towns with population over 20,000 to establish a transit system that is separate from the regional system has produced outcomes that work to weaken rather than to promote regional consolidation.

The Iowa DOT has not strongly enforced compliance with this legislation resulting in little recent activity to form regional transit systems. In the years immediately following enactment of the legislation, the state was strict in enforcing compliance and several regional systems were formed. Over the past several years, enforcement has diminished, as the review process and sanctions require a substantial amount of administrative resources. In addition, as every region in the state has at least a few human service agencies that transport their own clients, it is difficult to impose sanctions on any particular region when it is apparent that all regions are out of compliance to at least some extent.

Kansas provides an example of relatively weak regional transit legislation and policy. In 1995, Kansas Statute No. 75-5052 authorized the Department of Transportation to establish coordinated transit districts (CTDs) to enhance coordination and management of state and federal passenger transportation funds. There are fifteen CTDs in the state, which are the designated recipients of Section 5310 and 5311 funds, and state funds for rural public and specialized transportation services.

In practice, the CTDs are administrative units that are the conduit for state and federal funding to the local county transit agencies. The CTDs meet approximately every one to four months to discuss

transportation issues, make funding recommendations to KDOT, and develop methods to better coordinate transportation services. The CTDs are the not the actual providers or coordinators of transportation services. Most of the transportation operators provide service to a single county and most service is performed within the county except for a few out-of- county medical trips.

The CTDs have been effective in allowing the state DOT staff to be held at a relatively small number, and in reducing state DOT staff workload for administration and technical support. However, the legislation has done little to motivate consolidation into multi-county systems or increase the level of coordination among current systems.

According to the KS DOT contact, the department is rethinking the role of the CTDs because the officers that manage the work of the CTDs bear a significant burden. They are not paid for their CTD work, and have full-time jobs with their transportation agency. Further, the recent State Management Review by FTA concluded that the CTDs needed to be more involved in developing public transportation across the state.

2. Flexible Legislative Provisions: The Iowa regional transit legislation appeared relatively ineffective in terms of directing funding to regional systems; that legislation provides an example of flexibility. Iowa legislation allows a county board of supervisors to directly select or to use a competitive bid process to identify a lead agency to organize regional transit. Regional systems can be governmental systems that are organized through intergovernmental agreements, or can be private non-profit agencies. Although the non-profit organizational model allows a local government less direct control, it detaches the unit of government from transit system debt, offering a useful organizational model to regions and counties that are sensitive to liability and debt issues. Also, a 1976 transit provision in Iowa legislation directs transit systems to follow the state transportation plan, thereby allowing modifications to state policies and plans without requiring new legislation.

The South Carolina legislation that enables the formation of regional transit authorities or systems is very detailed. Local communities believe that some parts of the law are barriers to regional transit because the laws govern so many aspects of the regional transit system formation, organization, governance, and service performance. Service area changes are difficult, as well. The Santee-Wateree RTA (SWRTA) became the Medicaid transportation provider in Orangeburg and Calhoun through a competitive bid process. However, the state legislature must designate SWRTA as the public transportation provider for those two counties before the system can receive state and federal transit funding. This designation might not occur until several months after the Medicaid service has been initiated.

3. Relationships Among Constituent Organizations: Contracting and agency membership are the two principal types of relationships that can be established to create multi-county transit services. Counties and agencies can become members of a regional transit agency or authority, in which case they typically have a representative(s) on a governing board and can fully participate in service development and funding decisions. Counties can also directly contract with a transit service provider for service.

Case study sites and state department of transportation spokespersons favored organizational relationships in which the counties and agencies become members of a regional transit system. States such as Maine, Minnesota, and Iowa encourage the establishment of regional transit systems based on membership through their policies and technical support. Agency membership gives counties and agencies greater control over service quality, costs, and short- and long-term development because their board representative(s) are constantly involved with service issues, and vote on policy and budgets. Furthermore, membership tends to provide a higher level of long-term stability than contracts (which usually last one to three years), and this stability is essential for systems to effectively make capital, human resource, and other investments into the transit system. Systems are less likely to make such long-term investments if they are not sure of the long-term relationship, contracts, and revenues of agency customers.

4. Degree of Local Control: A perceived loss of control is a common issue or fear that may become a barrier to the consolidation or coordination of transit services. This issue is commonly based on the fear that the consolidated system will not provide the efficiency, performance, or service development that the client needs. In some cases, the fear of losing "turf" or influence is key.

Human service agencies and county governments appear to be even more reluctant to trust transit service to an agency that is administered or operated from another county or town. The case study sites did not include any instances in which existing public transit systems merged, and therefore could not offer guidance on how to reduce local control barriers. However, several case study sites did provide their experience in overcoming loss of control by human service agencies in garnering service contracts from those agencies. RIDES MTD in Illinois conducts pilot programs in which service is provided to a human service agency on a temporary basis to help allay the agency fears of losing control over service quality. These pilot programs also provide the opportunity to fine tune service details for full implementation. RIDES also offers to employ former human service employees who might be displaced as a result of the transit service being contracted to RIDES. This offer is rarely accepted because the human service agencies are often eager to return drivers and other staff involved in client transportation to their primary functions within the agency such as being caseworkers, counselors, and teachers.

5. Governing Board Representation: There is a common governing board structure in place at a majority of the case study systems. The governing board typically had one elected official or county manger from each county and major municipality (above a threshold population). In a few cases, a county board appoints a human service agency representative or a consumer (e.g., person with a disability or senior citizen) as a board member. This type of representation emphasizes the "democratic" nature of the boards (e.g., one representative per county), rather than proportional (e.g., number of representatives related to the amount of service purchased).

The majority of the case study transit systems believed their boards functioned effectively. One transit system, the 10-15 RTA in Iowa, experienced a fairly high turnover rate among board members because the members were elected officials who sometimes were not reelected. This high turnover rate has decreased the "institutional memory" of the board.

6. Governing Board Autonomy: The majority of the regional transit systems in this study began as part of a regional human service agency such as a community action agency, area agency on aging, an economic development agency, or a council of government. These regional agencies tend to manage several major programs that might include social services, handicapped employment, jobs training, senior programs and meals, mental health, Medicaid administration, and transit. Given the number and size of these programs, the regional agency board is generally not able to focus as deeply on a single program such as transit as can a board dedicated to that specific activity. Most of the case study transit systems in this situation have formed transit advisory boards that report directly to the regional agency board. The East Tennessee Human Resource Agency (ETHRA) and Yadkin Valley Economic Development District, Inc. (YVEDDI) are two examples of transit systems that have formed advisory boards to engage in transit issues when the parent agency governing board might not have the time and resources to focus on these relatively narrower issues.

7. Communications Among Transportation System Member Agencies: Clear communications and an open governing process were common ingredients to successfully forming and operating regional transit systems. Although these ingredients are also necessary for successful single-county systems, the greater number of stakeholders and increased distances inherent in multi-county systems require a greater communications effort to keep all stakeholders informed and comfortable.

8. Local Champion: The importance of leadership in initiating and sustaining multi-county systems cannot be overemphasized. Many of the system managers and other key players involved with the systems that were interviewed appeared to have exceptional leadership skills for managing the varied interests of the many elected officials, agency directors, and governing boards that are unusually complex in multi-county systems. Betty Green, the Chief Executive Officer of RIDES MTD in Illinois, has been a manager at the agency since its inception in 1977, and accepted the *Transit System of the Year Award* from the Community Transportation Association of America in the year 2000. Pam Ward, the Transportation Administrator for the Ottumwa Transit Authority in Iowa, was the Chairperson for the Rural Transit and Intercity Bus Committee of the Transportation Research Board. Dave Marsh, General Manager of the Capital Area Rural Transit System in Texas, is a board member of the Community Transportation Association of America.

9. Lack of Contiguous Boundaries with Human Service Agency Regions: Contracts to provide transit services to human service agencies are important for rural transit systems. The human service agency clients share many of the same origins and destinations; therefore, consolidating these trips helps to make more efficient use of capital, operations, and administrative resources. However, human service agencies are often organized on a multi-county, or regional level, and these regional boundaries may not match those of a regional transit system. It is not uncommon for a regional transit system to have contracts with more than one Area Office on the Aging, regional Medicaid administrator, and regional employment and training center for the disabled. For example, the Hill County Transit District (HCTD) in Texas provides transit for three Agencies on Aging and two Medicaid regional offices.

The results of these boundary differences can be increased administrative costs, lost opportunities to contract with regional human service agencies, and operations service gaps.

In the best case, these disparate boundaries require a greater administrative effort because a regional transit system will have to negotiate and administer several human service contracts, and provide multiple service reports for the same type of service, e.g., Medicaid. In the worst case, the boundary disparity will require significant administrative and management resources because each regional Medicaid administrator, for example, may require a different type of service, scheduling process, billing basis, and reporting data and format. One region might require the client to directly contact an agency social worker to make trip reservations while other regions might permit the transit system to deal directly with the client. Some regions might require a flat billing rate, while one region will only contract for a flat trip rate.

Regional transit and human service boundaries that do not match can also cause some systems to lose contracting opportunities. For example, the Texas Department of Health contracts for Medicaid and other related human service transportation by bidding services on a regional basis. The Capital Area Rural Transportation System (CARTS) provides some of the Medicaid transportation in their service area. In some cases, the regional boundaries of the Department of Health and CARTS do not coincide resulting in service proposals that are not attractive to CARTS because only a portion of the Medicaid contract lies in the CARTS service area. In general, cases in which the boundaries of human service agency and transit district regions differ make it difficult for the transit districts to bid on human service contracts.

This difficulty in bidding on human service transit contracts can also leave service gaps in the transit system service. Public transit systems often develop routes based on human service contracts, and use these routes to serve their public customers, as well. The Potomac Valley Transit Authority in West Virginia has many human service transportation contracts such as sheltered workshops, Medicaid, senior programs, mental health programs, and employment programs. However, these contracts are usually awarded on a county-by-county basis, and as a result the system has limited service, or "gaps," in counties where another operator or the human service agency itself provides the agency transit.

10. Degree of Local Control: In some cases, influential human service agencies have either blocked the formation of a regional public transportation system, or significantly decreased the efficiency and effectiveness of the transit service by supporting alternative transit operations. Some managers and state DOT officials in this study identified a lack of cooperation from human service agencies as a significant barrier to the formation of single- and multi-county transit systems.

11. Effective Coordination with Urban Transit Systems: Although a few of the case study transit systems coordinated services with adjoining urban transit providers, most of the systems had only low levels of such service coordination. The Ottumwa Transit Authority (OTA) in Iowa operates the 10-15 Regional Transit Agency service by contract, but this relatively high level of consolidation and coordination resulting from the working relationship was the exception rather than the rule. The Capital Area Rural Transportation System (CARTS) in Texas transfers few passengers to the Capital Metro fixed-route service in Austin, and the few contracts that Capital Metro had with CARTS to operate shuttle and express routes in the CARTS rural service area have declined recently. The South Plains Area Rural Transportation Assistance Network (SPARTAN) in Texas has little service coordination with Lubbock Citibus. In Tennessee, the service area expansion of urban transit systems is creating coordination challenges for adjacent regional transportation providers in areas such as Knoxville. The urban and rural service areas begin to overlap as the urban area expands, and the urban and rural transit systems have not yet established effective operations and funding agreements for these areas.

The Yadkin Valley Economic Development District, Inc. (YVEDDI) in North Carolina provides an example of a lack of service coordination with a nearby urban transit operator. The YVEDDI service area involves areas to the north, west, and southwest of Winston-Salem and Forsyth County. As a result, most of the service demand runs along the US 421, US 52, and I-40 highway corridors between the service area and Winston-Salem. However, there is no service coordination with Trans-Aid of Forsyth County or the Winston-Salem Transit Authority.

It is difficult to conclude whether these poor coordination examples represent lost opportunities because the scope of this study did not include an evaluation of service coordination among rural and urban systems. Nonetheless, it can be stated that coordination with an urban operator represented a very small portion of the services of those rural operators that are adjacent to urban areas, whether or not viable coordination opportunities existed.

12. Labor: The case study sites did not identify any notable problems with labor unions or differing pay rates. Also, the prospect of employee layoffs resulting from a transit system or human service agency consolidating its transit services into a regional system did not appear to be an issue. Most of the human service agencies that contracted or consolidated their transit services with a public transit system were glad to be able to return vehicle drivers and other transit workers to their primary professional positions as social workers, employment specialists, trainers, and teachers.

In the formation of the Berkeley/Charleston/Dorchester Regional Transportation Management Associations (RTMA) in South Carolina, all personnel from existing transit systems had to reapply for positions in the new RTMA. As a result an executive director from one system was not hired.

13. Relationships Between Transportation and Human Service Organizations: Many of the case study sites began transit operations as part of a human service agency but eventually separated from the agency to become a public transit system. The mission of the human service agency was usually much broader than that of the transit services unit, and therefore the agency management and governing board was not able to focus attention and resources on the transit service development and issues. Furthermore, the transit service divisions sometimes found that service innovation, efficiency, and effectiveness was constrained by the umbrella agency work rules, shifting resources, policies, and budgets. In other cases, the human service

agency clients, e.g., senior citizens, became a minor portion of the overall transit clientele as the transit system expanded service to Medicaid, mental health, employment program, Head Start, and other clients groups.

In Texas, the Hill County Transit District (HCTD), South Plains Area Rural Transportation Assistance Network (SPARTAN), and Alamo Regional Transit (ART) all started services as multi-county human service agencies, but eventually became separate transit systems after enactment of the 1994 Texas law that created Rural Transit Districts. Leaders have discussed making the Heart of Texas Council of Governments (HOTCOG) transit operations an independent agency. This desire for independent status for HOTCOG transit is based on the broad HOTCOG mission to provide a wide array of other services including solid waste, workforce development, and elderly programs. The deep governing hierarchy is responsible, as well. The Transportation Advisory Committee reports to the Aging Advisory Committee, which reports to the HOTCOG Board.

One case study site transit system is transitioning to become an independent agency. The River Rider Heartland Express in Minnesota is supervised and administered through the Sherburne County Social Service Department to provide public and human service transit in Wright and Sherburne counties. In July 2002, a Joint Powers Agreement will form River Rider into an independent, multi-county transit system that is governed by a six-member Board. Currently, as a unit of the Social Services Department, River Rider must follow policies that are not well matched to specific needs of providing and operating transit service. In one instance, the transit unit had difficulty hiring new drivers and personnel to match contract and grant funding expansion because there was a hiring freeze at the social service department.

An alternative to becoming a completely independent agency is to remain a part of the parent agency but establish significant autonomy. The Intercounty Public Transportation Agency (ICPTA) and Yadkin Valley Economic Development District, Inc. (YVEDDI) in North Carolina represent examples of this model. There is a benefit for a transit operator to maintain a relationship with a parent agency. The operator can take advantage of the specialized support services such as fiscal/accounting, human resources, information technology, legal, risk management, and other administrative support available from the parent agency.

Key Funding Findings

Findings involving funding include those relating to the presence of regional level planning, state funding incentives/disincentives for regional systems, the ability/inability to co-mingle funds from different counties, allocation restrictions, equity among local match providers, and the presence/absence of funding from dedicated sources.

1. Regional Level Planning: State DOTs have contributed to the formation of regional transit systems through their provision of technical assistance and the application of funding for planning purposes. As rural counties in some states have considered initiating public transportation services, state DOT staff and policies have encouraged these counties to consider forming a regional transit system with adjacent counties, or to become part of an existing regional transit system. For example, Tennessee DOT policy was to develop rural public transportation systems based on regional human service agency areas instead of developing single-county transit systems. The Tennessee DOT invested in the planning and success of the East Tennessee Human Resource Agency (ETHRA) in the 1970s, and as planning funding and resources became available, made the same investment in transportation planning at other regional human service agencies. This application of planning funding has helped develop a rural transit landscape in which nine regional and two single-county rural transportation systems provide service to all 95 counties in Tennessee.

Other states have effectively used a similar strategy that focuses technical assistance and planning funding on regional transit system development and communities that are inclined to consider or support such systems. This policy is usually supported by enabling legislation and requires regional transit services be provided by regional entities. The West Virginia DOT policy is to rely on regional providers for service expansion or changes, if at all possible. The West Virginia DOT encourages transit systems, especially new

systems, to demonstrate a regional focus by using a regional name (instead of a single-county or other locally derived name,) and making the transit system board and bylaws flexible enough to easily incorporate expansion services to other counties and communities. West Virginia DOT staff believes that these policies make regional transit more attractive to communities that want to initiate transit services or consolidate human service agency transportation.

This focusing of technical assistance and planning funding on regional transit system also works well to maintain transit service in an area in which the transit system is in danger of failing. For example, the Illinois DOT worked with the troubled transit service in Pekin, Illinois and provided planning funding to enable the community to join City Link, the existing urban transit system in Peoria. Similar policy and procedures helped communities with troubled transit systems to join the Rockford Mass Transit District in Illinois.

2. Funding Incentives: Funding incentives that favor regional and multi-county transit systems can be very effective. In some cases, the case study sites believed that state DOT and human service grant funding for capital, planning, and administration were more favorable once they formed a multi-county transit system. In other cases, state legislation or state DOT policy directs funding specifically to regional transit systems or authorities.

Only rural regional transit systems are eligible to receive state and federal rural transit funding in Tennessee, and only urban and regional systems can receive the State Transit Assistance, Section 5311, and Section 5307 funding in Iowa. The Illinois downstate operating assistance program can only be appropriated to Mass Transit Districts (MTDs). Although MTDs historically have been small- and medium-sized urban systems, four rural regional transit systems have successfully lobbied the state legislature to become designated as MTDs.

However, none of the case study sites became multi-county systems when one or more existing transit systems consolidated. The case study systems expanded services to communities and counties that did not previously have public transportation, and most of the systems began as multi-county entities designated by state legislation. Although one can say that funding specially designated for regional transit systems has effectively motivated their formation, it is uncertain to what extent such special funding would motivate existing transit systems to consolidate into multi-county systems.

3. Funding Distribution: Some transit systems receive public transportation and human service grant funding and contracts on a regional rather than a county-by-county basis. A regional funding distribution allows a transit system more flexibility to apply the funding to areas and services that have the greatest need. In addition, flexibility in funding distribution can help to ensure that some program funds remain unspent due to particular circumstances, while there is still unmet transportation demand in the area.

The Tennessee Department of Human Services distributes Office on Aging program funding (i.e., Title III) to the regional Aging Commissions that subsequently contract with the regional transit provider for service. This arrangement allows the regional transit provider to more effectively match funding with transportation demand and to freely intermingle clients. The River Rider Heartland Express in Minnesota submits a single Section 5311 application to the Minnesota DOT for funding, and consequently does not earmark funding or vehicles for a particular county or community. The 10-15 RTA in Iowa places all State Transit Assistance, and Section 5311 funding, and fare revenue into a single revenue pool and distributes that funding by client, not by county.

Funding that can only be used to provide service in a specified county or community does not always allow a transit system sufficient flexibility to apply funding to the greatest service need. The result can be gaps and imbalances in meeting service demand, and in some cases a particular funding allocation may not be fully expended. For instance, a vehicle might travel through a community while providing service to another

area, but not be able to board or alight a passenger from that community because there is not adequate funding to cover additional service in that particular community.

For example, the Chisago-Isanti County Heartland Express in Minnesota does not intermingle Section 5311 funding between the two counties that the system serves. As a result, vehicles must be purchased for the exclusive use of one particular county. Big Bend Transit, Inc. in Florida designates vehicles and routes for specific county and agency clients for two reasons. In a few cases, the agency contract explicitly prohibits Big Bend from intermingling their clients with other riders on the same vehicle. However, even if all the service contracts permitted client intermingling, the Bid Bend manager believes that the system lacks the complex information system that would be necessary to break out costs by county or agency using different billing basis (e.g., by trip, mileage, time).

The state DOT allocation formula or policy for Section 5310, Section 5311, and state level grants can actually serve as a disincentive to form multi-county transit systems. In some cases, multi-county transit systems receive less administrative and capital funding than they might have received had they existed as single-county systems. For example, although RIDES serves nine counties, the Illinois DOT provided only a single-county share of Section 5311 grant funding for the first five years of the system's existence. While economies of scale typically result from regional organizations, they are not directly proportional to the number of counties served. That is, RIDES can be more efficient than nine single county systems but is highly unlikely to be nine times as efficient as any single-county transit system.

A few case study systems believed the Community Transportation Program (CTP) in North Carolina seems to inherently present a disincentive for existing public transit systems to form regional systems. The CTP grant provides Section 5310, Section 5311, and other administrative and capital funding to rural public transportation systems. The administrative funding levels are divided into four discrete categories that are based on factors that depict the operational size of the system such as miles, hours, and trips. The administrative funding for the largest system category has a limit, no matter how large a system might become. As a result, a regional system formed by four existing transit systems, for example, is likely to receive less CTP funding for administration than the sum total of their grants had they remained single-county systems. In effect, the systems lose grant funding by forming a regional system.

Some rural areas suffer high levels of unemployment and low levels of investment, and therefore are very sensitive to grant funding and its impact on local spending. They may view the formation of a regional system as a loss of jobs or investment because the overall grant funding and overall number of employees is lower.

4. Intermingling Funding Sources/Streams: Having the flexibility to intermingle funding throughout the entire service area is important. For example, the Kerr Area Transportation Authority (KATA) in North Carolina receives funding from a state Rural General Public (RGP) operations grant from each of the four counties in its service area. However there are two different processes that KATA must use to receive the funding. Some counties send the full RGP grant funding directly to KATA, and the system spends down the grant as service is rendered. Other counties do not provide the RGP grant funding in a lump sum, but reimburse KATA each month as service is rendered and billed. The Intercounty Public Transportation Agency (ICPTA – North Carolina) also uses these two processes for the RGP and Elderly/Disabled Transportation Assistance Program (EDTAP) grants because Currituck County prefers to directly receive the funding and pay ICPTA through monthly invoicing. These systems prefer to receive the full grant funding at the beginning of the fiscal year to allow greater flexibility to best match funding to service needs.

Many of the interviewees in this study also desired greater flexibility to intermingle the different public transit funding for administrative, operations, and capital expenses. Those interviewees who served a small urban area, or had a small urban area adjacent to their service area, also wanted the flexibility to intermingle urban and rural grants. Some of the systems have designed creative methods to effectively combine the urban and rural funding. The South Carolina DOT allows the regional transportation authorities to intermingle vehicles and equipment that have been purchased using both urban and rural

funding grants. For example, a system can track the urban and rural service mileage, then charge the mileage (at a specified rate) to the appropriate grant. Although this method allows a regional transit system to in effect intermingle clients and services and produce the desired operations efficiencies, the systems wanted the flexibility to completely intermingle the grants in order to eliminate this administrative tracking burden. This tracking can become even more complex if urban and rural riders are intermingled on the same vehicle at the same time.

Funding that is not allocated by a "lump sum" (i.e., to be used throughout the service area) restricts the options that a transit system has to provide balanced, efficient service. A comparison of the two major rural transit grant programs in North Carolina at one system illustrates this point. The Choanoke Public Transportation Authority (CPTA) receives a Community Transportation Program (CTP) grant for administrative and capital expenses. This grant, which is composed of Section 5310, Section 5311, and state funding, can be used to support services throughout the service area. On the other hand, the North Carolina DOT sends the ROAP grant (Rural Operating Assistance Program) directly to each of the four counties. This grant is composed of the Elderly and Disabled Transportation Assistance Program (EDTAP) and Rural General Public (RGP) funding. CPTA must invoice each county to be reimbursed for ROAP eligible transportation. As a result, CPTA does not have the flexibility to apply ROAP funding throughout the service area without regard to a clients' county of residence, and may experience mismatches between service demand and supply among the counties in the service area. In past years, CPTA was not able to expend its RGP allocation for one county while at the same time the transit system was not able to meet demand for the same type of service in another county. ROAP funds can be transferred from one county to another in a regional system. EDTAP and RGP funds cannot be transferred between counties, with the exception of the multi-county systems.

5. Dedicated Funding Source(s): A dedicated funding source is especially important to a regional transit system. The guaranteed revenue reduces the likelihood that the lack of local funding becomes a barrier for communities to work together in a regional transit system, and if the funding is targeted only to regional or multi-county systems, it provides a very strong incentive for forming such transit systems.

Only a few of the case study systems receive dedicated funding. For example, the Illinois legislature has appropriated a portion of the downstate operating assistance program to RIDES. This grant program returns a specified portion, e.g., 2/32, of the sales tax generated in the service area of a Mass Transit District (MTD) to cover up to 53 percent of the operations costs. In fact, this dedicated funding source has spurred a total of four regional transit systems to successfully lobby the Illinois state legislature to be designated as MTDs. However, only two MTDs have been appropriated downstate operating assistance.

6. Equity in Local Contribution: The case study systems used a wide variety of formulas to calculate the amount of local funding contribution required from the counties, towns, and communities. Many formulas were based on the amount of service consumed (e.g., number of trips or service miles), while some used population and/or equal shares. There were a few cases in which the issue of a local contribution appeared to cause some tension among the different communities. For example, according to the by-laws of the Santee-Wateree Regional Transit Agency, the financial contribution of a member county is not binding – it is voluntary. As a result, contributions from member counties vary from $2,500 to $10,000 per year, and some counties are seen as not "pulling their weight." The amount and equality of local contributions appeared to be an issue mostly in systems that did not use formulas based on service consumption, or had poorly defined contribution formulas.

7. Competitive Contracts: In some states, the human service agencies' transportation procurement process creates considerable competition among different regional transit systems. The long-term results of this competition can be positive or negative. Competition often results in lower-cost, higher quality service, however, the temporary nature of competitive contracts can deter the formation of progressively more efficient regional transit systems.

A notable feature of the South Carolina regional systems is that there is competition among the regional transportation authorities (RTAs) and regional transportation management associations (RTMAs). The Santee-Wateree RTA used to provide the Medicaid transportation for Sumter and Clarendon counties but lost that service in the last competitive bid process to the Pee Dee River RTA. In rural Berkeley County, the Santee-Wateree RTA provides Medicaid transportation and the Berkeley-Charleston-Dorchester RTMA provides public transportation. The gain and loss of these major human service contracts can produce gaps in the RTA service areas, and can change the service area boundary as the contracts change from year-to-year.

The Commission for the Transportation Disadvantaged (CTD) in Florida is unique among states and provides a good illustration of regional transit competition. A key provision of the Florida statue that created the CTD requires substantial transportation coordination among human service agencies. The member agencies, e.g., Medicaid, must purchase transportation from the local CTD provider unless a more cost-effective provider is identified and the agency meets several other criteria for selecting alternative providers. Fifteen percent of the State Transportation Trust Fund, , is used to support the CTD program, usually for hiring local coordinators and providing operations funding and some capital funding.

The CTD has not spurred the creation of multi-county transit systems or authorities in Florida. Each county identifies their CTD operator, which may be the county itself or a brokered operator, and commonly use a competitive bid process to award the operations contract. As a result, some CTD providers may serve several counties and/or agencies. Although this may create "de facto" regional and multi-county systems, it is not known to what extent the systems have integrated their various client services in order to save administrative, operations and maintenance costs. The temporary nature of these competitive service contracts can work against the development of a highly integrated, cost-effective regional transit provider.

Big Bend Transit, Inc. in Florida illustrates a case in which a transit system has become a "de facto" regional transit provider. Although Big Bend is not "officially" a multi-county transit system, it is a non-profit organization that receives the Section 5310 and Section 5311 grants for four counties because it has won the CTD grant through a competitive process in each county. The system also has a variety of other human service contracts for those and one additional county. However, according to Big Bend management, the system is reluctant to make a larger investment in transportation for those counties because of the temporary nature of the CTD contracts and the possible loss of public transportation grant funding should they lose the CTD contracts. Big Bend must compete for the CTD contract in each county every three years against both local and national level (e.g., ATC Public Transportation) transit operators.

This competition can produce both positive and negative results. On the one hand, competition can be instrumental in controlling the rise of operational costs and motivating operators to maintain customer-driven service. On the other hand, competition can create inefficient service gaps if a system fails to win major human service contracts for one or more of the counties in its service area. Furthermore, the temporary nature of term contracts, e.g., one-, two-, and three-year contracts, does not provide a transit provider the security and stability necessary to make long-term plans and investments in developing services.

8. Lack of Fully Allocated Cost Accounting Practices: Case study site contacts stated that in many instances, human service agencies perceived that their costs to transport clients are less than those proposed by public transit systems. Depending on the particular case, this perception may, or may not, be true. The systems believe that there is an inability or disinterest among human service agencies to properly calculate their fully allocated costs (FAC) for delivering transit services. This problem was a common for case study systems. The human service agencies very often underestimate their transit costs because the vehicle driver, for example, may be a teacher whose labor charges are not accounted in the transit costing process, and support services such as call taking, scheduling, dispatching, and general administration, are difficult to capture when performed by employees who have major duties outside of transportation. The result of not fully allocating these costs to transit is a significant under estimate of the actual transit costs, and subsequently service proposal costs from regional transit providers appears to be comparatively expensive.

