

# Triangle Area Rural Planning Organization Human Service Transportation Coordination Plan



January 26, 2009

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## **Purpose and Background for the Public Transportation Coordination Plan**

Community Transportation Systems and human service agencies are dependent on both state and federal funding grants to sustain their transportation administration and operations. The purpose of this plan is to provide a viable and effective public transportation service network in the four counties that comprise the Triangle Area Rural Planning Organization that complies with the current federal regulatory requirements pertaining to human service public transportation coordination.

Both the Transportation Equity Act for the Twenty First Century (TEA-21) (Public Law 105-478 – 1998) and the Safe, Accountable, Flexible and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU)(Public Law 109-59 – 2005) required provisions for locally developed and coordinated public transportation human service planning processes. The Triangle Area Rural Planning Organization (TARPO) and the North Carolina Department of Transportation Public Transportation Division (NCDOT PTD) have joined with local public transportation agencies and local stakeholder agencies in scheduling local workshops and in developing a regionally coordinated service plan that conforms to the current federal regulatory requirements. These workshops were held in the four TARPO member counties during the period January 7-13, 2009. These efforts have resulted in the development of a coordinated plan that serves and qualifies the local transit providers for Federal Transit Administration (FTA) funding assistance under Section 5310 (Elderly and Disabled Transportation Assistance), Section 5316 (Job Access Reverse Commute), Section 5317 (New Freedom), and synchronizes such transport with other federal assistance programs such as FTA Section 5311 (Non-Urbanized Transit Formula Allocation), Community Action, Medicaid, Independent Living Centers, and Agency on Aging Programs. In the development of this plan, the client needs, service gaps and other issues of each local transportation provider have been considered. This coordinated plan is intended to be flexible and capable of being expanded or modified at a future date to incorporate additional efforts and initiatives to meet the needs of each local transit provider. The time horizon for this coordinated plan is three years.

### **Outreach for the workshops**

Local human services transportation planning workshops were held in Carthage (Moore County) on January 7<sup>th</sup>, in Hillsborough (Orange County) on January 8<sup>th</sup>, in Siler City (Chatham County) on January 9<sup>th</sup> and Sanford (Lee County) on January 13<sup>th</sup>. Extensive mailing lists were prepared to assemble a broad spectrum of representatives of the target population. Outreach and attendance levels were:

- 54 people were invited and 25 people attended the Moore County workshop,
- 20 people were invited and 18 people attended the Orange County workshop,

- 84 people were invited and 33 people attended the Chatham County workshop,
- 29 people were invited and 10 people attended the Lee County workshop,

A pre-meeting was also held with the Hispanic Task Force in Siler City on January 9<sup>th</sup> to collect some of the limited English language concerns; approximately 20 people were present.

The local Community Transportation Systems that participated in the plan development included the Moore County Transportation Services (MCTS), the Chatham Transit Network (CTN), the Orange County Public Transportation Services (OCPT), and the County of Lee Transportation Services (COLTS). A Triangle J Council of Governments representative and NCDOT-PTD representatives were present at each workshop.

### **Coordinated Plan Elements**

FTA proposed the following key elements be contained in each coordinated plan:

- An assessment of transportation needs for individuals with disabilities, older adults, and persons with limited incomes;
- An inventory of the available services that identifies areas of redundant service and gaps in service;
- Strategies to address the identified gaps in service;
- Identification of coordination actions to eliminate or reduce duplication in services and strategies for more efficient utilization of resources; and
- Prioritization of implementation strategies.

### **The Planning Process**

The TARPO regional coordinated plan will comply with the requirements of SAFETEA-LU as detailed in the March 29, 2007 Federal Register and entitled “Elderly Individuals and Individuals with Disabilities, Job Access and Reverse Commute, New Freedom Programs: Final Circulars, effective May 1, 2007. The plan development will involve the following sequential steps:

1. Conducting a survey of Community Transportation Needs, identifying specific problems and issues related to the following concerns: educational and informational, accessibility and safety, cross county trips and coordination potentials, applications and eligibilities, price, funding, community development, customer service, and other general transit issues.
2. Developing an inventory of existing transit services and assessing service related attributes and metrics.
3. Developing strategies and actions to improve transit services
4. Developing a short-term (three-year) regional plan document.

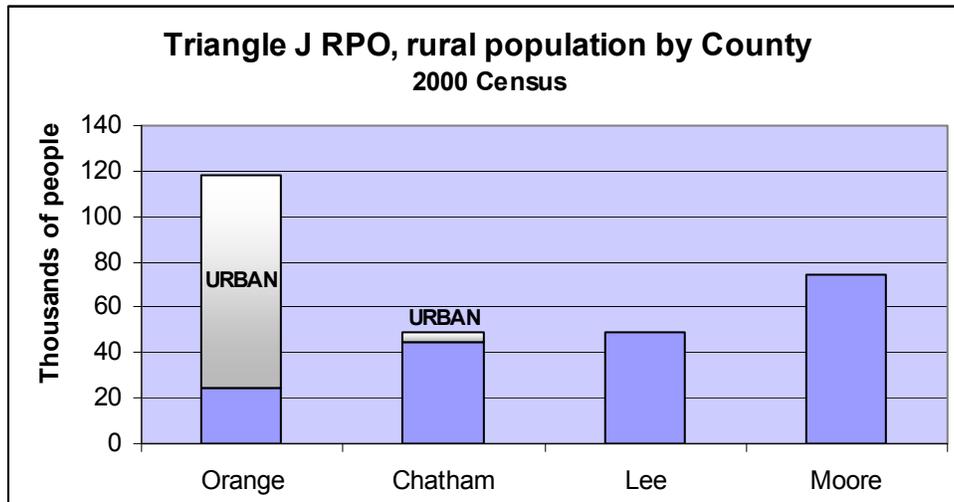
The coordinated aspect of the planning process involves the assembly of representatives of a broad range of human service agencies and client groups at each of

four county level workshops to consider service additional measures to deliver more cost effective transit service delivery, to provide increased capacity to serve unmet needs, to improve the quality of service, to encourage greater utilization of transit services, and to provide services that are more convenient and readily understood by various potential users.

### **Triangle Area Rural Regional Profile**

The Triangle Area Rural Planning Organization (TARPO) region encompasses geographical areas in the following four counties: Chatham County (partial), Orange County (partial), Lee County (total), and Moore County (total). The parts of Chatham County and Orange County not covered by the RPO are covered by the Durham-Chapel Hill-Carrboro MPO referred to as DCHC. DCHC did a locally coordinated plan in March of 2007, which addressed the needs of the urbanized portions of Chatham County and Orange County.

The 2000 census indicates the rural (e.g. non-urbanized) population for the TARPO region was 192,473 persons. This population was distributed as follows: 24,150 to Orange County (12.54%), 44,514 to Chatham County (23.13%), 49,040 to Lee County (25.48%) and 74,769 to Moore County (38.85%). The total population of North Carolina population reported on that date was 8,049,313 persons.



In 2000, 16.3% of the United States population or 45,797,200 persons were Age 60 or above and 16.1% of North Carolina's population or 1,292,553 persons were Age 60 or above. In TARPO, 41,036 persons (21.32%) were Age 60 or above. The respective distributions for this parameter within the TARPO region were as follows: 3,250 to Orange County (13.46%), 8,834 to Chatham County (19.85%), 8,454 to Lee County (17.24%), and 20,498 to Moore County (27.42%).

As per standard US Census Bureau reporting, 19.3% or approximately 49,746,248 persons over the age of 4 living in the United States were classified as disabled in 2000. Approximately 21.10% or 1,540,365 persons over the age of 4 living in North Carolina were classified as disabled in 2000. These specific metrics were reported for civilian, non-institutionalized persons over the age of 4. The total civilian non-institutionalized population over the age of 4 reported for the TARPO region in 2000 was 177,607

persons. The respective distributions for this parameter within the TARPO region were as follows: 4,174 to Orange County (18.56%), 7,792 to Chatham County (18.89%), 9,116 to Lee County (20.39%), and 14,233 to Moore County (20.58%).

In 2000, the federal poverty level was established as \$8,350 per single household adult with an additional \$2,900 per each additional household member. In the United States for the year 2000, approximately 33,899,812 persons or 12.40% of the total population was below this household based level. In North Carolina, approximately 1,292,533 or 16.10% of the total state population was below this household based level. In TARPO, 20,678 persons or 10.74% of the population were reported to be below this level. The respective distributions for this parameter with the TARPO region were as follows: 1,773 to Orange County (7.34%), 4,351 to Chatham County (9.77%), 6,185 to Lee County (12.61%), and 8,369 to Moore County (11.19%).

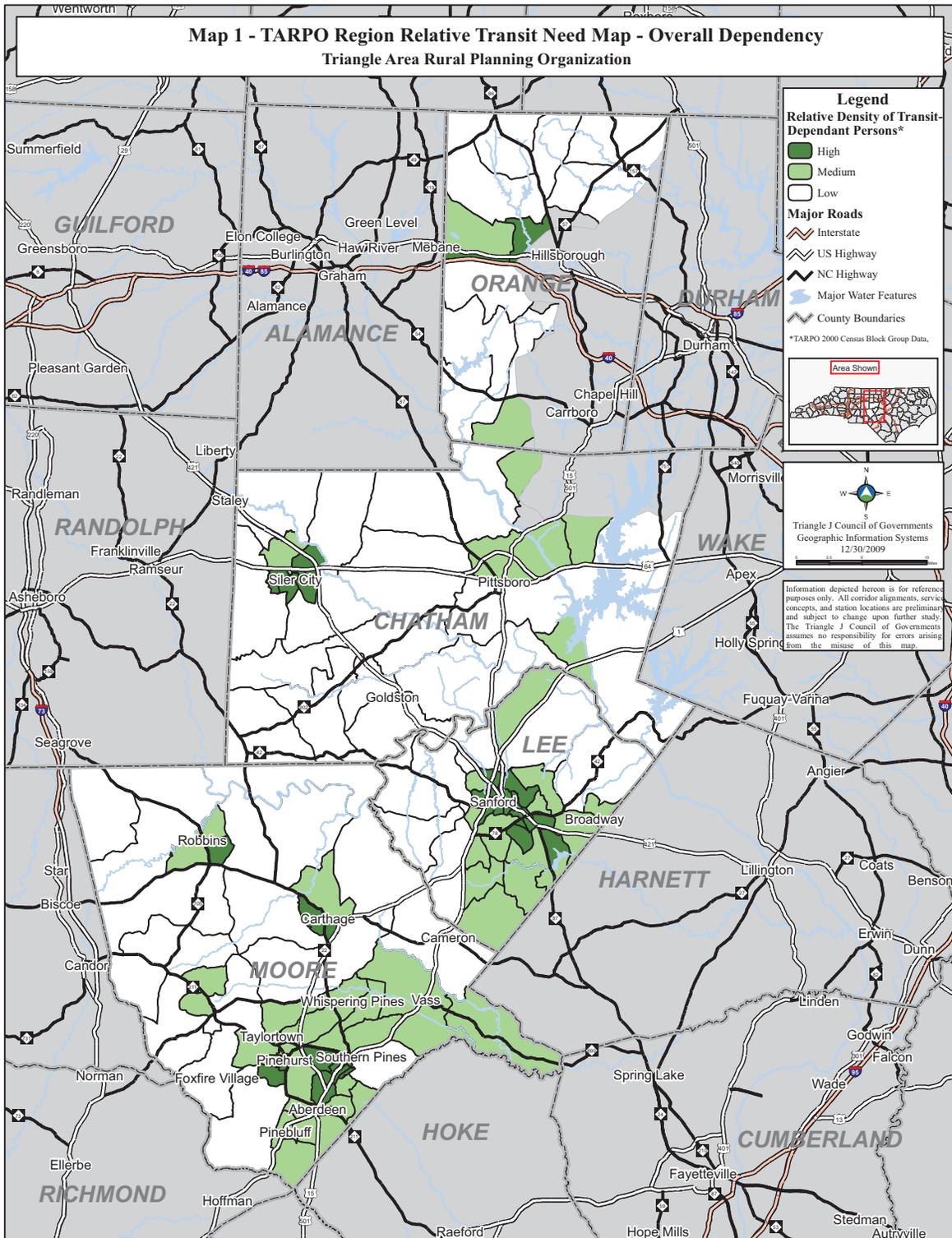
In 2000, approximately 10,861,067 or 10.30% of the households in the United States were without registered motor vehicles. In North Carolina, approximately 235,339 or 7.50% of the households were without registered motor vehicles. The total households in the TARPO region that were without registered motor vehicles in 2000 was approximately 4,592 or 6.02% of the total of 76,309 households. The respective distributions for this parameter within the TARPO region in 2000 were as follows: 433 to Orange County (4.60%), 1,054 to Chatham County (5.96%), 1,412 to Lee County (7.65%), and 1,693 to Moore County (5.51%).

Unemployment levels that were reported by the United States Census Bureau in 2000 for the TARPO counties were as follows: Orange County – 3.70%, Chatham County – 2.90%, Lee County – 4.60% and Moore County 5.50%.

The total non-white racial population in the United States that was reported in the 2000 census was approximately 88,869,132 persons or approximately 30.90% of the total national population. In North Carolina, the total non-white racial population in 2000 was reported to be approximately 2,402,158 persons, or approximately 29.84% of the total state population. The respective distributions for this parameter within the TARPO region in 2000 were as follows: 6,009 in Orange County (24.88%), 12,804 in Chatham County (28.76%), 16,573 in Lee County (33.79%) and 15,925 in Moore County (21.30%).

The TARPO region has continued to experience population growth during the first decade of the Twenty First Century. Although specific figures are not included in this document, various media accounts have reported that significant increases in the Hispanic population have occurred in the TARPO region and other areas of central North Carolina during this decade. The proximity of the TARPO region to the Raleigh and Durham metropolitan areas has resulted in a rise of out-of-county commuters in Orange, Chatham and Lee Counties during the decade. The incursion of the Baby Boomer generation into the senior element (Age 62 plus) during this decade has caused an increased population in the aging communities throughout most of the TARPO region. Moore County has remained one of the state's most attractive retirement destinations for seniors moving to North Carolina from out-of-state.

## **Map #1 -CONCENTRATIONS OF TRANSIT DEPENDANT PEOPLE IN AREA**



Note: the five parameters that comprise this 'transit dependant' map can be found in Appendix D

## **Identification of Transportation Service Gaps and Needs**

A survey of community transportation needs and interests was mailed to local governmental staff, human services agency personnel and other public transportation stakeholders in each of the four TARPO counties during December 5-8, 2008. This survey covered a wide variety of issues pertaining to the existing public transportation services and it provided the respondents the opportunity to note issues and needs that must be addressed immediately, those that needed improvement, those that were not critical but needed to be initiated, and those that either required too much effort or that currently lacked adequate funding. Ten responses to the survey were received from Moore County; four responses, from Lee County; thirteen responses, from Chatham County and two responses, from Orange County. This feedback was reviewed and was helpful in preparing a matrix analysis tool outlining specific needs and strategies to be used in the local workshops.

The matrix analysis tool included the following generic needs elements:

- Increased services to fill gaps, including inter-county fixed routes and highway service corridors
- Increased local area services, including circulators, shuttles, or deviated fixed routes
- Increased time span for existing services, such as early morning, early evening or weekend services
- Broadcasting user-friendly services, such as web based or peer-to-peer services
- The provision of enhanced amenities at transit stops, such as lighting, sidewalks, benches, or audible signs
- Increased all types of services to new user or stakeholder groups
- Travel training for the transit inexperienced, elderly or language impaired
- More travel services needed to major county employment centers
- Transit services geared to long-haul commuters
- Customer service improvements
- County to county transfers and enabling agreements
- Removing physical and institutional barriers for the mobility impaired
- Local government policy issues concerning land use and transit service compatibility
- Strengthening the county transit advisory boards policies
- Policies to remove language barriers
- Policies related to emergency evacuation needs
- Other (write in) local needs

Coupled with these needs elements, the matrix analysis tool also noted the following generic strategies:

- Fixed route services
- Local circulator services
- Extended evening services
- Weekend services
- Voucher programs
- Greater utilization of volunteer drivers

- Brokered trips
- Express services
- Use of transit passes
- Auxiliary client agency operated services
- Vanpools
- Use of larger capacity vehicles (greater than 20 passengers)
- Park and ride lots
- Institution of door-to-door services
- Other (write in) local strategies

The matrix analysis exercise was used in breakout sessions to identify existing gaps and inadequacies, to identify and discuss existing barriers to adequate or efficient services, and to identify service improvements and opportunities for coordinated services. The breakout group results were orally reported and a composite matrix was prepared for each local workshop.