In fact, the Maine DOT contact identified this FAC problem as one of the principal reasons for erosion of legislation and policy in Maine to form regional transit systems. Maine statute created regional transit districts with policy support from the state DOT and state level human service agencies. Subsequently, some major state agencies withdrew funding from the regional transit providers in hopes of providing their own service, or purchasing service, at a lower cost. Many agencies that withdrew from the regional providers found that they could not provide the service at a lower cost, and some also suffered serious service quality problems. Meanwhile, the regional providers experienced higher costs in their own service because they attempted to serve some sparsely populated areas of Maine without the benefit of combining the public and major human service agency service demand.

The Santee Wateree Regional Transportation Agency (SWRTA) in South Carolina has encountered considerable hurdles in attracting human service contracts because of the problem with FAC. However, the SWRTA director has professional experience in social services, and therefore been adept at working with the agencies to develop FAC figures that more accurately demonstrate the true costs and compare less favorably with SWRTA service cost proposals.

9. Inability to Implement Authorized Funding Mechanisms: Legislation enabling regional transit systems often permits municipalities or counties to collect a variety of taxes to fund transit. However, these taxes are infrequently implemented because local elected officials, authority board members, or voters have not approved such measures, or in some cases the state legislature never approved the necessary appropriation. The Illinois state legislature has only appropriated funding from the downstate operating assistance program for two of the four rural mass transit districts (MTD) that are eligible for such funding. Iowa statute allows a property evaluation up to $0.95/$1,000 to fund local transit, but the voters of only eight municipalities have approved the tax. In a few states, such as West Virginia and Texas, existing legislation permits local voters or elected officials to approve local taxes to support transit but these taxes are rarely voted on or approved.

Legislative requirements for funding referenda to be held in each county served by a regional transit system, as opposed to holding a single referendum, can be a barrier to funding regional transit agencies. For example, the West Virginia state law that enables regional transit authorities has been a barrier to creating, funding, and developing regional authorities. The law requires each county in a proposed regional authority, which must match the boundaries of the regional planning authority, to pass a referendum to raise revenue for the authority. If a single county in the proposed authority service area does not pass the levy, the authority may not exact the taxation proposed in the levy. As a result, only two of the eleven regional transit authorities enabled in West Virginia legislation have been created, and these authorities have not passed the funding levy. The Potomac Valley Transportation Authority (PVTA) has not attempted regional referendum because of the difficulty in passing such a levy in all its constituent counties.

Key Administration Findings

Findings from rural case study sites involving administration include the opportunity to realize resource savings, and the effects of conflicting reporting requirements and non-uniform regulations, policies, and procedures in a region.

1. Resource Savings: There was a universal belief among case study site contacts that regional transit systems can offer administrative efficiencies compared to single-county systems. Regional transit systems are able to apply their administrative services to the several counties, communities, and agencies to which they provide service in order to realize administrative overhead savings. Case study systems also believed that the staff of regional transit systems may be able to provide more specialized skills than commonly smaller staff of single-county systems. The regional staff can have greater specialized training and experience, and may

include specialists in accounting, training, marketing, and specific grant programs. Some study contacts believed the regional systems may also have lower employee turnover.

For example, the Choanoke Public Transportation Authority (CPTA) in North Carolina believes it realizes substantial administrative savings compared to a scenario in which each of the four counties in its service area operated its own transit system. CPTA has three administrative personnel, including a director, finance officer, and secretary/receptionist, and plans to hire a human resource specialist in the next fiscal year. Four single-county systems with only a director and secretary/receptionist would amount to eight total employees, and could not take advantage of the specialized services of a finance officer and human resource specialist.

The staff of the transit offices at the various state DOTs believed that having regional and multi-county transit systems helped to reduce the administrative burden to manage grant funding and regulatory programs, and organize and deliver technical assistance. Multi-county systems reduce the overall number of rural systems with which the state transit staff must work. For example, staff of the Office of Public Transit, Kansas DOT, is relatively small. It is made up of a Program Manager, two Program Coordinators, a Drug and Alcohol Manager, and an administrative/financial assistant. The Kansas DOT is able to maintain a relatively small staff because the fifteen community transit districts (CTD) perform much of the grant processing function, and help organize training and other technical assistance on a regional level. In North Carolina there are approximately 84 community transit systems serving 100 counties. By comparison, Texas has 41 rural transit districts serving 254 counties, Tennessee has eleven regional transit systems serving 95 counties, and Iowa has 16 regional transit agencies serving 99 counties. Many representatives of these state DOTs believe that the quality and effectiveness of their technical assistance and training is better because they provide such services to a much smaller number of systems when compared to a state that has a predominance of single-county transit systems. They feel this assistance can be more focused and intense if there are significantly fewer transit systems and transit system staff person involved.

2. Conflicting Reporting Requirements: The database and reporting requirements in a regional transit agency can become quite complex. These agencies tend to have a relatively high number of member counties and human service contracts, and therefore must track trip cost information and generate billing invoices for a multitude of client groups. This task becomes even more difficult if the transit system is not able to standardize the trip cost data and report formats among the agencies. Some regional transit systems must use a variety of billing formulas, data, and cycles, generate different report formats, and maintain multiple types of eligibility records for their different customers. These varied requirements can exist within one client group. For example, regional transit systems may often serve more than one Medicaid provider, and each provider may have different billing and reporting requirements. This problem seems to occur less frequently among transit systems that contract with human service agencies, such as Medicaid and Area Aging Program, on a regional rather than a county-by-county basis. A few transit systems suggested that state-level human service administration set and enforce statewide reporting standards for client transportation in order to eliminate these conflicting reporting requirements.

3. Non-Uniform Regulations, Policies and Procedures Throughout the Region: The regulations, policies, and procedures can also become complex for a regional system for the same reason – the system is serving a relatively large number of different counties and human service agencies and is not able to implement uniform regulations, policies, and procedures. The Santee-Wateree Regional Transportation Agency (SWRTA – South Carolina) provides a poignant example. SWRTA Medicaid clients call the operations center in their particular county, but all other clients call the central office for trip reservations and dispatching. Some social service agencies require clients to contact the agency, not SWRTA, to schedule trips. A few agencies want to use vehicle miles traveled for billing purposes instead of the standard SWRTA flat fee. Finally, SWRTA had to develop special monitoring systems to allow the agencies to more easily audit the transportation services. The inability of SWRTA to use uniform procedures, even among Medicaid,

Social Services, and Area Aging Office agencies from the different counties and regions, has eroded some of the efficiencies gained through the consolidation of transit demand into a regional provider.

In contrast, the Choanoke Public Transportation Authority (CPTA) in North Carolina has been able to standardize its scheduling process and reporting requirements for all client groups. CPTA service includes four counties and numerous human service clients, including Medicaid, mental health, social services, Aging Program, Smart Start, and community colleges. This standardization has been accomplished through good communication with the inter-agency council that exists in each county. CPTA keeps these councils, which have significant influence with their respective county commissioners, well informed on how CPTA functions in terms of operations and administration so the agencies understand how the demand for non-standard procedures harms system efficiency and effectiveness.

4. Multiple Administrative Units: A few multi-county systems are required to use the administrative support services, e.g., human resources and payroll, of each of the member counties. This complicated organization reduces administrative benefits of the multi-county system by creating administrative paperwork burdens. The Chisago-Isanti County Heartland Express illustrates a model to avoid. Driver pay rates vary between the two counties in the service area, and the system pays drivers according to the county in which they provide service. As a result, there is little flexibility to use a driver that is paid by one county for service in another county because of the required paperwork for transferring funding. In addition, the payroll systems, payroll periods, pay scales, and cost accounting codes of each county are different but Chisago-Isanti County Heartland Express must conform to each payroll system. The transit system must dedicate considerable operations and cost accounting resources to learn and administer these separate payroll systems, and is hindered by operational inflexibilities that don't allow them to use drivers in all parts of the service area.

5. Regional Administrative Entities: Several states, such as Texas, Florida, Kansas and Illinois, incorporate regional entities into the administration of rural transit systems. The Texas Department of Transportation has public transit coordinators located in each of their 25 district offices. The Rural Transportation Assistance Program (RTAP) funds these coordinators. Coordinators' responsibilities include providing technical assistance, monitoring grants, conducting vehicle inspections, and performing other administrative and oversight functions for local transit systems in their district.

Some coordinators' responsibilities involve public transit only, while other coordinators responsibilities include highway and other transportation modes.

Florida's transportation disadvantaged program was created in 1979 and reenacted in 1989. The 1989 act created the Florida Commission for the Transportation Disadvantaged (CTD), and enhanced the local participation in the planning and delivery of coordinated transportation services through creation of local coordinating boards (LCBs) and community transportation coordinators (CTCs). The board and coordinator in each county are responsible for ensuring that human service and public transportation services are coordinated to the fullest extent possible, and administering and monitoring the required competitive procurement process for Transportation Operators.

While the CTD has increased the coordination of human service transportation for clients of the disparate agencies, local public transit systems may provide service in more than one CTD district. In these instances, administrative activities required of the local transit operator may become relatively complicated.

Organizational/Institutional, and Administration Summary Characteristics

Summary information pertaining to organizational/institutional, administration, and operations characteristics of the case study site systems is presented in Figure 4-3, followed by more detailed information from the interviews conducted with the case study sites and associated state departments of transportation.

Figure 4-3 provides summary information on the institutional and administration characteristics of the case study sites. Note that twelve transit systems operate as non-profit organizations, five operate as an independent unit of government (authority/regional transit district), and that three systems are operated as a part of one of their constituent counties.

Governing boards are typically composed of members appointed by local county and municipal governments, with some transit systems also including human service agency representatives.

The service area of case study transit systems service ranged from two to sixteen counties, with an average of six counties in the service area for the twenty systems.

The number of administrative employees ranged from one to eight, with an average of four administrative employees.

Fourteen of the twenty multi-county rural transit systems submit one application for state grants, as opposed to submitting separate applications from each county in the service area. The five North Carolina multi-county transit systems each submit a single Community Transportation Program grant application, but must submit Rural Operating Assistance Program applications on a county-by-county basis. Only Big Bend Transit, in Florida, must submit all grant applications on a county-by-county basis.

Billing methods vary greatly among rural transit systems, and include billing by: a flat trip rate, by zone, by mileage, by time, and combinations of these categories.

Figure 4-3: Organizational / Institutional and Administration Characteristics

System Name	Type of System	Board Structure[6]	Number of Counties	Number of Administrative Employees[7]	State Grant Applications	Billing Method
Big Bend Transit, Inc.—*Tallahassee, FL*	Non-profit	(Not available)	5	7	County-by-county applications for State DOT and CTD Grants.	Complex, varies by county and agency
Northeast Kansas Transit Council, Inc.—*Oskaloosa, KS*	Non-profit	Each transit system appoints representatives who elect officers.	4	1	Single application	By flat trip rate
RIDES Mass Transit District—*Harrisburg, IL*	Authority	Member appointed by: County chairman from each county (9) Mayor from each town with 5,000 or more pop. (1) Three non-profit groups (22 total members)	9	8	Single applications for Downstate Operating Assistance, and Section 5310 and Section 5311.	By trip mileage
10-15 Regional Transit Agency—*Ottumwa, IA*	Non-profit	Board of Supervisor from each county (10 total members)	10	2 ½ -- most service is contracted to Ottumwa Transit Authority	Single applications for State Transit Assistance, and Section 5310 and Section 5311.	By trip mileage or time, depending on client
Kennebec Valley Community Action Program (KVCAP)—*Augusta, ME*	Non-profit	Board invites advocates and consumers to become members (11 total members)	2	3	Single application	By flat trip rate plus trip mileage

[6] This column describes the governing board that makes funding and service allocation decisions. Some systems have a second board that has an advisory role for transit-specific issues.

[7] Administrative employees include those persons performing general management, finance and accounting, human resources (H.R.), marketing, training, and clerical support functions. Those person performing call-taking, scheduling, routing, dispatching, driver, driver supervision, and maintenance functions are considered operations employees, and therefore are not included in this count of administrative employees.

System Name	Type of System	Board Structure[6]	Number of Counties	Number of Administrative Employees[7]	State Grant Applications	Billing Method
Chisago/Isanti County Heartland Express—*Cambridge, MN*	County	County commissioners from each county appoint: Commissioner (2) County administrator (2) Family Services Manager (2) Plus human resource manager and transit planner from Chisago County, and Heartland Express Director (9 total members)	2	2	Single application	Flat trip rate for bus service, and trip mileage for service using volunteer driver
River Rider Heartland Express—*Elk River, MN*	County	Elected body in each county and town appoint an elected official (6 total members)	2	1 1/2	Single application	By trip mileage and time
Choanoke Public Transportation Authority (CPTA)—*Rich Square, NC*	Non-profit	County commissioners from each county appoint two members, except Halifax County appoints three. (9 total members)	4	4	Single application for CTP grant (admin. & cap.), and county-by-county for ROAP grants (ops.)	Mostly flat trip rate, but one contract uses trip mileage and time
Craven Area Rural Transportation System (CARTS)—*New Bern, NC*	County	Board of County Commissioners (7 total members)	3	4	Single application for CTP grant (admin. & cap.), and county-by-county for ROAP grants (ops.)	By flat trip rate, or mileage and time, depending on mix of clients on vehicle
Intercounty Public Transportation Authority (ICPTA)—*Elizabeth City, NC*	Non-profit	Elected county official and citizen from each county (10 total members)	5	2 1/2	Single application for CTP grant (admin. & cap.), and county-by-county for ROAP grants (ops.)	(Not available)
Kerr Area Transportation Authority (KATA)—*Henderson, NC*	Non-profit	County Commissioner and human service representative from each county (8 total members)	4	5	Single application for CTP grant (admin. & cap.), and county-by-county for ROAP grants (ops.)	Trip mileage and time

System Name	Type of System	Board Structure[6]	Number of Counties	Number of Administrative Employees[7]	State Grant Applications	Billing Method
Yadkin Valley Economic Development District, Inc. (YVEDDI)—*Booneville, NC*	Non-profit	Representative from each county (4 total members)	4	4	Single application for CTP grant (admin. & cap.), and county-by-county for ROAP grants (ops.)	Trip mileage
Santee Wateree Regional Transportation Authority—*Sumter, SC*	Authority	Counties, City of Sumter, and state legislative delegation each appoint one member (8 total members)	5	8	Single application	By trip mileage
East Tennessee Human Resource Agency (ETHRA)—*Knoxville, TN*	Non-profit	Elected official from each county (16 total members)	16	5	Single applications for State Operating Assistance, Section 5310, and Section 5311	(Not available)
Capital Area Regional Transportation System (CARTS)—*Austin, TX*	Regional Transit District	(Not available)	9	7	Single application	(Not available)
Alamo Regional Transit (ART)—*San Antonio, TX*	Non-profit	County Judge from each county appoints one member (11 total members)	11	2	Single application	By trip and mileage
Heart of Texas Council of Governments (HOTCOG)—*Waco, TX*	Regional Transit District	Each member government appoints an elected official to the board, which selects an Executive Committee (17 total members on Executive Committee)	6	2	Single application	By flat trip rate and zones (i.e., counties)
Hill Country Transit District (HCTD)—*San Saba, TX*	Non-profit	Each county and city appoint one representative (13 total members)	9	7	Single application	By trip

System Name	Type of System	Board Structure[6]	Number of Counties	Number of Administrative Employees[7]	State Grant Applications	Billing Method
South Plains Community Action Association, Inc. (SPARTAN)— *Levelland, TX*	Non-profit	(Not available)	10	6	Single application	(Not available)
Potomac Valley Transit Authority (PVTA)— *Petersburg, WV*	Authority	Each county and city appoint one representative (9 total members)	5	2 1/2	Single application	By flat trip rate and mileage

Key Operations Findings

Figure 4-4 provides summary information on selected operations characteristics of the case study sites. Service area population varies from approximately 48,000 (Northeast Kansas Transit Council, Inc.) to over 1,000,000 (CARTS in Austin, Texas).

The size of the service area ranges from approximately 1,150 square miles (River Rider Heartland Express in Minnesota, and Intercounty Public Transportation Authority in North Carolina) to over 10,000 square miles (Alamo Regional Transit in San Antonio, Texas).

The number of vehicles operated varies from five (Northeast Kansas Transit Council, Inc.) to 125 (Santee Wateree Regional Transportation Authority in South Carolina).

The number of annual trips provided varies from approximately 43,000 (Northeast Kansas Transit Council, Inc.) to over 380,000 (Hill Country Transit District in Texas).

Figure 4-4: Operations Characteristics

System Name	Service Area Population	Service Area Size	Number of Vehicles	Annual Trips
Big Bend Transit, Inc.—*Tallahassee, FL*	337,108	3,591	93	388,321
Northeast Kansas Transit Council, Inc.—*Oskaloosa, KS*	48,404	2,049	5	42,672
RIDES Mass Transit District—*Harrisburg, IL*	105,213	3,361	58	224,760
10-15 Regional Transit Agency—*Ottumwa, IA*	140,000	5,000	39	225,993
Kennebec Valley Community Action Program (KVCAP)—*Augusta, ME*	60,000	4,400	18	(not available)
Chisago/Isanti County Heartland Express—*Cambridge, MN*	72,388 (Counties only)	1,168	9	60,000
River Rider Heartland Express—*Elk River, MN*	150,000	1,147	8	69,159
Choanoke Public Transportation Authority (CPTA)—*Rich Square, NC*	121,845	2,313	53	277,428
Craven Area Rural Transportation System (CARTS)—*New Bern, NC*	114,751	1,571	32	100,902

System Name	Service Area Population	Service Area Size	Number of Vehicles	Annual Trips
Intercounty Public Transportation Authority (ICPTA)—*Elizabeth City, NC*	85,866	1,150	18	97,705
Kerr Area Transportation Authority (KATA)—*Henderson, NC*	158,684	1,706	34	135,179
Yadkin Valley Economic Development District, Inc. (YVEDDI)—*Booneville, NC*	187,113	1,590	82	~300,000
Santee Wateree Regional Transportation Authority—*Sumter, SC*	264,000	~2,500	125	62,082 demand- responsive only)
East Tennessee Human Resource Agency (ETHRA)—*Knoxville, TN*	919,151	6,722	94	156,876
Capital Area Regional Transportation System (CARTS)—*Austin, TX*	1,128,156	7,511	81	331,650
Alamo Regional Transit (ART)—*San Antonio, TX*	371,545	10,145	62	151,423
Heart of Texas Council of Governments (HOTCOG)—*Waco, TX*	307,867	5,556	60	108,090
Hill Country Transit District (HCTD)—*San Saba, TX*	377,937	8,426	77	381,849
South Plains Community Action Association, Inc. (SPARTAN)—*Levelland, TX*	336,908	8,807	45	137,000
Potomac Valley Transit Authority (PVTA)—*Petersburg, WV*	72,000	2,700	20	81,435

Findings related to operations included those involving increased professionalism, offering a variety of transportation services, maintenance, inter-regional transportation services provision, adherence to non-productive business practices, and distributed versus centralized operations.

1. Availability of Specialized Professional Skills: Larger public transit systems are often able to hire staff with greater specialization in areas such as marketing, accounting/finance, operations, administration, or maintenance. Since many regional transit systems are larger organizations than many single-county transit systems, regional systems may be able to employ staff with more specialized skills and experience. For example, among the eight administrative staff members in the Santee-Wateree RTA in South Carolina, there are staff members specializing in finance, regulation compliance, vehicle maintenance, salary and benefits, and operations. The 10-15 RTA in Iowa includes a transit administrator, maintenance supervisor and mechanic, and 2 ½ full-time professionals to perform RTA planning, financial management, marketing functions, and some specialized dispatching.

Large transit systems generally have a greater pool of administrative, operations, and capital resources than a small transit system. These resources are required to develop new transit services or to expand service into a new community or county. However, most of the case study regional transit systems were said to be operating at capacity, and therefore would have difficulty expanding services. For example, the Ottumwa Transit Authority, which provides service for the 10-15 Regional Transit Authority, finds it difficult to expand services to an additional human service agency as a result of their large 5,000 square mile service area. The transit system has a policy to not initiate new services unless a thorough evaluation determines that the system can provide the service at the expected quality.

The East Tennessee Human Resource Agency (ETHRA) is deemed by its management to be operating at capacity and is not able to add further human service transportation without a substantial investment in the system for additional vehicles.

In the case of the Pee Dee RTA in South Carolina, expansion beyond the capability to provide a consistent level of service led to the loss of membership in the transit system by three counties. One transit manager believes that an inadequate development plan led the Pee Dee RTA to offer services that were beyond their resources.

The Potomac Valley Transit Authority in West Virginia has experienced difficulty in developing new routes because of a lack of resources to increase service throughout its large, sparsely populated service area. Although large single-county or regional transit systems might be better suited for service expansion than small single-county systems, care must be taken to ensure the necessary resources are available before any service expansion is attempted.

2. Variety of Transportation Services: All the rural public transportation systems reviewed in this study operate demand-responsive service, however, several systems also operate fixed-route or deviated route service to meet local service demands. One multi-county rural transit system described an opportunity to list and determine the success of new operations procedures in only one county before adopting a new operations procedure throughout its service area.

For example, the Intercounty Public Transportation Agency (ICPTA) in Elizabeth City, North Carolina, operates a loop route in Elizabeth City and a trolley route in Edenton.

The Santee-Wateree Regional Transportation Agency (SWRTA) in South Carolina operates several deviated routes. These routes serve stops at time points for general public riders, but also deviate from the route to provide door-to-door service for some human service agency clients.

The Craven Area Rural Transit System (CARTS) in North Carolina operates deviated route service in New Bern, a city with approximately 25,000 residents.

In addition to its demand-responsive service, Capital Area Rural Transportation Service (CARTS) operating in a 9-county area surrounding Austin, Texas operates fixed-route service in three towns, intercity service connecting major municipalities in its service area, and commuter bus routes into Austin.

While some single-county transit systems operate other than just demand-responsive service, the economics of scale, and the greater likelihood of having staff with specialized operations planning skills may facilitate developing and implementing fixed-route, deviated route, and other types of service at regional transit systems.

Serving a multi-county area can also facilitate testing and implementing new types of services, as those services can be tested in only one county, evaluated for success, and implemented throughout the service area, if deemed successful. A single-county transit system may be required to implement changes on a more "all or nothing" basis, which can be difficult to accomplish, or to change, should the change not be deemed to be successful.

The Yadkin Valley Economic Development District, Inc. (YVEDDI) in North Carolina reported that it has tested various operational concepts in one county, evaluated the success of the test program, and then if successful, implemented that operational change throughout its service area. For example, that transit system plans to test alternative means of providing transportation for Department of Social Service clients, such as providing gas vouchers, paying relatives or friends a mileage reimbursement for transporting agency clients, and contracting with other providers for off-hour transportation

Transit systems that operate several types of transportation services must exercise care in establishing different fares for what some customers may perceive is similar service. The SWRTA experienced complaints from human service agencies over the higher fares their clients were paying compared to general public riders on deviated routes. The human service agency perceived that its clients, who were able to receive door-to-door service, were receiving similar service to general public passengers, who boarded and alighted at stops, but were paying a higher rate per trip. SWRTA staff had to carefully explain the difference in service before the human service agency agreed to pay the higher trip charge.

3. Maintenance: Case study sites cited two ways in which regional transit systems could realize maintenance benefits. First, regional transit systems may be able to realize economics of scale by operating fewer maintenance facilities and/or employing fewer staff than several transit systems each serving only one county. This economy of scale may also be realized by single-county transit systems where vehicles are maintained as part of the county fleet. Many case study sites, such as the Craven Area Rural Transportation System (CARTS) and Choanoke Public Transportation Authority (CPTA) in North Carolina, Capital Area Rural Regional Transportation System (CARTS) in Texas, and the East Tennessee Human Resource Agency (ETHRA) have centralized their vehicle maintenance facilities despite the large size of their service areas.

Second, special maintenance skills, such as those required to maintain diesel engines, may be beyond the capabilities of small transit systems. Such skills may not be readily available in all rural areas, and a small transit system may not be easily able to afford to hire an employee with such skills. Again, economics of scale may enable a multi-county rural transit system to better afford to hire maintenance staff with special skills.

For example, the Potomac Valley Transit Authority (PVTA) in West Virginia was able to develop in-house maintenance services for wheelchair lifts and diesel engines when no private garage in their service area was able to maintain those items. Had PVTA been a small transit agency in that area, they would not have been able to purchase and maintain diesel-powered vehicles, and would have lost substantial time transporting vehicles to a remote dealer for wheelchair lift maintenance and repair.

4. Inter-Regional Transit: Several representatives from case study transit systems and their associated state departments of transportation believe that transit operations by regional systems can facilitate the planning, operations, and coordinators' of inter-regional transportation services. While transportation services serving a region can be operated by single-county transit systems, that typically involves additional

effort to successfully coordinate operations between several transportation providers. A regional rural transit system can more easily coordinate out-of-county transportation to a regional center.

RIDES RTA in Illinois provides out-of-county, non-emergency medical trips to Evansville, IN, St. Louis, MO, and Paducah, KY for clients throughout its nine-county service area. CTDs are the not the actual providers of transportation service. The human services agencies and public transit systems that compose the Coordinated Transit Districts (CTDs) typically only provide transit services for their clients or a single county. Although there is no coordination among these separate operators for their intra-county trips, they do coordinate much of their out-of-county medical trips.

One might expect a regional transit system to be more likely than a single-county system to develop and operate coordinated service with an adjacent urban transit system. However, case study site transit systems cited only infrequent instances of service coordination between their transit system and nearby urban transit systems. For example, the Capital Area Rural Transportation System (CARTS) has few passenger transfers with the Capital Metro fixed-route service in Austin, Texas. In another example, the South Plains Area Rural Transportation Assistance Network (SPARTAN) was said to operate only limited coordinated service with Citibus in Lubbock, Texas. A relatively high level of service coordination might be expected in these cases, as both of these rural systems operate in areas adjacent to a large portion of the urban transit system service area.

In North Carolina, the service area of the Yadkin Valley Economic Development District, Inc. (YVEDDI) adjoins the north, west, and southwest borders of Forsyth County. Intercounty service is focused along the US 421, US 52, and I-40 highway corridors between the major towns of the four-county service area and Winston-Salem, in Forsyth County. However, YVEDDI management stated that there is no service coordination between YVEDDI and Trans-Aid of Forsyth County or the Winston-Salem Transit Authority.

5. Adherence to Non-Productive Operations Practices: As single-county transit systems develop into regional systems, some systems retain operations practices that are non-productive at the larger scale of operations. While some operations practices were appropriate for the operation of a single-county transit system, as the transit system expanded its service area and client base, those practices become ineffective, and may result in inefficient practices.

For example, the Texas RTDs still provide transportation service through single-county contracts with human service agencies. This county-by-county contract structure and the awarding of service contracts to different contractors in various counties have imposed a barrier to increasing operations efficiency at the Heart of Texas Council of Governments (HOTCOG). That transit system lacks effective Intercounty service coordination resulting from the tradition of establishing service contracts on a county-by-county basis under the Agency on Aging program plus the lack of a single transportation provider serving the entire service area.

This has resulted in the various service providers being unwilling to transport human service agency clients from adjacent counties served by another subcontractor on Intercounty routes. The county governments and human service agencies have become used to this service arrangement, and have not seen the need to change the contract process to improve operations efficiency and effectiveness.

In addition, the HOTCOG operations are distributed at several sites, eliminating the potential advantages than could be realized from centralization of functions such as scheduling and routing at a single site. The service contractors in each county are responsible for call taking, scheduling, and dispatching as well as providing transportation service in their particular county. To reduce these problems, transit system managers would prefer to not use county borders to define the area to be served by contractors when the service contracts are re-bid.

Another example of adhering to non-productive practices is that of a transit system that began as a Medicaid provider continuing to adhere to customer policies that reduce the efficiency of the system. The Medicaid transit rules may not permit negotiating trip times, and may require that client eligibility be confirmed with a human service agency for each trip. This procedure is not necessary for general public

passengers and clients of other human service agencies, but continues as a practice for all passengers as a transit system expands from a single-county to a regional entity.

6. Distributed vs. Centralized Operations: One might expect a multi-county transit system might centralize its operations at one center to take advantage of the economies of scale from consolidating call taking, scheduling, routing, and dispatching functions at a single center. However, many of the case study systems distributed all or part of their operations functions at several locations in their service area as a result of serving a relatively large area and with a relatively high proportion of trips provided on an intra-county basis.

The case study sites exhibited a variety of operations models, ranging from a completely centralized operations system to having an operations center in each county. The East Tennessee Human Resource Agency (ETHRA) serves as a model of a single operations center, centralizing call taking, scheduling, dispatching, etc. for all nine counties of the service area at one site. A large portion of ETHRA service originates in or is destined for the urban hub of Knoxville and surrounding Knox County. ETHRA staff believe they can more easily coordinate and monitor their services from a single operations center.

The Potomac Valley Transit Authority (PVTA) in West Virginia also has highly centralized operations. PVTA schedules and dispatches all 82,000 annual passenger trips from its central office. Vehicles are outposted throughout the service area. Given the large service area, this distribution is more efficient than a centralized system but has resulted in occasional problems in controlling and monitoring the vehicles and drivers. In order to overcome this problem, PVTA staff is investigating the possibility of opening a second operations office. This would provide one office to monitor operations in the northern two counties and one office to monitor operations in the southern three counties. Each operations office would have a manager and small clerical staff to manage service in their respective areas.

Other regional transit systems, such as River Rider Heartland Express in Minnesota use a model that includes both centralized and distributed functions. Call taking, scheduling and routing are performed at one centralized office, but small distributed operations centers in each county are used for closer supervision of drivers, for the distribution and collection of route manifests, and as sites at which vehicles are outposted and inspected.

The Yadkin Valley Economic Development District, Inc. (YVEDDI) is a model of distributed operations. YVEDDI maintains an operations center in each county, with a supervising coordinator, dispatcher, part-time data-entry person, and several vehicle drivers. Each operations center performs all call taking, dispatching, routing, vehicle maintenance, and driving duties for that particular county. Customized computer software assists with scheduling, generating manifests, and organizing trip data. The YVEDDI central office collects trip data from the operations centers and generates all bills and grant reports. The Ottumwa Transit Authority in Iowa uses a similar operations design as it operates primarily intra-county trips, which are operated through a ten county, 5,000 square mile service area.

There may be a point at which further consolidation results in diminishing operating efficiencies and service effectiveness. The manager of the Intercounty Public Transportation Agency (ICPTA) in North Carolina believes there is a saturation point in expanding the size of a service area at which operating efficiencies are no longer realized. He speculated that it is unlikely that ICPTA could efficiently expand their five-county operation to Gates County because a large number of the trip destinations from that county are to points outside of the current ICPTA service area.

It should be noted that several of the case study regional transit systems indicated that supervision of drivers, routes, and service is difficult in their large service areas if operations are highly centralized. The Ottumwa Transit Authority has rejected requests to provide service outside of the current ten-county service area because they do not believe such service can be provided effectively and efficiently, and believe that driver and route supervision will be too difficult to manage in a larger service area.

C. Metropolitan City-County Transit Systems

Key Organizational/Institutional Findings

Key findings involve use of one of three types of organizational/institutional models, governing boards, geographic area served, enabling legislation, and general public vs. human service transportation.

1. Organizational Models: Three basic types of transit models were studied:

- City- or County-Dominated systems
- Consolidated (or Unified) systems
- "Federated" (or Composite) systems

City- or County-Dominated Systems—the *city-dominated model* is perhaps the most common of the models examined in the study. These transit systems typically started as a privately operated business and then converted to a public operation in the 1960s or 1970s as demographic trends and the increased preference for the automobile drove the private systems into financial trouble and bankruptcy. These city- or county- dominated systems are primarily focused on traditional fixed-route bus service within the city. In general they do not provide human service transportation other than the ADA (Americans with Disabilities Act) required complementary service for the disabled. Organizationally, they are usually a department of city government. Examples include the systems in Durham, Raleigh, Chapel Hill, and Detroit.

In contrast, the *county-dominated systems* largely grew out of the need to provide specialized human services transportation in the county, usually in rural areas not served by the city systems. While some of these systems are venturing into service for the general public, their main focus is on such special needs as medical trips (e.g., Medicaid programs), and service for the elderly or disabled. The service provided is usually a paratransit operation (dial-a-ride, small vehicle service), although some also provide limited fixed-route service. Sometimes they provide feeder service to line-haul routes of a city or regional system. They often coordinate their service where appropriate with nearby city systems but their focus is on rural areas of the county. They function as a unit of county government. Examples include the Wake Coordinated Transit Services operation of Wake County (a division of the county Department of Human Services), and Orange Public Transportation in Orange County (a division of the county Department of Aging), both in North Carolina.

In both cases, whether city- or county-dominated, service outside the boundaries of the political jurisdiction is usually both limited and provided on a contract basis.

Consolidated (or Unified) Systems—consolidated or unified systems are usually the next stage in the evolution of city- or county-dominated systems. Due to the growing size of an urban area, the increasing number of "regional" passenger trips (trips across political boundaries), and/or the need to coordinate city and suburban or county services, a different organizational form is needed to bridge the multiple political jurisdictions or organizational boundaries involved. This usually takes the form of an independent transportation authority with its own governing board and geographic boundaries that include multiple political jurisdictions. Often some kind of taxing authority is also provided for operating funds and/or capital needs. Examples include the Capital District Transportation Authority (CDTA) in the Albany, New York area, Capital Metro in Austin, Texas, Tri-Met in Portland, Oregon, LYNX in Orlando, Florida, and the Chicago Transit Authority.

A variation of this type is a system that has consolidated by some kind of interlocal agreement. In this case, a formal transit authority is not created but through an intergovernmental agreement between

several political jurisdictions an organization is created where operations and facilities can be consolidated under a unified organizational and governing structure. An example is in Rocky Mount, North Carolina where the city system in Rocky Mount and the human service transportation operated in Nash and Edgecombe Counties by NETS (Nash-Edgecombe Transportation System) were merged into a single entity created as a "legal cooperative" under state law. This agency has its own governing board composed of representatives from the City of Rocky Mount and the two adjoining counties.

Charlotte offers an unusual case. The transit system is operated by the city's Public Transit Department but it serves areas both inside and outside of Mecklenburg County—including Rock Hill in South Carolina. A "regional system" has been created through interlocal agreement that is governed by a Metropolitan Transit Commission. Mecklenburg County passed a ½ cent sales tax to support transit. The transit system therefore serves the county as part of its regular operations but it provides service to communities outside the county through contract.

Consolidated systems can be organized around county boundaries (CDTA and Rocky Mount, NC), or the urbanized area (Capital Metro and Tri-Met). They generally consolidate or unify the previous transit services, i.e., services and facilities are owned and operated by the new organization.

"Federated" (or Composite) Systems—this organizational model involves a "federated" organization whereby an umbrella organization is created to provide more comprehensive regional service, planning, coordination, and/or funding. It may come about because distinct urbanized areas in a large region start to overlap and there is a desire for better coordination of services and facilities, or because it is not politically feasible or economically desirable to create a unified system (for example combining a city and a suburban system where the politics of the two areas are quite different, or combining systems with different unions and wage scales or outstanding debt structures). Existing transit operations under the umbrella agency remain somewhat autonomous, often having their own governing boards. Examples are Triangle Transit Authority (TTA) in the Research Triangle area of North Carolina, RTA in metropolitan Chicago, and the proposed Detroit Area Regional Transportation Authority (DARTA) in the Detroit area.

TTA serves three counties in the Research Triangle area of North Carolina. It has certain operating, planning, funding and taxing powers, however, the three city systems in Raleigh, Durham and Chapel Hill/Carrboro still operate relatively independently. There are some cooperative fare arrangements for transfers between these systems and TTA, and there is some coordination of routes and schedules, but the transit systems do not operate as an integrated or unified system.

In Chicago, the RTA was created as an umbrella agency for the six-county Chicago metropolitan area. The legislation that created the RTA, as substantially amended in 1983, created three "Service Boards" under the RTA—one for the Chicago Transit Authority (a pre-existing authority dating from the 1940s that serves the City of Chicago and nearby suburbs), Metra, the commuter rail system (formerly privately-owned commuter railroads), and Pace, the suburban bus system (formerly privately- and publicly-owned bus systems). Each Service Board has its own governing board.

The impetus for this model is the increasing urbanization of a metropolitan area and the need to provide transportation service across sub-regional political boundaries. One study participant from the Illinois Department of Transportation observed that the trend in Illinois seems to be to "centralize" in the smaller urban areas, and to "decentralize" (i.e., to move more toward the federated model) in the larger urban areas (Chicago and East St. Louis). A participant from Chapel Hill also observed that the national trend seems to be toward the federated model, not the consolidated or unified model.

The organizational models are summarized in Figure 4-5.

Figure 4-5: Organizational Models

System	Model Type	Comments
National Sites		
Capital District Transportation Authority (CDTA—Albany NY)	Consolidated	
Capital Metro (Austin TX)	Consolidated	
Chicago Regional Transportation Authority (RTA)	Federated	The three Service Boards under RTA are "consolidated".
Detroit Department of Transportation	City-County Dominated	
LYNX (Orlando)	Consolidated	
SMART (suburban Detroit)	Consolidated	
Tri-Met (Portland OR)	Consolidated	
North Carolina		
Capital Area Transit (CAT--Raleigh)	City-County Dominated	
Chapel Hill Transit	City-County Dominated	
Charlotte Area Transit System (CATS)	City-County Dominated	CATS has formed a "regional" system through interlocal agreement and is exploring the desirability of becoming a formal regional transportation authority.
Durham Area Transportation **Authority** (DATA)	City-County Dominated	
Orange Public Transportation (OPT)	City-County Dominated	Primarily human service transportation.
Piedmont Wagon Transit System (PWTS)	City-County Dominated	In process of consolidating city service with county human service transportation.
Rocky Mount Transit	Consolidated	
Triangle Transit Authority (TTA)	Federated	The three city systems within TTA's territory are "city-dominated"
Wake Coordinated Transportation System (WCTS)	City-County Dominated	Primarily human service transportation.

2. Governing Boards: There are a number of variations in governing boards in terms of size, who the board members represent, composition, appointing authority and powers. (Other issues such as compensation and length of terms are not part of the scope of this report.)

A key issue mentioned by many survey participants was that of representation. A governing board needs to be sufficiently representative of the various political jurisdictions and stakeholders in order that the various interests feel sufficiently represented (or protected). In many instances, there has been concern that an area will not have sufficient control over the service it receives or the amount it pays for services.

The issue of representation also leads directly to the issue of board size—a board can quickly become too large to operate effectively. A careful balance has to be achieved between adequate representation and manageable size. At the LYNX system in Florida, the board of one of the predecessor agencies had grown to 25 members and had become unwieldy. Moreover, members from very small areas had the same vote as members from large areas. When LYNX was created by the consolidation of two agencies, it was able to

reduce the board to its current size of eleven after a process of public discussion. In this study the boards ranged in size from three (in Rocky Mount, NC) to thirteen (Chicago RTA and TTA) members.

A related issue is how to give the constituent groups or areas a proportionate vote on the board that represents their relative "importance" in the region, whether this is measured in terms of population, taxes contributed, service received or transit usage. In general, this was accomplished at the case study systems by giving larger or more populated areas more votes on the board. Theoretically this could also be accomplished by giving individual board members a weighted vote to represent their relative "importance".

All of the boards at the case study sites are appointed boards. However, there are some transit boards in the country that have elected boards. This may result in board members whose agenda is mainly political, and in introducing too much politics into such decisions as where services are provided, where rail lines are built, and what should be the fare structure. Many of the appointed boards in this study are composed of elected officials, either as designated in the enabling legislation or as selections of the appointing authority. Other boards have members who are local civic or business leaders, or sometimes citizens or riders. Some boards have both elected and non-elected members.

There were a variety of opinions about what type of person should be on a board. Some case study spokespersons believed that elected officials are often too parochial in perspective and that their thinking is too short-range in nature (more geared to election cycles than long-term needs). Some felt that business or civic leaders were better able to provide a regional perspective and to consider long-range plans and needs. In general, it was believed that there needed to be at least some members on the board who could represent a long-range, regional perspective.

A particularly difficult issue is how to structure a board where geographic areas or political jurisdictions have the ability to opt in or out of the authority (see discussion of Geographic Area below). If such an area is of significant size or political influence, the board membership structure might need to be changed.

An unusual case regarding boards is that of the Triangle Transit Authority (TTA) in the Research Triangle area (North Carolina). TTA has a 13-member board with ten members appointed by the region's three counties and principal municipalities, and three members appointed by the North Carolina Secretary of Transportation. The number of representatives from the cities and counties is roughly in proportion to their population. The members are a mixture of individuals from the public and private sectors. However, in addition to this board the TTA also has a separate Special Tax Board, as provided in its enabling legislation, that has the power to enact (or not enact) certain taxes to support the TTA's operations. The Special Tax Board has six members--two elected officials from each of the three counties—and has no function other than approving the taxes.

The characteristics of the governing boards of the case study systems are summarized in Figure 4-6.

Figure 4-6: Governing Boards

System (U.S.)	Size	No./Areas Represented	Appointed By	Type of Person	Comments
Capital District Transportation Authority (CDTA—Albany NY)	9	3—Albany County 2—Rensselaer County 2—Saratoga County 2—Schenectady County	Governor (from lists of names), with approval of Senate	Individuals with business skills	
Capital Metro (Austin TX)	7	2—City of Austin 3—various suburban areas 2—at large	5—various city/county governing bodies 2—MPO (at large)	5 elected officials 2 at large representing general public	One Austin appointee must represent interests of "transportation disadvantaged".
Chicago RTA	13	5—Chicago 4—Cook County outside Chicago. 1—DuPage County 2—Remaining Counties 1—Region (Chairman)	5—Chicago mayor 4—Cook County Board 1—DuPage County Board 2—4 other counties 1—RTA Board	Various	Chairman is selected from outside the Board by a ¾ vote of the other 12 board members.
Detroit DOT	No board				System operates as a city department reporting to the Mayor and City Council.
LYNX (Orlando)	11	3—the three counties served 3—principal city in each county 5—regional	5 regional by the Governor		FLDOT Regional Secretary is an ex officio member.
SMART (suburban Detroit)	7	6—two from each of the three largest counties 1—represents the four counties served	3 are the CEOs of the three large counties. They each select another representative. The four counties in the area collectively select 1.	The three CEOs are elected officials.	
Tri-Met (Portland OR)	7	Entire area.	Governor		Each board member must live in a specific district.

System (North Carolina)	Size	No./Areas Represented	Appointed By	Type of Person	Comments
Capital Area Transit (CAT--Raleigh)	9	City of Raleigh	City Council		Although the system operates as a department of the city, it has a governing board. However, the City Council retains authority over funding.
Chapel Hill Transit	9				System operates as a department of the town. There is a very active advisory board for Chapel Hill Transit.
Charlotte Area Transit System (CATS)	8	1—City of Charlotte 1—Mecklenburg County 6—suburban towns in Mecklenburg County	The interlocal agreement specifies that the representatives will be the Mayor of Charlotte, the County Board Chairman, and the Mayors of the six suburban towns.		The Metropolitan Transit Commission includes non-voting members from cities and counties served outside of Mecklenburg County. It also includes representatives from NCDOT and SCDOT.
Durham Area Transportation Authority (DATA)	No board				Operates as a division of the city's Department of Public Works. It has a Board of Trustees that is advisory, however, it can approve routes and schedules.
Orange Public Transportation (OPT)	No board				Operates as a division of the county Department of Aging.
Piedmont Wagon Transit System (PWTS)	Consortium of local government participation that provides direction on budgets and services				Operates as a department of the City of Hickory. There is a consortium of the local governments participating in Piedmont Wagon that provides direction on budges and services.
Rocky Mount Transit	3	1—Rocky Mount 1—Nash County 1—Edgecombe County	1—Rocky Mount City Council 1—Nash County Board 1—Edgecombe County Board		

System (North Carolina)	Size	No./Areas Represented	Appointed By	Type of Person	Comments
Triangle Transit Authority (TTA)	13	10—region's three counties and principal municipalities 3—at large	10 by the principal cities and counties 3 at large by the NCDOT Secretary	Various private- and public sector individuals.	The 10 members are in rough proportion to the population of each jurisdiction. NOTE: TTA also has a Special Tax Board of 6 members, 2 from each county, all elected officials. It approves any taxes imposed.
Wake Coordinated Transportation System (WCTS)	No board				Operates as a unit of the county Department of Human Services.

3. Geographic Area: The creation of regional urban transit systems has tended to follow development growth in their geographic areas. As urban areas have physically expanded due to increased population and suburbanization, the travel needs of residents have spanned more and more political boundaries—city, suburban, county and in some cases even states. Transit systems have responded to these regional trip needs and increasing intra-regional interdependence through the creation of some form of regional transit agency.

As discussed in the section on Organizational Models above, the city-county transit systems are usually organized around either an urbanized area boundary or a county (or counties) boundary. Some of these urbanized areas are contained in one county (e.g., CAT in Raleigh and DATA in Durham), and some span multiple counties (e.g., Tri-Met in Portland and Capital Metro in Austin). Those agencies that are organized around county boundaries include those limited to one county (e.g., Orange Public Transit and the Wake Coordinated Transportation System in North Carolina), and those including several counties (e.g., the Triangle Transit Authority in North Carolina, RTA in Chicago, and the Capital District Transportation Authority in New York).

Sometimes the legislation governing regional transit authorities allows areas within the boundary to opt out of the authority, or for areas outside the boundary to opt in. For example, several areas around the Austin, Texas area chose not to join Capital Metro at its inception. A few areas subsequently opted out when they did not believe they were receiving benefits commensurate with their financial contribution. A couple of suburban areas have subsequently opted in. There is a large area within the boundaries of Portland Tri-Met that is not part of the district. This is a hilly and sparsely populated area that chose to be excluded from the Tri-Met district when Tri-Met redrew its boundaries in the 1970s to match urbanized area rather than county borders.

There are generally two methods used to opt in or opt out of regional transit systems. In one method, the issue is put before the voters. In the other method, a decision is reached by the relevant political jurisdiction, e.g., by a city council or county board.

4. Enabling Legislation: The case study sites demonstrated four different ways of establishing city-county transit systems:

- No legislation. The system was established as a department or unit of city or county government (e.g., the Durham Area Transit Authority and the Detroit Department of Transportation).
- Interlocal or intergovernmental agreement. These more regional systems were formed by legal agreements between political jurisdictions as permitted under state law (e.g., Charlotte and Rocky Mount in North Carolina).
- Generic enabling legislation. These authorities or districts were formed under general state enabling legislation pertaining specifically to transit systems (e.g., Mass Transit Districts in Illinois, Regional Transportation Authorities in North Carolina, and Metropolitan Transportation Authorities in Texas.
- Specific state legislation. Some regional transit authorities were formed under legislation directed specifically to that authority. The Chicago RTA was created by a state law that was targeted specifically at the Chicago metropolitan area. The proposed DARTA legislation to create a coordinated system between the Detroit Department of Transportation and SMART (the suburban authority) is another example.

The latter alternative seems to be most relevant to very large systems that because their size and complexity are unique in their respective states.

In the case of the city or county departments, special dedicated funding is not provided. Funds usually come from general city or county revenues. This is also the case with the systems formed through intergovernmental agreement. However, where there is state legislation involved, either generic or specific, there is sometimes also a tax or specific funding source provided or permitted.

5. General Public vs. "Human Service" Transportation: In general, the city-county transit systems do not provide "human services" transportation directly (with the exception of the complementary paratransit service for the disabled required by the Americans with Disabilities Act). Their operations tend to be limited to traditional transit service for the general public. Where human service transportation is provided, it is usually through a subsidiary or private contractor. Exceptions are the "county-dominated" systems that for the most part exist to provide human service transportation, i.e., Orange Public Transit and the Wake Coordinated Transportation System in North Carolina. These systems may provide some service to the general public in areas of the county not served by the municipal transit systems but their focus is on service for people with special needs (the elderly, disabled, medical trips, etc.).

Key Funding Findings

There are four key issues related to funding:

- Sufficiency—is there enough funding?
- Funding "equity"—are sub-areas or jurisdictions receiving benefits commensurate with the funds they provide?
- Dedicated funding—is there an assured source of funds as opposed to uncertain annual appropriations from state or local sources?
- Funding program structure—are there problems or constraints caused by the structure of funding programs (e.g., the separation of funds into categorical programs such as urban/rural, or operating/capital)?

There are some other funding issues that will not be addressed in this report, for instance what are the best tax sources for local funding. A desirable feature, of course, is that the tax trends well with inflation. Another desired feature is a tax that is administratively easy and economical to collect. A good case can also be made for having multiple sources wherever possible so that an adverse impact on one tax source doesn't impact the overall system too severely.

1. Sufficiency: Funding is obviously a key issue for regional transit systems, as most systems earn well below one-half of their operating expenses from the farebox (an exception is the Chicago RTA which is required to earn at least 50% of its operating expenses from the farebox). The remainder of operating expenses and capital expenses must come from elsewhere, usually from local, state and/or federal funding sources.

Most transit systems receive some federal funds, both operating and capital. However, there are differences depending on whether the urban area is large or small. For urbanized areas with a population of 200,000 or more, federal formula funds (Section 5307) go directly to the local grant recipient. For areas with a population of 50,000-200,000, these funds go to the state.

The experience is varied when it comes to state funding. In Texas, for example, the large "metropolitan" systems (urban areas over 200,000) do not receive state funds, whereas smaller urbanized area systems (50,000-200,000) do. The rationale is that the metropolitan systems have the ability to levy a local sales tax of up to 1% and therefore do not need state help. In other states such as Illinois, Michigan, New York, North Carolina, and Florida, some state operating and/or capital financial assistance is usually provided. In some cases this assistance is relatively assured, and in other cases it involves an annual appropriation that must be sought each year. Examples of assured funding include Michigan where SMART and the Detroit Department of Transportation receive regular funds from the transit portion of the state's Transportation Fund which is funded by ¼ cent of a 2 cent state gasoline tax increase, and Illinois which provides the Chicago RTA with an amount equal to a ¼ percent sales tax on certain items sold in Cook

County. An example of an annual appropriation is the Capital District Transportation Authority in New York. In North Carolina, all city-county systems receive state funds but these funds are not dedicated.

Local funds come from a variety of sources. Where the system is either city- or county-dominated, some local funds usually come from city or county general revenues. Regional systems sometimes have to seek annual appropriations from the local jurisdictions in their area. Some systems receive funding from a dedicated source, for example:

- Capital Metro has a 1 percent sales tax, Charlotte a ½ percent sales tax, and the Chicago RTA has a sales tax of 1 percent in the central county and ¼ percent in the outer counties.
- Tri-Met in Portland has a payroll and self-employment tax.
- TTA in North Carolina imposes a $5 tax on vehicle registrations, and a 5 percent tax on automobile rentals.
- SMART has a property tax (1/3 mill).
- Chapel Hill dedicates a portion of its property tax ($.10/$100 valuation).

2. Funding Equity: An important issue in regards to funding is assuring jurisdictions within the region that they are getting a "fair share" of services in exchange for the taxes they are providing. A key point raised by the participants from Capital Metro was that the requirement to levy a uniform 1 percent sales tax throughout the region created problems because some areas clearly could not justify implementing a commensurate amount of transit service. These areas subsequently opted out. (Since 1988, four suburban cities have voted to withdraw from the district—Westlake Hills, Rollingwood, Cedar Park and Pflugerville.) The respondent suggested that there be flexibility to levy varying tax rates depending on the amount of service likely to be received. For example, a less-dense suburban area might be allowed to join the district with a ¼% sales tax instead of the full 1%.

Another approach relating to funding equity is that taken by SMART. This system has developed community-based transit services aimed at communities throughout suburban Detroit that might not be receiving much traditional transit service. This has overcome some of the resistance to its property tax funding, SMART also works closely with communities to design and operate a system tailored to the needs of that community. These systems are often paratransit in nature. SMART offers such assistance as helping to plan the system, joint marketing, purchasing of vehicles, and performing heavy maintenance. The communities usually operate the systems by contracting with a private provider thereby retaining more control over the service than if it was operated by SMART.

A different approach to funding equity was taken by the RTA in Chicago. Here, after substantial political controversy and opposition, the legislation that substantially restructured the RTA in 1983 created a differential sales tax—1 percent in Cook County (the central and most densely populated county, and ¼ percent in the outer counties (more suburban and rural). It also included the creation of funding formulas that assured that certain percentages of the RTA sales tax would be allocated to specific Service Boards (the continual concern being addressed by this was that the Chicago Transit Authority would otherwise consume most of the funds). However, these measures have not avoided controversy. RTA is currently being sued by Pace, the suburban bus system that is part of RTA, over Pace's belief that it is not receiving its fair share of funding. In addition, due to the differential growth rates in the city and the suburban areas, and therefore in the RTA sales tax, the formulas have tended to over-fund Metra (the commuter rail system) and under-fund the Chicago Transit Authority.

3. Dedicated Funding Source: Several study participants stressed the importance of having a dedicated source of state and/or local funds. When there is not a dedicated source and the system has to go to the local or state governments for annual appropriations, three types of problems are created:

- Political compromises may result in the implementation of transit services with little operational justification.

- The unpredictability of the annual appropriations makes it more difficult to do long-range planning and implementation for the system.
- Lack of a dedicated funding source can also increase the difficulty to secure multi-year capital grants from the federal or state governments because the local share cannot be assured over time.

Almost all of the systems receive federal funding for operating and/or capital needs. Figure 4-7 summarizes local and state *operating* funding information for the systems studied.

4. Funding Program Structure: Current federal funding programs limit state DOT flexibility in transferring funds among programs that fund urban areas with greater than 200,000 population to urban areas with less than 200,000 population, and from rural areas to urban areas with greater than 200,000 population. Additional flexibility in transferring at least some portion of funds among these programs is not envisioned to increase or reduce funding levels to one or more of these programs, but as a means to allow state DOT staff to better allocate all sources of funding. In other words, flexibility in allocating funds from among various sources would enable state administrators to more effectively allocate federal and state funds to various sub-recipients of those funds.

The NC General Assembly currently appropriates public transportation funding into the following line-item categories:

- Rural Capital
- Rural Operating
- Elderly and Disabled
- Urban and Regional Maintenance
- New Starts
- Human Service
- Urban and Regional Technology

In order to provide greater flexibility in meeting the changing needs of public transportation in the state, particularly as more and more systems regionalize and combine, the consolidation of some or all of these categories into fewer line items could be explored. For example, capital and operating, or urban and rural, line items might be combined.

Figure 4-7: Operating Funds

System (U.S.)	Local	Dedicated	State	Dedicated	Equity Provision(s)	Comments
Capital District Transportation Authority (CDTA—Albany NY)	Mortgage recording tax (minor--2-4% of budget)	Yes	Annual appropriation	No	No	State funds are not dedicated but were described as "fairly automatic".
Capital Metro (Austin TX)	1% sales tax	Yes	No	N.A.	"Suburban Community Equity Adjustment Program" adopted by Board in FY 2000.	1/4th of sales tax is committed for capital projects
Chicago RTA	Sales tax (1% in Cook County, ¼% in outer counties)	Yes	Annual appropriation equal to ¼% of some retail sales in Cook County	No	Certain percent of sales tax must be used in certain sub-areas.	State also reimburses RTA for reduced fares for elderly, disabled and student riders.
Detroit DOT	City general revenues	No	Gas tax funds from state are split 65/35 with SMART	Yes	N.A.	½ cent of a 2 cent statewide gas tax increase goes into a special fund for transit and is allocated to systems based on operating expenses.
LYNX (Orlando)	Must seek annual funds from local communities	No	State provides block grants for operating and capital	No	Local funds generally used for service in the local community	LYNX must go request local jurisdictions for funding. State funds are not dedicated but are relatively automatic.
SMART (suburban Detroit)	1/3 mill property tax	Yes	Receives 35% of gas tax funds from state (see Detroit DOT above)	Yes	Most of the property tax is used for local "community-based" service (this amount is matched by SMART from other funds)	See Detroit DOT above. SMART will request voter approval for an increase in the property tax in August 2002 (probably to 2/3 mill)

System (U.S.)	Local	Dedicated	State	Dedicated	Equity Provision(s)	Comments
Tri-Met (Portland)	A payroll tax provides the majority of its operating funds. A property tax pays debt service on some capital bonds.	Yes	See comments	See comments		State lottery proceeds back the bonds used to build light rail. State cigarette tax proceeds and general funds are used for elderly and disabled services. The cigarette tax is dedicated.
System (North Carolina)	**Local**	**Dedicated**	**State**	**Dedicated**	**Equity Provision(s)**	**Comments**
Capital Area Transit (CAT--Raleigh)	Annual appropriation from city budget	No	Formula allocation from Hwy. Trust Fund and Vehicle Regis. Fees	No	N.A.	
Chapel Hill Transit	Property tax in Chapel Hill and Carrboro. UNC-Chapel Hill participates in funding the net deficit of the system.	Yes	"	No		
Charlotte Area Transit System (CATS)	½ cent sales tax in Mecklenburg County	Yes	"	No	Information is provided to jurisdictions about the cost of service provided to each	
Durham Area Transportation Authority (DATA)	Annual appropriation from city budget	No	"	No		
Orange Public Transportation (OPT)	Funded through county budget	No	"	No		
Piedmont Wagon Transit System (PWTS)	Annual appropriation from city and county budgets	No	"	No	Local funds linked to amount of service received	

System (North Carolina)	Local	Dedicated	State	Dedicated	Equity Provision(s)	Comments
Rocky Mount Transit	Annual appropriation from city and county budgets	No	"	No		
Triangle Transit Authority (TTA)	Vehicle registration fee ($5), and auto rental tax (5%)	Yes	"	No		
Wake Coordinated Transportation System (WCTS)	Funded from county budget	No	"	No		

Key Administration Findings

It seems apparent that there should be opportunities for administrative savings and efficiencies if such functions are consolidated in a single agency. It makes more sense, for example, to have a single purchasing department, information systems department, or personnel department, than to have several such departments in multiple agencies in the same area. This is especially true where these functions can be consolidated in a single physical facility.