## **Moore County Locally Coordinated Workshop & Process Summary**

### **Inventory of Moore County Transportation Services**

Moore County Transportation Services (MCTS) is a one hundred per cent travel demand response and subscription transit service agency. Its staff consists of 6 full-time drivers, thirteen regular part-time drivers, five resource part-time drivers, and four administrative personnel. The fleet consists of twenty-four vans, seventeen of which are equipped with wheel chair lifts. Its normal hours of operation were from 6:00 A.M. to 6:00 P.M. on weekdays. MCTS service is curb-to-curb countywide service.

The system is averaging almost 300 passenger trips per day. As to the distribution of its 2007 service trips, approximately 25% were to the Moore County Department of Aging clients for medical and nutrition needs; 24% were for medical, educational and employment clients eligible under the Rural General and Elderly and Disabled Persons Assistance Programs; 22% were to special needs children served through the Sandhills Children's Center; 17% were to medical clients served by the Moore County Department of Social Services; 11% were to special needs children served through the Pinetree Community Services Center, and 1% were for special needs served by the Moore County Public School System.

### **Moore County Historical Operating Statistics**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>% Change 06-07</b>
Total Service Miles	731,580	751,545	738,012	-1.80%
Transit System Service Miles	731,580	751,545	738,012	-1.80%
Total Service Hours	35,488	34,530	36,382	5.36%
Total Passenger Trips	62,010	61,671	57,160	-7.31%
Total Transit System Trips	62,010	61,671	57,160	-7.31%
Total Admin/Oper Revenue	\$770,002	\$807,709	\$935,644	15.84%
Total Contract Revenue	\$507,785	\$530,986	\$564,562	6.32%
Fare Revenue	\$3,075	\$3,088	\$4,754	53.95%
Total Admin/Oper Adj. Expense	\$730,838	\$836,147	\$880,380	5.29%
Peak Vehicles	25	21	22	4.76%

Driver FTE	18.60	20.14	21.20	5.28%
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	2005	2006	2007
Passenger Trips per Hour (M-F)	1.75	1.79	1.57
Passenger Trips per Mile (M-F)	0.08	0.08	0.08
Total Passenger Trips per Hour	1.75	1.79	1.57
Total Passenger Trips per Mile	0.08	0.08	0.08
Cost per Passenger Trip	\$11.79	\$13.56	\$15.40
Cost per Hour	\$20.59	\$24.22	\$24.20
Cost per Mile	\$1.00	\$1.11	\$1.19
Service Miles per Peak Vehicle	29,263	35,788	33,546
Trips per Driver FTE	3,334	3,062	2,696

### **The Moore County Pre-survey**

In order to quickly prioritize the transportation issues that need to be addressed in each county in the RPO, a common list of problems was assembled from other 'local plans' developed throughout the country. This survey was sent out to fifty-four people with the invitation and initial information packet about the workshop. The six-page survey was mailed out on December 5, 2008 and was requested back by December 31, 2008. The survey questions were grouped into eight areas for improvement as follows:

education & information	accessibility & safety	customer service
coordination & cross-county trips	service-related	applications & eligibility
customer price for service	funding	

The language that was used in the questionnaire was 'actual' statements made by participants during other workshops conducted in other counties<sup>1</sup>, with similar characteristics to those located in the Greater Triangle Area. This eliminated the planning and operational jargon often inadvertently laced into survey forms; however it occasionally introduced some subjectivity (see sample survey instrument in Appendix B). While somewhat lengthy and difficult; the questions allowed for cross referencing many of the typical problems that rural communities and community transit systems experience and gave great insight into the root of the problems, as well as, gave a measure of the urgency for addressing the problems.

Participants were asked to mark all those questions that applied to their experience as a member or representative of one of the target population groups. They entered:

<b>(I)</b>	For those that don't exist but need INITIATING
<b>(M)</b>	For those that MUST be fixed immediately
<b>(N)</b>	For those that NEED some improvement
<b>(T)</b>	For those that require TOO much effort for what you expect to get out of it
<b>(\$)</b>	For those that work but lack financing \$\$\$\$
<b>(OK)</b>	For any that operate efficiently

<sup>1</sup> Pinnacle County, Florida, did an excellent job of capturing citizen comments.

<b>(NA)</b>	For any that don't apply
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Note: You can use more than one symbol for each statement if you want to.

An entire page was devoted to adding any additional problems and to listing any known locations/agencies/times or places the problems/inefficiencies occurred.

The results of the seven surveys submitted back to the RPO gave the facilitator a starting point for opening up the discussion on 'identified needs'. Prior to the workshop, the facilitator had summarized the surveys and listed the needs on a flip chart, thereby fully prepared to expand those needs at the appropriate point on the agenda. The actual tabulations are listed below but were not presented to the audience. This avoided the discussion being focused on the low response rate and allowed the group to validate the identified needs and to move on to adding to the needs list.

### Tabulated Survey Results

<b>Transportation Needs</b>	<b>Intensity</b>	<b>Frequency</b>	<b>comments</b>
Increase service to fill gaps - implies some inter-county fixed route or service corridors	Immediate	4	
Broadcast user friendly education	Need	3	Very difficult due to service constraints
Increase all types of service to all user groups, esp. Vets and door-to-door elderly	Immediate	3	Difficult due to potential profiling
Remove language barriers	Need	1	
Disabled are denied trips	Need	1	
Make land use and transit work together	Need	1	
Different expectations across county lines (extends to Pine Hurst and rural Moore Co)	Need	1	
Trips need to serve employment centers/commuters/late night	Immediate	2	
Emergency evacuation	Need	1	
Language barriers	Need	1	

The flip chart listed the following non-prioritized "SURVEY RESULTS":

- Regular routes and/or deviated fixed services
- Customer service improvements
  - Broadcast "user friendly" information on eligibility and to improve internet website
  - Remove language barriers
- Better coordination of existing and future services – cross county coordination
- Make land use and transit work together
- Increase door-to-door for the target population
- Serve employment and commuter needs

### **The Moore County 'Matrix' Exercise**

The group was split into four working teams to conduct the 'matrix' exercise. The 'matrix' exercise was actually a combination of two assessments: 1) a needs assessment, with a focus on the needs of the following:

- Older Adults,
- Persons with Disabilities, and
- Low income households and/or those without vehicles;

and an assessment of the various transportation strategies that may be relevant to serve the needs.

The participants added several issues to the needs based on their representation of the client base. The final agreed to list of needs was highlighted as follows:

- Local Routes and shuttles,
- Weekend and evening service,
- Several corridor service connections – some fixed route others circulators,
- Dense housing near bus stops – i.e. assisted living,
- Medical emergency transport,
- Enhancing the Transportation Advisory Board, and
- Land use regulations to enhance transit use.

The NCDOT Mobility Development Specialist then shared several other worthy issues to be considered during the Moore County matrix evaluation. The expanded list became the 'needs' column on the 'matrix' form. Several blanks were left for the workshop participants to add any new 'needs' that were identified in the pursuant discussion. Participants were also encouraged to eliminate any 'needs' from the list that were not relevant to Moore County. The final list can be viewed in the far left hand column of the completed 'matrix' located on the following page.

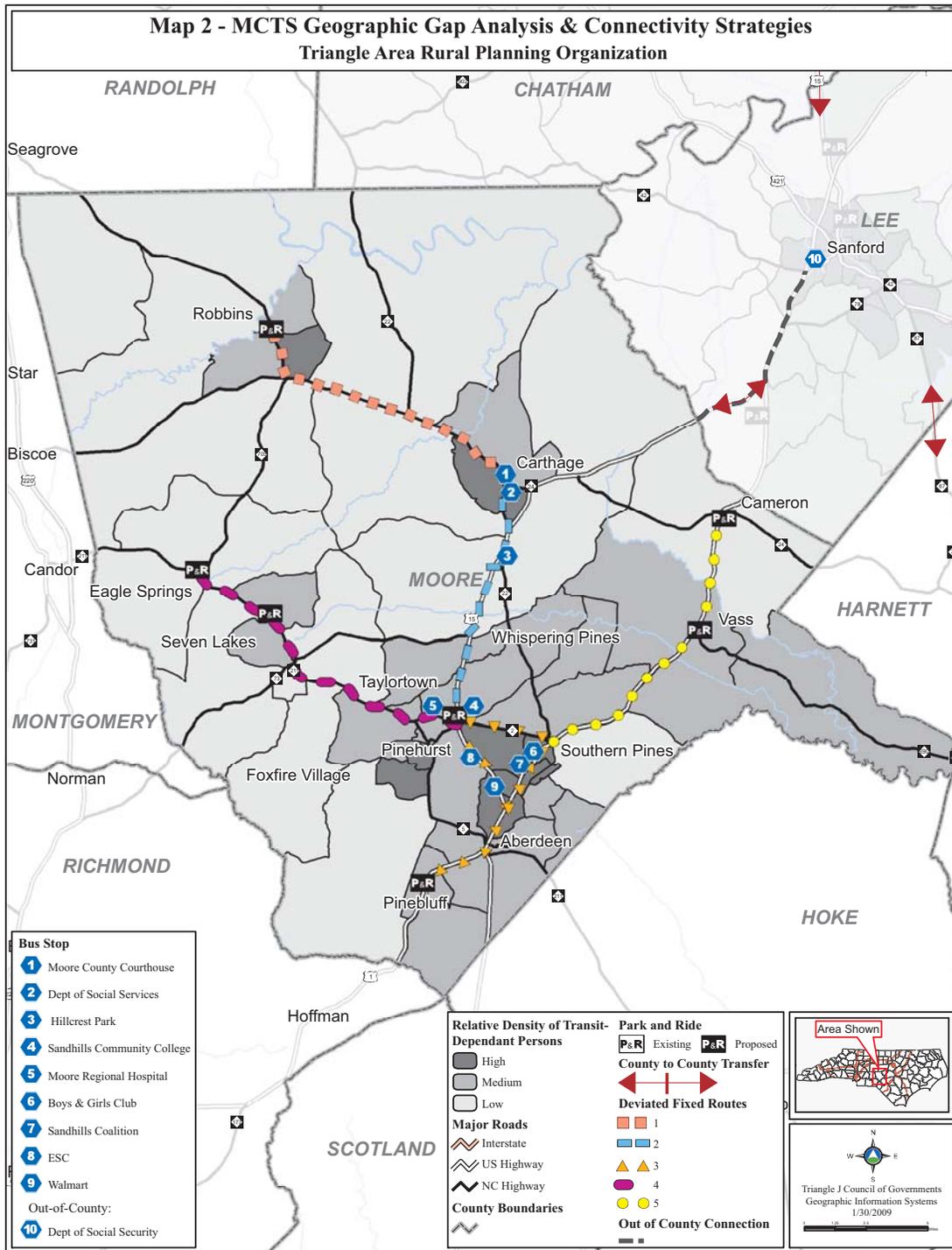
Finally the NCDOT Mobility Development Specialist listed an extensive array of possible strategies that might be applicable to serve the agreed upon Moore County transportation 'needs'. Participants added to this array as they explored each need, e.g. flex (zip) cars and bike racks were introduced. Information dissemination was moved to the strategy column and some specific types were spelled out, e.g. Internet webpage.

<b>MOORE COUNTY NEEDS / STRATEGIES</b>	<b>Fixed Route</b>	<b>Evenings</b>	<b>Week end</b>	<b>Vouchers</b>	<b>Volunteer drivers</b>	<b>Broker trips</b>	<b>Increase visibility</b>	<b>Express service</b>	<b>Transit Pass</b>	<b>Agency Operated</b>	<b>Vanpools</b>	<b>Big vehicle</b>	<b>Park &amp; Ride</b>	<b>Door to Door</b>	<b>Broadcast info</b>	<b>Flex car (zip)</b>	<b>Local expansion</b>	<b>Bike rack on bus</b>
<b>Increase service on highway corridors</b>	√√	√√	√√				√		√				√		√			√
<b>Increase local area service - deviated fixed route, shuttles or circulators</b>		√	√			√	√								√			√
<b>Increase time span of existing service</b>		√	√				√							√	√		√	
<b>Stops with transit amenities</b>																		
<b>Increase all types of service to new user groups - door-to-door to the elderly disabled</b>	√√	√√	√√	√√	√√		√√		√	√				√	√			
<b>Trips need to serve County employment centers</b>	√√ √	√√ √	√√ √	√√ √	√	√	√√	√	√√		√√ √	√√	√	√	√	√	√	√
<b>Customer service improvements – travel training</b>							√								√			
<b>County-to-County transfer (agreements)</b>	√		√												√			
<b>Remove Language barriers</b>		√	√				√								√			
<b>Remove barriers for mobility impaired</b>	√					√	√							√				√
<b>Access to Sand Hill Community College</b>		√√	√	√√	√√	√√	√			√	√			taxi				
<b>Land use and transit work together</b>	√√	√	√								√	√						
<b>Strengthen the Transportation Advisory Board</b>							√√		√									
<b>Emergency evacuation transportation</b>							√											

### **The Moore County Geographic Gap Analysis**

This exercise focused on the various maps located about the room that showed census tract level of concentrations of five target groups: low income, those over 60 years old, those without vehicles, those with reported disabilities and racial minorities. The four groups were encouraged to adopt a map and add points of interest and draw the types of connections that may be needed to link the pockets of highest needs to their probable destinations. Corridors, systems, inter-connections, and barriers were all discussed. It should be noted that Rural General Public service, e.g. non-subscription, came up in every discussion and was included in the coordinated recommendations.

The map that follows is a composite interpretation of the various working maps that were produced during the exercise.



### The Moore County Ranking Exercise

Near the conclusion of the workshop, the participants were invited to rank the strategies they individually found most appropriate for their clients or the interest they represented. This was done by asking the participants to allocate \$100 spread over the strategies they had recommended in the prior 'matrix' exercise. The results of that distribution are listed in the table below.

<b>RANK</b>	<b>SHOPPING LIST</b>	<b>TOTAL</b>
1	Fixed Routes	\$370
2	Expanded Local	\$284
3	Vouchers program	\$155
4	Evenings service	\$130
5	Weekends service	\$125
6	Increased operating funds	\$100
7	Park & Ride program	\$80
8	Vanpools program	\$77
9	Transit Pass program	\$76
10	Increased visibility of existing program	\$59
11	Broker trips to others	\$52
12	Web-Site Utilization	\$34
13	Agency operates own vans	\$33
14	Volunteer drivers program	\$31
15	Bigger or unique vehicles	\$27
16	Express service	\$19
17	Door to Door	\$19
18	Attendant for assisted travel	\$10
19	Build Bike-Ped facilities	\$10
20	Bike Racks on Busses	\$9
	17 participants =	\$1,700

### **Strategies for Moore County's Immediate Coordination Needs**

It was notable that a fixed route between Carthage and Pinehurst was a prime concern, utilizing the US 15-501 corridor. A feasibility of the viability of the extent of service these destinations could support is certainly warranted and will be discussed under the geographic service gap analysis.

Those without means due to economic hardships (including: homeless with children and substance abusers) ranked very high on the priority list and were strongly emphasized in the matrix exercise. Door-to-door service ranked fairly low in the priorities of the participants. The contrast of these two needs is telling of the two separate target groups, and those without means because of mobility impairment caused by any number of factors will always be a priority. In fairness, both needs must be addressed. In some instances, both needs can be met by strong service in the same corridors, i.e. medical trips to the clinics and hospitals also provide work trips to job sites, provided that scheduling can be worked out.

Looking at the geographic service gap analysis on the 'map' exercise it became clear that north-south fixed route service along US 15-501 definitely reaches the two most needy transit dependant nodes in the county; however, there is nothing to serve in between these two destinations. Very careful marketing may be necessary to determine exactly what hour to start, whether a noon trip is warranted and exactly when the night trips should end. This concept of limited fixed route service could be supported with vans staying within zones at either end of the fixed route service. This suggests a dispersed distribution of vans rather than basing all the vans out of Carthage. Furthermore the

remote outlying communities like Robbins and West End might be served by hiring drivers from these communities, who then carry passengers outbound while taking their vehicles home at night and inbound when reporting for work.

Voucher and transit pass programs ranked fairly high on the priority list. The benefits of a pass program should not be underestimated. The passes may need to be redeemable by providers other than MTCS and some brokerage may need to be in place to see that the most convenient yet cost effective option for each trip is used. One participant suggested taxi service to Sandhills Community College via some pass/voucher program, while another advocated vouchers for special needs clients.

MTCS currently runs several 'routes' that can run improved hours of service, provided operating money is available. While these 'routes' are open to the general public on a seats available basis via subscription, they should also be tested to serve the general public on a non-appointment/standby basis. Private business should also be encouraged to provide funds and or other resources to help their employees, potential employees and customers ride the MTCS 'routes'.

A huge information campaign, which also uses a peer based dissemination of information, must be provided. A well-advertised set of policies and programs needs to be assembled to give the public full disclosure of what options are available to them. Funding would need to come from several sources to pull together a comprehensive human service - public transportation package. A brokerage approach would attempt to serve this need.

Park-and-ride facilities need to be strategically located so as to provide a cost benefit to those willing to get out of their cars and share their commute. Carpools and vanpools are equally valid modes as is the bus at park-and-ride facilities and should be accommodated with appropriate comforts and amenities.