In addition to possible savings in labor costs, there are also advantages in terms of more efficient and effective programs. For instance, the RTA in Chicago administers the "Transit Check" program (tax free vouchers for employers to give as an employee benefit) for the region rather than each Service Board having its own program. It also conducts regional marketing that benefits all of the carriers.

Although there can be benefits in cost savings and in better coordination and service when administrative functions are consolidated, the study was not able to document or quantify such savings or efficiencies. Many of the consolidations in urban systems took place years ago, in the 1960s and 1970s. Moreover, these consolidations usually took place at the same time that a number of other changes were occurring, e.g., the conversion from private to public operation, and the concurrent consolidation and expansion of service.

In the larger transit systems, the administrative functions can be fairly extensive and it is often not a simple matter to even distinguish between what is "administrative" and what is "operational." Also, in the "federated" transit systems, administrative functions were not combined and savings thereby realized, but instead a new administrative layer was added. In the case of the RTA in Chicago, for the most part a new agency was added with strong financial and budget oversight powers. The TTA in North Carolina was not a consolidation of existing transit operations, but the formation of a new agency to provide regional bus service and build a regional rail system.

In one instance, however, there was a clear savings in administrative costs. In 1999 the City of Rocky Mount, North Carolina was looking for a new Transit Administrator. The two adjoining counties and the City of Rocky Mount decided that rather than having two administrators for the separate urban and rural systems, it would be more efficient to have only one for a combined system. This consolidation also resulted in the need for only one administrative assistant rather than two.

Key Operations Findings

The city-county systems examined in this study were mostly traditional bus operations—fixed-route, large-bus service for the general public. As described above, most of these systems also offer complementary paratransit service for the disabled as required by the Americans with Disabilities Act.

Some of the systems also offered other transit services such as small community-based systems using smaller buses and operating as dial-a-ride or deviated fixed-route service (service that primarily operates on a fixed route but will deviate from that route to pick up or drop off riders. Several systems also offer "park-n-ride" facilities, and carpooling and vanpooling services.

A few of the systems offer rail service. Portland operates a light-rail line. Detroit has a downtown "people mover" system. Chicago operates both heavy-rail (subway, elevated and highway-median) and commuter rail. Several of the cities are planning rail systems. TTA is designing and engineering a "regional rail" system (a cross between light rail and commuter rail). Charlotte is proceeding with plans for light rail (and is also studying express bus lanes). LYNX in Orlando is studying both light and commuter rail options.

A small number of the systems provide human service transportation, i.e., special transportation typically serving elderly citizens and people with physical or mental disabilities.

Figure 4-8 summarizes the transportation modes operated by the systems studied.

Figure 4-8: Modes Operated by Case Study Site Transit Systems

System (U.S.)	Fixed-Route Bus	ADA Paratransit	Other Paratransit	Light Rail	Heavy Rail	Commuter Rail	Other
Capital District Transportation Authority (CDTA—Albany NY	X	X	Human service transportation through a subsidiary (ACCESS)				Park-n-Ride Limited rural service
Capital Metro (Austin TX)	X	X	Some human services transportation				Park-n-Ride Vanpooling and carpooling
Chicago RTA	X	X	X		X	X	Service is actually operated by the Service Boards Park-n-Ride Vanpools
Detroit DOT	X	X					Downtown People Mover
LYNX (Orlando)	X	X	Human service transportation through a private contractor	Under study		Under study	Vanpooling and carpooling
SMART (suburban Detroit)	X	X	X				
Tri-Met (Portland)	X	X		X			Park-n-Ride Carpooling

System (North Carolina)	Fixed-Route Bus	ADA Paratransit	Other Paratransit	Light Rail	Heavy Rail	Commuter Rail	Other
Capital Area Transit (CAT--Raleigh)	X	X	X				
Chapel Hill Transit	X	X	X				
Charlotte Area Transit System (CATS)	X	X		Design and engineering for the South Corridor only		Under study	Busways Vanpooling and Carpooling
Durham Area Transportation Authority (DATA)	X	X					
Orange Public Transportation (OPT)	Limited	N.A.	Human services transportation				
Piedmont Wagon Transit System (PWTS)	X	X	Human services transportation				
Rocky Mount Transit	X	X	Human services transportation				
Triangle Transit Authority (TTA)	X	Operated for some routes		Under study for 15/501 corridor along with busways		Designing and engineering "regional rail"	Park-n-Ride Vanpooling and Carpooling Busways under study for US 15-501 corridor.
Wake Coordinated Transportation System (WCTS)	Limited rural	N.A.	Human services transportation using a private contractor				

V. Regionalization Issues

A. Introduction

There are a number of key issues that need to be addressed when considering the creation of regional public transportation systems.

- Creation
- Governance
- Organizational form
- Funding
- Geographic area
- Direct Service Operations vs. Coordinating vs. Contracting/Brokering
- General Public vs. Human Service Transportation
- Urban vs. Rural Service
- Equity between systems that do not elect to regionalize versus those who do regionalize
- Phased versus one-time implementation of regional transit systems

These issues are discussed below.

B. Key Issues

Creation

How should regional transportation agencies be created? Who should be involved? Whose approval should be required? There are a number of methods used to create regional agencies throughout the country. Some have been created by specific state legislation that pertains to only that agency. More often, regional agencies are formed under general state enabling legislation that prescribes exactly how they are to be formed. In at least one of the case studies (the Chicago RTA), a region-wide referendum was required to approve the creation.

State legislation can either prescribe the specific geographic area of the regional agency, or it can be left to local political jurisdictions to define the region as they see fit. For example, general enabling legislation could allow a group of municipalities and/or a group of counties to jointly create a regional agency. Creation of a multi-county agency might include approval by the affected county boards, and might also include approval by the city councils of the principal municipalities in the region.

The issue is further complicated by whether the transportation to be provided involves urban transportation, rural/human service transportation, or both. A regional agency that is only involved in providing urban service might most appropriately be created for an "urbanized area" and would mainly involve municipal governments. An agency that provides rural and human service transportation might more appropriately be organized according to county boundaries and therefore mainly involve county governments.

Governance

What should the governing board of a regional public transportation agency look like? How many members should it have? How large does it need to be in order to be adequately representative of the region and the key stakeholders? How large is too large before it becomes unwieldy or unmanageable? Who should appoint the members? Who or what should they represent? Should they represent specific sub-areas or the region as a whole? What kind of people should they be? Elected officials? Civic leaders? Citizens or riders? A related issue is whether there should be a separate advisory committee of some kind that would represent important stakeholders such as riders, elderly or disabled persons, or citizens.

A central issue in structuring a board is to do so in a way that sub-areas do not perceive they will lose control over their existing transit services, or conversely, that they will be sufficiently protected from being unfairly taxed for service that they don't receive. For example, suburban areas may fear that city interests will dominate the board. Similarly, rural areas may fear that an inequitable share of funding will go to urban transit services.

These are the kinds of issues that need to be addressed in forming a governing board. The answers may vary from region to region depending on an area's political history, culture, size, and complexity. In the "regional" urban systems examined in this study, the board size ranges from 3 to 13. Some of the multi-county rural systems have boards that are even larger. One multi-county system, the RIDES Mass Transit District in Illinois, has a board of 22 members.

The boards are composed of elected officials, private sector individuals, or a combination of both. Sometimes board members represent a specific sub-area, such as a county or town in the region, sometimes they represent the region as a whole, e.g., "at large" members. Some board members are appointed by local city or county elected officials, and some are appointed by regional or statewide officials such as the governor or secretary of the state department of transportation. Most of the regional systems have a transportation advisory board or committee with representatives of various stakeholders such as the public, riders, elderly and disabled persons, and human service agencies.

Organizational Form

As with governing boards, there are a number of choices to consider in regard to the appropriate organizational form for a regional agency. In this study, three basic organizational models were examined. The first, the "city- or county-dominated" system, was not really a regional model. These systems for the most part serve only their specific city or county jurisdiction, although they may provide limited service to areas outside their boundaries through service contracts. Examples are Capital Area Transit in Raleigh, and Orange County Public Transit in Orange County, North Carolina.

The second type of model, the "consolidated" or "unified" system, was typically formed as a public transportation authority or district with its own governing board and a service area that included multiple cities/towns and/or counties, or through the use of interlocal agreements. This type of agency might or might not have the ability to impose taxes. Examples are Capital Metro in Austin, Texas, the Capital District Transportation Authority in New York, and Rocky Mount/NETS in North Carolina. A variant of this type of agency is one formed through interlocal or intergovernmental agreement as permitted by state law. This type of agency does not have its own taxing power. Many of the multi-county rural transit systems examined in North Carolina, Iowa, Maine, and Tennessee have consolidated the provision of public transportation services in their region through the use of interlocal agreements.

The third type of agency was the "federated" model whereby a new regional organization was created as an "overlay" to existing sub-regional transit agencies. The underlying transit systems retain a great deal of autonomy and may even have their own governing boards. Examples of this type of model are the Triangle Transit Authority in the Research Triangle Park of North Carolina, and the Chicago Regional Transportation

Authority. Both of these agencies have their own taxing power or funding sources. The Kansas Coordinated Transit Districts (CTDs) could be considered to be examples of this type of organization on the rural side. However, the CTDs function primarily as organizations to administer funding to local transit systems in their regions.

The regional case study transit systems were created by one of three different legal means:

- Interlocal or intergovernmental agreement as permitted by generic state law (e.g., the Charlotte Area Transit System, Rocky Mount Transit in North Carolina, and the Chisago-Isanti County Heartland Express system in Minnesota).
- Generic enabling legislation that allows any area in the state to form a public transportation authority or district (e.g., Metropolitan Transportation Authorities in Texas, Mass Transit Districts in Illinois, or Regional Transportation Authorities in North Carolina and South Carolina, plus Rural Transit Districts in Texas).
- Specific state legislation that applies only to a particular regional area (e.g., Tri-Met in Oregon and the Chicago Regional Transportation Authority). This option tends to be used when a particular region in a state is unique because of its size and complexity.

Funding

In addition to the obvious issue of whether a regional system has enough total funding, there are three other key funding issues:

- Should the agency have its own dedicated taxing ability or funding source? The alternative is to require the agency to solicit funds annually from the various local jurisdictions within its territory, a situation that can lead to planning and funding uncertainty, and to difficult negotiation or bargaining with multiple local governments.
- How to insure that there is a perception of funding equity, i.e., that what sub-areas are receiving in transit service is in some rough proportion to the taxes they are paying. Similarly, to what extent does the agency have the discretion to use its funds where they are most needed as opposed to where they are generated (or where they are allocated by state or federal funding programs)?
- If the agency is to have a dedicated local funding source, what type of tax or funding source is best? Transit authorities that have taxing ability use a wide variety of types of taxes. These include sales taxes, property taxes, payroll taxes and vehicle-related taxes such as automobile registration fees. Some important criteria when considering taxing sources are whether the tax trends well with inflation, whether it is easy to collect, and whether it will raise sufficient revenue.

Beneath these basic issues, there are a number of sub-issues. For example, if the agency has taxing ability, should it be able to levy the tax at a differential rate within its area so that the tax proceeds reflect, to some extent, the amount of service that an area is likely to receive? Or, alternatively, can it return some funds to sub-areas for alternative uses? Another issue is whether the voters must approve the imposition of the tax, or whether the agency's governing board and/or the affected city councils/county commissions can approve it.

The structure of transportation grant programs can cause problems. For example, the federal grant program has separate funding programs for urban and rural service. If a regional agency offers both types of service and it receives federal funding for each, it may be limited in its ability to use the same vehicles for both types of service. In addition, the funds cannot be intermingled and have to be accounted for separately.

Finally, the regional systems that provide human service transportation face an additional funding-related problem. Most of this type of transportation is provided by a transportation agency through service

contracts with a variety of human service agencies. The database and reporting requirements for such services can become quite complex. These agencies tend to have a relatively high number of member counties and human service contracts, and therefore must track trip cost information and generate billing invoices for a multitude of client groups. This task becomes even more difficult if the transit system is not able to standardize the trip cost data and report formats among the agencies. Some regional transit systems must use a variety of billing formulas, data, and cycles, generate different report formats, and maintain multiple types of eligibility records for their different customers. These varied requirements can exist within one client group. For example, regional transit systems may often serve more than one Medicaid provider, and each provider may have different billing and reporting requirements.

Geographic Area

By definition, a region contains multiple political jurisdictions. It is thought of as a region because of a significant level of interdependence and interaction between the region's sub-areas or political jurisdictions. In the case of public transportation, numerous trips are made across political boundaries. Among other things, a regional transit agency can allow these kinds of trips to be served more effectively.

There are two common ways of defining a region's boundaries. One approach is to use the borders of the county(s) that are part of the region. The other approach is to use the borders of the "urbanized area". Each approach has advantages and disadvantages.

The first approach has the benefit of being easy to define. In addition, it usually also provides "breathing room", i.e., some room for the urbanized area to expand without crossing over the borders. The downside is that it usually contains rural and low-density suburban areas that do not have much, if any, need for public transportation. If a county-based agency tries to impose a tax for transit, these low-density rural or suburban areas may oppose the tax because they are not likely to receive commensurate benefits. Examples of county-based systems are the Capital District Transportation Authority in New York, the Triangle Transit Authority in North Carolina, and all of the multi-county rural systems in the study.

The second approach is to use the boundaries of the urbanized area as the territory of the regional agency. This creates a territory in which public transportation is more relevant and where a tax to support public transportation is more supportable. The downside is that the boundaries may not provide much breathing room and they may have to be changed as the urban area grows. Examples of systems that are based on urbanized area boundaries are Tri-Met in Portland and Capital Metro in Austin, TX.

Particularly for the urbanized area type of agency, another issue often encountered is providing for sub-areas to decide whether or not to join the agency when it is created. This is usually put to the voters in an election. Sometimes sub-areas are given the opportunity to "opt out" of the agency if they are originally included but subsequently decide they aren't receiving enough benefits. Some agencies are allowed to expand as needed by annexing areas that become part of their service area.

Another factor in defining regional boundaries is to consider the boundaries of other important agencies, esp. the Metropolitan Planning Organization(s) in the area. MPOs are very important in transportation planning and if the boundaries of the two agencies are congruent it can facilitate planning and decision-making. Boundary definition is also important for rural multi-county transit systems in North Carolina as the state is coordinating the development and implementation of approximately 20 Rural Transportation Planning Organizations (RPOs). RPOs must consist of at least three contiguous counties with a combined minimum population of 50,000, and their purpose and organizational structure mirrors that of MPOs.

Direct Service Operations vs. Coordinating vs. Contracting/Brokering

Public transportation agencies can be involved in providing transportation service in one of four basic ways:

- Operating the service directly
- Using a private contractor to operate the service
- Coordinating the service provided by other organizations
- Acting as a transportation broker

The traditional way is to simply operate the service. The agency owns the vehicles, hires the drivers and operates the service. Metropolitan examples are Capital Metro in Texas, Tri-Met in Portland and LYNX in Orlando. The East Tennessee Human Resource Agency (ETHRA) is an example of this type of operation in a rural area.

A close cousin is where the public agency does not directly operate the service but contracts with a private service provider. The agency may or may not own the vehicles and facilities. Examples are the city-dominated services in Raleigh and Durham. (North Carolina is an interesting case in this regard. State law prohibits local governments from conducting collective bargaining with labor unions. Where a transit system has a labor union, the local governments have resorted to hiring a private contractor to operate the service. In this way the personnel are employees of the contractor and the contractor conducts the collective bargaining, not the local government.) The 10-15 Regional Transit Agency (RTA) in Iowa is an example of this type of operation in a rural environment.

It is also possible for a regional agency to be only a coordinator of service. Other public agencies or private companies provide the service and the regional agency's role is to insure that the various fares and services are coordinated to the extent possible. This type of agency usually has other powers such as service and capital investment planning, funding, financial oversight, and regional programs such as customer information and marketing. An example of this type of agency is the Chicago Regional Transportation Authority. The fifteen Coordinated Transit Districts (CTDs) in Kansas are a form of this type of coordinated service.

A fourth method sometimes used by an agency (which might also provide service by one of the above methods) is to be a broker of service. Here the agency determines what kind of service is to be provided and then finds a private provider to provide the service. In that way it can "shop" for the best service provider at the lowest cost. It could utilize a number of providers for different types of services, or for different areas within the service area. It is conceivable that an agency could be created that would only broker services, including services provided by public transit agencies in the area. Big Bend Transit, a multi-county system in Florida is an example of a brokerage operation.

Some agencies may utilize more than one of these methods. For example, the Triangle Transit Authority operates some service, and also coordinates its service with the city systems in its area. Some agencies may operate regular transit service but contract or serve as a broker for special transportation services such as those for the elderly and disabled, or human service transportation. LYNX in Orlando is an example of this.

An interesting conceptual argument can be made in this regard. One of the characteristics of many organizations is that they become more and more "inward-focused" over time. They become more operations-oriented and less customer-oriented. When they are criticized, they often become defensive and "pull up the drawbridge". This defensiveness often includes the boards of these organizations. To the extent that the organization actually operates the service, there can be a greater tendency for the board to identify with the internal organization and not with the customers that the agency is serving.

For this reason, there would be an advantage in structuring an agency that conceived of itself more as a coordinator or a broker of service rather than an operator. It would be charged with planning and then "purchasing" the best service possible for its customers. Its primary allegiance would be to the users of the

service, not to the operating organization or its management. It would operate arms-length from the actual service operators.

General Public vs. Human Service Transportation

An important issue is whether a regional transportation agency should be responsible for human service transportation (transportation of human service agency clients for medical, educational, employment, etc. needs) as well as for traditional transit service for the general public. On the surface, it would make sense, where both types of service exist or are needed in an area, that a single agency to be responsible for providing or at least coordinating it. This would allow the most effective use of equipment and personnel. However, this has not been a successful combination in most areas.

Most regional agencies that primarily serve urbanized areas do not get involved in human service transportation (other than the complementary "paratransit" dial-a-ride service for the disabled that is required by the Americans with Disabilities Act (ADA)). If they do get involved, it is generally by contracting with a provider that specializes in such service, or by brokering it. In two cases in this study, the difficulties in providing this type of service resulted in problems. In one of these cases, Tri-Met in Portland, the agency was initially charged with providing this service but quality-of-service issues arose and the function was ultimately transferred to a non-profit organization. More recently, problems with the quality of service in Orlando have motivated LYNX to hire a new service operator with the intention to shift many of the trips currently performed by four operators to this new operator. At the same time, both the Florida House and Senate intervened and proposed a bill that would essentially give responsibility for human service transportation to the area's Metropolitan Planning Organization. Ultimately, Governor Jeb Bush vetoed the bill, thus making LYNX the Community Transportation Coordinator (CTD) for the tri-county region.

There are several key problems with providing human service transportation that make it difficult for a traditional transit organization to provide it. First, the riders (typically clients of the human service agencies) usually have special needs, for example for door-to-door service or for a lift-equipped vehicle. Second, because of these special needs, the human service agencies are often not comfortable that the transit agency can adequately serve their clients. Third, specialized equipment is required--typically small vehicles are used that are often lift-equipped. Finally, the various human service programs present a maze of regulations, funding sources, billing requirements, and program constraints.

Urban vs. Rural Service

As discussed under Geographic Area above, there are sometimes rural transportation services in an urban regional transportation agency's service area. These are primarily human service in nature but sometimes the rural service operator also provides service to the general public. Alternatively, there may be no provider in a rural area and the regional agency has to consider providing it where needed. If the agency's tax includes these areas, it will be under some pressure to do so regardless of the need.

If the regional agency is organized around urban area boundaries, it will likely have to coordinate to some degree with services provided in nearby rural areas.

Rural service usually requires smaller vehicles than are used in traditional urban service. Because lower densities and longer distances are involved, these services are generally more expensive to serve on a per rider basis.

Equity Between Systems That Do Not Elect to Regionalize vs. Those That Regionalize

One of the benefits of regionalization is reducing costs by realizing economies of scale. For example, fewer administrative staff may be needed if several individual transit systems are consolidated. However, if the regional system's funding is reduced by the amount of staff savings, there may be less incentive for participating systems to consolidate.

A more specific example is the case of small single-county rural or human service systems. If there are three adjoining counties, each having a transportation system with its own administrator and administrative assistant (a total of six staff), what happens if they are encouraged to form a larger multi-county system but the system is only given enough funding for one administrator and two or three administrative personnel? The three counties have thereby lost funding for 2 or 3 administrative positions, in effect a disincentive for regionalization. Is there a sensible way to avoid such a disincentive?

Phased vs. One-Time Implementation of Regional Transit Systems

Consolidation of transit systems into regional authorities will be a difficult task at best, and may prove impossible to accomplish in some locations in the near term. A consideration is whether or not to allow/encourage phased regionalization, in which one or two transit systems consolidate in the near term, and that consolidated system then undergoes further consolidation(s) in the future with other transit system(s).

A related issue is whether to provide the ability for a regional transit system to start small and then add territory at a future time as appropriate. An alternative is to require that a region start off at some minimum threshold size, as is the case with RPOs. RPOs must include a three-county contiguous area with a combined population of at least 50,000. Similar criteria could be established to guide the formation of regional transit systems.

An example is Buncombe County. Within the county there is an urban transit system in Asheville, and also community transportation service in rural areas of the county. Because the county is not part of a larger metropolitan area, it might choose to form a public transportation authority that is limited to the county. However, if neighboring counties also operate community transportation systems, it may make more sense to create a multi-county authority that would provide both urban and rural/human service transportation. Should Buncombe County be required (or encouraged) to take the larger, longer-term view, for example by requiring that regional transportation authorities be at least three counties in size (similar to the state law regarding Rural Planning Organizations)?

VI. Recommendations

This chapter provides recommendations to address programmatic and legislative topics, followed by the potential composition of regional public transportation systems in North Carolina.

A. Programmatic Recommendations

This section provides programmatic recommendations involving organizational/institutional, funding, administration, and operations topics.

Programmatic Organizational/Institutional Recommendations

Organizational/institutional recommendations address the need for PTD consultants with the capability to address regional issues while supporting existing metropolitan and community transportation section staff, and the need to develop and implement uniform human service agency procedures at the local level throughout the state.

1. Regional Consultants

Issue: While the development and implementation of additional regional public transportation systems is anticipated to facilitate the administrative responsibilities of the NCDOT Public Transportation Division (PTD) staff in the long term, there will be a need for additional staff resources to facilitate the organization and startup of regional public transportation systems in the short term.

Discussion: There are several approaches that the PTD may elect to follow in this regard, including

- Eliminate the current division between rural and metropolitan program consultants, training consultants in both urban and rural program requirements, and assigning them to administer several regional systems. This arrangement was formerly in place at the PTD. PTD management stated that this approach was abandoned, as it demanded program consultants to acquire and maintain an excessive amount of specialized knowledge, and was found to be unworkable.
- Hire and train one or more regional oversight program consultants to serve as a bridge between rural and metropolitan program consultants. For example, one regional oversight consultant could be hired to coordinate rural coordination/consolidation, and one regional oversight program consultant could be hired to oversee city-county(s) coordination/consolidation in metropolitan areas (recommended). If this approach were to be adopted, and one regional program consultant were to be hired, a decision would be necessary as to whom this individual would report—the Rural Program Manager or the Metropolitan Program Manager. If one rural and one metropolitan regional program consultant were to be hired, the reporting structure for these positions would need to be clarified so as to avoid a lack of consistency between the rural and metropolitan regional program consultants. If the rural regional program consultant reported to the Rural Program Manager, and the metropolitan regional program consultant reported to the Metropolitan Program Manager, there would be potential for inconsistency between the actions and recommendations generated by these two program consultants.

- Hire and train one regional coordinator, who would report directly to the PTD Director and serve as a resource consultant to the Assistant Directors for Community and Metropolitan Transportation. This approach would avoid potential inconsistencies between rural and metropolitan program areas, and would provide a high level of visibility for regional transportation system activities. The focus of this position could be on regional issues and activities, and the position could draw upon the expertise of the existing rural and metropolitan staff for particular program details/requirements.

Recommendation: ITRE recommends that the PTD adopt this last approach, as it would establish a staff position dedicated to regional coordination/consolidation within the Division, have a clear reporting structure, and entail hiring a minimum of new staff.

2. Uniform Human Service Agency Procedures

Issue: Community transportation systems often encounter varying and often conflicting policy, procedures, reporting, and service level requirements among different human service agencies. These conflicting requirements can be especially difficult for multi-county transit agencies because the requirements can vary among counties even within one human service agency, such as the Agency on Aging or Department of Social Services (DSS). As the number of multi-county transit systems increases in North Carolina, this issue of conflicting requirements will become more critical and will have a greater impact on the financial efficiency of the transportation systems. The use of uniform statewide standards would help to eliminate some of the conflicting requirements that erode the operations and administrative efficiencies that multi-county transit systems can realize.

Discussion: The PTD works through the state level Human Service Transportation Council to motivate state human service agencies to adopt and ensure the use of standard reporting, policy, procedures, and service levels for human service transportation.

Human service transportation is an important component of community transportation systems. Many systems are able to serve both general public and human service agency clients on the same vehicles and routes, and manage the programs using the same administrative, operations, and maintenance staff and facilities. This practice results in more efficient and higher quality transit service for all passengers.

Recommendation: A recommended first step to accomplish this goal is the development and use of a standard report format for Medicaid, Work First, and other transportation programs administered by the Department of Social Services. A uniform report format would simplify accounting, billing, and invoicing procedures by regional transportation systems, and would provide information to DSS management in a similar format throughout the state on the transportation activity of each client. The Human Service Transportation Council (HSTC) can assist in developing such reporting requirements, and stipulating conformance with the requirements by regional and county agencies.

The current reporting system used by the Division of Aging, called ARMS, can serve as a model. Transit systems that provide Agency on Aging transportation are permitted to provide a data file with a specified format to the Division for reimbursement. This file format is standard throughout the state, and therefore, multi-county transit systems must only deal with a single set of reporting specifications. The *TrIP* scheduling software, which is available to all North Carolina community transportation systems and may eventually be installed at 40 systems, automatically generates the required Division of Aging file. The use of a similar statewide report and file standard by other large human service agencies would greatly streamline administration, and could be automatically programmed into *TrIP* and other popular transit data management systems.

In addition to specifying a standard reporting and billing format and process, it is recommended that state level agencies enforce these standards. In some cases, state agencies have enacted standards but the local agency, such as a county level office, has attached additional requirements. Although the Division of

Aging reporting system might serve as a model, it could benefit from some additional changes. For example, although the ARMS reporting standard is a statewide requirement, many local Division offices (e.g., Senior Center or Council of Government that administer the program locally) require transit systems to submit additional reports such as route manifests and trip pick-up and drop-off times. These requirements are likely to support ongoing audits of the transportation services. A statewide standard for auditing client transportation data would streamline program administration.

A second step to the development and use of uniform statewide standards is to develop and implement a standard procedure for human service agency clients' trip reservations. In some counties, the DSS permits clients to directly contact the transportation provider (e.g., community transportation system) to make trip reservations once that transportation provider has been notified of the eligibility period for the client. This procedure provides direct contact between the transportation provider and the client to negotiate trip details, if required. In other counties, human service agency clients must contact the DSS case manager who subsequently contacts the transportation provider to reserve a trip. As a result, a multi-county transit system can be required to meet both of these required reservation procedures among the different county DSS offices that are served, creating an administrative and operational burden. Establishing a single standard statewide procedure for making trip reservations would increase the effectiveness of regional community transportation services.

Programmatic Funding Recommendations

There are many funding issues involved in the development and implementation of regional transportation systems. For example, federal funding is distributed directly to transit systems operating in urban areas with greater than 200,000 population, but federal funding is distributed through state governments to transit systems operating in urban areas of less than 200,000 population and to transit systems operating in rural areas. Increased regional cooperation and consolidation of transit systems will generate questions regarding the appropriate distribution, generation, and use of federal, state, and local funds by transportation providers.

Funding will also be required to develop and implement regional transportation systems. In addition, should the NCDOT choose to pursue a policy of encouraging the development of regional public transportation systems, some types of incentives are likely to be necessary to effect the change from separate city and/or county systems to true regional systems.

Existing North Carolina multi-county community transportation systems were formed as multi-county organizations from their onset. Regionalization activities in rural areas of the state would involve increased coordination/consolidation of existing systems, similar to recent activities involving consolidation of Nash-Edgecombe Transit System (NETS) and Rocky Mount Transit, Wayne County and the City of Goldsboro, and the City of Hickory and Catawba County.

Funding recommendations address:

- Transitional funding
- Incentives to form regional transportation systems
  - Preference for discretionary funds
  - Preference for increases in programmatic funds
  - Preference for facility and technology funds
  - Provision of some/all local match for a limited period to encourage lone single-county systems to join an adjacent multi-county system (examples: Gates and Carteret Counties)
- Increased flexibility in allocating funds between programs for rural areas, metropolitan areas with less than 200,000 population, and metropolitan areas with greater than 200,000 population.

Recommendations are presented below for each of these topics.

1. Transitional Funding

Issue: Transitional funding will be required for organizations that elect to transition from single-county rural to a multi-county rural system or from separate city and county systems to a single city-county system.

Discussion: Transitional funding can address two potential problem areas:

- Additional funding may help to offset some of the risks that transit system managers, elected officials, and human service agencies perceive in the formation of a regional transit system, and may help to assure these stakeholders that the benefits to be realized from developing and implementing a regional transit system are worthwhile
- The additional funding can assist in meeting the temporary costs that may accompany consolidation and the transition to a new organization.

Funding needs will include:

- Planning funds—to develop a consolidation plan, to develop new administrative positions and responsibilities, and to plan new operations (Inter-county routes, improved coordination of out-of-county trips, centralized maintenance/scheduling/dispatching, etc.)
- Administrative funds—to train and support staff as their responsibilities shift and/or expand, to assess performance, and to make changes required to provide new services with a high level of customer satisfaction
- Capital funds—to purchase new technologies, construct/improve facilities, etc.
- Operating funds—to implement changes to transportation operations

Recommendations: Planning funds will be required to develop a coordination/consolidation plan for each new regional transit system. While general guidelines can be provided for recommended policies and procedures to accomplish coordination/consolidation, differing local conditions will require individual consideration. It is envisioned that this planning activity will be performed by private consultants under contract to the lead organization for the new community transportation system.

While some new regional community transportation systems may elect to centralize all administrative activities at a single site (grant management, human resources administration, call-taking, billing, etc.), some systems may elect to distribute some administrative activities at multiple sites throughout the service area, as in the YVEDDI model. Neither the centralized nor the distributed model is best for all systems; a choice must be made based on local conditions.

Planning funds will also be required to develop and evaluate potential inter-county routes and services. Again, we envision that this activity will be contracted to a private consultant, in consultation with the governing board, transportation advisory board (if a separate entity), and appropriate NCDOT Public Transportation Division staff.

Administrative funds will be required to train and develop staff for changing job responsibilities. As discussed in the previous section on planning funds, it is not recommended that administrative funding for staff positions be reduced, but instead be maintained at current levels, at a minimum. Additional funds will be required to provide training

However, regionalization offers an opportunity to incorporate personnel with additional skills under *both* centralized and distributed methods of organization. For example, if three counties elect to form a single

community transportation system, there need be only one system manager instead of three. We recommend that administrative funding *not* be reduced accordingly, but be applied to funding a similar number of positions in the new regional system. However, these positions should not be for "duplicate" managerial staff.

If this hypothetical three-county community transportation system elects to adopt the centralized model, it should employ one overall manager, with two assistant regional directors, *each with expertise and skills in an area that can provide direct benefit to the system*. For example, one assistant regional director could possess financial skills, and would assume responsibility for developing budgets, tracking expenses, and overseeing billing. The other assistant regional director could possess marketing skills, and would assume responsibility for developing, and implementing a marketing program that would include an ongoing monitoring of customer satisfaction. In this way, the overall skill set of the administrative staff would be increased, resulting in a community transportation system that possesses enhanced levels of skills in several critical areas *as well as* benefits from streamlined administrative functions.

Similarly, if the hypothetical three-county community transportation system elects to adopt the distributed model, it should employ one overall manager, with an assistant in each of the other counties, again *each with expertise and skills in an area that can provide direct benefit to the system*. In this way, a similar result would occur—the community transportation system would possess enhanced levels of skills in several critical areas *as well as* benefit from streamlined administrative functions.

To again use the example of the hypothetical three-county community transportation system, when selecting the overall manager, the governing board should develop qualifications for the position, advertise the position, review the qualifications of all applicants (presumably the current managers would apply for this position), conduct interviews with the highest-rated candidates, and hire the best qualified candidate. A similar process should be followed in filling the assistant manager positions.

Regional and multi-county transit systems might require additional capital funding for several purposes. The consolidation of operating and maintenance facilities for two or more transit systems may require the expansion of an existing facility, and in some cases might require a completely new operations and/or maintenance facility. Consolidation or coordination of call taking, scheduling, routing, or dispatching functions for several existing transit systems will increase the complexity of the required information support systems, and could require the purchase and use of advanced transit technologies such as automated scheduling/routing software. An investment might be required to link or consolidate existing radio systems. Finally, the service requirements of a newly formed regional public transportation system could change significantly, resulting in the need for new types of vehicles. For example, the implementation of a regional non-emergency medical transportation route in a small urban area might require use of a smaller transit vehicle than the cut-a-way vans or buses that a transit system uses for its fixed-route and demand-responsive services. These examples show that in some cases, the coordination or consolidation of transit systems may require additional capital investment in facilities, information systems, communication systems, and vehicle fleets to meet the changing operations and service requirements of the new transit system.

Operating funds will be required to implement new and/or modified services. While single-county community transportation systems may have previously coordinated out-of-county trips within the region, the consolidated regional system must now evaluate the need for, and develop and implement appropriate intra-regional routes. This will likely require adjusting the schedules of intra-county routes, and reassigning drivers and vehicles to new routes. In many cases, efficiencies resulting from consolidation may allow implementation of inter-regional routes without additional drivers or vehicles. An assessment will be required on a case-by-case basis to determine the specific needs of each regional system.

2. Funding Incentives

Issue: The PTD may elect to develop and provide incentives to encourage the coordination among, and/or consolidation of transit systems into regional entities. However, caution should be exercised when giving preference for funding.

Discussion: The PTD will need to ensure that the regional transit systems that benefit from preferred funding policies operate in accordance with the PTD-approved policies and procedures. In addition, these systems should meet certain criteria, such as:

- Administrative consolidation
- Provision of inter-county transit service
- Coordinated or integrated fares and services

Second, non-regional transit systems are likely to object that the system and its clients are being penalized for not being regional transit systems. They may cite performance indicators that demonstrate that their transit system performs as well or better than some or all regional transit systems.

Recommendations: The PTD can implement funding policies and procedures to favor regional transit systems through the adoption of:

- Preference for discretionary funds
- Preference for increases in programmatic funds
- Preference for facility and technology funds
- Provision of some/all local match for a limited period to encourage lone single-county systems to join an adjacent multi-county system (examples: Gates and Carteret Counties)

Preference in the allocation of discretionary funds: The PTD now allocates discretionary funds to both urban and rural transit operators. For example, community transportation systems may apply for discretionary Rural General Public (RGP) Program funds. The PTD could elect to distribute those discretionary funds only to multi-county rural systems.

As another example, State Maintenance Assistance Program (SMAP) funds are now allocated to metropolitan transit systems according to a formula that allocates funds 60 percent based on performance, 30 percent based on local commitment, and 10 percent as an equity share identical for all systems. The Board of Transportation could change this formula to include some percentage to be based on a transit system's participation in, or consolidation with a regional system. The performance and/or local commitment percentages could be reduced to accommodate a percentage that would be allocated only to regional transit systems.

Preference for increases in programmatic funds. It is not the intent to withhold funding from, or to penalize transit systems that do not elect to join regional systems. Increases above current programmatic funding levels could be targeted only to regional systems or biased to favor regional systems. Alternatively, all transit systems could receive a certain percentage increase in programmatic funds, but regional systems could be awarded a somewhat higher percentage increase in their share of programmatic funds. Either of these actions would provide an incentive to encourage the formation and growth of regional transit systems without penalizing those systems who elect not to join regional entities in the short term or at all.

Preference for facility and technology funds could be granted to regional transit systems. This would serve as a "reward" to those counties and/or systems that elect to become part of regional entities, and would also assist the regional entities to provide a higher level of service and, hopefully, customer service. For example, the PTD could choose to provide funding assistance for automated scheduling and dispatching software only to regional transportation systems rather than to single-county community transportation systems. The PTD

could also choose to accord priority for funds for new facilities to regional, rather than single-county transit systems. On the metropolitan side, funding preference for alternative fuel vehicles and associated facilities could be implemented for regional transit systems.

Provision of some/all local match funds for a limited period. All or a portion of local match funds for capital and/or administrative expenses could be provided by the PTD to economically disadvantaged counties that elect to consolidate their transit system into a regional entity. Gates County can serve as an example. Gates County operates a single-county rural system sandwiched between ICPTA and CPTA. If Gates County were to join ICPTA, the PTD could allow the county to apply the administrative funds that have been provided to the county transit system to the county's local match requirement for administrative and capital expenses. In this way, potential administrative and operating economies could be realized without a loss of funds to the county.

3. Effective Use of Large Urban, Small Urban, and Rural Area Funding

Issue: Federal funding is distributed directly to transit systems operating in urban areas with greater than 200,000 population, but federal funding is distributed through states governments to transit systems operating in urban areas of less than 200,000 population and to transit systems operating in rural areas. There are regulations regarding the use of funds for each of these types of areas, which in some cases complicate the management and operations of a regional transit system that serves two or more of these types of areas. Increased regional cooperation and consolidation of transit systems will generate questions regarding the appropriate distribution, generation, and use of federal, state, and local funds by transportation providers.

Discussion: Federal and state regulations do not forbid transit systems from intermingling services and vehicles supported by both urban and rural grants, however, to do so does require an accounting of costs to be allocated to urban grants and to rural grants. In accordance with FTA (Federal Transportation Administration) Circular 9040.1E, *Nonurbanized Area Formula Program Guidance and Grant Application Instructions*, a sub-recipient is expected to develop a reasonable basis for allocating costs between the two funding sources that is related to the service provided. Should a question arise, FTA has stated it would look to the North Carolina Department of Transportation to make a determination regarding the reasonableness of the cost allocation methodology.

Some transit system managers/directors are unfamiliar with cost allocating policies and procedures. For example, a transit director confided to the project team that his staff would be unsure how to allocate costs, i.e., urban or rural, for a vehicle that transports rural riders from a rural area to an urban area.

A recent example illustrates a solution to this problem.

In a memorandum from the PTD to the Goldsboro-Wayne Transportation Authority, dated June 12, 2001, the PTD outlined a cost sharing methodology that recommended a weighted average of the urban and rural service miles, service hours, and passenger trips for allocating administration, operating, and some capital costs. However, the memorandum recommended that the methodology not be used for vehicle costs when the vehicle is used for both urban and rural service. To solve this particular allocation problem, the PTD could allocate only state funds for vehicles, i.e., vans, used in both urban and rural service.

Recommendation: To address these issues, the PTD will need to provide guidance and training to local public transportation systems, and should actively promote the revision of federal rules and regulations to better accommodate regional transportation system needs.

As the number of regional, multi-county, and coordinated public transportation systems increase in North Carolina, the issue of allocating large urban, small urban, and rural funding in a single system will become more common and critical to resolve, especially for demand-responsive services. A set of guidelines should be developed to assist transit system managers to develop allocation procedures that meet their service and organizational structures. This will help to ensure adherence to federal and state policies and procedures, such as the use of consistent data periods and triggers for recalculating the allocations or redeveloping the

process. The PTD regional oversight program consultant could be responsible for developing these guidelines, and for working with regional and multi-county transportation systems to develop specific procedures for their system.

Programmatic Administration Recommendations

1. Coordination and Consolidation of CTIPs

Issue: Currently, the CTIPs of adjoining community transportation systems and/or metropolitan transit system(s) are coordinated or consolidated only if those transportation systems request it. If counties and/or municipalities in a potential region conduct separate CTIPs that are timed on different cycles or are conducted by different transportation consultants, there is little likelihood that barriers to, and issues affecting regional coordination/consolidation will be addressed satisfactorily.

Discussion: Increased coordination or consolidation of transportation services requires making difficult decisions on governance, funding, service type and level, agency staffing, etc. following in-depth study, review, negotiating, and planning. A coordinated or consolidated CTIP planning process can address these barriers and issues, and provide an opportunity for joint planning among counties and/or municipalities in a potential regional system that is required for consolidating transit services.

The PTD can adjust the CTIP schedule to coordinate or consolidate the CTIPs of counties or municipalities that have been identified as promising candidates to form a regional city-county or multi-county transit system.

Recommendation: The PTD should coordinate or consolidate the Community Transportation Improvement Plan (CTIP) process among counties that appear to be good candidates for forming a regional city-county or multi-county transit system. At a minimum, the CTIPs for community transportation systems that are located in areas identified as being potential regional transportation systems should be conducted and completed at the same time, be completed by the same consultant, and provide at least one scenario for a consolidated transit system. An optimal process would see the CTIP for two or more counties consolidated into a single planning study, which would focus on the benefits to be realized from forming a regional or multi-county transit system, and the actions that would be necessary to accomplish that goal.

Programmatic Operations Recommendations

Key operations issues involved in the regionalization of public transportation systems include:

- Operations training and technical support
- Extra-regional transportation coordination
- Distributed vs. centralized operations

This section discusses and provides recommendations for each of these issues.

1. Operations Training and Technical Support

Issue: Regional city-county and multi-county community transportation systems will require training and technical support to efficiently and effectively operate in their expanded service area. This training and technical support will be required to address new types of potential services (e.g., deviated and/or flex-route service, inter-regional routes, etc.), coordination and/or consolidation of fares throughout the region, modifications to call-taking and reservations policies and procedures, and financial systems (e.g., billing and

accounting). The PTD will need to determine how best to meet these training and technical support needs, using an appropriate combination of in-house resources, external consultants, and input from existing regional public transportation managers and staff.

Discussion: City/county and multi-county transit system service requirements and operations patterns are different from those of a single county rural or single city metropolitan transit system. City-county transit systems may find it beneficial to alter existing fixed routes to extend from the city into developed areas of the county. Multi-county community transportation systems may be able to develop new routes to meet inter-county trip needs. Both types of regional systems may find it effective to develop and implement deviated routes.

There may be a need to develop coordinated and/or consolidated fares throughout the new region to provide more effective customer service. Uniform record-keeping practices may need to be developed and implemented, particularly to gather, store, and analyze data to determine fully allocated costs. Policies and procedures for call taking, eligibility determination, and dispatching may no longer meet the needs of a consolidated system, and operations contracts will need to be re-examined to determine if they effectively meet current transportation needs.

Recommendation: The management, staff, and operations personnel of regional public transportation systems will need training and technical support to adjust current practices and to develop new policies and procedures to efficiently and effectively accommodate service change requirements. The PTD staff, consultants, and staff at existing regional public transportation systems will need to support these changes with appropriate training and technical support.

2. Extra-Regional Coordination

Issue: Even with the development and formation of regional transit systems, some transportation needs will continue to require trips beyond the transit system's service area, for example, for non-emergency medical care at medical facilities that offer specialized treatments. The PTD can assist regional and multi-county transit systems in the development and implementation of super-regional transit services.

Discussion: Out-of-county and inter-regional transportation has proven difficult to coordinate because of the relatively high-cost of this type of service and the difficulty in coordinating service among a relatively large number of single-county transportation systems. A shift to regional city-county and multi-county transit systems presents an opportunity to more easily coordinate these services, as there will be fewer systems involved in the process. Consolidation of out-of-county medical and inter-regional transportation among several systems will likely reduce trip costs as more passengers are transported on each vehicle, resulting in higher vehicle load factors.

Recommendation: The PTD regional oversight program consultant could be responsible for taking the lead to develop super-regional coordination strategies, in concert with the regional transit systems, and PTD rural and metropolitan program consultants.

3. Distributed vs. Centralized Operations

Issue: Some rural multi-county regional transportation systems both in North Carolina and throughout the United States are organized with highly centralized management and operations, and other systems are organized with management and operations functions distributed at multiple sites in two or more counties. Is one or the other of these models superior?

Discussion: Centralized administration and operations best fits local circumstances in which there is a single regional center that is the focus of most shopping, educational, medical, and other trip purposes within

that region. Distributed operations best fit locations in which there are two or more regional centers, and it is appropriate to locate some or all administrative and operations at two or more locations.

Recommendation: Neither model offers clear advantages in all situations. Each region should be evaluated according to local characteristics and preferences, and the more appropriate model for local conditions should be adopted.

B. Legislative Recommendations

This section provides recommendations for changes to federal and state transportation legislation, improved coordination among human service programs and transportation providers, regional transportation legislation, as well as for organizational/institutional, funding, administration, and operations activities.

Changes to Federal and State Legislation and Policies

1. Federal Transportation Legislation

Issue: What changes, if any, are recommended for TEA-21 legislation?

Discussion: ITRE conducted a brief survey of public transportation directors/managers at several state departments of transportation (including the NCDOT Public Transportation Division) to determine changes they would recommend to TEA-21 legislation. When asked specifically about changes that they would make to TEA-21, especially as it relates to regionalization, most survey respondents did not cite specific problems or make suggestions. For the most part they thought that the federal funding program works fairly well. The Director of Public Transportation for the Texas DOT stated that many problems are more imagined than real and that "any impediments can be overcome." Another respondent, however, used the analogy of a slow car and a fast car--if you've never driven a fast car, you may not realize that you're driving a slow one. In other words, transit professionals may have difficulty creating changes to TEA-21 because they have always known and followed this federal transit legislation.

A review of the legislation and administrative guidelines revealed that TEA-21 contains a great deal of program flexibility. This includes the possibility of using formula funds for operating or capital expenses, and, at the state level, for transferring funds between major program areas such as between urban and rural, and between large and small urbanized areas. We recognize that though permitted by TEA-21, accomplishing such transfers may be quite difficult and cumbersome in practice.

One issue that surfaced is a problem with the separation of urban and rural funding programs at the local level in consolidated systems. For instance, Rocky Mount Transit is developing a consolidated system that operates both the urban services in Rocky Mount, and the rural services in the rest of Nash and Edgecombe Counties. Rocky Mount Transit has had to be careful about not using buses funded through the rural program for urban trips because the system receives the funding from separate programs. In fact, it ended up buying some vans using urban funds that the rural program could use for this service. The Transit Administrator at Rocky Mount Transit recommends that there be a way to combine these funds so as to eliminate the constraints on the use of vehicles and the need to track the data necessary to keep the two programs separate and distinct. An alternative solution might be to add provisions to the reauthorization legislation to allow such a system to use a certain percentage of urban funds for rural services, and vice versa, if approved by the local governing body.

Another issue that was mentioned several times by case study sites was the effect that the "13c" labor provision has had on attempts to integrate or consolidate various transit operations. Because of union issues and differing wage levels, this provision has prevented or discouraged some attempts to consolidate transit

services. An example is the discussion to consolidate in some way the three major city systems and the TTA services in the Triangle. (However, one participant described the union and wage differential issues as a "smoke screen". In his opinion the real problem was a "lack of political will.")

Recommendation: The 13c labor protection provision has a long, complex legal and political history. It seems unlikely that it could be eliminated or substantially altered. Different ways of mitigating its impacts could be explored such as:

- Phasing out its requirements over a period of years.
- Exempting certain small operations or special purpose services.
- Providing special funding that would offset its financial impacts.

2. Coordination with Various Human Service Programs

Issue: Another problem that surfaced in regard to regionalizing transportation services was that of coordinating with the various human service programs such as Medicaid and service for the elderly. This is a particular problem in rural areas.

Discussion: The problem has three main components:

- Conflicting Reporting Requirements. The various agencies and funding programs often have different reporting requirements that greatly increase the administrative complexity for the transit operator as the number of agencies increases.
- Non-uniform Regulations, Policies and Procedures Throughout the Region. The same situation exists in regard to regulations, policies and procedures—because of multiple agencies and political jurisdictions, the transit operator finds it difficult to develop uniform policies that satisfy everyone.
- Non-contiguous Service Boundaries. Different agencies often have different service boundaries, thereby increasing the complexity of delivering efficient service and administering the system.

TEA-21 already includes a requirement for local government agencies and nonprofit organizations that receive assistance from federal sources other than the FTA to participate and coordinate to the extent feasible with recipients of assistance from FTA in the delivery of transportation services. This provision could be strengthened to require a formal service coordination plan to be developed by the MPO in each relevant area, or by the state DOT or RPO (Regional Planning Organization) in cases where there isn't an MPO (Metropolitan Planning Organization). This might be a condition for receiving certain federal funds. As one survey participant from Illinois observed, if there is not strong direction from the very top, an effort to coordinate regular and human service transportation in the state is not going to go very far very fast.

Recommendation: TEA-21 does not seem to create undue constraints or burdens on the development of regional transportation systems. Many of the problems cited stem more from state and local needs, policies and politics, than from TEA-21.

One suggestion with regard to the difficulty of coordinating regular transit service with the special transportation services, programs and funding of human service agencies is to see if the current requirement in TEA-21 that such coordination be addressed to the extent feasible could be strengthened to require that a formal plan for coordinating these services be developed in each area as a condition for receiving certain federal funds.

3. Regional Transportation Legislation

Issue: Existing legislation to create regional transportation agencies in North Carolina has shortcomings that, without modifications, limit its suitability for providing an adequate framework for the general creation of RTAs in North Carolina.

Discussion: Existing legislation regarding regional transportation agencies (RTAs) was discussed in "The Current Situation" section above. Basically, four different state statutes have been used to create regional transportation agencies in North Carolina:

- Interlocal Cooperation Act (Chapter 160A, Article 20). This Act allows political jurisdictions to join together for a common undertaking such as operating a regional transportation system. The Charlotte and Rocky Mount systems have used this method.
- Public Transportation Authorities Act (Chapter 160A, Article 25). This 1977 Act allows various political jurisdictions to jointly create a Public Transportation Authority. It has been used to create several multi-county rural systems in North Carolina such as the Choanoke Public Transportation Authority and the Kerr Area Transportation Authority.
- Regional Public Transportation Authority Act (Chapter 160A, Article 26). This 1989 Act was specifically designed to create the Triangle Transit Authority (TTA). While this legislation contains specific provisions that pertain only to the Triangle region, other areas could use this legislation with some revision.
- Regional Transportation Authority Act (Chapter 160A, Article 27). This 1997 Act was used to create PART (Piedmont Authority for Regional Transportation) in the Triad area. It is less specific than the Act used to create the TTA, but it would also have to be amended for use elsewhere (particularly in terms of the population criteria used to define its constituent counties).

Each of these Acts has shortcomings that limit its suitability for providing an adequate framework for the general creation of RTAs in North Carolina. The Interlocal Cooperation Act's major shortcoming is that is does not allow for any kind of dedicated funding source such as a special tax. In addition, a regional organization created by Interlocal Agreement does not have the same legal permanence as an authority. The Public Transportation Authorities Act's shortcomings include an inability to expand if the region outgrows its boundaries, or to levy any kind of local tax without voter approval. The other two Acts are now limited to the two regional transportation systems for which they were designed, and other areas could not use them without significant revision.

Recommendations: In formulating design criteria for a regional public transportation agency, it is useful to delineate some broad objectives or principles that describe its intended purpose and function. A list of such objectives is recommended below:

- To provide adequate mobility at reasonable cost to the citizens of the region, and to facilitate movement of those who because of age, economic circumstance, or infirmity do not have a transportation alternative.
- To provide and encourage public transportation services that are regionally coordinated with respect to fares, routes and schedules, and to promote the use of these services through a strong customer orientation and marketing emphasis.
- To recognize and respond to the need for alternative and innovative public transportation services.
- To promote and assure safe, rapid, convenient, comfortable, and accessible public transportation services that will improve the environment through a reduction in air and noise pollution.

- To alleviate increasing traffic congestion by promoting a balanced transportation system in which automobiles and public transportation act as complements, with each providing the services for which they are best suited.
- To promote overall public transportation system efficiency and effectiveness by using local bus, express or regional bus, rail and special transit services in a manner that best utilizes the distinct operational characteristics of each.
- To promote optimal land use and sustainable regional development patterns through coordination of operational transportation (highway and transit) planning and programming with long-range transportation and comprehensive planning of the region.
- To monitor and utilize developments in transportation technology that can improve service and reduce costs.
- To develop adequate financial resources, and to ensure their effective and responsible use through sound financial management systems and practices.
- To be accountable to the general public interest and trust through a meaningful process of public participation and communication.

With these broad goals in mind, as well as the shortcomings of existing state legislation, the following recommendations are made for general enabling legislation that could be used by various areas in North Carolina, whether urban or rural in nature, to create RTAs that can respond to current and future conditions and needs.

Organizational/Institutional Recommendations

1. Creation of Regional Transit Authorities (RTAs)

ITRE recommends that RTAs be created with the approval of the affected county boards, and also by the city councils of the principal municipalities in the region. It is further recommended that enabling legislation provide for different "tiers" of RTAs, as illustrated below.

The *first tier* would include the three largest regions in the state (Charlotte, the Triad and the Triangle). These areas are substantially larger in population than the next tier. Each of these regions has a population in excess of 1,000,000. Two of these regions already have legislation that has allowed them to form RTAs—TTA in the Triangle area, and PART in the Triad area. The Charlotte area has created a regional system through Interlocal Agreement, and is currently exploring the creation of a more formal transportation authority. (Due to its large size and other unique characteristics, it is possible that this area will require its own special legislation similar to that used in the Triangle and Triad.)

The *second tier* regions are areas that currently have an urban public transportation system. They have been designated as regions either because the federal government has defined them as Metropolitan Statistical Areas (MSAs)[8], or they make sensible regions based on criteria such as their congruence with the boundaries of a Rural Planning Organization (RPO). None of these regions exceeds 750,000 in population.

The *third tier* regions are either smaller, non-MSA urban areas of less than 200,000 in population that have small urban transit operations (Boone, Salisbury, and Wilson), or more rural areas that mostly provide rural and/or human service transportation.

[8] A Metropolitan Statistical Area (MSA) is a federal designation for an area that contains at least one city with 50,000 or more, or is a Census Bureau-defined urbanized area (of 50,000 or more) with a total metropolitan population of at least 100,000.

An example of how legislation might be structured in regard to creation of an RTA by these three tiers is described below.

Tier 1: This would only apply to Charlotte (the Triad and Triangle areas have already created regional transportation authorities). Creation would be by action of all the affected county boards and the city councils of all cities of 50,000 or more in population. Figure 6-1 below illustrates the approvals that would be needed.

Figure 6-1: Tier 1 Legislative Approvals

Area/Transit System	Counties	Cities Over 50,000	Total Approvals Needed
Charlotte	5 (Cabarrus, Gaston, Lincoln, Mecklenburg and Union)	3 (Mecklenburg, Gastonia and Concord)	8

Tier 2: In the case of these areas, creation would require the approval of the counties affected, and all cities in the area of 10,000 or more population. The following figure illustrates the number of local governments that would have to approve the action using these criteria if all counties in each regional area were involved.

Figure 6-2: Tier 2 Legislative Approvals

Area/Transit System	Counties	Cities Over 10,000	Total Approvals Needed
Asheville	4 (Buncombe, Henderson, Madison and Transylvania)	1 (Asheville)	5
Fayetteville	5 (Bladen, Cumberland, Harnett, Hoke and Sampson)	2 (Fayetteville and Hope Mills)	7
Gastonia[9]	1 (Gaston)	1 (Gastonia)	2
Greenville	3 (Beaufort, Martin and Pitt)	1 (Greenville)	4
Hickory	4 (Alexander, Burke, Caldwell and Catawba)	4 (Hickory, Morganton, Lenoir and Newton)	8
Rocky Mount	2 (Nash and Edgecombe)	2 (Rocky Mount and Tarboro)	4
Salisbury[8]	1 (Rowan)	1 (Salisbury)	2
Wilmington	4 (Brunswick, Columbus, New Hanover and Pender)	1 (Wilmington)	5

Tier 3: This would affect the Boone, Salisbury and Wilson areas, and any rural counties that form an RTA (Note: Watauga County which contains Boone has already formed a Transportation Authority using the Public Transportation Authority Act). The criteria that these areas could use to create an RTA might be

[9] Gastonia and Salisbury are actually part of the Charlotte-area MSA. Because each of these cities currently has its own transit system, this table assumes, for illustration only, that each of these areas would create a separate regional authority that encompasses only that county.

approval by each affected county and by any cities of 10,000 or more in population. Figure 6-3 below illustrates the number of approvals that would be involved for:

- Watauga and Wilson Counties (each of which has an urban system—in Boone and Wilson respectively)
- The five rural systems that have already formed into regional agencies
- As an example, a three-county region that has begun to discuss the formation of a regional system

Figure 6-3: Tier 3 Legislative Approvals

Area/Transit System	Counties	Cities Over 10,000	Total Approvals Needed
Urban Systems			
Boone	1 (Watauga)	1 (Boone)	2
Salisbury	1 (Rowan)	1 (Salisbury)	2
Wilson	1 (Wilson)	1 (Wilson)	2
Existing Rural Systems			
Choanoke Public Transportation Authority (CPTA)	4 (Halifax, Bertie, Northampton and Hertford)	1 (Roanoke Rapids)	5
Craven Area Rural Transportation System (CARTS)	3 (Craven, Jones and Pamlico)	1 (New Bern)	4
Inter-County Public Transportation Agency (ICPTA)	5 (Chowan, Perquimans, Pasquotank, Camden and Currituck)	1 (Elizabeth City)	6
Kerr Area Transportation Authority (KATA)	4 (Vance, Franklin, Granville and Warren)	1 (Henderson)	5
Yadkin Valley Economic Development District (YVEDDI)	4 (Stokes, Surry, Davie and Yadkin)	-	4
Potential Rural System (example)			
Wilkes, Alleghany and Ashe Counties	3 (Wilkes, Alleghany and Ashe)	-	3

2. Legal Form

Issue: Although a regional transportation organization can be created by Interlocal Agreement using the Interlocal Cooperation Act, such a mechanism has several shortcomings including a lack of local taxing/funding ability, and relatively weak legal force and permanence.