Moore County is in a prime location to benefit from county-to-county transfer agreement with Chatham and Lee Counties. This could seriously reduce MTCS out-of-county travel costs and bring hundreds of service hours back into the community.

The remaining transportation issues will likely find their way into the upcoming Moore County Transportation Visioning workshop to be scheduled later this year. Also, the Moore County Transportation System is due for a five-year development plan, which will lay out a rolling plan for transit system improvements. The needs identified in this workshop could be addressed by regional initiatives (i.e. brokerage, universal transit pass) or may even be stand alone projects, should the funding opportunity arise. The needs mentioned in this document should be seen as opportunities for public bodies, civic groups, private providers, agencies and the community transit system to apply for government funds to meet these Moore County mobility needs. Read more about the funding programs that are listed at the end of the report.

## Orange County Locally Coordinated Workshop & Process Summary

### **Inventory of Orange County Public Transportation Services**

Orange County Public Transportation Services (OPTS) operates both demand response deviated fixed route services and fixed route services. These services include one fixed route that operates between Chapel Hill and Hillsborough along NC Route 86, a second fixed route with similar service along NC 86 with loop service in Hillsborough and with extended service into Carrboro, one deviated circular route that operates primarily along secondary roads between Hillsborough and rural communities in southern Orange County like Orange Grove and Dobson's Crossroads, and a deviated fixed that operates along NC Route 86 between Cedar Grove and Hillsborough with a short loop in Hillsborough. (See Map #3). The OPTS staff consists of 8 full-time drivers, 8 part-time drivers, and three administrative personnel. Its fleet consists of 10 buses eight of which are equipped with wheel chair lifts and 6 vans four of which are equipped with wheel chair lifts. Its normal hours of operation are on weekdays from 6:00 A.M. to 5:30 P.M. The system is averaging almost 500 passenger trips per day (see statistical overview of the Operational Statistics in Appendix C). Its primary demand response and subscription service trips during 2007 were to Orange County senior services agencies, to Orange County Department of Social Services Medicaid patients and to Rural General Public Program subscribers. It provided no out-of-county services during 2007. OPTS is a curb-to-curb countywide service.

### **Orange County Historical Operating Statistics**

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>% Change 06-07</b>
Total Service Miles	462,704	464,299	472,281	1.72%
Transit System Service Miles	462,704	464,299	472,281	1.72%
Total Service Hours	32,500	34,125	36,162	5.97%
Total Passenger Trips	118,991	116,988	128,006	9.42%
Total Transit System Trips	118,991	116,988	128,006	9.42%
Total Admin/Oper Revenue	\$946,344	\$954,669	\$1,018,857	6.72%
Total Contract Revenue	\$234,905	\$279,334	\$289,532	3.65%
Fare Revenue	\$26,024	\$23,779	\$22,434	-5.66%
Total Admin/Oper Adj. Expense	\$946,344	\$954,669	\$1,018,857	6.72%
Peak Vehicles	13	14	18	28.57%
Driver FTE	12.70	12.72	17.26	35.70%

	<b>2005</b>	<b>2006</b>	<b>2007</b>
Passenger Trips per Hour (M-F)	3.63	3.39	3.47
Passenger Trips per Mile (M-F)	0.25	0.25	0.27
Total Passenger Trips per Hour	3.66	3.43	3.54
Total Passenger Trips per Mile	0.26	0.25	0.27
Cost per Passenger Trip	\$7.95	\$8.16	\$7.96
Cost per Hour	\$29.12	\$27.98	\$28.17
Cost per Mile	\$2.05	\$2.06	\$2.16
Service Miles per Peak Vehicle	35,225	32,799	26,238

Trips per Driver FTE	9,173	8,981	7,416
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### **The Orange County Pre-survey**

In order to quickly prioritize the transportation issues that need to be addressed in each county in the RPO, a common list of problems was assembled from other 'local plans' developed throughout the country. The six-page survey was mailed out on December 8, 2008 and was requested back by December 31, 2008. The survey questions were grouped into eight areas for improvement as follows:

- EDUCATION & INFORMATION
- ACCESSIBILITY & SAFETY
- CUSTOMER SERVICE
- CROSS-COUNTY TRIPS & COORDINATION
- SERVICE-RELATED (GENERAL)
- APPLICATIONS & ELIGIBILITY
- CUSTOMER PRICE FOR SERVICE
- FUNDING

The language that was used in the questionnaire was 'actual' statements made by participants during other workshops conducted in other counties<sup>2</sup>, with similar characteristics to those located in the Greater Triangle Area. This eliminated the planning and operational jargon often inadvertently laced into survey forms; however it occasionally introduced some subjectivity (see sample survey instrument in Appendix B). While somewhat lengthy and difficult; the questions allowed for cross referencing many of the typical problems that rural communities and community transit systems experience and gave great insight into the root of the problems, as well as, gave a measure of the urgency for addressing the problems.

Participants were asked to mark all those questions that applied to their experience as a member or representative of one of the target population groups. An entire page was devoted to adding any additional problems and to listing any known locations/agencies/times or places the problems occurred.

The results of the only two surveys submitted gave the facilitator a starting point for opening up the discussion on 'identified needs'. Prior to the workshop, the facilitator had summarized the surveys and listed the needs on a flip chart, thereby fully prepared to expand those needs at the appropriate point on the agenda. The actual tabulations are listed below but were not presented to the audience. This avoided the discussion being focused on the low response rate and allowed the group to validate the identified needs and to move on to adding to the needs list.

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<sup>2</sup> Pinnacle County, Florida, did an excellent job of capturing citizen comments.

Needs	SURVEY RESULTS		survey	
	intensity	frequency	#1	#2
Amenities - bus stops, lighting, benches, audible signs, sidewalks	need	1		1
Travel training esp. for elderly, special needs individuals, lack confidence	need	1	1	1
Increase service to fill gaps - inter-county fixed route or service corridors	immediate	2	1	1
Broadcast user friendly education	immediate	0		
Language barriers	need	0		
Increase all types of service to all user groups, i.e. Vets, YMCA, and door-to-door elderly	immediate	0		
Better connections/coordinated service	Too difficult	2	1	1
Customer service improvements	need	0		
Empower the TAB	need	0		
Longer service hours	need	0		
Disabled are denied trips	need	0		
Make land use and transit work together	need	2	1	1
Other counties do it better	need	1	1	
Trips need to serve employment centers / late night/commuters	immediate	1		1
Alternative fuels	need	0		
Mobility Management - Clearinghouse	need	1	1	
Emergency evacuation	need	0		
Better pass/voucher program	need	0		
	Response	=	6	6

The flip chart started with the following needs listed as non-prioritized “SURVEY RESULTS”:

- Travel training
- Amenities at the bus stops
- Connectivity with all other routes and services
- More service to fill in gaps
- Evening service
- Commuter service
- Dense housing near the stops, i.e. assisted living
- Cross county coordination is “too difficult” – other county services are better

### **The Orange County ‘Matrix’ Exercise**

The group was split into two working team to conduct the ‘matrix’ exercise. The ‘matrix’ exercise was actually a combination of two assessments: 1) a needs assessment, with a focus on the needs of the following:

- Older adults,
- Persons with disabilities, and
- Low income households and/or those without vehicles;

and an assessment of the various transportation strategies that may be relevant to the needs.

The participants added several issues to the needs based on their representation of the client base. The final agreed to list of needs was highlighted as follows:

- General rural public transportation
- Land use regulations/issues
- Travel training
- Amenities at the bus stops - (sidewalk and safety were added)
- Better connectivity of existing services
- More service to fill in gaps – locations, as well as, evening service
- Provide long haul commuter service from target area
- Dense housing near bus stops – i.e. assisted living
- Cross-county transfer
- Transportation hub
- Bike racks on bus

The NCDOT Mobility Development Specialist then shared some of the results of surveys from Moore and Chatham Counties and suggested several worthy issues be considered during the Orange County matrix evaluation. The expanded list became the 'needs' column on the 'matrix' form. Ten blanks were left for the workshop participants to add any new 'needs' that were identified in the pursuant needs discussion. Participants were also encouraged to eliminate any needs from the list that were not relevant, e.g. Orange County already has a detailed and functional evacuation plan, in which the community transit system buses are an integral part of any evacuation operation. Therefore, this was eliminated from the analysis. The final list can be viewed in the far left hand column of the completed 'matrix' located on the following page.

Finally the NCDOT Mobility Development Specialist listed an extensive array of possible strategies that might be applicable to serve the identified needs that had been established by the participants. Participants added to this array as they explored each need, e.g. flextime work hours were introduced as was inter-county agreements for cross-county transfer.

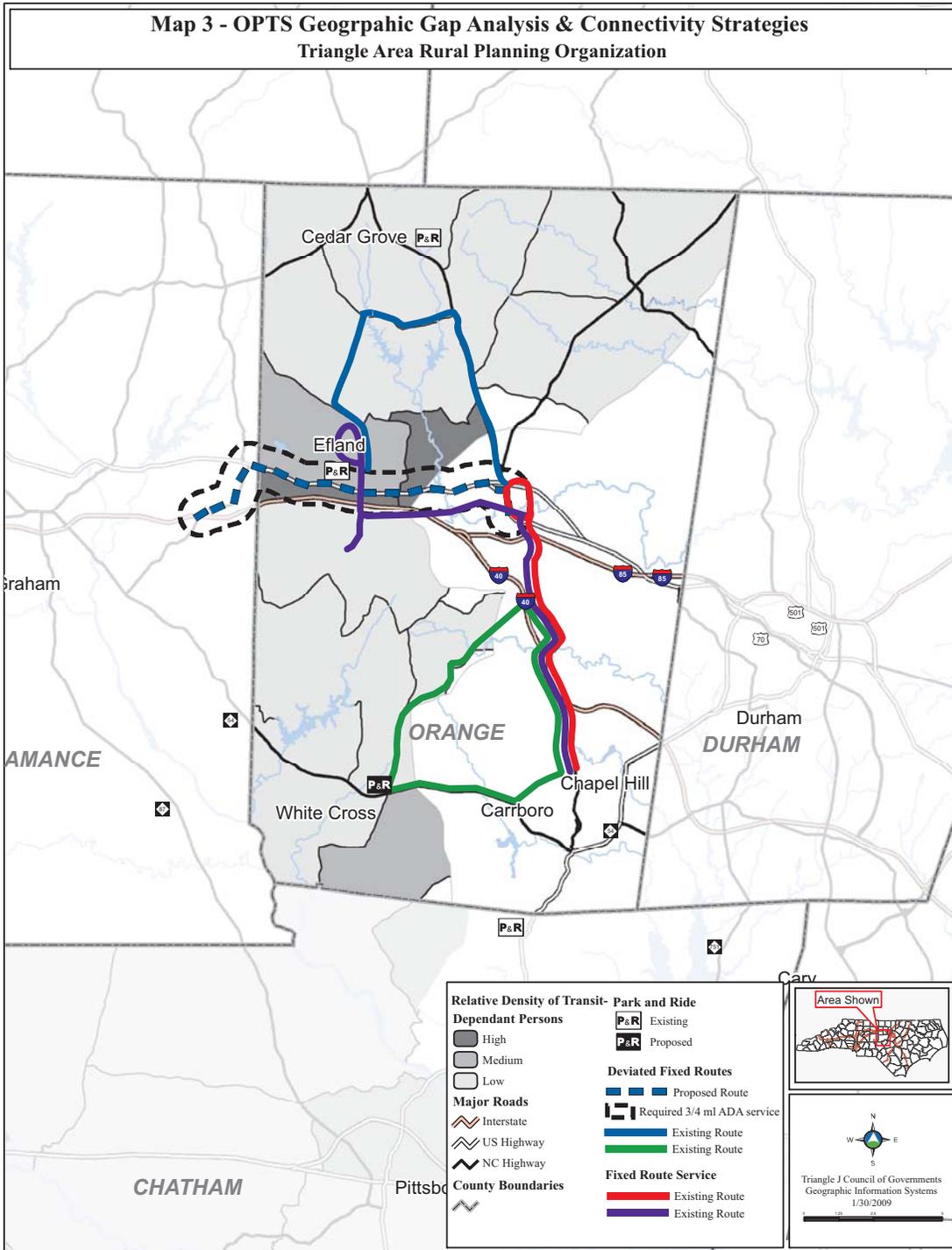
<b>ORANGE COUNTY NEEDS / STRATEGIES</b>	Fixed Routes	Evenings	Weekends	Vouchers	Volunteer drivers	Broker trips	Express service	Increase visibility	Transit Pass	Agency Operated	Vanpools	Big vehicle	Park & Ride	Door to Door	Circulators	Flex time hrs	Link to other provider	bike rack or bus lane	land use
Increase service to fill gaps - implies some inter-county fixed route or highway service corridors	√	√	√				√	√	√				√		touch pts	√	√		
Increase local area service - deviated fixed route, shuttles or circulators								√											
Increase time span of existing service; specify early morn, evening, weekend								√											
Broadcast user-friendly info/education - i.e. web, public forums,	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
Stops with transit amenities - i.e. lighting, benches, audible signs, sidewalks - safety	√						√	√					√		√				√
Increase all types of service to new user groups, i.e. veterans, YMCA (please specify group)	√	√		√	√	√								√	touch pts		√		√
Travel training for inexperienced/hesitant, i.e. for elderly, limited English, elderly, etc.	√	√					√	√	√					√	√	√			
Trips need to serve county employment centers	√	√	√	√	√	√	√	√	√		√		√	wee kly	√	√	√	√	√
<del>serve long haul commuters</del>	(see corridor fix route)																		
<del>Customer service improvements</del>	n/a																		
County-to-county transfer (agreements)	√	√	√		√	√							√				√		√
Remove barriers for mobility impaired																			
Better coordinated service	√	√			√	√	√		√	√	√		√		√	√	√		√
Childcare										√	√			√					√
Remove language barriers					√	√		√											
<del>Emergency evacuation transportation</del>	well defined and tested																		
Institutional and/or policies needed																			

Invigorate/strengthen advisory board	the	transportation	add a person from the non-urbanized area															
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### **The Orange County Geographic Gap Analysis**

This exercise focused on the various maps located about the room that showed census tract level of concentrations of five target groups: low income, those over 60 years old, those without vehicles, those with reported disabilities and racial minorities. The two groups were encouraged to adopt a map and add points of interest and draw the types of connections that may be needed to link the pockets of highest needs to their probable destinations. Corridors, systems, inter-connections, and barriers were all discussed. It should be noted that Rural General Public service, e.g. non-subscription, came up in every discussion and was included in the coordinated recommendations.

The map that follows is a composite interpretation of the various working maps that were produced during the exercise.



**The Orange County Ranking Exercise**

Near the conclusion of the workshop, the participants were invited to rank the strategies they individually found most appropriate for their clients or the interest they represented. This was done by asking the participants to allocate \$100 spread over the strategies they had recommended in the prior 'matrix' exercise. The results of that distribution are listed in the table below.

<b>RANK</b>	<b>SHOPPING LIST</b>	<b>TOTAL</b>
1	Fixed Routes	\$460
2	Child care transportation	\$272
3	Evenings service	\$115
4	Door to Door or Door	\$105
5	Weekends service	\$55
6	Peer Based - Increased visibility of existing program	\$45
7	Dialysis transportation	\$45
8	Park & Ride program - with safety features	\$40
9	Attendants for clients	\$26
10	Broker trips to other providers	\$25
11	Vanpools program	\$25
12	Volunteer drivers program	\$22
13	Bike/Bus lane	\$17
14	Agency operates own vans	\$12
15	Vouchers program	\$10
16	Bigger or unique vehicles	\$10
17	Express Service	\$8
18	Transit Pass program	\$8
	13 participants =	\$1,300

It should be noted that one participant allocated his entire \$100 to childcare and another allocated the entire allotment to fixed route, which made these two categories far above the rest. However even with these two extremes weighted, the fixed routes and childcare transportation still topped the list.

Looking at the geographic service gap analysis on the 'map' exercise, it became clear that east west fix route service along US 70 definitely reaches the highest transit dependant population and could be well coordinated with existing service. According to the participants, evening and weekend service should be instituted as part of the fixed route service from the onset. The park-and-ride facilities, which ranked 8<sup>th</sup> in priority, logically fits along the NC 86 north south transit service corridor. Note that the Orange County Planning Department may want to establish some specific transit oriented development policy for the corridor.

The fixed route would require door-to-door demand responsive ADA (Americans with Disability Act) service. This band could be extended beyond ADA requirements using New Freedom funds. To partially address the high child care transport priority, at least one childcare facility needs to be located within walking distance of a bus stop, preferable at a park-and-ride facility. Funds for transit-oriented development could possibly provide incentive for the day care center to locate there. Fixed route buses could be equipped with several child car seats, if the demand warranted. A huge information campaign, which also uses a peer based dissemination of information, must be provided. A well advertised attendant policy and perhaps an entirely new program might also be proposed under New Freedom (see program description in Funding Chapter). This proposed fixed route and the package of elements mentioned in this paragraph are shown in the Map #3. Funding would need to come from several sources to pull together this comprehensive program approach.