Discussion: A public transportation authority can take one of at least three different forms:

- The first form is an authority that basically owns and operates the transportation facilities and services in its territory. This is the most common form, and the one often used historically to buy out and/or consolidate previous private or public transit operations in a growing region. An example is the Capital District Transportation Authority in New York. This type of authority is referred to elsewhere in this study as a "consolidated" authority.
- A variation of this form is an authority that does not own and operate all or most transit operations in the region. Its role may be more to coordinate existing services, and to provide some services not provided by the existing operators. An example of this is the TTA in the Triangle area of North Carolina, a regional authority that was basically "overlaid" on a region already containing three large city transit systems. TTA provides some regional bus commuter service, operates vanpooling and carpooling programs, and is planning to build a regional rail system. This type is referred to as a "federated" authority because it is separate layer of government with other relatively autonomous units of government underneath it.
- The last form of authority is one that does not own or operate any service directly. Its role might be to encourage service and fare coordination, perform regional capital investment planning, provide public funding, and to oversee operating and financial performance. Facilities and services are owned and operated by other public agencies. An example is the Chicago RTA. This type is also referred to as a "federated" authority.

Recommendation: It is therefore recommended that RTAs be created as public "authorities". This is the primary mechanism that has been used for this purpose in North Carolina to date, particularly for the larger urban systems. It is also the prevalent approach used elsewhere in the country.

3. Territorial Jurisdiction

Issue: Regional transit authorities could be organized geographically according to county boundaries or urbanized area boundaries.

Discussion: Using urbanized area boundaries can have several disadvantages. For one thing, as the urbanized area grows the boundaries might have to be changed more often than if county boundaries are used. For another thing, in the case studies examined local political jurisdictions are often allowed to opt in or opt out of the authority, a situation that can lead to political fragmentation and funding uncertainty.

Using county boundaries provides more room for urbanized areas within the region to grow, and also provides opportunities for better coordination or consolidation with rural or human service transportation systems in the region. County boundaries are more easily defined than boundaries of an urbanized area, and are more readily understood and recognized.

Recommendation: It is recommended that RTAs be organized geographically by county boundaries. Although some transit authority case study sites are organized according to urbanized area boundaries, they are in the minority. None is organized in this way in North Carolina.

4. Immediate vs. Phased Regional Implementation

Issue: Although the general long-term goal is to create multi-county regional authorities, it seems likely that some single counties may want to create a regional transportation authority, at least initially. Examples would be Wilson County (Wilson), Pitt (Greenville), and Cumberland (Fayetteville). Watauga County (Boone) has already done so.

However, what happens if a single county that is in a larger MSA, especially one that is within the Triangle, Triad or Charlotte regions, wants to create a regional transportation authority of its own? The rationale for doing so might include:

- In the case of the Charlotte MSA (six counties), for whatever reasons a county simply may not want to join a larger regional authority (for example, Gaston or Rowan Counties that have their own urban transit systems in Gastonia and Salisbury respectively).
- In the case of counties in the Triangle or Triad, they may want to be able to create a dedicated funding source, over and above whatever funds TTA or PART is able or willing to provide, and thus relieve city/county budgets. This would also give them more control over local transit routes and fares, and would remove most of the workload associated with public transportation matters from the responsibility of their city/county governing boards.
- This might be a way around the issue of imposing differential taxes within a large region. (Legally, a taxing body cannot impose taxes at different levels in different parts of its territory.) The multi-county regional authority might provide a certain minimum level of funding/services, and if a county wanted more, they could impose their own tax.

Discussion: With the above in mind, there are at least three different options:

- Allow single-county authorities to be created wherever desired.
- Disallow single-county authorities if they are within the territory of existing or prospective regional transit authorities (at least one municipal transit authority already exists within such a region--Greensboro. However, what would occur if single-county authorities were to form, as an example, in Pitt (Greenville) and Wilson (Wilson) Counties, and they later want to form a larger multi-county authority that includes the "hypothetical" Rocky Mount, Wilson, Greenville, Tarboro metropolitan area (in the year 2050)? Would the single-county authorities be dissolved before joining the larger regional entity, or could the county authorities simply become sub-units of the larger authority?
- Allow single-county authorities but limit their powers if within a multi-county region. For example, single-county authorities might be prohibited from imposing the same taxes as a multi-county authority, or from receiving certain state or federal funds that would be allocated to the multi-county authority instead, or from setting fare levels that are inconsistent with the regional fare structure approved by the multi-county authority.

Recommendation: The middle option presented above is preferable, to allow the state to maintain some control over the size and structure of regional transit systems. It is suggested that the PTD develop a statewide plan for the development of regional transit systems, and then encourage local jurisdictions and agencies to follow that plan.

It is also recommended that RTAs have a means to expand their territorial jurisdiction. Although the use of county boundaries will provide most regions with a great deal of growing room, this may not be enough room over a timeframe of 20, 30 or more years. The Regional Transportation Authority Act (which created PART), provides one example of how this might be done. This Act allows PART to expand to include contiguous areas with the consent of the affected board(s) of county commissioners (however, it cannot be expanded to more than 12 counties). The Water and Sewer Authorities Act (Chapter 162A, Article 1) also has a provision that allows political subdivisions to join (or withdraw) from an authority. However, it should be noted that a significant expansion of an RTA's territory might present a need to enlarge the governing board, an issue that is discussed below.

5. Governance

Issue: Questions of representation on, and the selection of members to an RTA are among the most sensitive of any issues involved in discussions of region-wide organizations. A wide variety of stakeholder interests exist that deserve consideration with regard to representation questions:

- Populations—total population, urbanized area population, rural population
- Political jurisdictions—the state, counties, cities/towns
- Financial supporters—state and local taxpayers, riders, funding agencies
- Transportation interests—public transportation operators, human service agencies, riders, private transportation providers

Discussion: The issue of *board representation and size* is addressed first, and then *board composition*.

Board Representation and Size:

Board representation is a crucial issue. One of the common sentiments expressed by study respondents that have been involved in regional transportation efforts was the concern by local officials that sub-areas of the region would lose control over the level of transit service that they receive, or that they would be unfairly taxed for service that they don't receive. Unless this issue is adequately addressed and sub-areas believe that they will have a strong voice on the governing board, acceptance of a regional organization will be much more difficult to achieve.

It is recommended that the board be structured in a way that reflects the populations of the key political jurisdictions involved. This is the most common approach, both in North Carolina and in transit authorities throughout the country. The appropriate number of board members depends partly on the need to find adequate, equitable representations for the key political jurisdictions within the region. Public accountability must also be considered.

A small board, e.g., 3-5 members, focuses power and responsibility and facilitates efficient meetings. However, in a large and complex region, a small board may not provide adequate representation for the many different interests. For instance, a small board may not sufficiently take sub-regional concerns into account. The other extreme, a very large board, also has weaknesses. Too large a board means diffusion of responsibility, with no readily identifiable individuals held strictly accountable. As with any large group, it can make board deliberation and decision-making difficult because of the large number of diverse interests involved. Further, a large board runs the risk of each member taking a fairly narrow view related to his or her specific constituency.

Recommendations: With these considerations in mind, a reasonable approach to board representation is proposed below. The same three tiers of regions discussed under "Creation" above are also recommended in regard to how board members are appointed and whom they would represent. In addition to appointments by key local governments, it is recommended that at-large members be appointed by the Governor or Secretary of Transportation to represent the region as a whole. These at-large appointments would be from 1-3 members (whichever number results in an odd number of total board members). In addition, the number of at-large members should not exceed one-half of the total number of board members so as to not dominate the board.

The following tables show one example of how the legislation might be structured for the three different tiers. The criteria used were selected with two primary objectives in mind: the general principal of one person, one vote (i.e., larger areas should have more representation than smaller areas), and that the criteria would not result in a board either so large as to be unmanageable, or so small as to be inadequately representative of the various parts of the region.

Tier 1: Total regional population greater than 750,000. Appointing authority would be as follows:

- Counties of 500,000 or more population--2 appointees
- Counties of less than 500,000—1
- Cities of 500,000 or more—3
- Cities of 50,000-500,000—1

In the Charlotte region, if the five counties of Cabarrus, Gaston, Lincoln, Mecklenburg and Union Counties were included, this would result in a board of the size shown in Figure 6-4:

Figure 6-4: Tier 1 Board Structure

Area/Transit System	County Appointees	City Appointees	At-Large Appointees	Total Board Members
Charlotte	6 (2 from Mecklenburg, and 1 each from Cabarrus, Gaston, Lincoln and Union)	5 (3 from Charlotte, and 1 each from Gastonia and Concord)	2	13

Tier 2: Total regional population of 200,000-750,000, or an MSA. Appointing authority as follows:

- Counties of 100,000 or more—2 appointees
- Counties of less than 100,000--1
- Cities of 50,000 or more—2
- Cities of 25,000-50,000—1

Refer to Figure 6-5 for the number of potential board members at Tier 2 transit systems should this structure be adopted.

Figure 6-5: Tier 2 Board Structure

Area/Transit System	County Appointees	City Appointees	At-large Appointees	Total Board Members
Asheville	5 (2 from Buncombe, 1 each from Henderson, Madison and Transylvania)	2 (Asheville)	2	9
Fayetteville	6 (2 from Cumberland, 1 each from Bladen, Harnett, Hoke and Sampson)	2 (Fayetteville)	1 or 3	9 or 11
Gastonia[10]	2 (Gaston)	2 (Gastonia)	1 or 3	5 or 7

[10] Gastonia and Salisbury are actually part of the Charlotte-area MSA. Because each of these cities currently has its own transit system, this table assumes, for illustration only, that each of these areas would create a separate regional authority that encompasses only that county.

Area/Transit System	County Appointees	City Appointees	At-large Appointees	Total Board Members
Greenville	4 (2 from Pitt, 1 each from Beaufort and Martin)	2 (Greenville)	1 or 3	7 or 9
Hickory	5 (2 from Catawba, and 1 each from Alexander, Burke, and Caldwell)	1 (Hickory)	1 or 3	7 or 9
Rocky Mount	2 (1 each from Nash and Edgecombe)	2 (Rocky Mount)	1 or 3	5 or 7
Salisbury[9]	2 (Rowan)	1 (Salisbury)	2	5
Wilmington	5 (2 from New Hanover, 1 each from Brunswick, Columbus and Pender)	2 (Wilmington)	2	9

Tier 3: Total regional population of less than 200,000 (and not an MSA). Appointing authority as follows:

- Counties—50,000 or more—2
- Counties—less than 50,000—1
- Cities—25,000 or more—2
- Cities—10,000-25,000—1

Refer to Figure 6-6 for the number of potential board members at Tier 3 transit systems should this structure be adopted.

Figure 6-6: Tier 3 Board Structure

Area/Transit System	County Appointees	City Appointees	At-large Appointees	Total Board Members
Urban Systems				
Boone[11]	1 (Watauga)	1	1	3
Wilson	2 (Wilson)	2	1 or 3	5 or 7
Existing Rural Systems				
Choanoke Public Transportation Authority (CPTA)	5 (2 from Halifax, 1 each from Bertie, Northampton and Hertford)	1	1 or 3	7 or 9
Craven Area Rural Transportation System (CARTS)	4 (2 form Craven, 1 each from Jones and Pamlico)	1	2	7
Inter-County Public Transportation Agency (ICPTA)	5 (1 each from Chowan, Perquimans, Pasquotank, Camden and Currituck)	1	1 or 3	7 or 9
Kerr Area Transportation Authority (KATA)	4 (1 each from Vance, Franklin, Granville and Warren)	1	2	7

[11] Note: the Boone transit authority (AppalCART) currently has an eight-member board.

Area/Transit System	County Appointees	City Appointees	At-large Appointees	Total Board Members
Yadkin Valley Economic Development District (YVEDDI)	5 (2 from Surry, 1 each from Stokes, Davie and Yadkin)		2	7
Potential Rural System (example)				
Wilkes, Alleghany and Ashe Counties	4 (2 from Wilkes, 1 each from Alleghany and Ashe)		1 or 3	5 or 7

Another approach to creating a governing board, although not recommended, is to simply let the political jurisdictions that are forming the regional agency decide among themselves how the governing board should be constituted. This is the approach used by the Public Transportation Authorities Act (Chapter 160A, Article 25), and by the Water and Sewer Authorities Act (Chapter 162A, Article 1). Regions that have formed using the Interlocal Cooperation Act (Chapter 160A, Article 20) also use this method. However, these Acts were primarily intended for regional agencies involving a smaller number of political jurisdictions than would typically be involved in a regional transportation authority.

An advantage of this approach is that the matter is left to local officials who best know the needs and circumstances of the area. A disadvantage is that it may be very difficult for a large number of counties and municipalities to come to agreement on how each jurisdiction should be represented. One result of this might be a very large and unwieldy board.

Board Composition:

The boards of the transit systems in the study have a variety of types of members. Many boards are composed of elected officials (e.g., county commissioners or city council members). Some boards have a mixture of elected officials, other public officials (e.g., city or county managers), and/or business or civic leaders, citizens, or representatives of special groups such as the elderly and disabled.

It is recommended that the composition of RTA boards be left to the discretion of the appointing authorities. They can decide what makes most sense for their particular political jurisdictions. In general, however, it is recommended that board appointments represent fairly broad-based interests (e.g., a particular geographic area, or an area of expertise such as transportation or finance), and that more narrow interests such as human service agencies, elderly and disabled riders, or special interest groups be represented on a Transportation Advisory Board (see below).

It is further recommended that consideration be given to including a non-voting member from the NC Division of Public Transportation on RTA boards.

Terms and Compensation:

The length of board member terms and how much they are compensated for their service are important factors in the overall effectiveness of a board. It is recommended that terms be sufficiently long so that the board members are able to develop knowledge and experience (e.g., four years or more), and that staggered terms be considered in order to provide continuity. Compensation should be on a per diem basis as is customary in many public authorities and private companies, and should be substantial enough to reflect the importance and responsibility of the position. This will serve to attract individuals with the levels of expertise and experience that are needed for an effective public board.

6. County-by-County vs. Region-wide Approval of RTAs

Issue: One of the problems with attempting to create a multi-county RTA that requires the approval of several county boards, and perhaps by some municipalities too, is that the one county, or one municipality, can basically veto its creation.

Discussion: There are several possible options for addressing this issue:

- Not making it a requirement that all counties have to approve it. It could be a majority of the counties, or an extraordinary majority such as 75%. However, this could lead to problems if one or more jurisdictions that do not approve the RTA are required to become part of the RTA.
- If a particular jurisdiction or two don't approve, create an RTA without them. It would just be a smaller RTA. This is not unlike what happened in the Detroit area with SMART and the City of Detroit system. It can obviously create a problem if these counties are significant to the regional system.
- Instead of approval by county boards, allow a region-wide referendum to create an RTA. This runs the risk of disapproval of the entire RTA, particularly in a region with a lot of low-density suburban or rural areas and that doesn't have a large base of public transportation users.

Recommendation: A region-wide referendum to create an RTA is preferred, as this provides one opportunity for all residents to cast their vote, and creates a single authority without any lapses in coverage of the region. If this option is likely to result in a small majority of voters in one or more local sub-areas being able to veto a regional transit system, then the second option may be utilized in order to allow the formation of a regional authority.

7. Transportation Advisory Board

In addition to the formal governing board, it is recommended that each RTA create a Transportation Advisory Board that the governing board is required to meet with on a regular basis. This board should include members who represent riders, citizens, the transportation disadvantaged, and other important stakeholders in the regional transit system. In general, Transportation Advisory Boards should be larger than governing boards because the emphasis is on representation of a variety of interests rather than on the efficiency of decision-making.

Legislative Funding Recommendations

Legislative funding recommendations address the ability and sources of dedicated funding, a revenue recovery ratio requirement, and state public transportation funding appropriations.

1. Dedicated Funding

Issue: One of the frequent recommendations made by study respondents was the importance and benefits of a dedicated funding source.

Discussion: Benefits from having a dedicated funding source include:

- Not having to negotiate annually with multiple local governments for operating and/or capital funding.

- Removing the uncertainty of local funding, thereby permitting better long-range planning and decision-making.
- Improved ability to match available state and federal funding.
- Providing an explicit funding source so that the transit system does not have to compete for scarce local funds.

Recommendation: RTAs should be given the power to generate their own local funding through a dedicated funding source such as a tax levy. This does not mean that they have to exercise this power, only that they be given the ability to do so.

Another point mentioned in several interviews was the desirability of not making the imposition of a tax "all or nothing", i.e., that the tax is either imposed or not imposed. Instead, it was recommended that the authority have the ability to levy the tax in stages. For example, a sales tax that was authorized at 1% might be initially imposed at 1/2 %, and then subsequently raised as the need develops.

2. Funding Equity

Issue: The issue of funding equity needs to be carefully addressed, i.e., local political jurisdictions within the region need to believe that they are receiving transit services and benefits that reflect a fair share of the local funds that are generated in that jurisdiction. This can be difficult because some areas due to their nature may not justify much transit service (e.g., low density suburban or rural areas), while other areas may have substantial transit needs that exceed what may be considered by some to be their fair share (e.g., a high-density area in the central city).

Discussion: Methods should be explored for creating differential taxing levels within the regions that would better reflect the distribution of transit benefits. For example, the Regional Transit Authority Registration Tax statute (Chapter 105, Article 51) allows PART, the RTA created under the Regional Transportation Authority Act (Chapter 160A, Article 27), to create special, county-based districts within the region and to levy a separate vehicle registration or vehicle rental tax in each district. Another example is the County Service District Act, Chapter 153A, Article 16.

Recommendation: It is recommended that an RTA have at least some discretionary funding that it can use to respond to critical needs, and that not all funding is simply directed to sub-areas of the region by legislated formulas. Another approach that could be explored is creating a mechanism for some local funds to be returned to local jurisdictions that are not receiving a proportionate share of transit services. For example, some funds might be returned to a mostly rural county that was receiving very little transit service that it could use for road improvements instead.

3. Dedicated Funding

Issue: There are many different sources of dedicated funding used throughout the country and in North Carolina. These include sales taxes, property taxes, payroll taxes, and a variety of auto-related taxes such as vehicle registration fees.

Discussion: In recommending specific sources, there are several important criteria to consider:

- Is the tax broad-based enough to produce sufficient revenue?
- Does it trend well with inflation so that it will keep up with inflationary increases in expenses?
- Is it relatively easy (and inexpensive) to collect and administer?

In its 1997 report, Governor Hunt's Transit 2001 Commission suggested that "five local transit financing techniques have emerged as worthy of serious consideration":

- *Vehicle Registration Surcharge.* An additional annual payment of $5 per vehicle registration. The TTA currently imposes this tax, and PART is authorized to do so.
- *Rental Vehicle Gross Receipts Tax*. An additional tax on commercial rental vehicles. TTA and PART currently impose this tax. (PART imposes it only in Forsyth and Guilford Counties.)
- *Parking Tax*. A fee or tax on parking spaces within a jurisdiction, e.g., a sales tax on fee-paid commercial parking.
- *Local Option Sales Tax*. Mecklenburg County received voter approval to levy a ½% sales tax for transit in 1998.
- *Land Transfer Fees.* Local governments may collect an "excise stamp tax" on real estate transactions at one percent of the value of the sales price. Several counties in North Carolina currently have this authority, and Camden, Chowan, Dare, Pasquotank and Perquimans currently collect these taxes.

Another important issue in regard to a local funding source is whether the ability to impose a local tax should be subject to voter approval. Regional transportation authorities created under the state Public Transportation Authorities Act are authorized to levy "special taxes", but only after voter approval. The ½% sales tax for transit in Mecklenburg County (for the Charlotte-area transit system) was subject to voter approval. On the other hand, PART is allowed to impose its vehicle-related taxes upon approval of the affected county boards. The TTA requires the approval of its Special Tax Board, and taxes can be imposed without any vote by the county boards in the region. The experience in other states is also mixed in this regard. Because public transportation is often used by only a small segment of the population, it can be difficult to persuade voters to approve taxes to support it. The many social benefits of public transportation such as improving air quality, reducing traffic congestion, conserving energy and providing transportation for the transit dependent are not always readily visible or appreciated. A balance needs to be struck between the need to provide a socially beneficial public service and a desire to let voters approve new taxes.

Recommendation: A suggested approach for consideration is as follows:

- *If the Board is composed entirely of elected officials*, allow certain limited special taxes, such as the vehicle-related taxes that TTA and PART can currently impose, to be approved by the board. (An additional taxpayer protection could be to require that an *extraordinary* majority of the board approve such a levy). *If the board is not entirely composed of elected officials*, require that the governing board of any affected county also approve the tax levy.
- Require that more general, broad-based taxes such as a sales tax, property tax or gas tax be submitted to the voters for approval.

4. Revenue Recovery Ratio Requirement

Issue: Some transit systems are required by state legislation to cover a certain percentage of their expenses from passenger fares.

Discussion: For example, the Chicago RTA requires that the system as a whole cover 50% of its expenses from the farebox. The intention is to insure that the actual users of the system pay a fair share and that taxpayers do not bear an unfair portion of the burden. Another intention is to insure that systems do not operate routes and services that do not meet specific productivity thresholds. This can also be a way to limit the amount of subsidy required from state funds.

Smaller systems, especially systems providing a lot of service in low-density or rural areas, typically have a low revenue recovery ratio. A variant to requiring that these systems earn a percentage of their expenses from the farebox would be to broaden the recovery ratio requirement to include not just farebox revenue, but any revenue raised locally, i.e., either revenue from fares or local funding sources. This would allow the system the option of either meeting the requirement by charging high fares and/or eliminating unproductive routes, or permitting low fares or less productive routes as long as the area is willing to raise local funds to meet the recovery ratio requirement.

Recommendation: It is recommended that the issue of a revenue recovery ratio requirement be explored. One area for further study would be whether a required revenue recovery ratio should vary depending on the type of service being operated or on the nature of the area being served. For example, a fixed-route system operating in mostly high-density city areas can typically cover more of its costs from the farebox than a system that operates dial-a-ride paratransit service in remote rural areas. However, recovery ratios should take into account those systems that operate weekend and evening services, which may transport fewer passengers, but provide a necessary service.

Legislative Administration Recommendations

In addition to the general power to provide public transportation services, certain additional powers should be considered for RTAs:

Eminent Domain. This would give RTAs the ability to acquire land that may be needed for future rail lines, park-n-ride facilities, or consolidated operating and maintenance garages. (TTA and PART both have this power.)

Special Security Force. Many transit systems, especially regional systems in large urban areas, have the power to provide and maintain (or contract for) a security force that can supplement the police forces of local jurisdictions in protecting the security of their riders and facilities. (TTA and PART also have this power.)

Legislative Operations Recommendations

RTAs should have the ability to operate, contract for, broker or subsidize public transportation services including all forms of regional surface transportation such as bus, rail, water, vanpool, carpooling, taxi and "human service" transportation (with appropriate protections for private, for-profit companies such as not competing with sight-seeing or charter bus operations). They should also have an ability to provide extraterritorial trips, especially those relating to medical needs, within some reasonable geographic limit from the authorities' territorial borders.

C. Potential Regional Systems

Regional community transportation systems and metropolitan transit systems should include geographic areas that share common economic, employment, political, and social characteristics. That is, regional transportation systems should serve urbanized areas and their associated suburban surroundings, and contiguous rural areas. ITRE staff reviewed and evaluated boundaries of several current governmental organizations as well as commuting patterns between counties to develop a series of potential regional areas.

To determine potential boundaries for regional community transportation systems and metropolitan transit systems, ITRE staff reviewed the boundaries for the following organizations:

- Rural Transportation Planning Organizations (RPOs)—Figure 6-7 shows the 20 RPOs that have been chartered or planned.
- Metropolitan Transportation Planning Organizations (MPOs)—Figure 6-8 shows the 17 MPOs in North Carolina.
- Councils of Government (COGs)—Refer to Figure 6-9 for the boundaries of the 17 COGs.
- NCDOT Highway Divisions—Figure 6-10 shows the 14 Highway Divisions.
- Regional partnerships for economic development—Refer to Figure 6-11 that displays the boundaries of these seven regions.
- Proposed 511 Traveler Information System "Regions"—Figure 6-12 shows the general areas for the 12 proposed regions.

The maps listed above were found to have varying degrees of relevance (in approximately the order listed) for use in determining appropriate boundaries for regional transportation systems. When grouping counties into potential regional transportation systems, priority was given to the RPO and MPO boundaries, as these organizations are/will be responsible for planning transportation improvements, including the transit elements of such improvements. Concurrence between planning and operational boundaries to the maximum extent practicable allows those responsible for planning and for operating community and metropolitan transportation systems to interact with each other on a regular, continual basis, and to become familiar with each other's needs and priorities.

RPO boundaries generally follow COG boundaries throughout the state. MPO boundaries generally surround urbanized areas. NCDOT Highway Divisions appear to have only limited relevance to regional public transportation services, as they are not drawn to reflect commuting patterns centered on the state's urbanized areas. Economic Development District boundaries encompass large areas, there being only seven such districts in the state. The proposed 511 "Regions" were not found to be useful tools for organizing regional public transportation systems.

Overlaying this mapping was an analysis of regional commute patterns, based on *Quik-Commute* from the State Library of North Carolina. Unfortunately, the 1990 version is the most recent available at the time the research was conducted. While the numerical data in that version is not current, overall commuting patterns should be relatively similar to those now in effect.

Figure 6-7: Rural Transportation Planning Organizations (RPOs)

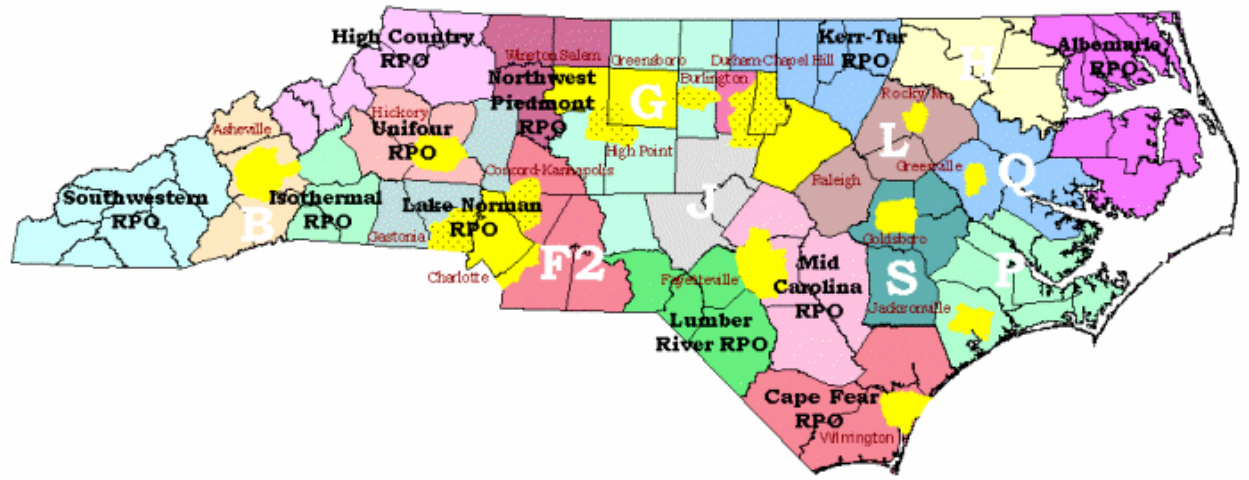


Figure 6-8: Metropolitan Transportation Planning Organizations (MPOs)

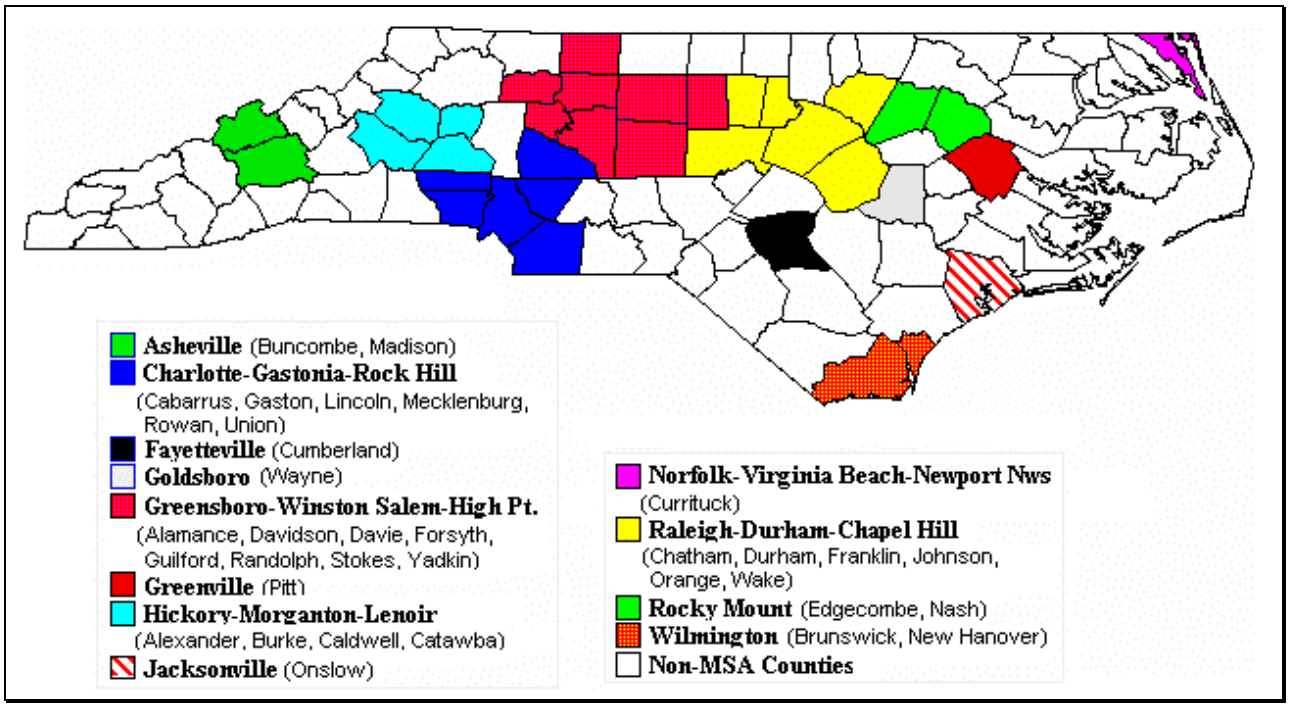


Figure 6-9: Councils of Government (COGs)

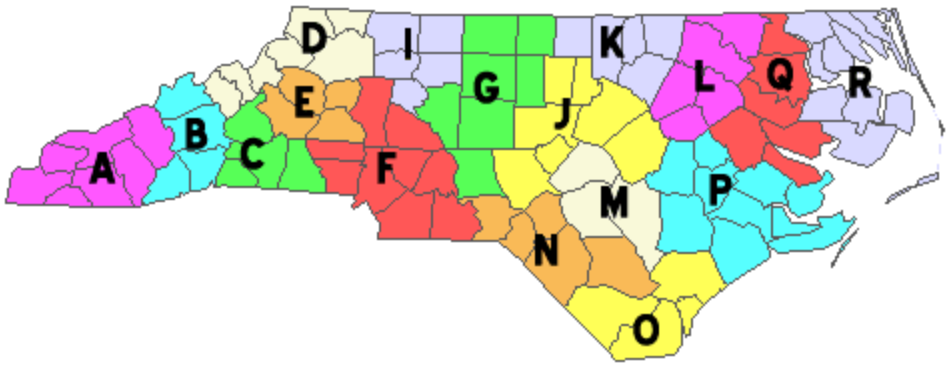


Figure 6-10: NCDOT Highway Divisions

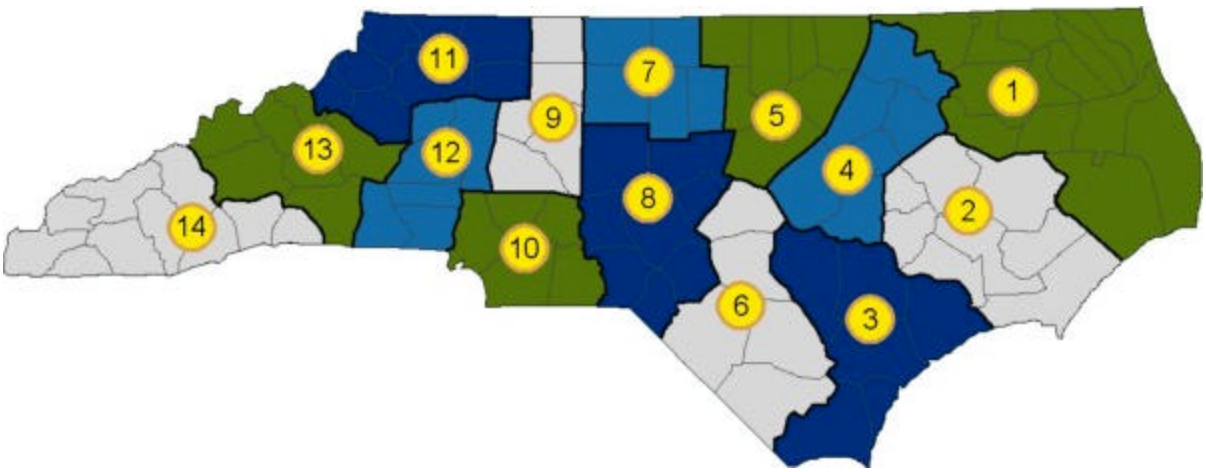
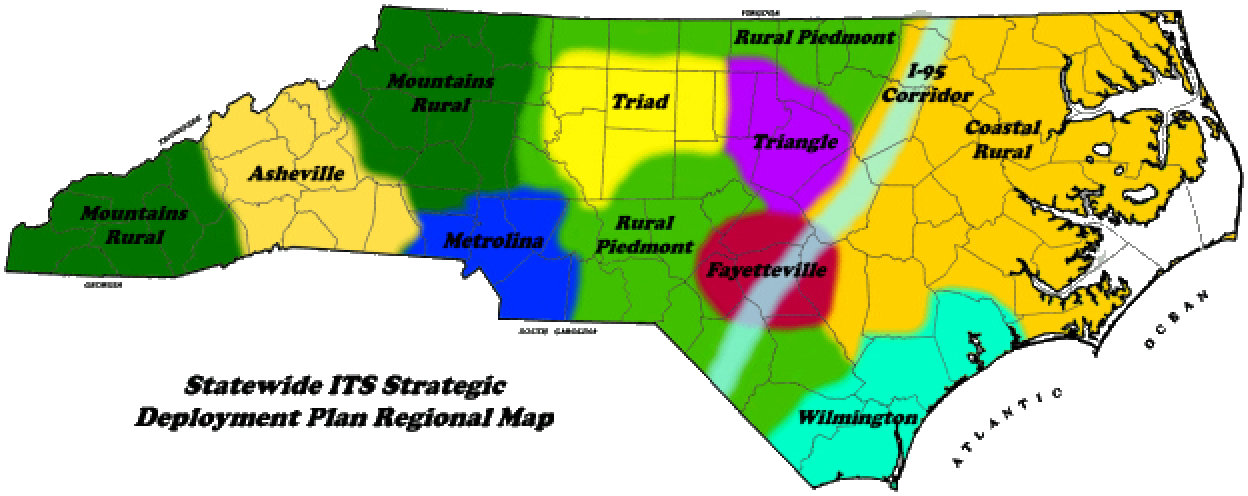


Figure 6-11: Regional Partnerships for Economic Development

Figure 6-12: Proposed 511 Traveler Information System "Regions"



Through this two-part analysis, ITRE staff accounted for organizational as well as behavioral aspects of regional affiliations throughout the state. Figure 6-13 lists counties that comprise RPOs, COGs, NCDOT Highway Divisions, and regional partnerships for economic development for counties that could be involved in the formation of city-county and/or multi-county community transportation systems. The right-hand column of the table lists potential counties that could be included in regional public transportation systems throughout the state. Note that this table and the illustrative map in Figure 6-14 illustrate "first cut" possibilities for delineating regional transit systems and are not a plan endorsed by the NCDOT. Note also that in many cases, there are two or three potential options that county and municipal leaders could follow that would result in regional transportation systems that would possess some relationship to current organizational and behavioral patterns throughout the state.

Figure 6-13: Potential Small Urban-County, and Rural Multi-County Regional Transportation Systems

RPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Proposed Regional Transportation Systems
Southwestern: Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain	**A:** Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain	**14:** Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Swain, Polk	**Advantage West:** Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania, Watauga, Wilkes, Yancey	**Option 1 or Phase I** (two regional systems)**:** 1. Cherokee, Clay, Graham, Macon (70,877) 2. Haywood, Jackson, Swain (100,122) **Option 2 or Phase II** (one system)**:** Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain. (170,999) **Option 3:** 1. Cherokee, Clay, Graham, Jackson, Macon, Swain (116,966) 2. Haywood joins Buncombe, Henderson, Madison, Transylvania (398,505)
B: Buncombe, Henderson, Madison, Transylvania	**B:** Buncombe, Henderson, Madison, Transylvania	**13:** Buncombe, Burke, Madison, McDowell, Mitchell, Rutherford, Yancey	**Advantage West:** Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania, Watauga, Wilkes, Yancey	**Option 1:** Buncombe, Henderson, Madison, Transylvania Counties, plus Asheville Transit (344,442) **Option 2:** Buncombe, Haywood, Henderson, Madison, Transylvania (398,505)

RPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Proposed Regional Transportation Systems
High Country: Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	**D:** Alleghany, Ashe, Avery, Mitchell, Watauga, Wilkes, Yancey	**11:** Alleghany, Ashe, Avery, Caldwell, Surry, Watauga, Wilkes, Yadkin	**Advantage West:** Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania, Watauga, Wilkes, Yancey	**Option 1 / Phase I** (two or three systems)**:** 1. Avery, Mitchell, Yancey (50,628)—if AppalCART is included (93,323) 2. Watauga (AppalCART) (42,695) 3. Alleghany, Ashe, Wilkes (100,693)—if AppalCART is included (143,388) Note: AppalCART could remain by itself, or elect to join either #1 or #3 above. **Option 2 / Phase II** (one system)**:** Alleghany, Ashe, Avery, Mitchell, Watauga (AppalCART), Wilkes, Yancey (194,016)
Isothermal: McDowell, Polk, Rutherford	**C:** Cleveland, McDowell, Polk, Rutherford	**13** (McDowell, Rutherford) **14** (Polk)	**Advantage West** Alleghany, Ashe, Avery, Buncombe, Burke, Caldwell, Cherokee, Clay, Graham, Haywood, Henderson, Jackson, Macon, Madison, McDowell, Mitchell, Polk, Rutherford, Swain, Transylvania, Watauga, Wilkes, Yancey	**Option 1:** McDowell, Polk, Rutherford (123,374) **Option 2:** Cleveland, McDowell, Polk, Rutherford (219,661)
Unifour: Alexander, Burke, Caldwell, Catawba	**E:** Alexander, Burke, Caldwell, Catawba	**11** (Caldwell) **12**(Alexander, Catawba) **13** (Burke)	**Advantage West** (Burke, Caldwell) **Charlotte** (Alexander, Catawba)	Alexander, Burke, Caldwell, Catawba (341,851)

RPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Proposed Regional Transportation Systems
Lake Norman: Cleveland, Gaston, Iredell, Lincoln	**C** (Cleveland) **F** (Gaston, Iredell, Lincoln)	**12:** Alexander, Catawba, Cleveland, Gaston, Iredell, Lincoln	**Charlotte:** Alexander, Anson, Cabarrus, Catawba, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, Union	**Option 1:** 1. Gaston and Lincoln join Charlotte regional system (1,204,339) 2. Cleveland joins Charlotte (1,300,626) or McDowell, Polk, Rutherford (219,661) 3. Iredell (122,660) **Option 2:** 1. If Gaston and Lincoln do not join Charlotte: Cleveland, Gaston, Lincoln (350, 432) 2. Iredell (122,660)
F2: Anson, Cabarrus, Rowan, Stanly, Union	**F:** Anson, Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, Union	**9** (Rowan) **10** (Anson, Cabarrus, Stanly, Union)	**Charlotte:** Alexander, Anson, Cabarrus, Catawba, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, Union	**Option 1:** 1. Anson, Rowan, Stanly, (213,715) 2. Cabarrus, Union join with Mecklenburg and Charlotte Area Transit System in a regional system (950,194) **Option 2:** 1. Anson, Stanly (83,375) 2. Rowan forms city-county system with Salisbury (130,340) 3. Cabarrus, Union join with Mecklenburg and Charlotte Area Transit System in a regional system (950,194)
Northwest Piedmont: Davie, Forsyth, Stokes, Surry, Yadkin	**I:** Davie, Forsyth, Stokes, Surry, Yadkin	**9** (Davie, Stokes) **11**(Surry, Yadkin)	**Piedmont Triad:** Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Montgomery, Randolph, Rockingham, Stokes, Surry, Yadkin	**YVEDDI:** Davie, Stokes, Surry, Yadkin (187,113)

RPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Proposed Regional Transportation Systems
G (Piedmont Triad): Alamance, Caswell, Davidson, Forsyth, Guilford, Montgomery, Randolph, Rockingham,	**G:** Alamance, Caswell, Davidson, Guilford, Montgomery, Randolph, Rockingham	**7**(Alamance, Caswell, Guilford, Rockingham) **8** (Montgomery, Randolph) **9** (Davidson)	**Piedmont Triad:** Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Montgomery, Randolph, Rockingham, Stokes, Surry, Yadkin	These counties are potentially included in PART. **Option 1:** ***1.*** All but Caswell and Montgomery join PART. (1,227,543) 2. Caswell joins Person (59,124); Montgomery joins Moore (101,591); or joins with Anson and Stanly (110,197); or joins with Anson, Stanly, and Rowan (240,537). **Option 2:** All counties join PART.
Lumber River: Hoke, Richmond, Robeson, Scotland	**N:** Bladen, Hoke, Robeson, Richmond, Scotland	**6** (Robeson) **8**(Hoke, Richmond, Scotland)	**Southeast:** Bladen, Brunswick, Columbus, Cumberland, Hoke, New Hanover, Pender, Robeson, Richmond, Sampson, Scotland	**Option 1:** (Recommended) Richmond, Robeson, Scotland (Hoke joins Cumberland and other affiliated counties.) 205,901 **Option 2:** Hoke, Richmond, Robeson, Scotland (239,547)
J: Chatham, Lee, Moore, Orange	**J:** Chatham, Durham, Johnston, Lee, Moore, Orange, Wake	**7** (Orange) **8** (Lee, Moore, Chatham)	**Research Triangle:** Chatham, Durham, Franklin, Granville, Harnett, Johnston, Lee, Moore, Orange, Person, Vance, Wake, Warren	**Option 1:** 1. Chatham, Lee, Moore (173,138) 2. Orange joins with Chapel Hill; Durham City/County consolidate; Wake and Cary join with Raleigh; Johnston joins TTA **Option 2:** 1. Chatham, Lee join TTA 2. Moore joins Montgomery (101,591) 3. Orange joins with Chapel Hill; Durham City/County join; Wake and Cary join Raleigh; Johnston joins TTA

RPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Proposed Regional Transportation Systems
Kerr-Tar: Franklin, Granville, Person, Vance, Warren	**K:** Franklin, Granville, Person, Vance, Warren	**5:** Durham, Franklin, Granville, Person, Vance, Wake, Warren	**Research Triangle:** Chatham, Durham, Franklin, Granville, Harnett, Johnston, Lee, Moore, Orange, Person, Vance, Wake, Warren	1. **KATA:** Franklin, Granville, Vance, Warren (158,684) 2. Person and Caswell form a regional system. (59,124); or Person joins TTA, and Caswell joins PART.
Cape Fear: Brunswick, Columbus, New Hanover, Pender	**O:** Brunswick, Columbus, New Hanover, Pender	**3**(Brunswick, New Hanover, Pender) **6** (Columbus)	**Southeast:** Bladen, Brunswick, Columbus, Cumberland, Hoke, New Hanover, Pender, Robeson, Richmond, Sampson, Scotland	Brunswick, Columbus, New Hanover, Pender Counties, Wilmington Transit Authority (329,281)
Mid Carolina: Bladen, Cumberland, Harnett, Sampson	**M:** Cumberland, Harnett, Sampson	**3**(Sampson) **6**(Bladen, Cumberland, Harnett)	**Southeast** (Bladen, Cumberland, Sampson) **Research Triangle** (Harnett)	**Option 1:** (Recommended) Bladen, Cumberland, Harnett, Hoke, Sampson Counties, Fayetteville Area System Transit (520,073) **Option 2:** 1. Bladen, Cumberland, Harnett, Sampson Counties, Fayetteville Area System Transit (486,427) 2. Hoke joins Richmond, Robeson, Scotland (239,547)
S: Duplin, Greene, Lenoir, Wayne	**P:** (Duplin, Greene, Lenoir, Wayne)	**2:** (Greene, Lenoir) **3:** (Duplin) **4:** (Wayne)	**Eastern:** Carteret, Craven, Duplin, Edgecombe, Greene, Johnston, Jones, Lenoir, Nash, Onslow, Pamlico, Pitt, Wilson	**Option 1:** Duplin, Greene, Lenoir, Wayne (241,014) **Option 2:** 1. Greene, Lenoir, Wayne (191,951) 2. Duplin joins Onslow (199,418) **Option 3:** 1. Wayne (113,329) 2. Greene, Lenoir join Pitt (212,420) 3. Duplin joins Onslow (199,418)

RPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Proposed Regional Transportation Systems
L (Upper Coastal Plain): Edgecombe, Johnston, Nash, Wilson	**J:** (Johnston) **L:** (Edgecombe, Nash, Wilson)	**4:** Edgecombe, Halifax, Johnston, Nash, Wayne, Wilson	**Eastern:** Carteret, Craven, Duplin, Edgecombe, Greene, Johnston, Jones, Lenoir, Nash, Onslow, Pamlico, Pitt, Wilson	**Option 1:** 1. NETS—Edgecombe, Nash, Rocky Mount Transit (current) (168,619) 2. Wilson City-County consolidation (73,814) 3. Johnston joins TTA **Option 2:** 1. NETS—Edgecombe, Nash, Rocky Mount Transit, Wilson City-County (242,433) 2. Johnston joins TTA
H: Bertie, Halifax, Hertford, Northampton	**L:** (Halifax, Northampton) **Q:** (Bertie, Hertford)	**1**(Bertie, Hertford, Northampton) **4** (Halifax)	**Northeast:** Beaufort, Bertie, Camden, Chowan, Currituck, Dare, Gates, Halifax, Hertford, Hyde, Martin, Northampton, Pasquotank, Perquimans, Tyrrell, Washington	**CPTA:** Bertie, Halifax, Hertford, Northampton (121,830)
P (Eastern Carolina): Carteret, Craven, Jones, Onslow, Pamlico	**P:** Carteret, Craven, Duplin, Greene, Jones, Lenoir, Onslow, Pamlico, Wayne	**2**(Carteret, Craven, Jones, Pamlico) **3** (Onslow)	**Eastern:** Carteret, Craven, Duplin, Edgecombe, Greene, Johnston, Jones, Lenoir, Nash, Onslow, Pamlico, Pitt, Wilson	**Option 1:** **CARTS:** 1. Carteret, Craven, Jones, Pamlico (174,134) 2. Onslow forms a city-county system with the City of Jacksonville (150,355) **Option 2:** **CARTS:** Carteret, Craven, Jones, Onslow, Pamlico (324,489)

RPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Proposed Regional Transportation Systems
Q (Mid-East): Beaufort, Martin, Pitt	**Q:** Beaufort, Bertie, Hertford, Martin, Pitt	**1** (Martin) **2** (Beaufort, Pitt)	**Eastern:** (Pitt) **Northeast:** (Beaufort, Martin)	**Option 1:** Beaufort, Martin, Pitt Counties, Greenville Area Transit (204,349) **Option 2:** 1. Beaufort and Pitt Counties, Greenville Area Transit (178,756) 2. Martin joins NETS (178,756) **Option 3:** 1. Pitt County and Greenville Area Transit form a city-county system (133,798) 2. Beaufort joins Dare, Hyde, Tyrrell, and Washington (98,623) 3. Martin joins NETS (178,756).
Albemarle: Camden, Chowan, Currituck, Dare, Gates, Hyde, Pasquotank, Perquimans, Tyrrell, Washington	**R:** Camden, Chowan, Currituck, Dare, Gates, Hyde, Pasquotank, Perquimans, Tyrrell, Washington	**1:** Bertie, Camden, Chowan, Currituck, Dare, Gates, Hertford, Hyde, Martin, Northampton, Pasquotank, Perquimans, Tyrrell, Washington	**Northeast:** Beaufort, Bertie, Camden, Chowan, Currituck, Dare, Gates, Halifax, Hertford, Hyde, Martin, Northampton, Pasquotank, Perquimans, Tyrrell, Washington	1. **ICPTA:** Camden, Chowan, Currituck, Gates, Pasquotank, Perquimans (96,382) 2. Dare, Hyde, Tyrrell, Washington (53,665)

This example would result in the creation of 26-38 regional rural transit systems, compared with the 84 rural systems that are now in operation throughout the state.

Figure 6-14: Map of Potential Regional Public Transportation Systems

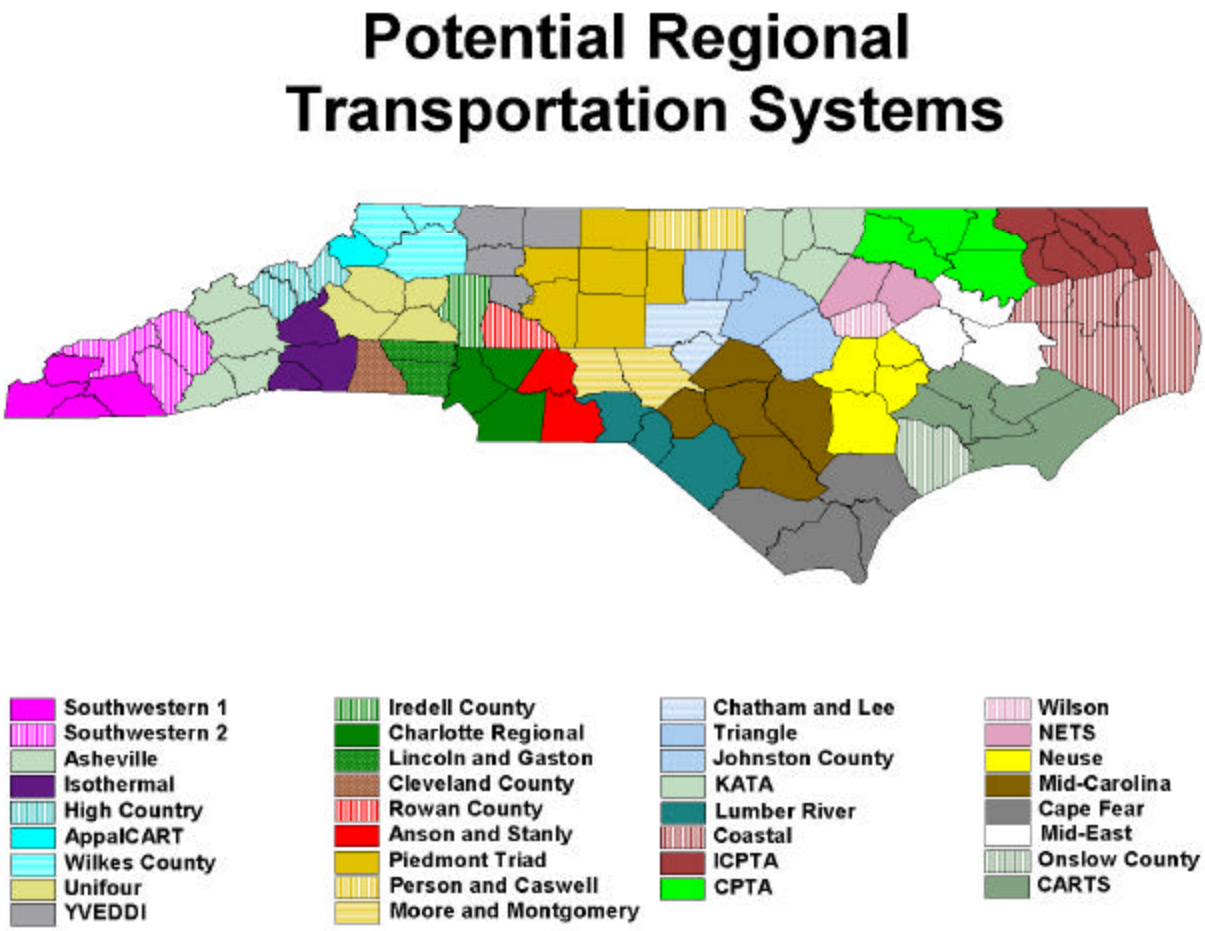


Figure 6-15 shows three potential large metropolitan transportation systems in areas previously referred to as *Tier 1* regions. Each of them is a metropolitan area of more than one million in population. Each of them has already formed a regional transportation system, either through state legislation or interlocal agreement:

- The Triangle Transit Authority (TTA) in Wake, Durham and Orange Counties
- The Piedmont Authority for Regional Transportation (PART), initially formed in Alamance, Davidson, Forsyth, Guilford, Randolph and Rockingham Counties, but with authority to expand to 12 contiguous counties
- The Charlotte Area Transit System (CATS) in Mecklenburg County

Each of these systems has the potential of expanding as the regions continue to grow in population and geographical area. For example, each of the above transportation systems is currently within a larger, federally defined Metropolitan Statistical Area (MSA), and also within a larger area comprising a Council of Governments (COG).

The Charlotte MSA is currently comprised of the six counties of Cabarrus, Gaston, Lincoln, Mecklenburg, Rowan and Union. The MSA for the Piedmont Triad region is defined as the eight counties of Alamance, Davidson, Davie, Forsyth, Guilford, Randolph, Stokes and Yadkin. The Triangle MSA is defined as the six counties of Chatham, Durham, Franklin, Johnson, Orange and Wake.]

Figure 6-15: Potential Large Metropolitan (Tier 1) Regional Transportation Systems

MPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Regional Transportation Systems
Piedmont Triad Area: • Burlington-Graham • Greensboro Urban Area • High Point Urban Area • Winston-Salem Forsyth	**G:** Alamance, Caswell, Davidson, Guilford, Montgomery, Randolph, Rockingham **I:** Davie, Forsyth, Stokes, Surry, Yadkin	**7**(Alamance, Caswell, Guilford, Rockingham) **9** (Davidson, Forsyth)	**Piedmont Triad:** Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Montgomery, Randolph, Rockingham, Stokes, Surry, Yadkin	• Greensboro Transit Authority • High Point Transit System • Piedmont Authority for Regional Transportation (Alamance, Davidson, Forsyth, Guilford, Randolph, Rockingham Counties) • Winston-Salem Transit Authority
Research Triangle Area: • Capital Area • Durham-Chapel Hill-Carrboro UA	**J:** Chatham, Durham, Johnston, Lee, Moore, Orange, Wake	**4** (Johnston) **5** (Durham, Wake) **7** (Orange) **8** (Chatham, Lee)	**Research Triangle:** Chatham, Durham, Franklin, Granville, Harnett, Johnston, Lee, Moore, Orange, Person, Vance, Wake, Warren	• Capital Area Transit System • Town of Cary (dial-a-ride transportation) • Chapel Hill Transit • Durham Area Transit Authority • Triangle Transit Authority (Durham, Orange, Wake) (Potential—Chatham, Johnston, Lee,)

MPOs	COGs	NCDOT Highway Divisions	Economic Development Districts	Regional Transportation Systems
Charlotte Area: • Cabarrus-South Rowan • Gaston Urban Area • Mecklenburg-Union	**F:** Anson, Cabarrus, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, Union	**9** (Rowan) **10** (Cabarrus, Mecklenburg)	**Charlotte:** Alexander, Anson, Cabarrus, Catawba, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, Union	• Charlotte Area Transit System • Gastonia Transit • Salisbury Transit System "Core" system: Cabarrus, Gaston, Lincoln, Mecklenburg, Union Counties Potential additions: Anson, Cleveland, Iredell, Rowan, Stanly Counties

VII. Recommendations for Next Steps

The findings and recommendations presented in this report are intended to be only initial statements in what is envisioned to be a long-term process that will include feedback from a variety of stakeholders from throughout North Carolina. The information in this report was developed in response to the research study scope, and does not present or address the concerns of many local elected officials, transit system managers and staff, and other stakeholders who will be involved in the process of developing and implementing regional North Carolina transit systems.