It was noted that attendants at daycare centers, who could greet the vehicles at the stop locations, could save valuable vehicle dwell time. While the attendant position might not be eligible for funding, a small shuttle vehicle, i.e. an electric golf cart with child seats affixed, might be appropriate because of the rural nature of most structures in the target areas, e.g. not curbside. The facilitators want to honor Orange County's out-of-the-box thinking when it came to addressing this non-traditional need. An analysis would need to be done to determine the minutes of time saved and the fuel savings, multiplied by the number of passengers, in order to justify such expenditures.

The high priority door-to-door service, ranked at #4, is also geographically important in two outlying communities – White Cross and Cedar Grove. Surveys of these communities would have to be done, in order to determine the level and type of services needed, which could connect these communities to the proposed fix route service and/or existing service (i.e. volunteer drivers). It was noted that some out-of-county transport may be more cost effective than transport to Orange County's urban centers. Any thoughts of transferring older and/or disabled people must include seamless transfer facilities – e. g. high platform, touch point timing between vehicles (communications), high level of information, and shelter that ensures safety and security should a wait period occur. A targeted marketing campaign, which relies on a peer based dissemination of information, must be provided.

Dialysis transportation is a common concern for all transportation providers. A statewide dialysis transportation study should be considered, perhaps tapping State Transportation Planning Funds. The solution set could explore increasing the number of available sites as an option to extensive out-of-county transport.

The remaining issues ranked 10-18 above could find their way into a comprehensive package above, including regional initiatives (i.e. brokerage, universal transit pass) and even stand alone projects, should the funding opportunity arise.

#### **Title VI Public Involvement – Orange County**

Participants were asked to pick up the voluntary Title VI forms and turn them in; however none have been received.

### **Chatham County Locally Coordinated Workshop & Process Summary**

#### **Inventory of Chatham County Public Transportation**

The Chatham Transit Network (CTN) is a non-profit agency that receives partial funding from Chatham County. CTN provides countywide curb-to-curb demand response public transportation services. Its offices are located in Pittsboro. Its staff consists of nineteen part-time drivers and six administrative personnel. Its fleet consists of twenty-one vans, eleven of which are equipped with wheel chair lifts. CTN operates weekday AM peak and PM peak 24-passenger van service from Siler City through Pittsboro to Chapel Hill. Three of these vans are used primarily on the service to Chapel Hill, all with wheel chair lift capabilities, and the remaining eighteen vans have capacities varying from 9 to 15 passengers. It provides deviated route van services reaching out through corridors approximately two and one half miles wide each weekday from Pittsboro to Siler City, to Goldston and other Southern Chatham County communities, to Moncure, to Jordan Lake and eastern Chatham County communities, and to North Central Chatham County. The system is averaging approximately 265 passenger trips per day (see statistical overview

of the CTN operational statistics in Appendix C). Its approximate distribution of 2007 demand response trips included approximately 9% to Chatham County Department of Social Services Medicaid clients, 37 % to Rural General Public Program subscribers, and 54% to other Chatham County Department of Social Services clients. CTN's normal services hours are from 8:00 A.M. to 5:00 P.M.

### Chatham County Historical Operating Statistics

	2005	2006	2007	% Change 06-07
Total Service Miles	505,087	357,084	402,645	12.76%
Transit System Service Miles	487,410	331,736	390,356	17.67%
Total Service Hours	23,631	15,292	22,282	45.71%
Total Passenger Trips	93,117	74,693	69,721	-6.66%
Total Transit System Trips	91,383	72,957	69,347	-4.95%
Total Admin/Oper Revenue	\$600,535	\$678,232	\$770,439	13.60%
Total Contract Revenue	\$295,258	\$402,743	\$403,974	0.31%
Fare Revenue	\$12,149	\$16,595	\$13,293	-19.90%
Total Admin/Oper Adj. Expense	\$592,669	\$677,856	\$703,238	3.74%
Peak Vehicles	20	20	18	-10.00%
Driver FTE	17.90	13.82	14.53	5.16%

	2005	2006	2007
Passenger Trips per Hour (M-F)	3.97	4.88	3.20
Passenger Trips per Mile (M-F)	0.18	0.21	0.17
Total Passenger Trips per Hour	3.94	4.88	3.13
Total Passenger Trips per Mile	0.18	0.21	0.17
Cost per Passenger Trip	\$6.36	\$9.08	\$10.09
Cost per Hour	\$25.08	\$44.33	\$31.56
Cost per Mile	\$1.17	\$1.90	\$1.75
Service Miles per Peak Vehicle	24,311	16,550	21,686
Trips per Driver FTE	5,095	5,268	4,771

### The Chatham County Pre-survey

In order to quickly prioritize the transportation issues that need to be addressed in each county in the RPO, a common list of problems was assembled from other 'local plans' developed throughout the country. The six-page survey was mailed out on December 8, 2008 and was requested back by December 31, 2008. Eighty surveys were mailed out and another ten were sent by e-mail. The survey questions were grouped into eight areas for improvement as follows:

education & information	accessibility & safety	customer service
coordination & cross-county trips	service-related	applications & eligibility
customer price for service	funding	

The language that was used in the questionnaire was ‘actual’ statements made by participants during other workshops conducted in other counties<sup>3</sup>, with similar characteristics to those located in the Greater Triangle Area. This eliminated the planning and operational jargon often inadvertently laced into survey forms; however it occasionally introduced some subjectivity (see sample survey instrument in Appendix B). While somewhat lengthy and difficult; the questions allowed for cross referencing many of the typical problems that rural communities and community transit systems experience and gave great insight into the root of the problems, as well as, gave a measure of the urgency for addressing the problems.

Participants were asked to mark all those questions that applied to their experience as a member or representative of one of the target population groups. An entire page was devoted to adding any additional problems and to listing any known locations/agencies/times or places the problems/inefficiencies occurred.

The results of the only twenty-four surveys submitted gave the facilitator a starting point for opening up the discussion on ‘identified needs’. Prior to the workshop, the facilitator had summarized the surveys and listed the needs on a flip chart, thereby fully prepared to expand those needs at the appropriate point on the agenda. The actual tabulations are listed below but were not presented to the audience. This avoided the discussion being focused on the low response rate and allowed the group to validate the identified needs and to move on to adding to the needs list.

#### Tabulated Survey Results

<b>Transportation Needs</b>	<b>Intensity</b>	<b>Frequency</b>	<b>comments</b>
Bus Stops with all amenities - lighting, benches, audible signs, sidewalks	Initiate	13	central hub, plus multiple stops, safety!
Increase local service coverage - i.e. shuttle, deviated fixed routes	Immediate	12	
Broadcast user friendly education - i.e. noted web based eligibility forms	Immediate	12	web, new groups etc.
Travel training esp. for elderly, special needs individuals, lack confidence	Need	11	fear of unknown
Increase service in corridors - i.e. fixed route, express service	Immediate	10	
Remove Language barriers	Need	10	
Increase service to special user groups, esp. Vets and door-to-door elderly	Immediate	9	difficult expensive
Better coordination with other transit service (including private)	Immediate	9	hook up to Express
Mobility Management - Clearinghouse	Need	9	
Increase service hours - i.e. evening service	Need	8	
Trips need to serve employment centers/commuters/late night	Immediate	8	difficult, expensive
Make land use and transit work together	Need	7	housing clients, low income housing
Customer service improvements	Need	6	
Empower / invigorate the TAB	Need	6	Add limited language

<sup>3</sup> Pinnacle County, Florida, did an excellent job of capturing citizen comments.

			and non-agency reps.
County-to-County Transfer	Need	6	equitability
Better pass/voucher program	Need	5	bulk discount
Disabled are denied trips	Need	3	
Emergency evacuation	Need	3	
Alternative fuels	Need	2	
attendants	Initiate	1	

The flip chart used to start the discussions listed the following needs as non-prioritized “SURVEY RESULTS”:

- Amenities at the bus stops
- Regular routes and/or deviated fixed services
- More service hours to fill in gaps
  - Evening service
  - Weekend Service
- Commuter service, express or fixed route service
- Customer service improvements
  - Broadcast “user friendly” information on eligibility and to improve internet website
  - Remove language barriers
  - Travel training for those who hesitate to use transit
- Better coordination of existing and future services –
  - Brokerage/mobility manager
  - Cross county coordination
- Dense housing near the transit corridors, i.e. assisted living

**The Chatham County ‘Matrix’ Exercise**

The group was split into two working team to conduct the ‘matrix’ exercise. The ‘matrix’ exercise was actually a combination of two assessments: 1) a needs assessment, with a focus on the needs of the following:

- Older adults,
- Persons with disabilities, and
- Low income households and/or those without vehicles;

and an assessment of the various transportation strategies that may be relevant to the needs.

The participants added several issues to the needs based on their representation of the client base. The final agreed to list of needs was highlighted as follows:

- Local routes and shuttles
- Weekend and evening service
- Amenities at the bus stops - (sidewalk and safety were added)
- Better connectivity of existing services
- Several corridor service connections – some fixed route and others were circulators
- Dense housing near bus stops – i.e. assisted living

- Medical emergency transport
- Enhancing the transit advisory board, travel training, emergency evacuation, and land use regulations were all relegated to policy improvements.

The NCDOT Mobility Development Specialist then shared some of the results of surveys from Moore and Orange Counties and suggested several worthy issues be considered during the Chatham County matrix evaluation. The expanded list became the 'needs' column on the 'matrix' form. Several blanks were left for the workshop participants to add any new 'needs' that were identified in the pursuant needs discussion. Participants were also encouraged to eliminate any needs from the list that were not relevant. The final list can be viewed in the far left hand column of the completed 'matrix' located on the following page.

Finally the NCDOT Mobility Development Specialist listed an extensive array of possible strategies that might be applicable to serve the identified needs that had been established by the participants. Participants added to this array as they explored each need, e.g. flextime work hours and, bike racks were introduced. Information dissemination was moved to the strategy column and many specific types were spelled out as follows: radio stations, local and area newspapers, Internet webpage of CTN, help for hearing/learning impaired, bilingual dispatchers, etc.

One workgroup prepared additional comments in bullet form as follows:

- Need service between home and daycare centers/preschools
- Smaller vans to the routes that would connect Siler City to Pittsboro
- Business partners to sponsor routes to their shopping centers
- Circular bus routes (7am-9pm) for food panty, doctor, groceries, courthouse, etc
- Safe nighttime ride for 2<sup>nd</sup> shift workers
- Culturally competent staff, who speak Spanish – wheelchair and family friendly

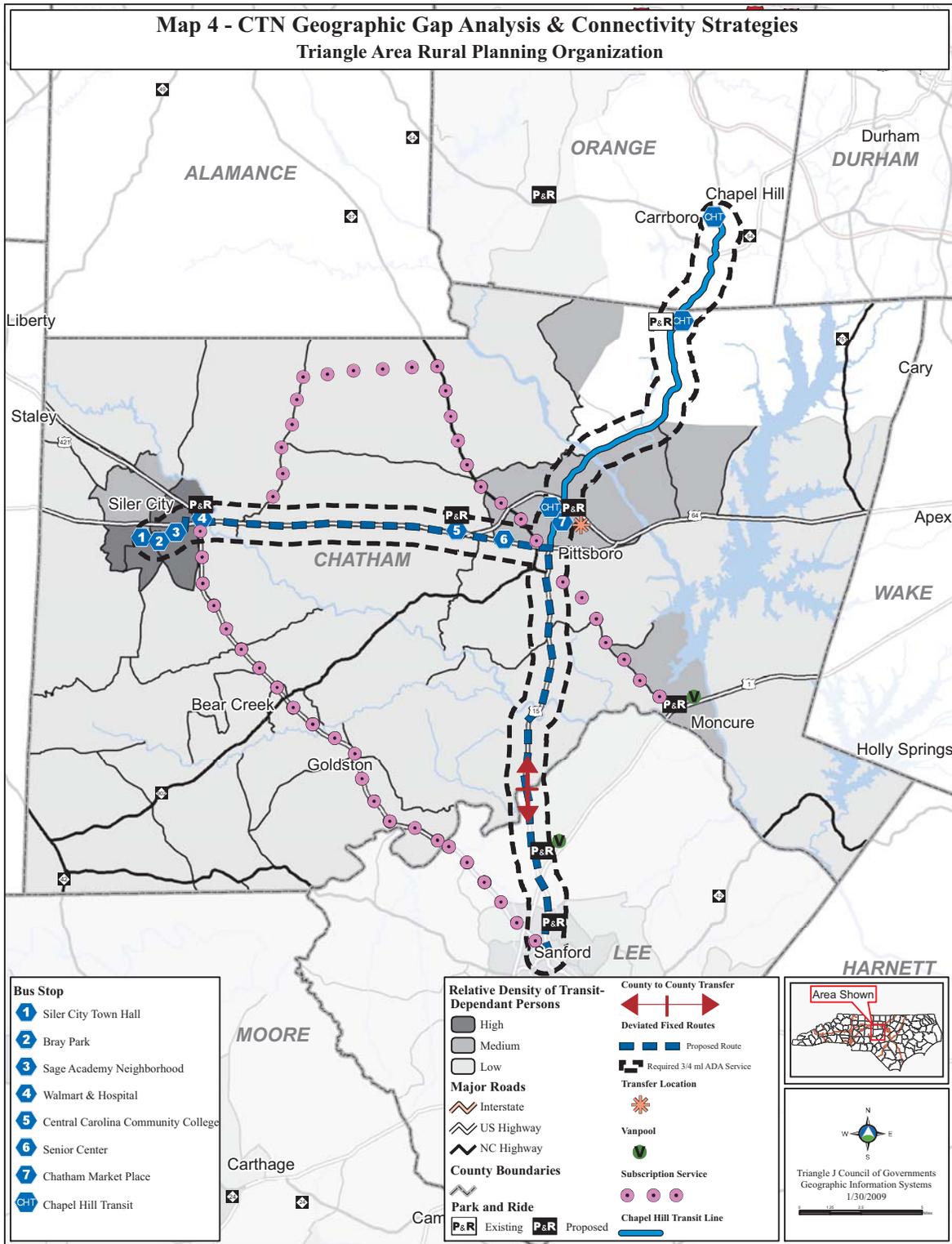
NEEDS / STRATEGIES	Fixed Route	Evenings	Week end	Vouchers	Volunteer drivers	Broker trips	Increase visibility	Express service	Transit Pass	Agency Operated	Vanpools	Big vehicle	Park & Ride	Door to Door	Flex time hrs	bike rack	broadcast info
Increase service on highway corridors	√	√	√			√	√	√	√				√				√
Increase local area service - deviated fixed route, shuttles or circulators		√	√			√	√										√
Increase time span of existing service; specify early morn, evening, weekend	√	√	√	√		√	destin ation based		√		Empl oyer		√	√			√
Stops with transit amenities - i.e. lighting, benches, audible signs, sidewalks - safety	√	√	√				√	√	√				√			√	√
Increase all types of service to new user groups - door-to-door to the elderly disabled		√	√	√	√	√			√					√			√
Trips need to serve County employment centers	√	√	√	√		√		√	√		√		√	√		√	√
Customer service improvements	√	√	√	√		√	√	√	√		√	√	√				√
County-to-County transfer (agreements)	√	√	√	√				√	√				√			√	√
Remove language barriers	√	√	√	√	√	√	√	√	√		√						√
Remove barriers for mobility impaired	√					√	√							√			√
Better coordinated service - brokerage	√	√	√	√	√	√	√	√	√		√	√	√	√	√		√
Recreation		√	√	√	√		√	√	√	√		√	√			√	√
Medical emergency service - i.e. return from hospital		√	√	√	√	√											
Institutional and/or policies needed																	
Strengthen the transportation advisory board																	
Emergency evacuation transportation	county direct use of vehicles; need plan and divers																

### **The Chatham County Geographic Gap Analysis**

This exercise focused on the various maps located about the room that showed census tract level of concentrations of five target groups: low income, those over 60 years old, those without vehicles, those with reported disabilities and racial minorities. The two groups were encouraged to adopt a map and add points of interest and draw the types of connections that may be needed to link the pockets of highest needs to their probable destinations. Corridors, systems, inter-connections, and barriers were all discussed. It should be noted that Rural General Public service, i.e. non-subscription, came up in every discussion and was included in the coordinated recommendations.

The map that follows is a composite interpretation of the various working maps that were produced during the exercise.

**Map 4 - CTN Geographic Gap Analysis & Connectivity Strategies**  
**Triangle Area Rural Planning Organization**



**The Chatham County Ranking Exercise**

Near the conclusion of the workshop, the participants were invited to rank the strategies they individually found most appropriate for their clients or the interest they represented. This was done by asking the participants to allocate \$100 spread over the strategies they had recommended in the prior ‘matrix’ exercise. The results of that distribution are listed in the table below.

RANK	SHOPPING LIST	\$ TOTAL
1	Fixed Routes	\$511.00
2	Door to Door	\$281.00
3	Evenings service	\$226.00
4	Clearinghouse - broker trips to others	\$212.00
5	Increased visibility of existing program	\$172.50
6	Weekends service	\$171.00
7	Park & Ride program	\$154.50
8	Vouchers program	\$109.00
9	Vanpools program	\$90.00
10	Circulators	\$79.00
11	Transit Pass program	\$78.50
12	Agency operates own vans	\$65.00
13	Bigger or unique vehicles	\$45.00
14	Eliminate language barrier - dispatcher	\$45.00
15	Express Service	\$38.50
16	Volunteer drivers program	\$30.00
17	Mid-day service	\$22.00
18	Improve Customer Service	\$20.00
19	Disabled service to 'employment'	\$15.00
20	Attendants on vehicles besides driver	\$15.00
21	Land use - transit oriented development	\$10.00
22	Recreation	\$10.00
	24 participants =	\$2,400

### **Strategies for Chatham County's Immediate Coordination of Needs**

It was notable that fixed route between Siler City and Pittsboro was a prime concern, as was the connection between Pittsboro and Sanford. A feasibility of the viability of the extent of service these destinations would support is certainly warranted and will be discussed under the geographic service gap analysis. However what should be noted immediately beyond this is that door-to-door service ranked as the next most important need. The contrast of these two needs is telling of two separate target groups, those without means due to economic hardships and those without means because of mobility impairment caused by any number of factors. In fairness, both needs must be addressed; however each issue needs almost an entirely separate strategy.

Looking at the geographic service gap analysis on the 'map' exercise, it became clear that east-west fixed route service along US 64 definitely reaches the two most needy transit dependant nodes in the county; however there is nothing to serve in between these areas. Therefore, the cost of providing frequent fixed route service may be prohibitive. Very careful marketing may be necessary to determine exactly what hour to start, whether a noon trip is warranted and exactly when the night trips should end. Because of the long haul per passenger mile, the Pittsboro destination would have to serve as a major hub to all connections to the rest of the county or to other counties. A transfer facility that synchronized trips between Chatham Transit Network and any other provider willing to run north south along US 15-501 would be vital. This facility would need to be in a good employment/service area for those wishing to terminate in Pittsboro. The facility needs to be substantial enough to accommodate staging for several full size buses. One integral feature to consider in the hub facility design is ease of off-loading handicap scooters and wheelchairs. Because the participants strongly emphasized better information flow, the transportation hub should be equipped to serve as a visible transfer center to all area transportation services, private, agency, and intermodal. The destination should be accessible by a defined set of pedestrian corridors that provide both pleasant and safe gateways to the facility. Affordable child-care should be within walking distance of the transfer facility. Dependant on the exact location, the local Chamber of Commerce or another community service organization might be housed at the hub to provide some of the "culturally competent people, who speak Spanish and are wheelchair and family friendly". The transportation broker/mobility manager could be located at the transfer hub, if the facility contained the technology to link the broker to the long list of area providers and their vehicle real-time locations. In

conclusion, the fixed route service from Pittsboro to Siler City needs to be sited and planned for the long-range benefits it will afford, so that it becomes a true marketing feature for the service and not just a bus stop to bus stop transfer location.

At the Siler City end, shuttles operated by volunteer drivers, local civic groups with vans, private companies and agency-operated vans will have to feed the fixed route line. A circulator provided by Chatham Transit Network (CTN) will be a one or two trip deviated route at best, as the bulk of the CTN vehicles will be needed to bolster the door-to-door service that is the number two priority of the locally coordinated human service public transportation plan. CTN currently runs several 'routes' that can provide improved hours of service, provided operating money is available. While these 'routes' are open to the general public on a seats available basis via subscription, they should also be tested to serve the general public on a non-appointment basis through some pilot programs, e.g. a flag card held by the general public rider who is waiting at a designated location along the 'route'. To be successful, the pilot program will need clear measures for success and a terrific means of getting public participation and support. Private business should also be encouraged to provide funds and or other resources to help their employees, potential employees and customers ride the CTN 'routes' and connect to the hub in Pittsboro.

A huge information campaign, which also uses a peer based dissemination of information, must be provided. A well-advertised set of policies and programs needs to be assembled to give the public full disclosure of what options are available to them. Funding would need to come from several sources to pull together a comprehensive human service public transportation package. The Mobility Management approach attempts to serve this need.

Park-and-ride facilities need to be strategically located so as to provide a cost benefit to those willing to get out of their cars and share their commute. Carpools and vanpools are equally valid modes, as is the bus at park-and-ride facilities and should be accommodated with appropriate comforts and amenities. Technology is key to their success, as is employee incentive programs such as preferential parking and/or cash incentives. For the bus, technology has to be in place for the patron to purchase fare medium ahead of time through the Internet and/or on-site at the park-and-ride facility to increase boarding time. Note that both transit pass and voucher program ranked high on the priority list. The benefits of a sophisticated universal pass program should not be underestimated. Several park & ride facilities were recommended at the workshop and are shown on the Map #4. Commercial enterprises should be allowed to operate within or at the perimeter of the park-and-ride facilities – coffee kiosks, dry-cleaning vans, day-care providers, lunch wagons, etc. Several participants wanted to explore gaining access to the existent UNC employee park-and-ride facility at the Orange/Chatham County line.

Chatham County is in a prime location to benefit from county-to-county transfer agreements. Touched by Durham and Wake Counties both of which have active community transit systems, Chatham County could seriously reduce it's out-of-county travel costs and bring home hundreds of service hours back into the community if it crafted some equitable county-to-county transfer agreements.

The remaining ten transportation issues could find their way into the comprehensive packages above, including regional initiatives (i.e. brokerage, universal transit pass) and even stand alone projects, should the funding opportunity arise. The mention of these needs in this document leaves an opportunity for public bodies, private providers, agencies and the community transit system to apply for government funds to meet these identified needs. Read more about the funding programs that are listed in the funding chapter.

#### **Title VI Public Involvement – Chatham County**

A graph of the Title VI participation can be found in Appendix E.

### **Lee County Locally Coordinated Workshop & Process Summary**

#### **Inventory of County of Lee Transportation Services**

The County of Lee Transportation Services (COLTS) is a one hundred per cent demand response and subscription service agency. Its staff consists of twenty part-time drivers and three administrative personnel.

Its fleet consists of seventeen vans, seven of which are equipped with wheel chair lifts. Its hours of operation are weekdays from 6:00 A.M. to 6: 00 P.M. COLTS serves approximately seventeen contracting agencies in Lee County on an on-going basis and it provides countywide curb-to-curb service. The system is averaging approximately 230 trips per day (see statistical overview of the COLTS in Appendix C). As to the approximate distribution of its 2007 service trips, 31% were to Lee County Department of Social Services Medicaid patients, 25% were to Lee County Division of Social Services nutrition patients, 22% were to adult special education and other special needs education clients primarily associated with the Central Carolina Community College, 13% were to Rural General Public Program employment related clients, and 9% were to dialysis patients.

### Lee County Historical Operating Statistics

	2005	2006	2007	% Change 06-07
Total Service Miles	468,662	433,021	467,081	7.87%
Transit System Service Miles	468,662	433,021	467,081	7.87%
Total Service Hours	25,881	29,064	27,816	-4.29%
Total Passenger Trips	52,903	56,612	57,950	2.36%
Total Transit System Trips	52,903	56,612	57,950	2.36%
Total Admin/Oper Revenue	\$459,612	\$502,968	\$561,846	11.71%
Total Contract Revenue	\$222,974	\$242,650	\$181,359	-25.26%
Fare Revenue	\$18,202	\$18,980	\$16,938	-10.76%
Total Admin/Oper Adj. Expense	\$476,712	\$556,584	\$630,992	13.37%
Peak Vehicles	13	13	14	7.69%
Driver FTE	12.80	13.14	14.06	6.99%

	2005	2006	2007
Passenger Trips per Hour (M-F)	2.04	1.95	2.08
Passenger Trips per Mile (M-F)	0.11	0.13	0.12
Total Passenger Trips per Hour	2.04	1.95	2.08
Total Passenger Trips per Mile	0.11	0.13	0.12
Cost per Passenger Trip	\$9.01	\$9.83	\$10.89
Cost per Hour	\$18.42	\$19.15	\$22.68
Cost per Mile	\$1.02	\$1.29	\$1.35
Service Miles per Peak Vehicle	36,050	33,309	33,363
Trips per Driver FTE	4,133	4,308	4,122

### The Lee County Pre-survey

In order to quickly prioritize the transportation issues that need to be addressed in each county in the RPO, a common list of problems was assembled from other 'local plans' developed throughout the country. The six-page survey was mailed out on December 5, 2008 and was requested back by December 31, 2008. Twenty-nine surveys were mailed out. The survey questions were grouped into eight areas for improvement as follows:

education & information	accessibility & safety	customer service
coordination & cross-county trips	service-related	applications & eligibility
customer price for service	funding	

The language that was used in the questionnaire was 'actual' statements made by participants during other workshops conducted in other counties<sup>4</sup>, with similar characteristics to those located in the Greater Triangle Area. This eliminated the planning and operational jargon often inadvertently laced into survey forms; however

<sup>4</sup> Pinnacle County, Florida, did an excellent job of capturing citizen comments.

it occasionally introduced some subjectivity (see sample survey instrument in Appendix B). While somewhat lengthy and difficult; the questions allowed for cross referencing many of the typical problems that rural communities and community transit systems experience and gave great insight into the root of the problems, as well as, gave a measure of the urgency for addressing the problems.

Participants were asked to mark all those questions that applied to their experience as a member or representative of one of the target population groups. An entire page was devoted to adding any additional problems and to listing any known locations/agencies/times or places the problems/inefficiencies occurred.

The results of the only three surveys submitted gave the facilitator a starting point for opening up the discussion on 'identified needs'. Prior to the workshop, the facilitator had summarized the surveys and listed the needs on a flip chart, thereby fully prepared to expand those needs at the appropriate point on the agenda. The actual tabulations are listed below but were not presented to the audience. This avoided the discussion being focused on the low response rate and allowed the group to validate the identified needs and to move on to adding to the needs list.

### **Tabulated Survey Results**

<b>Transportation Needs</b>	<b>Frequency</b>
Broadcast information, i.e. eligibility, better website, etc.	2
Transportation clearinghouse - Mobility Manager	2
More inter-county service	2
After hours reservation	2
County-to County connection - especially Harnett Co.	1
Evenings service	1
Weekends service	1
Transportation for employment - 2nd and 3rd shift	1
Policy on companions/attendants	1
Remove barriers for limited English speakers	1
Stops with transit amenities - safe locations, audible signs	1
Fixed Routes, Circulator, or Deviated Fixed Routes	1
Travel Training for the apprehensive population, i.e. mentally challenged	1
Recreation and shopping trips	1

The flip chart started with the following whole host of needs listed as non-prioritized "SURVEY RESULTS":

- Amenities at the bus stops
- More inter-county service - fixed routes, circulator, or deviated fixed routes
- More service hours to fill in gaps
  - Evening service
  - Weekend service
- Remove barriers for limited English speakers
- Travel training
- Recreation and shopping trips
- Transportation for employment
- Better coordination of existing and future services –
  - Brokerage/mobility manager
  - cross county coordination
- Recreation and shopping trips

### **The Lee County 'matrix' exercise**

All the participants worked as a team during the 'matrix' exercise. The 'matrix' exercise was actually a combination of two assessments: 1) a needs assessment, with a focus on the needs of the following:

- Older adults,
- Persons with disabilities, and
- Low income households and/or those without vehicles;

and an assessment of the various transportation strategies that may be relevant to the needs.

The participants added several issues to the needs based on their representation of the client base. The final agreed to list of needs was highlighted as follows:

- Local Routes and shuttles
- Transport for after school and summer programs

The NCDOT Mobility Development Specialist then shared some of the results of surveys from Moore, Chatham and Orange Counties; and suggested several worthy issues be considered during the Lee County matrix evaluation. The expanded list became the 'needs' column on the 'matrix' form. Several blanks were left for the workshop participants to add any new 'needs' that were identified in the pursuant needs discussion. Participants were also encouraged to eliminate any needs from the list that were not relevant. The final list can be viewed in the far left hand column of the completed 'matrix' located on the following page.

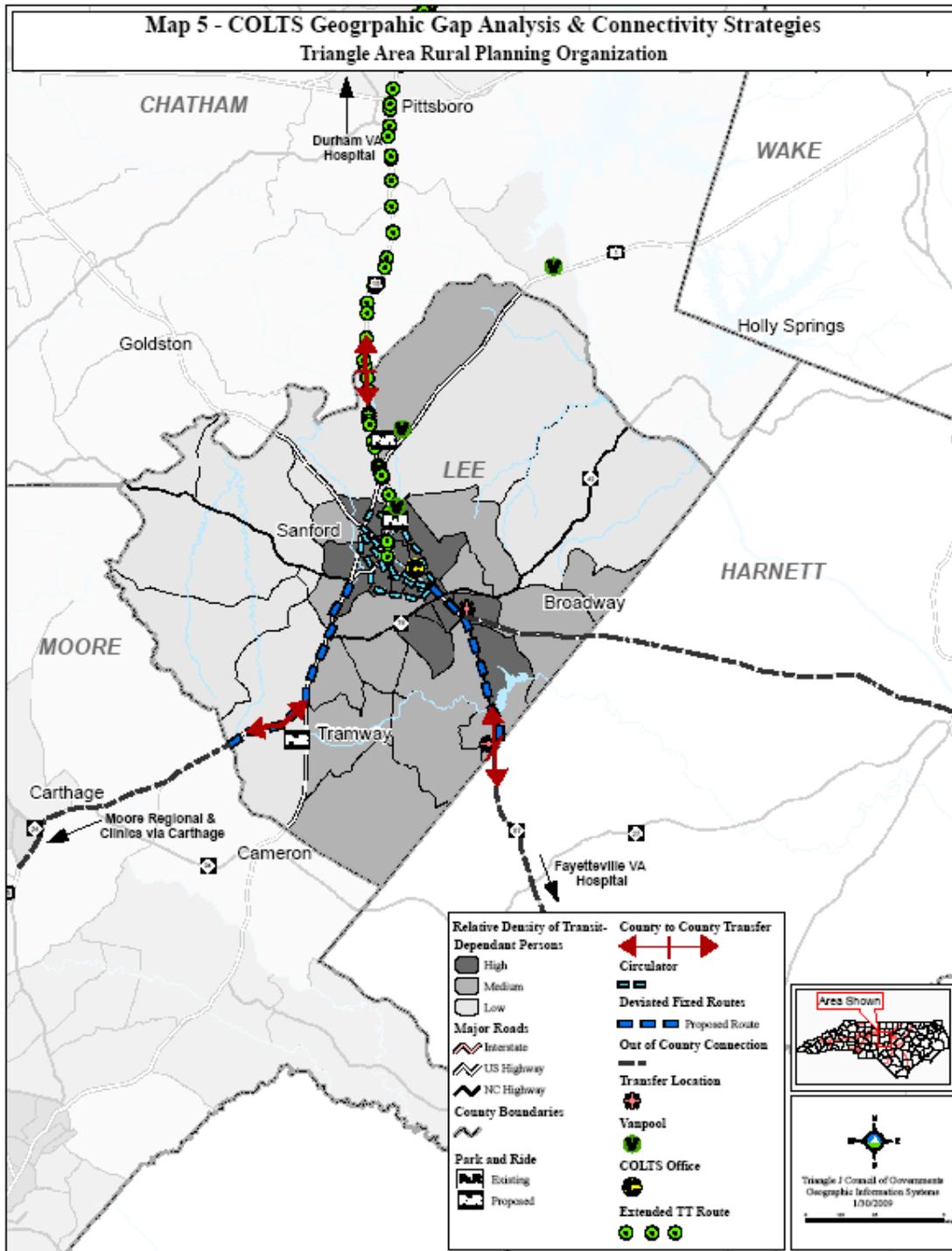
Finally the NCDOT Mobility Development Specialist listed an extensive array of possible strategies that might be applicable to serve the identified needs that had been established by the participants. Participants added to this array as they explored each need, e.g. circulator, mobility management and administrative policies as strategies rather than needs.