ITRE staff envision this report serving as an initial information source that may be provided to state and local stakeholders for review and comment. Certainly, review and comment by NCDOT staff, particularly the PTD, is required prior to further action. PTD staff may elect to provide the report to transit system managers, local elected officials, human service agency personnel, and local residents to receive comments from those parties on the recommended actions.

The research staff recommends that the PTD develop an action plan to accomplish the following activities:

- Distribute the study final report to selected North Carolina Community Transportation System and Metropolitan Transit Systems
- Conduct follow-up activities to receive initial comments from transit system managers.
- Prepare information for distribution to key stakeholders—all North Carolina transit system managers, elected officials (county and municipal), planners, MPO/RPO staff, Chambers of Commerce, etc.
- Distribute this information to key stakeholders throughout the state.
- Plan, conduct logistics for, and develop presentation/handout materials for regional meetings. Such meeting could be conducted in the Eastern, Piedmont, and Western parts of the state.
- Conduct regional meetings to receive comments from stakeholders.
- Conduct further study of the potential roles for RPOs with regional transit systems. For example, might an RPO become the lead agency for a regional transit system?
- Incorporate findings into Action Plan—purpose, goals, and key activities (what, who, when).
- Prepare informational materials for NC legislators (as appropriate).
- Distribute materials to NC legislators (as appropriate).
- Invite expressions of interest from existing transit systems to consolidate into one or more regional transit systems.
- Determine appropriate technical and financial assistance that will be required to support the development and implementation of one or more regional demonstration systems.
- Select one or more demonstration sites to become regional transit systems.
- Gather operating and financial statistics on existing transit systems that will become part of one or more regional systems, to allow comparison of "before" and "after" data to determine administrative and operational efficiencies gained as a result of regionalization.
- Provide technical and financial assistance to the affected transit systems before, during, and following the transition to a regional entity.
- Gather operating and financial statistics on existing transit systems that became part of one or more regional systems, to allow comparison of "before" and "after" data to determine administrative and operational efficiencies gained as a result of regionalization.

It is assumed that the PTD staff will keep NC Board of Transportation members informed of the status of activities during all parts of this process, and that input from Board members will be incorporated into the process.

VIII. Implementation and Technology Transfer Plan

The primary product from this study is recommendations to the NCDOT PTD for policies and procedures to encourage the development and implementation of regional public transit systems throughout North Carolina. There is a rural and an urban component to these recommendations. The rural component of this primary product recommends policies and procedures that the NCDOT PTD can adopt to encourage further development and implementation of rural multi-county regional transit systems. The urban component provides recommendations for policies and procedures for the development and implementation of city/county regional public transit systems, for consideration by areas such as Wilmington/New Hanover County, Asheville/Buncombe County, and Greenville/Pitt County that are considering the integration of their city and county transit systems. The urban component also addresses areas such as the Triangle, the Triad, and Metrolina, in which there is some interest in integrating county general public and human services transportation systems with one or more urban transit systems.

The outcome from this product could be increased administrative and operating efficiency in North Carolina's public transit systems, as well as facilitating the role of the NCDOT PTD to administer and fund all public transit programs. NCDOT PTD staff will be able to provide increased encouragement and more effective financial assistance to transit systems and local elected officials as a result of the recommendations developed. In addition to benefits to NC DOT PTD staff and to local transit systems, the recommendations from this research will result in improved service to transit customers through better integration of transit services among local providers, and more comprehensive public transit services in all areas of the state.

The secondary product is recommendations for changes in federal, state, and local statutes and regulations to support and encourage the formation and operation of regional transit systems. This product identifies problems with current statutes and regulations that impede the development and/or implementation of regional transit systems, and recommends changes to those statutes and regulations that will increase opportunities for the creation and operation of regional transit systems. The development and implementation of more comprehensive, responsive regional transit systems should result in improved mobility for state residents and contribute to local economic development activities.

ITRE will seek to disseminate the information from this study to the national audience through a presentation at the Transportation Research Board (TRB) Annual Meeting in Washington, DC.

Appendices

A. Review of the Literature

B. Telephone Interview Protocols:

- Transit System Managers
- State Department of Transportation Representatives

A. Review of the Literature

A review of the literature produced the following citations.

Title: REGIONAL TRANSIT DEVELOPMENT PLAN, FY 1992-96, COVERING CEDAR, CLINTON, MUSCATINE, AND SCOTT COUNTIES, IOWA

Publication Date: 03/00/1992

Publisher/Corporate Author(s):

Great River Bend Services, Incorporated
3719 Bridge Avenue, Unit 4
Davenport IA 52807
USA

Abstract:

This study is designed to serve as a planning and implementation tool for publicly funded transit services in the region. The plan addresses existing demographic data, existing transit services (public and private), and implementation of past and current programs. Future programs are identified and assessed; and detailed as to implementation programs for the FY '93 and '94 considering operational, capital and planning elements of service. The FYs '95-'97 programs are also considered, but in lesser detail. The document is used in applying for state and federal operating and capital assistance, operational management and policy guidance.

Available from:

Great River Bend Services, Incorporated
3719 Bridge Avenue, Unit 4
Davenport IA 52807
USA

Title: SOUND MOVE: LAUNCHING A RAPID TRANSIT SYSTEM FOR THE PUGET SOUND REGION. THE TEN-YEAR REGIONAL TRANSIT SYSTEM

Author(s): Weiner, E

Publication Date: 05/31/1996

Publisher/Corporate Author(s):

Central Puget Sound Regional Transit Authority
821 Second Avenue, M.S. 151
Seattle WA 98104-1598
USA

Abstract:

The document discusses 'Sound Move', the Ten-Year Regional Transit System Plan being proposed by the Central Puget Sound Regional Transit Authority. The basic goal of the plan is to expand the capacity of the region's major transportation corridors by adding new high-capacity transportation services and facilities. Included in the plan is a mix of transportation

improvements, such as: high-occupancy-vehicle expressway, regional express bus routes, commuter rail and light rail. Also included are new community "gateways" - connections in urban and suburban areas for communities to connect to the rest of the region. Additionally, the plan was developed to fit within the region's comprehensive Metropolitan Transportation Plan that includes all forms of transportation - high-capacity transit, local transit, HOV lanes, ferries, airports, automobiles, freight traffic, bicycles and pedestrians.

Available from:

Central Puget Sound Regional Transit Authority
821 Second Avenue, M.S. 151
Seattle WA 98104-1598
USA

Title: TRANSIT IMPLEMENTATION IN THE SEATTLE AREA: IMPLEMENTING MAJOR INVESTMENTS AT A REGIONAL SCALE

Author(s): Parson, JD

Conference Title: Institute of Transportation Engineers 67th Annual Meeting

Sponsored by: Institute of Transportation Engineers

Location: Boston, MA

Date Held: 19970803-19970807

Publication Date: 00/00/1997

Publisher/Corporate Author(s):

Institute of Transportation Engineers
525 School Street, SW, Suite 410
Washington DC 20024-2729
USA

Abstract:

This paper provides an overview of the nearly decade long process to develop and implement a Regional Transit System Plan for the three-county metropolitan area centered in Seattle. This effort, known as the Regional Transit Project, culminated in November, 1996, with voter approval of tax measures to fund the first phase of the plan, which includes light rail, commuter rail, bus and High Occupancy Vehicle (HOV) elements estimated to cost nearly $4 billion ($1995). The program, approved by the voters, is the first ten-year increment of a larger long range transportation plan for the region that was developed in coordination with a two-tier growth and management planning process. The latter was designed to produce both a regional development vision and detailed local comprehensive plans, along with implementing development regulations. These parallel planning efforts, which were facilitated and governed by Washington State laws, have provided a unique opportunity to produce a coordinated program of land use and transportation actions. The long-range regional transit improvements have been designed to achieve specific growth management and economic development objectives, while the land use policies and regulations have been designed to support investment in transportation infrastructure in the region over the next 30 years. The new Central Puget Sound Regional Transit Authority is

now embarked on the major challenge of implementing one of the largest transportation programs in the country.

Available from:

Institute of Transportation Engineers
525 School Street, SW, Suite 410
Washington DC 20024-2729
USA

Title: TOWARD REGIONAL TRANSPORTATION GOVERNANCE: A CASE STUDY OF GREATER VANCOUVER

Author(s): Meligrana, JF

Journal Title: Transportation

Volume: 26 **Issue:** 4

Publication Date: 11/00/1999

Pagination: pp 359-380

Report No: ISSN: 00494488

Publisher/Corporate Author(s):

Kluwer Academic Publishers
Spuiboulevard 50, P.O. Box 17
3300 AA Dordrecht
Netherlands

Abstract:

This paper discusses the evolving institutional structure and governance of transportation planning, policy development and transit delivery within one major North American city-region, the Greater Vancouver area. Various methods of transportation governance are explored from complete independence to full regional integration. The move away from a direct provincial role in transportation management to a greater regional transit authority is discussed and critiqued.

Available from:

Kluwer Academic Publishers
101 Philip Drive
Norwell MA 02061

Title: ADA COMPLIANCE AND FUNDING

Author(s): Duffy, J

Journal Title: MASS TRANSIT

Volume: 26 **Issue:** 4

Publication Date: 06/00/2000

Pagination: pp 52-53

Publisher/Corporate Author(s):

Cygnus Publishing, Incorporated
1233 Janesville Avenue, P.O. Box 803
Fort Atkinson WI 53538-0803
USA

Abstract:

Hillsborough Area Regional Transit (HARTline), Tampa, Florida, places great emphasis on demand management rather than fulfilling unlimited demand for Americans with Disabilities Act (ADA) transportation resources. The article describes the HARTline innovative one-on-one training to help disabled passengers learn how to use the bus system.

Available from:

Cygnus Publishing, Incorporated
1233 Janesville Avenue, P.O. Box 803
Fort Atkinson WI 53538-0803
USA

Title: INNOVATIVE TRANSIT SERVICE DESIGN AND DELIVERY FOR THE LOWER RIO GRANGE VALLEY, TEXAS

Author(s): Cherrington, LK

Conference Title: Bus and Paratransit Conference Proceedings

Sponsored by: American Public Transportation Association

Location: Houston, Texas

Date Held: 20000507-20000511

Publication Date: 00/00/2000

Publisher/Corporate Author(s):

American Public Transportation Association
1201 New York Avenue, NW
Washington DC 20005
USA

Abstract:

Traditional fixed route and fixed schedule transit services typical in large urban areas are frequently impractical and inaccessible for smaller urban and rural areas. Designing transit services to address transit need in small urban/rural communities with limited funds requires creativity, flexibility, and cooperation. This paper describes how public agencies and community leaders met the challenge of developing innovative transit service in Texas. The success of the resulting services has captured the attention of other small urban and rural areas across the state. Using a strategy that combines nontraditional service design and service levels and an innovative governance and funding agreement, the local governments

that comprise the Hidalgo County urbanized area in the Lower Rio Grande Valley developed a regional transit system that provides transit to all of the urbanized areas in the county, provides connectivity between urban communities, links rural to urban areas, and provides access to intercity and international transit services.

Available from:

American Public Transportation Association
1201 New York Avenue, NW
Washington DC 20005
USA

Title: LABOR-MANAGEMENT COOPERATION THROUGH DISCIPLINE AND WORK RULES

Author(s): Stein, CB

Conference Title: Proceedings of the 1998 Bus Operations, Technology and Management Conference

Sponsored by: American Public Transportation Association

Location: Phoenix, Arizona

Date Held: 19980517-19980521

Publication Date: 00/00/1998

Publisher/Corporate Author(s):

American Public Transportation Association
1201 New York Avenue, NW
Washington DC 20005
USA

Abstract:

The Greater Cleveland Regional Transit Authority (GCRTA), the largest public transportation agency in the state of Ohio, employs nearly 3,000 people and its employees are heavily unionized. Nearly seven years ago the GCRTA began an effort to change the culture of the organization to a customer focus by implementing Total Quality (TQ) management philosophy and process improvements. A combined labor management Policy Committee identified the work rules and the discipline policy as major impediments to achieving TQ goals. A joint task force was formed to tackle this formidable challenge. The vision was lofty, with goals such as the attainment of a positive relationship among all employees. Both the management and the two unions accepted the final recommendations. This agreement represents a milestone not only in the efforts to achieve a customer-focused organization but also in the efforts to build a labor-management partnership.

Available from:

American Public Transportation Association
1201 New York Avenue, NW
Washington DC 20005
USA

Title: EVALUATION PLAN FOR THE CAPE COD ADVANCED PUBLIC TRANSPORTATION SYSTEM

Publication Date: 06/00/2000

Report No: FTA-MA-26-7031-2000-1 ,RSPA/VNTSC-WP-TT050-1

Publisher/Corporate Author(s):

Federal Transit Administration
Office of Mobility Innovation, 400 7th Street, SW
Washington DC 20590

Volpe National Transportation Systems Center
Kendall Square
Cambridge MA 02142
USA

Abstract:

The Cape Cod Regional Transit Authority (CCRTA) Advanced Public Transportation System (APTS) project is an application of Intelligent Transportation Systems (ITS) to fixed route and paratransit operations in a rural transit setting. The purpose of the project is to apply ITS technology that will improve intermodal transportation services for the residents of rural Cape Cod as well as for visitors to the region.

Available from:

Federal Transit Administration
Office of Mobility Innovation, 400 7th Street, SW
Washington DC 20590
USA

Title: SAN DIEGO REGIONAL INTERMODAL TRANSPORTATION MANAGEMENT SYSTEM (IMTMS)

Author(s): Cather, R; Churchill, BW

Conference Title: Compendium of Papers. Institute of Transportation Engineers 2000 District Annual Meeting

Sponsored by: Institute of Transportation Engineers

Location: San Diego, California

Date Held: 20000624-20000628

Publication Date: 00/00/2000

Pagination: 13p

Publisher/Corporate Author(s):

Institute of Transportation Engineers
1099 14th Street, NW

Washington DC 20005-3438
USA

Abstract:

The genesis of the IMTMS project was an expansion of an original contract for the definition and design of a Caltrans Intermodal Transportation management Center (IMTMC) in the San Diego region of the Southern California Priority Corridor. This Intermodal TMC was envisioned to be a prototype of how the Caltrans freeway management system could potentially integrate with the operations of other regional transportation management systems. This project was among several to receive federal grants under the Priority Corridor's SHOWCASE program. The San Diego Association of Governments (SANDAG) expanded the scope of this project to include the definition and design of four primary modal management systems and a regional network, including the following: (1) Advanced Traffic Management System (Intermodal) or ATMSi-freeway operations monitoring and control; (2) Regional Arterial management System (RAMS)-arterial traffic signal coordination; (3) Transit Management System (TrMS)-regional transit operations for all modes of public transportation (bus, light rail, commuter rail, Amtrak); (4) Advanced Traveler Information Management System (ATIMS)-traveler information server providing a bridge between public sector data sources and private sector information service providers; and (5) Regional IMTMS Network-integration of the above systems within the region and with the remaining SHOWCASE partners in the priority Corridor.

Available from:

Institute of Transportation Engineers
1099 14th Street, NW
Washington DC 20005-3438
USA

Title: YOSEMITE REGIONAL TRANSPORTATION STRATEGY: CREATING A PUBLIC-PRIVATE PARTNERSHIP

Author(s): Tumlin, J; Nelson, BW

Journal Title: Transportation Research Record

Issue: 1735

Publication Date: 00/00/2000

Publisher/Corporate Author(s):

Transportation Research Board
2101 Constitution Avenue, NW
Washington DC 20418
USA

Abstract:

In 1992 the Yosemite Area Regional Transportation Strategy (YARTS) group began meeting to discuss access and transportation needs of visitors to the Yosemite region. The group included representatives of the five rural counties surrounding Yosemite National Park, the National Park Service, the state department of transportation, and eventually the U.S. Forest

Service and other state and federal agencies. Urgency increased after the park instituted a program of gate closures to address congestion and parking problems within Yosemite Valley. Although the closures lasted only a matter of hours, the impact was felt for months to come as visitors changed their plans in the face of potential closures. Two years later, a flood permanently removed infrastructure within the park, including parking spaces and camping sites, making access from the surrounding communities even more critical. After 8 years of planning, YARTS has implemented the first regional transit service ever focused on the 4 million annual visitors to Yosemite. The 2-year demonstration service plan is not intended to replace automobile access to the park but rather to provide an alternative mode of access. The plan is creating a unique partnership between YARTS and private vendors who will provide the service and assume much of the start-up risk. The plan provides a working outline of the service, including anticipated service levels and fares. All of these plan highlights are discussed, along with a history of the YARTS organization, which describes the technical and political challenges to implementation.

Available from:

Transportation Research Board Business Office
2101 Constitution Avenue, NW
Washington DC 20418
USA

Title: REGIONAL TRANSIT PLANNING

Author(s): SANDBERG, JAN

Publication Date: 00/00/1992

Publisher/Corporate Author(s):

PROGRAM EVALUATION DIV., OFFICE OF THE LEGISLATIVE AUDITOR, STATE OF MINNESOTA,
ST. PAUL, MN:

SANDBERG, JAN

Abstract: No abstract provided.

Acknowledgement of Document Source: UC, BERKELEY, INSTITUTE FOR TRANSPORTATION STUDIES

Title: WHAT STRUCTURE FOR REGIONAL TRANSIT?

Author(s): MIDDLETON, WILLIAM D.

Journal Title: TRANSIT CONNECTIONS

Publication Date: 06/00/1994

Abstract: No abstract provided.

Acknowledgement of Document Source: NORTHWESTERN UNIVERSITY TRANSPORTATION LIBRARY

Title: SACRAMENTO REGIONAL TRANSIT DISTRICT: DELIVERING QUALITY SERVICE TO ITS TRANSIT GUESTS.

Author(s): WARRINER, JUDITH.;ZINGELMAN, ANNE M.

Journal Title: TRANSIT CALIFORNIA

Publication Date: 00/00/1995

Abstract: No abstract provided.

Acknowledgement of Document Source: UC, BERKELEY, INSTITUTE FOR TRANSPORTATION STUDIES

Title: REGIONAL TRANSIT SERVICE STARTS IN HAMPTON ROADS

Journal Title: PASSENGER TRANSPORT

Publication Date: 10/04/1999

Abstract:

SUBTITLE: MERGER OF PENTRAN AND TRT.

Acknowledgement of Document Source: NORTHWESTERN UNIVERSITY TRANSPORTATION LIBRARY

B. Telephone Interview Protocols:

- Transit System Managers
- State Department of Transportation Representatives

ITRE

Regional Transportation Systems: Telephone Survey for Multi-County Transit Agencies

We are gathering information on regional transit systems as part of a study for the North Carolina Department of Transportation, and appreciate your help in this study. This survey will serve as the basis of a telephone interview with managers of regional transit systems. Please take a few minutes to review the survey and fill in all information that you can gather in advance of a telephone interview.

The data obtained from interviews will be summarized in several technical memoranda and a final report that will be developed over the course of the study, which concludes in June 2002. If you have questions please contact: Thomas Cook at (919) 515-8622, tjc@unity.ncsu.edu or Andy Henry at (919) 513-3482, ajhenry@unity.ncsu.edu.

THANK YOU FOR YOUR CONTRIBUTION!!!

I. General Information

1. Agency Name: _____
2. Contact: _____ Phone #: _____
3. Fax #:_____ E-Mail Address: _____
4. Website: _____

II. History of the Transit System

1. Has this transit system always been a multi-county entity, or did it grow from a smaller entity (city or single county system) into a regional organization?

2. What was the rationale for starting the multi-county transit system?

3. Briefly, describe the process that was used to form the multi-county system.

4. Who were the leaders in starting the system, and with what organization were they affiliated (e.g., transit system, local government, state DOT, human service agency, etc.)?

5. Were any incentives (financial or other) utilized in the formation of the multi-county system?

6. Briefly describe challenges that were experienced during the startup of the multi-county system.

7. Were there any labor issues involved in consolidating/coordinating services or in the startup of the multi-county operation?

8. Was there any perceived loss of control by a local agency (transit, human service, or government)?

   If so, how was this perceived loss of control resolved?

9. What lessons were learned from the startup process (that would be of interest to, or could provide guidance to other entities considering the formation of a regional transit system)?

10. What challenges has the transit system faced since the startup period, and how have they been resolved?

11. What successes has the transit system experienced since startup, and to what do you attribute that success?

12. What lessons have been learned since the startup process (that would be of interest to, or could provide guidance to other entities considering the operation of a regional transit system)?

13. What are the pros and cons of having a multi-county transit system?

14. Is there any interest in expanding the current multi-county system?

    If so, from whom?

    If there is interest in expansion, is there resistance from any party?

15. (If the system "grew" from a single to a multi-county system) What efficiencies were gained/lost in the transition to a regional entity?

16. (If the system "grew" from a single to a multi-county system) What staff was gained/lost in the transition to a regional entity?

III. Legislation and Governing Structure

1. Was authorizing/enabling legislation required prior to being able to form the multi-county transit system?

   If so, what state and/or local agency(s) took the lead in drafting the authorizing/enabling legislation?

2. Were there any challenges encountered in drafting authorizing/enabling legislation?

   If so, please describe those challenges and their outcome.

3. Were any interagency agreements (between a city and its county, different counties, different human service agencies, or combinations of these) required?

   If so, please describe those interagency agreements.

4. Type of Agency:

   For-Profit _____ Non-Profit _____ Local Government _____

5. Briefly describe the transit system's governing body—what is its structure, how many members, are members elected or appointed and by whom, responsibilities, etc.).

6. What is your perception of how state and/or federal policies helped/hindered in the formation of a multi-county regional transit system?

7. Does the transit system contract with any entity (local government, human service agencies, etc.) to provide service?

   If so, what agency(s).

III. Geographic and Demographic Characteristics

1. What is the size of the service area?_____ Square Miles, covering _____ Counties (name below).

2. What is the character of the service area?

   ___ Rural ___ Suburban ___ Small city(s) and rural ___ Tourist destination

   Describe:

   _____

   _____
   _____

3. What is the population of the service area?

   _____

4. Describe the demographics of the service area population (does it tend to be elderly, low income, many students, etc.)

IV. Operations

1. Days/Hours of operation: _____ M-F _____ Sat _____ Sun

2. Type(s) of service operated: ___ Demand-Responsive (Dial-A-Ride) ___ Subscription (Standing order)

   ___ Fixed Route ___ ADA Paratransit ___ Deviated Route ___ Other (describe)

   _____
   _____

3. Numbers of vehicles: _____ Minivans _____ Standard Vans _____ Lift-Equipped Vans

   _____ Cutaway Vans _____ Body on Chassis _____ Small transit bus _____ Standard transit bus

4. Number, by title, of administrative staff:

5. Number of drivers: _____ Full-Time _____ Part-Time

6. Maintenance staff: _____ Supervisors _____ Mechanics _____ Other (describe)

7. Is maintenance performed: _____ In-house _____ By outside contractor _____ Combination

8. Is maintenance performed at: _____ One site _____ Multiple sites (_____ number of sites)

9. Fares: _____ Adult _____ Elderly/Disabled _____ Other (describe)

10. Is dispatch done: _____ Manually _____ Computerized

    If computerized, using what product (manufacturer):

    _____

    If computerized, is your product working effectively?

    _____

11. Is dispatch performed at: _____ One site _____ Multiple sites (_____ number of sites)

12. What functions are centralized at a regional site, and what functions are conducted at multiple sites throughout the service area?

13. If operations are conducted at multiple sites, how are communications carried out between sites (e.g., via radio, telephone—land line or cellular, Internet, etc.)?

14. Are vehicles outposted?

V. Funding

1. From what federal programs do you receive funding (e.g., Section 5310, 5311, Title III, Title XX, etc.)?

2. From what state programs do you receive funding (e.g., state operating assistance, state coordination grants, elderly and disabled program, etc.)?

3. From what local sources do you receive funding (e.g., municipalities, dedicated tax millages, etc.)?

4. Do you receive funds from a dedicated funding source? ___ Yes ___ No If "Yes", describe:

5. How are funds from different sources intermingled or combined?

6. Were there differences in interest/commitment to funding from local sources (e.g., municipalities, counties, agencies, etc.)? ___ Yes ___ No If "Yes", how were these differences resolved?

VI. Operating Statistics (to be gathered from FTA and verified/corrected by transit system)

1. Number of annual passenger trips: _____
2. Number of annual passenger miles of service: _____
3. Number of annual passenger hours of service: _____
4. Number of annual vehicle hours of service: _____
5. Annual operating costs: _____
6. Annual administrative costs: _____
7. Annual revenues: _____

ITRE

Regional Transportation Systems: Telephone Survey for State DOTs

We are gathering information on regional transit systems as part of a study for the North Carolina Department of Transportation, and appreciate your help in this study. This survey will serve as the basis of a telephone interview with state DOT staff. Please take a few minutes to review the survey and fill in all information that you can gather in advance of a telephone interview.

The data obtained from interviews will be summarized in several technical memoranda and a final report that will be developed over the course of the study, which concludes in June 2002. If you have questions please contact: Thomas Cook at (919) 515-8622, tjc@unity.ncsu.edu or Andy Henry at (919) 513-3482, ajhenry@unity.ncsu.edu. Our facsimile number is (919) 515-8898.

THANK YOU FOR YOUR CONTRIBUTION!!!

I. General Information

1. Department Name: _____

5. Contact: _____ Phone #: _____

6. Fax #: _____ E-Mail Address: _____

7. Website:
_____

II. History of Regional Transit Systems in the State

17. What was the rationale for supporting the formation of regional transit systems?

18. Briefly, describe how state DOT polices promoted or supported the formation of regional transit systems.

19. Were any incentives (financial or other) utilized in the formation of regional transit systems?

20. Who were the leaders in supporting the formation and the continued operation of regional transit systems in this state, and with what organization were they affiliated (e.g., transit system, local government, state DOT, elected officials, etc.)?

21. Briefly describe challenges that were experienced and lessons learned during the expansion of an urban transit system into the surrounding county(s).

22. Briefly describe challenges that have been experienced and lessons learned since the expansion of an urban system into a regional system has been completed.

23. Identify and describe any labor issues involved in expanding services or starting service in the surrounding county(s), and describe how these issues were resolved.

24. Was there any perceived loss of control by a local agency (transit, human service, or government)?

    If so, how was this perceived loss of control resolved?

25. What have been the benefits and successes that the state DOT has experienced since startup of regional transit systems?

26. What has been the impact on administrative efficiencies and DOT staff in supporting the development and implementation of regional transit systems

27. Describe the support services the state DOT staff provides to regional transit systems.

28. If the state DOT has contracted with any consultant to support the development and/or implementation of regional transit service, describe the services rendered by the consultant?

29. Is there any interest in expanding state support for regional transit systems?

    If so, from whom?

    If there is interest in expansion, identify and explain any party(s) that are resisting the expansion.

III. Legislation and Governing Structure

8. Was authorizing/enabling legislation required prior to the formation of regional transit systems?

   If so, what state and/or local agency(s) took the lead in drafting the authorizing/enabling legislation?

9. Were there any political or technical challenges encountered in drafting authorizing/enabling legislation?

   If so, please describe those challenges and their outcome.

10. Describe the contracts, interagency memorandum and other types of agreements (between a city and its county, different counties, different human service agencies, etc.) that are used to form regional transit systems?

11. Describe the governing body of the transit systems or authorities that operate the regional transit system (i.e., what is its structure, how many members, are members elected or appointed and by whom, responsibilities, etc.).

12. What is your perception of how state and/or federal policies helped/hindered in the formation of a regional transit system?

IV. Funding

7. List the name and amount of the different local, state, and federal funding sources that support regional transit systems (e.g., Section 5307, Section 5309, Section 5311, state grants, local taxes and bonds). Please provide information for both capital and operating funds.

8. Describe how funds from different sources can be intermingled or combined?

9. Are there differences in interest/commitment to funding from local sources (e.g., municipalities, counties, agencies, etc.)? ___ Yes ___ No If "Yes", how were these differences resolved?

V. Operations

1. Describe how the formation of regional transit systems has facilitated the development and operations of intra-regional transportation, particularly with regard to the transit system used as the case study site in your state.

VI. Administration

1. Describe how the existence of regional transit systems has impacted state DOT administration (e.g., facilitated reporting, and oversight of local transit systems)?

2. Describe how the existence of regional transit systems has facilitated the provision of technical assistance to local transit systems?