NEEDS / STRATEGIES	Fixed Routes	Evenings	Weekends	Vouchers	Volunteer drivers	Mobility Manager	Increase visibility	Express service	Transit Pass	Agency Operated	Vanpools	Big vehicle	Park & Ride	Door to Door	Circulator	Institutional policy
Increase service on highway corridors	connect	√	√				√		√			√			connect	
Long Haul Commuter service - Triangle Transit	√	√	√				√	√	√		√	√	√		√	√
Increase local area service - deviated fixed route, shuttles or circulators	see circulator as strategy above															
Increase time span of existing service; specify early morn, evening, weekend		√	√	√	√	decide			√	√				√	√	
Stops with transit amenities - i.e. lighting, benches, audible signs, sidewalks - safety	√						√						√		√	
provide "user friendly" info - eligibility, website improved	√	√	√			√	√	√	√		√		√	√	√	
Travel training for people unfamiliar with transit e.g. reluctant to ride	√			√	√	√	√		√	√			√	√	√	
Make land use and transit work together	√						√	√			√		√		√	√
Increase all types of service to new user groups - door-to-door to the elderly disabled	no specific group identified															
Trips need to serve County employment centers		√	√				√		√		√	√	√	√		√
Customer service improvements	no comments															
County-to-county transfer (agreements)	√						√					√	√			√
Remove Language barriers	no comments															
Remove barriers for mobility impaired	no comments															
Better coordinated service - brokerage	see mobility manager as strategy above															
Recreation, after school and summer		√	√	√	√					√				√		
Institutional and/or policies needed																
Strengthen the transportation advisory board	no comments															
Targeted marketing campaign	√	√	√	√		champion		√	√	√	√		√		√	

### **The Lee County Geographic Gap Analysis**

This exercise focused on the various maps located about the room that showed census tract level of concentrations of five target groups: low income, those over 60 years old, those without vehicles, those with reported disabilities and racial minorities. The group was encouraged to adopt a map and add points of interest and draw the types of connections that may be needed to link the pockets of highest needs to their probable destinations. Corridors, systems, inter-connections, and barriers were all discussed. It should be noted that rural general public service, e.g. non-subscription, came up in every discussion and was included in the coordinated recommendations.

The map that follows is a composite interpretation of the elements that were considered during the exercise.



### The Lee County Ranking Exercise

Near the conclusion of the workshop, the participants were invited to rank the strategies they individually found most appropriate for their clients or the interest they represented. This was done by asking the participants to allocate \$100 spread over the strategies

they had recommended in the prior 'matrix' exercise. The results of that distribution are listed in the table below.

RANK	SHOPPING LIST	\$ TOTAL
1	Evenings service	85
2	Weekends service	80
3	Circulator	75
4	Peer Based - Increased visibility of existing program	60
5	Transit Pass program	35
6	Agency operates own vans	30
7	Vanpools program	30
8	Vouchers program	25
9	Park & Ride program - with safety features	15
10	Fixed Routes	10
11	Volunteer drivers program	10
12	Bigger or unique vehicles	10
13	Recreation/aftercare	10
14	Stops with transit amenities	10
15	Mobility Manager	10
16	Land use solution	5
17	Broker trips to others	0
18	Express Service	0
19	Door to Door	0
	5 participants =	\$500.00

**Strategies for Lee County's Immediate Coordination Needs**

Extended hours of service for both evenings and weekends was the prime need according to the participants of the workshop. It would appear that the call for evening and weekend service was to extend hours on existing door-to-door service, for the elderly and disabled, but could also serve employment needs as well (i.e. seats available). Job Access Reverse Commute (JARC) funds used in the past produced a lot of "no shows" so this issue should be addressed with new policies before any new JARC application is prepared.

The circulator could meet some needs for quality of life for the older adults and persons of low income, as well as connect COLTS to regional and county-to-county transfer vehicles.

Transit passes and voucher programs both ranked high. Therefore some options that meet client needs should be explored. This would be a great opportunity for some flexible programs that utilized other providers than just COLTS. An extensive list of transportation services were cited during the workshop:

Boys and Girls Club	On the Road Again
YMCA	Road to Recovery-Highway to Healing
Fleming Taxi	Contract worker vans
Sandhills Transit	Lee County Industries

A mobility manager could help make the connection between the client and the providers.

The transportation broker/mobility manager could be located at a transfer hub along the circulator. Private business should also be encouraged to provide funds and other resources to help their employees, potential employees and customers ride the circulator routes, in order to make it a success; this could be done by the businesses 'adopting a weeks worth of service'.

A huge information campaign, which also uses a peer based dissemination of information, must be provided. A well-advertised set of policies and programs needs to be assembled to give the public full disclosure of what options are available to them. Funding would need to come from several sources to pull together a comprehensive human service public transportation package. The Mobility Management approach attempts to serve this need.

Park-and-ride facilities need to be strategically located so as to provide a cost benefit to those willing to get out of their cars and share their commute. Carpools and vanpools are equally valid modes, as is the bus, at park-and-ride facilities and should be accommodated with appropriate comforts and amenities.

The remaining transportation needs will likely find their way into the new five-year community transit system development plan that will be developed in the upcoming year. The mention of all the needs in this document leaves an opportunity for public bodies, private providers, agencies and the community transit system to apply for government funds to meet these identified needs. Read more about the funding programs that are listed in Funding Chapter.

#### **Title VI Public Involvement - Lee County**

'Title VI Public Involvement' forms were made available to all participants. Only four forms were received, which can be found in Appendix E.

## **A REGIONAL PERSPECTIVE**

### **Cross County Coordination Opportunities**

All four workshops identified the need for improved cross county line travel coordination and for the need to improve travel services along the major transportation corridors (US Highways 1, 15-501 and 421). In the long term this Highway Corridor offers an excellent opportunity for consolidation of services in Moore, Lee and Chatham Counties. The workshops identified increased work related travel needs across all socio-economic and demographic categories for major employment centers located in Orange, Wake, Durham and Cumberland Counties. A coordinated Job Access Reverse Commute (JARC) application is warranted, logical this effort should be coordinated with the designated 5307 – Urban Transit Systems, e.g. Chapel Hill Transit and Triangle Transit. The strategic location of Park and Ride facilities should also be a regional decision. The Fort Bragg Base Realignment & Closure Initiative to locate the FORSCOM Defense Headquarters in Cumberland County was noted has having a significant impact on employment travel needs in Lee and Moore Counties; the military should be brought into the transit provision and transportation funding discussions. Improved coordination and utilization of ‘seat available’ transportation to major medical centers in Orange, Durham and Wake Counties was cited – county-to-county agreements need to be formally established. The acquisition of automatic vehicle location technology and enhanced real-time scheduling software were cited as a significant potential improvement that would enhance utilization and coordination of services. All four counties recognized that the establishment of ‘highly visible’ transit hubs in their respective major urbanized areas would enhance intra-county and inter-county travel planning and coordination.

### **Project Selection and Evaluation**

The matrix evaluation process has revealed that there are long lists of project needs in each of the TARPO counties, even for the near term. Projects must be selected that will address current needs, that will likely produce favorable impacts, and that will tackle core issues with broad service implications. This will help eliminate replications, redundancies and inefficiencies and will provide the greatest returns for the limited funds that are available. Projects must also be selected that bring not only immediate benefits and improvements but will also contribute to favorable results beyond an initial three-year period. The most helpful resources in identifying and confirming the most needed projects to be funded in any of the county organizations will include the American Public Transportation Association, the Community Transportation Association of America, the Transit Cooperative Research Program of the Transportation Research Board, peer transit agencies, and professional consultants and experts.

The following factors should be considered in selecting and evaluating the merits of individual projects:

1. Maintaining a healthy balance between operating assistance projects with capital projects. Operating assistance projects should be maximized based on match funds from locally available resources to meet the greatest number of needs and to provide the greatest degree of service flexibility. Capital projects may be advantageous in the near-term along travel corridors and in areas where the service demands are greatest and will help build service capacities in later years.

2. Projects that support and optimize schedule adherence for fixed route deviated and demand response services will enhance benefit-cost for the agency and will support further expansion of services.
3. Projects that will serve districts that are being developed based on smart growth and mixed-use principles will provide favorable returns and will actually provide a wider array of services to adjoining areas. The application of smart growth principles in land use will adequately serve much employment and medical travel needs.
4. The TARPO region will continue to need enhanced, expanded and reliable employment travel services to major urban centers like Fayetteville, Raleigh, Durham and the Research Triangle Park. In some instances, it may be advantageous to consider the pooling of funds and resources to initiate these services until satisfactory ridership levels are established along specific travel corridors.

## **Federal and State Transportation Programs for Rural Areas<sup>5</sup>**

### **NON-URBANIZED AREA FORMULA PROGRAM (FTA Section 5311)**

*Funding Source:* Federal

*Purposes:* Funds capital, operating and administrative purposes. Maximum federal participation of 80% for administrative and capital costs. NCDOT matches 5% state funds for administrative costs and 10% for capital costs. Small urban fixed route systems and regional community transportation systems are eligible to apply for up to 50% of the net operating costs associated with general public routes.

*Eligible Recipients:* State and local governments, nonprofit organizations (including Indian tribes and groups) and public transit operators in non-urbanized areas are eligible sub-recipients.

### **RURAL CAPITAL PROGRAM**

*Funding Source:* Federal and State

*Purposes:* Provides up to 90% federal and/or state participation. Funds are for the purchase of vehicles, communications equipment and related capital equipment; the purchase or upgrade of computer equipment, file servers, software, printers, telephone systems, mobile data terminals, automatic vehicle locators and other technologies; and the purchase or renovation of facilities for administrative and/or operating use. Funds cover up to 90% of feasibility plan preparation, land acquisitions, design and construction costs.

*Eligible Recipients:* Community transportation system grantees including local governments and nonprofit organizations (including Indian tribes and groups) in non-urbanized areas and in urbanized area counties where there is not a consolidated urban/rural transportation system.

### **HUMAN SERVICE TRANSPORTATION MANAGEMENT PROGRAM**

*Funding Source:* State

*Purposes:* Funds the administrative costs associated with the transportation of consolidated human service transportation systems and systems operating in urbanized area counties where a consolidated countywide transit system does not exist. Provides up to 85% of eligible costs.

*Eligible Recipients:* Consolidated human service and community transportation systems operating in urbanized area counties where a consolidated countywide transit system does not exist. Grantees include local governments and nonprofit organizations.

### **ELDERLY AND DISABLED INDIVIDUALS TRANSPORTATION PROGRAM (FTA 5310)**

*Funding Source:* Federal

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<sup>5</sup> As listed on the NCDOT-PTD website in November 2008

*Purposes:* Funds capital projects. Most funds are used to purchase vehicles, but acquisition of transportation services under contract, lease or other arrangements and state program administration are also eligible expenses. Prior to SAFETEA-LU, NCDOT transferred funds annually to the Section 5311 program. North Carolina can use up to one-third of funds through 2009 for operating costs to serve elderly and disabled in regional systems.

*Eligible Recipients:* State and local governments, nonprofit organizations (including Indian tribes and groups) and public transit operators in nonurbanized areas.

#### REGIONAL AND INTERCITY PROGRAM

*Funding Source:* State and Federal

*Purposes:* Funds intercity bus service in underserved areas of North Carolina that connect to the national intercity network. Also provides state funds for Travelers' Aid programs that assist homeless, stranded or indigent travelers with their intercity transportation needs through the purchase of bus tickets. Provides up to 50% of the net operating costs. Section 5311(f) funds used to support portion of NCDOT share.

*Eligible Recipients:* Community transportation systems; other public, private nonprofit and private for-profit transportation providers; public transportation authorities; intercity bus providers; local public bodies including counties and municipalities; Indian tribes and regional or local planning organizations.

#### RURAL OPERATING ASSISTANCE PROGRAM (ROAP)<sup>6</sup>

Part 1; Elderly and Disabled Transportation Assistance Program (EDTAP)

*Funding Source:* State

*Purposes:* Provides operating assistance for the transportation of the state's elderly and disabled citizens. Funds up to 100% of cost of service.

*Eligible Recipients:* County governments.

Part 2: Rural General Public Program

*Funding Source:* State

*Purposes:* Funds community transportation systems that serve the general public in the state's rural area. Provides up to 90% of cost of service.

*Eligible Recipients:* County governments

Part 3: Employment Transportation Assistance Program

*Funding Source:* State

*Purposes:* Funds transportation service to employment for low-income individuals. Also supports the N.C. Rural Vanpool Program. Provides up to 100% of cost of service.

*Eligible Recipients:* County governments

#### RURAL PLANNING PROGRAM

*Funding Source:* Federal and State

*Purposes:* Funds the updating of local community transportation plans, regional transportation feasibility studies and special studies. Provides up to 100% of cost of regional feasibility studies (90% of implementation plan) and 90% of local planning studies.

*Eligible Recipients:* Lead transportation agencies including local governments, transportation authorities, nonprofit organizations and Indian tribes.

#### RURAL TRANSIT ASSISTANCE PROGRAM (RTAP) (FTA SECTION 5311 (B)(2))

*Funding Source:* Federal

*Purposes:* Funds training, technical assistance, research and related support activities. Maximum of 100% federal participation.

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<sup>6</sup> Composed of three separate funding sources, allowing for one application

*Eligible Recipients:* NCDOT is the grant recipient; however, funds can be contracted or passed through to other entities.

#### JOB ACCESS AND REVERSE COMMUTE (JARC) PROGRAM (FTA Section 5316)

*Funding Source:* Federal

*Purposes:* Funds new transit service to assist welfare recipients and low-income individuals with transportation to jobs, training and childcare.

*Eligible Recipients:* Local governments and nonprofit organizations.

#### NEW FREEDOM PROGRAM (FTA Section 5317)

*Funding Source:* Federal

*Purposes:* Funds new transportation services and public transportation alternatives beyond those required by ADA to assist persons with disabilities in both urban and rural areas.

*Eligible Recipients:* Local governments and nonprofit organizations.

#### PUBLIC TRANSPORTATION GRANT PROGRAM

*Funding Source:* State

*Purposes:* Matches NCDOT statewide grants and local federal capital and planning grants. Also funds the Apprentice and Intern Programs and the Transportation Demand Management Program. Program funds short-term demonstration projects and those ineligible for federal funding.

*Eligible Recipients:* Local governments, nonprofit organizations, community transportation systems, transportation authorities and institutions of higher education.

#### APPRENTICE AND INTERN PROGRAMS

*Funding Source:* State

*Purposes:* Funds the work experience for selected recent graduates and graduate students in public transportation. Apprentices, who are recent graduates, work full time for a 12-month period. Interns, who are graduate students, work approximately 12 weeks full time during the summer between their two years of graduate school and approximately 10 hours a week during the fall and spring semesters of their second year. It funds up to 90% of eligible costs.

*Eligible Recipients:* All state transit systems are eligible to receive reimbursement of project costs for salary, benefits and travel within specified guidelines.

#### TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM

*Funding Source:* State and Federal (Congestion Mitigation and Air Quality)

*Purposes:* This program is Urban by its' very nature. It funds programs that encourage ridesharing arrangements such as carpools and vanpools and the use of public transit and other alternative transportation in an effort to reduce congestion and vehicle emissions. State funds are matched dollar-for-dollar by local funds.

*Eligible Recipients:* Public bodies responsible for promotion of TDM activities that may provide services such as carpool/vanpool matching and vehicles for use in vanpooling. It is the intent of the program to fund only one organization per region with the temporary exception of the Triangle area but requiring that certain program components, such as marketing activities, be coordinated in one regional marketing program.

#### TECHNOLOGY GRANT

The North Carolina Department of Transportation Public Transportation Division (PTD) encourages North Carolina's Community Transportation systems to employ advanced technologies to foster increased efficiencies in the state by providing grants for qualifying transportation systems. Technologies that may be eligible for this grant include:

- Advanced Scheduling Software
- Maintenance Software
- Mobile Data Computers/Automatic Vehicle Locators (MDC/AVL)
- Integrated Voice Response Systems (IVR)

First, the Community Transit System must be identified as eligible for the technology in the Technology Implementation Plan. Next, the business practices and policies of the transit system must be reviewed and adapted where necessary.

## Appendix A

### Moore County January 7, 2009 LCHSTP Workshop Invitation List

invited	attended	Attended on January 7, 2009	invited	Did not attend
1	1	<b>Alona Sloan - Moore County Social Services</b>	1	Andrea Correll - Village of Pinehurst
	1	<b>Andrew Gardner - Moore County Planning &amp; Community</b>	1	Bart Nuckols - Town of Southern Pines
	1	<b>Anne Friesen - Friend to Friend</b>	1	Beuna Shields - The Bethesda Center
1	1	<b>Bill Barlow - NCDOT Public Transportation</b>	1	Brant Sikes - Resident of Robbins
1	1	<b>Brian Borchardt - Village of Whispering Pines</b>	1	Buddy Spong - Moore County Red Cross
	1	<b>Daniel Van Liere - Upper Coastal Plains RPO</b>	1	Carol Henry - Jackson Hamlet Community Action
	1	<b>David Bender - NCDOT Public Transportation</b>	1	Caroline Eddy - Sandhills Coalition for Human Care
1	1	<b>Edwina Brisbon - Moore County Social Services</b>	1	Clare Ruggles - Resident of Robbins
1	1	<b>Elizabeth Cox - Habitat for Humanity</b>	1	Craig McIntosh - Employment Security Commission
	1	<b>George Hunt - Moore County Veterans Office</b>	1	Cynthia Curtis - The Bethany House
1	1	<b>Jeff Crouchley - NCDOT Public Transportation</b>	1	David Hale - Sandhills Community College
	1	<b>Kathy Blake - Town of Southern Pines</b>	1	Don Black - Pinetree Community Services
1	1	<b>Keisha Threadgill - Moore County Department of Aging</b>	1	Jackie Thamm - Friend to Friend Association
	1	<b>Mary Pat Buie - The Sandhills Center</b>	1	Jennifer King - Moore County Social Services
1	1	<b>Pat Strong - Triangle J Council of Governments</b>	1	Jill Sherman - Moore County Aging
	1	<b>Patricia Myers - Moore County Social Services</b>	1	Jodi Smith - Town of Vass
	1	<b>Rose Highland-Sharpe - Sandhills Community College</b>	1	Joey Raczkowski - Planning & Community Development
1	1	<b>Roxanne Leopper - First Health of the Carolinas</b>	1	Kathy Liles - Town of Aberdeen
1	1	<b>Susan Bellew - Family Promise of Moore County</b>	1	Margaret Davis - Needmore Community Association
1	1	<b>Terri Prots - Moore County Department of Aging</b>	1	Marianne Kernan- National Alliance for Mental Illness
1	1	<b>Terry Jordan - NCDOT Public Transportation</b>	1	Mark Wethington - Moore Free Health Clinic
1	1	<b>Tim Emmert - Moore County Planning &amp; Community</b>	1	Marshall Joyner - Sandhills Transportation LLC
	1	<b>Tim Lea - Moore County Commission Board</b>	1	Maurice Holland - Midway Community Association
1	1	<b>Timothy Thompson - Moore Transportation Services</b>	1	Melanie Gayle - Sandhills Children's Center
1	1	<b>Wanda Felt - Sandhills Center for Mental Health</b>	1	Melissa Adams - Town of Carthage
	25		1	Mimi Ainsworth - Village of Foxfire
			1	Minnie Turner - The Salvation Army
			1	Nancy Walker - Southern Pines Housing Authority
			1	Nezzie Smith - Sandhills Community Action
			1	Patrick Coughlin - Moore County Chamber of Commerce

46% turnout based on 54 invitations

**Moore County Invitees continued .....**

- 1 Rebecca Bradley - Sandhills Children's Center
- 1 Reverend John Tampa - Caring for Moore Emmanuel Church
- 1 Robert Huber - Pinetree Community Services
- 1 Ron Hodiak - Pinetree Community Services
- 1 Scott Brooks - Moore County Public Safety
- 1 Stephanie Minks - Town of Pinebluff
- 1 Tamra Shaw - NCDOT
- 1 Thomas Jones - Waynor Road in Action Association
- 1 Wendy Russell - The Arc of Moore County
- 54 INVITED**

**Orange County January 8, 2009 LCHSTP Workshop Invitation List**

<b>Invited</b>	<b>Attended</b>	
1	1	<b>Al Terry - Orange County Public Transportation Services</b>
	1	<b>Alice Gordon - Orange County Commission Board</b>
1	1	<b>Ardra Webster - Orange County Parks &amp; Recreation</b>
	1	<b>Barry Jacobs - Orange County Commission Board</b>
1	1	<b>Bill Barlow - NCDOT Public Transportation Division</b>
1	1	<b>Dan Barker - Orange County Transit Advisory Board</b>
1	1	<b>Donna Mission - Opportunities for Everyone</b>
1	1	<b>Gwen Harvey - Orange County Assistant Manager</b>
1	1	<b>Jerry Passmore - Orange County Department of Aging</b>
1	1	<b>Jim White - Orange County Transportation Advisory Board</b>
1	1	<b>Karen Lincoln - Orange County Transportation Planning</b>
1	1	<b>Kathie Kearns - Orange County Department of Aging</b>
1	1	<b>Meg Pickel - Orange County Health Department</b>
1	1	<b>Pat Strong - Triangle J Council Of Governments</b>
1	1	<b>Robert Gilmore - Orange County Department of Social Services</b>
1	1	<b>Serena McPherson - Orange Co. Department of Social Services</b>
1	1	<b>Vanessa Nestrom - Orange County Mental Health</b>
1	1	<b>Wayne Sherman - Orange County Transit Advisory Board</b>
1		John Talmadge - Triangle Transit Commuter Services Director
1		Nancy Coston - Orange County Department of Social Services
1		Pamela Rich - Orange County Employment Security Commission
1		Margaret Hauth - Hillsborough Planning Director
<b>20</b>	<b>18</b>	<b>90% rate of participation</b>

**Chatham County January 9, 2009 LCHSTP Workshop Invitation List**

<b>Invited</b>	<b>Attended</b>		<b>Invited</b>	<b>Did not attend</b>
1	1	Angel Dennison - Chatham County COA	1	Alex Reta - Chatham County Social Services
1	1	Bill Barlow - NCDOT Public Transportation Division	1	Allison Palmer - Vocational Rehabilitation Services
1	1	Cari McCachren - Child Care Networks	1	Amy Burrell - Chatham Trades Inc,
1	1	Cindy Wilhelm-Snipes - Chatham Division of Social Services	1	Angela Leonti - CCCC
	1	Connie McAdams - Child Care Network	1	Ann Kaiyala - Woods Charter School
	1	Dale Olbrich - Chatham Council on Aging	1	Arturo Velasquez - Spanish Interpreter
1	1	Danny Stroupe - Chatham Trades Inc.	1	Barry Gaines - Town of Goldston
	1	Faye Tillman - Chatham Council on Aging	1	Bill Lail - Family Resource Center
1	1	Genevieve Megginson - Chatham Co. Partnership for Children	1	Carl Thompson - Chatham County Commission Board
	1	Heather Altman - Carol Woods Association	1	Carol Straight - Chatham Hospital
	1	J. C. Mowandza - Chatham Kids	1	Carolyn Worley - Laurel's of Chatham
	1	Jack Meadows - Siler City Planning Department	1	Cathy Cole - Club Insight
1	1	Jeff Crouchley - NCDOT Public Transportation Division	1	Charles Fields - Town of Goldston
	1	Jennie Ellington - Chatham Council on Aging	1	Charles Turner - Town of Siler City
	1	Jody Minor - Chatham Mediation Network	1	Charlie Horne - Chatham County Manager
	1	Luzm Borryayo- FRC	1	Chris Walker - Town of Pittsboro
1	1	Manuel Colorado - Coalition for Family Peace (Hispanic)	1	Claudette Womble - Chatham-Orange Community
	1	Marcia Espinola - Hispanic Liaison Services	1	Cling Bryan - Town of Pittsboro
	1	Marcia Perritt - NCRCAP	1	Danny Scott - Town of Goldston
	1	Margaret Wirth - NCRCAP	1	Della Newkirk - CCCC
	1	Marianne Nicholson - Chatham Kids	1	Diane Campbell - Chatham County Schools
1	1	Mary Warren - Triangle J Council of Governments	1	Dina Reynolds - Chatham County United Way
1	1	Pat Strong - Triangle J Council of Governments	1	Donna Johnson - Crystal Transportation
	1	Rhonda Phillips - Chatham Social Services	1	Gary Board - Chatham Transit Net Board
	1	Ron Ilinitch - SBTDC	1	Gene Brooks - Town of Pittsboro
	1	Rosa Suha - Sister to Sister	1	George Lucier - Chatham County Commission Board
	1	Sandy Coletta - Chatham Social Services	1	Giselle Easters - Chatham County Head Start
1	1	Scott Ford - Chatham Transit Network	1	Guy D. Smith - Town of Siler City
	1	Sergio Borryayo - FRC	1	Gwen Overturf - Chatham County Together
1	1	Sterlin Holt - Chatham County Health Dept	1	Helen Buckner - Town of Siler City
1	1	Theresa Isley - Chatham Coalition for Family Peace	1	Holly Coleman - Chatham County Health Department
1	1	Tom Vanderbeck - Chatham County Commission Board	1	Hugh Harrington - Town of Pittsboro
	1	Yesenia Espiricueta - FRC	1	Janet Groce - Chatham Chapter - The ARC of NC
	33	39% participation rate	1	Janice Almond - Deep River Mediation

**Chatham County Invitees continued .....**

- 1 Jeannie Ellington - Chatham county COA
- 1 Jeannie Roscoe - Chatham Chapter - ARC of NC
- 1 John Gaines - Town of Goldston
- 1 John Grimes - Town of Siler City
- 1 Judy Baldwin - Carolina Dialysis
- 1 Julian Serano - The Chatham County Line
- 1 Karen Allen - CCCC
- 1 Kathy Altman – Community Connections For Seniors
- 1 Kim Palmer - Chatham Child Development Center
- 1 Kristy Bray - Sunbridge Care & Rehabilitation
- 1 Larry Cheek - Siler City Town Council
- 1 Leletia Causey - B&V Home Care
- 1 Lindsey Straughn - Chatham County COA
- 1 Lucy Gilley - Carolina Dialysis
- 1 Madonna Brewer - Carolina Dialysis
- 1 Marie Jordan - Chatham County Group Homes
- 1 Mike Cross- Chatham County Commission Board
- 1 Pamela Baldwin - Pittsboro Town Board
- 1 Patricia Perry - Town of Siler City
- 1 Precious Sie Duke - Vocational Rehabilitation Services
- 1 Rahkie Mateen - Chatham Trades Inc.
- 1 Randall Rigsbee - The Chatham News
- 1 Randy Voller - Town of Pittsboro
- 1 Renee Paschal - Chatham County Assistant Manager
- 1 Rosa Sutton-Lockett - Sister 2 Sister Solutions
- 1 Roy Barnes - Chatham County Together
- 1 Sally Kost - Chatham County Commission Board
- 1 Sam Adams - Town of Siler City
- 1 Sandra Cameron - Carolina Dialysis
- 1 Sandy Sanchea - JOCCA
- 1 Sharon Dowd - Chatham Trades Inc.
- 1 Shirelle Lee - Chatham County Together
- 1 Tony Siler - Town of Siler City
- 1 Vicki McConnell - Chatham Transit Network
- 1 Vivian Barera - B&V Home Care
- 1 Wayne Woody - Town of Goldston
- 84 INVITED

**Lee County January 13, 2009 LCHSTP Workshop Invitation List**

Invited	Attended	
1	1	<b>Bill Barlow - NCDOT</b>
		<b>Billy Stewart - Lee County Department of Social Services</b>
	1	<b>Billy Wolfenbarger - Roadway Industries</b>
1	1	<b>Debbie Davidson - Lee County Senior Services</b>
1	1	<b>Howard Surface - Lee County Health Department</b>
1	1	<b>Jim Cook - County of Lee Transportation Services</b>
1	1	<b>Pat Strong - TJCOG</b>
1	1	<b>Robert McCarthy - COLTS Advisory Board</b>
1	1	<b>Rocky Dillon - Center for Independent Living</b>
1	1	<b>Roger Bailey - The Stevens Center</b>
1	1	<b>Tamra Shaw - NCDOT</b>
1	1	<b>Terry Jordan - NCDOT</b>
1		Bill Larrison - Sandhills Center for Mental Health
1		Bob Heuts - Lee County Economic Development
1		Bob Joyce - Sanford Chamber of Commerce
1		Edith Edmond - Employment Security Commission
1		Gaye Freeman - Lee County Work First
1		Jan Hayes - Lee County United Way
1		John Crumpton - Lee County Manager
1		Lyn Hankins - Lee County Partnership for Children
1		Maribel Diaz - Lee County Hispanic Task Force
1		Meg Moss - Lee County Industries
1		Melanie Rodgers - Lee County Senior Services
1		Reverend Dale Miller
1		Robert Bridwell - Sanford/Lee Community Development
1		Robert Reives - Lee County Commission board
1		Sandy Cameron - Carolina Dialysis
1		Sue Tipton - Central Carolina Community College
1		Susan Conclin - NC Cooperative Extension
1		Susan Oskirko - Lee County Social Services
1		Tim Lawson - Central Carolina Advance Life Support
29	10	<b>34% participation rate</b>

## Appendix B

### Coordinated Public Transit - Human Service Transportation Planning

#### **A survey of community transportation needs**

In order to quickly prioritize the transportation issues that need to be addressed in your community – a common list of problems has been assembled from other ‘plans’ developed throughout the country. Please mark all those that apply to your experience.

Enter

<b>(I)</b>	For those that don't exist but need INITIATING
<b>(M)</b>	For those that MUST be fixed immediately
<b>(N)</b>	For those that NEED some improvement
<b>(T)</b>	For those that require TOO much effort for what you expect to get out of it
<b>(\$)</b>	For those that work but lack \$\$\$\$
<b>(OK)</b>	For any that operate efficiently
<b>(NA)</b>	For any that don't apply

Note: You can use more than one symbol for each statement if you want to.

#### **"Typical Problems"**

##### **EDUCATION & INFORMATION**

	There is a need for education on available services, various programs, and eligibility requirements (to both clients and the general public). There should be an emphasis on providing this education to the elderly.
	Travel training programs exist, but are limited and have long waiting lists in order to access them.
	Travel training is needed where there is less experience with public transportation.
	There is a need for a basic information telephone line for all public transit services.
	There needs to be a transportation information clearinghouse.
	There are issues with communication, e.g., websites are poor quality and/or difficult to find; the ‘call center’ is not as informed as it should be and does not address cross-county needs; and the transportation agencies are inconsistent in interpreting eligibility requirements.
	There is a need for more non-traditional public outreach efforts in order to achieve greater public participation during the planning process for transit services.
	There needs to be advertising of the various services to the elderly, low income, and general public
	Use of acronyms and lack of understanding of specific terms creates a language barrier between transportation agencies and the public and also with agency-to-agency coordination.
	Staff, information, and the ability to understand transit services when an individual does not speak English create a language barrier.
	Need to market/increase participation on the Transportation Advisory Board (TAB).
	The staff of assisted living facilities needs to become more knowledgeable about the actual transportation needs of the residents for whom they are caring.
	User notification of any changes in services needs to be improved.
	For the elderly population, there is fear/reluctance to learn about and actually use the fixed route public transportation system.

##### **ACCESSIBILITY & SAFETY**

	Bus stop locations are not accessible to the disabled, elderly, and general populations due to the lack of sidewalks and gaps between sidewalks and lack of proximity to services.
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	There is a concern for safety on transit service. Lighting around stops is needed to help with the passenger feeling of security.
	Traffic near bus stop locations is a problem and often makes it difficult for pedestrians to get to the vehicle.
	There is a need for shelters and benches to protect passengers from weather conditions and make utilizing transit more appealing.
	All vehicles providing service for the disabled need to be made wheelchair accessible; includes taxis, vanpool vans, and all buses in the fleet.
	Audible signs are also needed.
	There is a lack of confidence among users to utilize the services.
	Those who really need the services are disenfranchised.

### **CROSS-COUNTY TRIPS & COORDINATION**

	There is a need for inter-county travel for fixed route and paratransit trips.
	The coordination of transportation providers needs to occur.
	There are too many funding sources and too many entities with which to coordinate.
	Private paratransit trip providers need to coordinate better with the CTS.
	There is a lack of transit connectivity between North/South/East and West

### **APPLICATIONS & ELIGIBILITY**

	Users of the various services must be willing and prepared to provide detailed personal information so that eligibility determinations for services can be made.
	The disabled are being denied trips.
	A large percentage of applications for employment trips are rejected
	The applications for service are long, complicated, and difficult to fill out.
	There is a lack of knowledge of the eligibility requirements among agencies. (Agencies do not always know where to send people for service if they do not qualify for a particular program.)
	There is a challenge with fast-tracking applications.
	There are difficulties with ADA service in that the trips take too long, it is a long process to be eligible for service, and sometimes users are only offered a one-way trip.
	The eligibility applications for paratransit service need to be more readily accessible, e.g., on the web, in the case manager's office.

**SERVICE-RELATED (GENERAL)**

	In general, there is not enough public transportation service available.
	There are many areas without service – poor coverage.
	There are gaps in service.
	The system is too fragmented.
	More routes are needed and existing routes need to be extended.
	The span of bus service is too short.
	There are not enough transportation alternatives/services to permit true independence for the users.
	There needs to be more fixed stop locations along routes and at certain uses.
	There is a need for door-to-door service for the user and possibly the user's escort.
	Paratransit service needs to be more responsive and more flexible for all paratransit trip needs and for all persons with disabilities.
	There is a lack of flexibility within the system.
	Too much advanced planning is required in order to get transportation.
	There are too many transfers on public transit routes.
	There are too many "drops" from taxi service.
	Shared taxi is not appropriate.
	Connections are not designed well.
	There is no service on main roads.
	There is no paratransit service outside of the ¾ mile corridor.
	For the elderly population, door-to-door service is needed.
	Transit service is too infrequent on most routes.
	People have to wait too long for a ride.
	There is a need to improve the efficiency of scheduling to reduce the amount of vehicle idle time between trips.
	There are some overlaps in county services.
	Existing feeder transit service is not in sync with bus schedules and is inflexible.
	There is no linkage from local service to express service.

**SERVICE-RELATED (SPECIFIC)**

	Transportation services are too limited in the evening hours and on weekends.
	There needs to be service for workers working the second and third shifts.
	There is a need for shopping, recreational, and employment paratransit trips.
	There is a need for public transportation service (both fixed route and paratransit) focused specifically on getting people to jobs.
	Service needs to connect workers with employment and there needs to be "after hours" service to provide transportation for late shifts.
	The large percentage of trips used for dialysis purposes uses too much of the funding available for paratransit trips.
	For secondary school age children with disabilities, there is little availability of service in rural areas.
	There needs to be more buses to provide holiday services and to provide more service for the rural counties that receive much less service than other areas.
	There is not enough express bus service.
	The public transportation system needs to be utilized to provide emergency evacuation services.
	Limitation prevents opportunities for persons with disabilities to access employment, education, training, volunteer opportunities, recreation, and housing.

**CUSTOMER SERVICE**

	There is some dissatisfaction with the service times for door-to-door service due to the "time window" on each end of the trip and with the handling of "no shows".
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	It difficult to provide many trips due to the emphasis on "on-time" service.
	The current system is set up to accommodate those who administer the services as opposed to being geared towards those who will use the services.
	Service providers need to be more "consumer friendly."
	Transit passes wear out and/or often have difficulty being read.
	Users cannot make reservations for service after business hours.
	Agencies that do not have a paratransit driver policy regarding the assistance of passengers when boarding and exiting the vehicle (help with baggage, or walking to the door etc. especially an issue with curb to curb service).
	Some agencies do not have a paratransit policy to address fees and service for companion riders.
	There needs to be a central transit customer service hub that spans the boundaries of the planning area.
	Agency staffs are too small to handle the number and complexity of issues that arise.

### **CUSTOMER PRICE FOR SERVICE**

	The system needs to be more cost effective and provide more affordable services.
	The customer price for services is too high especially for the elderly population.
	Some pass issues are related to availability.
	Discounts should be offered for bulk purchases of passes.

### **FUNDING**

	There is a general lack of funding for public transportation.
	Transportation funding needs to be divided much more equitably between roads and public transportation with more funding for public transportation.
	No one is in charge of seeing that the cheapest trip option is utilized – no trip broker
	Limited funding causes prioritization of paratransit trips with those trips going to serving elderly and medical needs.
	ADA paratransit service is constrained by funding only the 3/4 mile service area.
	The funding for the Locally Coordinated Human Services Transportation Plan is extremely limited

### **DEVELOPMENT- RELATED**

	How do public transportation agencies provide service in lower density areas?
	Caseworkers that obtain housing for clients do not ensure that the transit dependant people are housed near existing transit routes.
	Users of the system need to make better home/transit choices.
	There needs to be affordable housing near transit stops.
	It is difficult to find property and clear the property for shelter installation.
	Affordable housing is only available in "pockets" throughout the County.
	Transportation demand has increased because of the way the study area has developed.
	Developments being built now are "high end."



Appendix C -

Moore County FY2007 OPSTATS Report Form

1	<b>CTP Grantee's Legal Name</b>		Moore County								
2	<b>Transit Contact Person</b>		Timothy W. Thompson, Director								
9	How Many Volunteer Drivers?		0	How many personal vehicles in service?		0					
<b>FY 2007 ANNUAL OPERATING STATISTICS</b>											
10	Total operational vehicles		24	Administrative Employees employed by system							
11	Total seating capacity of operational vehicles		304	How many	3	Tot hrs paid	6,420	FTE	3.09	37	
12	Total ADA accessible vehicles		17	Drivers employed by system							
13	Total vehicles in peak service		22	How many	24	Tot hrs paid	44,102	FTE	21.20	38	
				Maintenance Employees employed by system							
14	Annual # of Operating Days - Monday-Friday		250	How many	0	Tot hrs paid	0	FTE	0.00	39	
15	Annual # of Operating Days - Saturdays		0	Other Operational Employees employed by system							
16	Annual # of Operating Days - Sundays		0	How many	0	Tot hrs paid	0	FTE	0.00	40	
Total Operating Days			250	Total Employee FTE			24.29	41			
<b>Mon to Fri Annual Service</b>		<b>Transit System</b>	<b>Other Providers</b>	<b>Other CT Systems</b>	<b>Volunteers</b>	<b>Total</b>					
17	Vehicle Service Hours (M-F)		36,382	0	0	0	36,382				
18	Vehicle Service Miles (M-F)		738,012	0	0	0	738,012				
19	Vehicle Revenue Miles (M-F)		732,800	0	0	0	732,800				
20	Passenger Trips (M-F)		57,160	0	0	0	57,160				
<b>Sat and Sun Annual Service</b>		<b>Transit System</b>	<b>Other Providers</b>	<b>Other CT Systems</b>	<b>Volunteers</b>	<b>Total</b>					
21	Vehicle Service Hours (Sat-Sun)		0	0	0	0	0				
22	Vehicle Service Miles (Sat-Sun)		0	0	0	0	0				
23	Vehicle Revenue Miles (Sat-Sun)		0	0	0	0	0				
24	Passenger Trips (Sat-Sun)		0	0	0	0	0				
<b>Total Annual Operations Data</b>				<b>Total Annual Service Statistics</b>							
25	Number of denials		0	Total Vehicle Service Hours			36,382	42			
26	Number of no-shows		2,529	Total Vehicle Service Miles			738,012	43			
27	Number of in-service breakdowns of vehicles		0	Total Revenue Miles			732,800	44			
28	Number of mobility impaired passenger trips		4,076	Total Passenger Trips			57,160	45			
29	Number of out-of-county passenger trips		7,733								
<b>Service Mode</b>		<b>Service Miles</b>	<b>Service Hours</b>	<b>Non-Contract Trips</b>	<b>Medicaid Trips</b>	<b>Other Contract Human Service Agency Trips</b>					
30	Fixed Route		0	0	0	0					
31	Deviated Fixed Route		0	0	0	0					
32	Demand Response/Subscription		738,012	36,382	0	8,517	48,643				
33	<b>SUBTOTAL</b>				0	8,517	48,643				
34	Taxi Trips				0	0	0				
35	<b>TOTAL</b>				0	8,517	48,643				
		<b>Miles</b>	<b>Hours</b>	<b>TOTAL Trips</b>			<b>(should be same as Line 45)</b>				
36	Incidental Services		0	0				57,160			

# Orange County FY2007 OPSTATS Report Form

1	<b>CTP Grantee's Legal Name</b>	Orange County							
2	<b>Transit Contact Person</b>	Al Terry							
9	How Many Volunteer Drivers?	0	How many personal vehicles in service?		0				
<b>FY 2007 ANNUAL OPERATING STATISTICS</b>									
10	Total operational vehicles	20	Administrative Employees employed by system						
11	Total seating capacity of operational vehicles	304	How many	2	Tot hrs paid	3,120	FTE	1.50	37
12	Total ADA accessible vehicles	14	Drivers employed by system						
13	Total vehicles in peak service	18	How many	17	Tot hrs paid	35,904	FTE	17.26	38
			Maintenance Employees employed by system						
14	Annual # of Operating Days - Monday-Friday	250	How many	0	Tot hrs paid	0	FTE	0.00	39
15	Annual # of Operating Days - Saturdays	52	Other Operational Employees employed by system						
16	Annual # of Operating Days - Sundays	0	How many	2	Tot hrs paid	4,160	FTE	2.00	40
	Total Operating Days	302	Total Employee FTE		20.76	41			
	<b>Monday to Friday Annual Service</b>	<b>Transit System</b>	<b>Other Providers</b>	<b>Other CT Systems</b>	<b>Volunteers</b>	<b>Total</b>			
17	Vehicle Service Hours (M-F)	35,654	0	0	0	35,654			
18	Vehicle Service Miles (M-F)	466,071				466,071			
19	Vehicle Revenue Miles (M-F)	413,360				413,360			
20	Passenger Trips (M-F)	123,550				123,550			
	<b>Saturday and Sunday Annual Service</b>	<b>Transit System</b>	<b>Other Providers</b>	<b>Other CT Systems</b>	<b>Volunteers</b>	<b>Total</b>			
21	Vehicle Service Hours (Sat-Sun)	508				508			
22	Vehicle Service Miles (Sat-Sun)	6,210				6,210			
23	Vehicle Revenue Miles (Sat-Sun)	5,980				5,980			
24	Passenger Trips (Sat-Sun)	4,456				4,456			
	<b>Total Annual Operations Data</b>			<b>Total Annual Service Statistics</b>					
25	Number of denials	0	Total Vehicle Service Hours		36,162	42			
26	Number of no-shows	252	Total Vehicle Service Miles		472,281	43			
27	Number of in-service breakdowns of vehicles	6	Total Revenue Miles		419,340	44			
28	Number of mobility impaired passenger trips	11,594	Total Passenger Trips		128,006	45			
29	Number of out-of-county passenger trips	0							
	<b>Service Mode</b>	<b>Service Miles</b>	<b>Service Hours</b>	<b>Non-Contract Trips</b>	<b>Medicaid Trips</b>	<b>Other Contract Human Service Agency Trips</b>			
30	Fixed Route	125,354	7,987			24,977			
31	Deviated Fixed Route	89,510	5,720	59,107					
32	Demand Response/Subscription	257,407	22,101	10,090	29,376				
33	<b>SUBTOTAL</b>			69,197	29,376	24,977			
34	Taxi Trips								
35	<b>TOTAL</b>			69,197	29,376	24,977			
		<b>Miles</b>	<b>Hours</b>	<b>TOTAL Trips</b> (should be same as Line 45)		123,550			
36	<b>Incidental Services</b>								

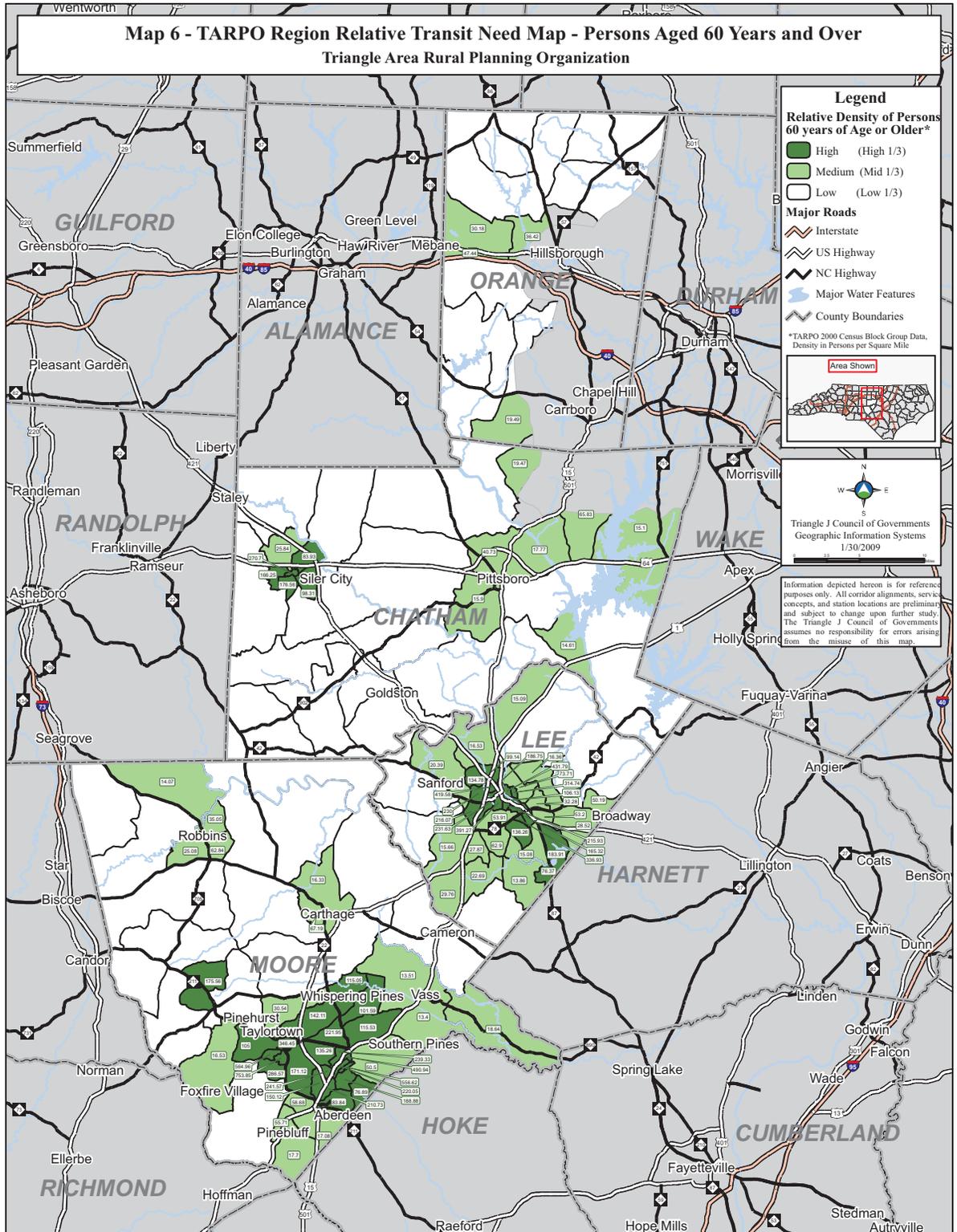
# Chatham FY2007 OPSTATS Report Form

1	<b>CTP Grantee's Legal Name</b>	Chatham Transit Network							
9	How Many Volunteer Drivers?	0	How many personal vehicles in service?			0			
<b>FY 2007 ANNUAL OPERATING STATISTICS</b>									
10	Total operational vehicles	20	Administrative Employees employed by system						
11	Total seating capacity of operational vehicles	264	How many	4	Tot hrs paid	7,540	FTE	3.63	37
12	Total ADA accessible vehicles	13	Drivers employed by system						
13	Total vehicles in peak service	18	How many	23	Tot hrs paid	30,230	FTE	14.53	38
			Maintenance Employees employed by system						
14	Annual # of Operating Days - Monday-Friday	258	How many	0	Tot hrs paid	0	FTE	0.00	39
15	Annual # of Operating Days - Saturdays	52	Other Operational Employees employed by system						
16	Annual # of Operating Days - Sundays	5	How many	1	Tot hrs paid	2,080	FTE	1.00	40
Total Operating Days		315	Total Employee FTE			19.16	41		
<b>Monday to Friday Annual Service</b>		<b>Transit System</b>	<b>Other Providers</b>	<b>Other CT Systems</b>	<b>Volunteers</b>	<b>Total</b>			
17	Vehicle Service Hours (M-F)	21,025	325			21,350			
18	Vehicle Service Miles (M-F)	384,154	12,289			396,443			
19	Vehicle Revenue Miles (M-F)	298,431	8,481			306,912			
20	Passenger Trips (M-F)	68,021	374			68,395			
<b>Saturday and Sunday Annual Service</b>		<b>Transit System</b>	<b>Other Providers</b>	<b>Other CT Systems</b>	<b>Volunteers</b>	<b>Total</b>			
21	Vehicle Service Hours (Sat-Sun)	932	0			932			
22	Vehicle Service Miles (Sat-Sun)	6,202	0			6,202			
23	Vehicle Revenue Miles (Sat-Sun)	4,838	0			4,838			
24	Passenger Trips (Sat-Sun)	1,326	0			1,326			
<b>Total Annual Operations Data</b>			<b>Total Annual Service Statistics</b>						
25	Number of denials	3	Total Vehicle Service Hours		22,282	42			
26	Number of no-shows	85	Total Vehicle Service Miles		402,645	43			
27	Number of in-service breakdowns of vehicles	1	Total Revenue Miles		311,750	44			
28	Number of mobility impaired passenger trips	5,762	Total Passenger Trips		69,721	45			
29	Number of out-of-county passenger trips	4,128							
<b>Service Mode</b>		<b>Service Miles</b>	<b>Service Hours</b>	<b>Non-Contract Trips</b>	<b>Medicaid Trips</b>	<b>Other Contract Human Service Agency Trips</b>			
30	Fixed Route	0	0	0	0	0			
31	Deviated Fixed Route	0	0	0	0	0			
32	Demand Response/Subscription	402,645	22,282	13,473	4,987	51,261			
33	<b>SUBTOTAL</b>			13,473	4,987	51,261			
34	Taxi Trips			0	0	0			
35	<b>TOTAL</b>			13,473	4,987	51,261			
		<b>Miles</b>	<b>Hours</b>	<b>TOTAL Trips</b>		<b>69,721</b>			
36	<b>Incidental Services</b>	0	0						

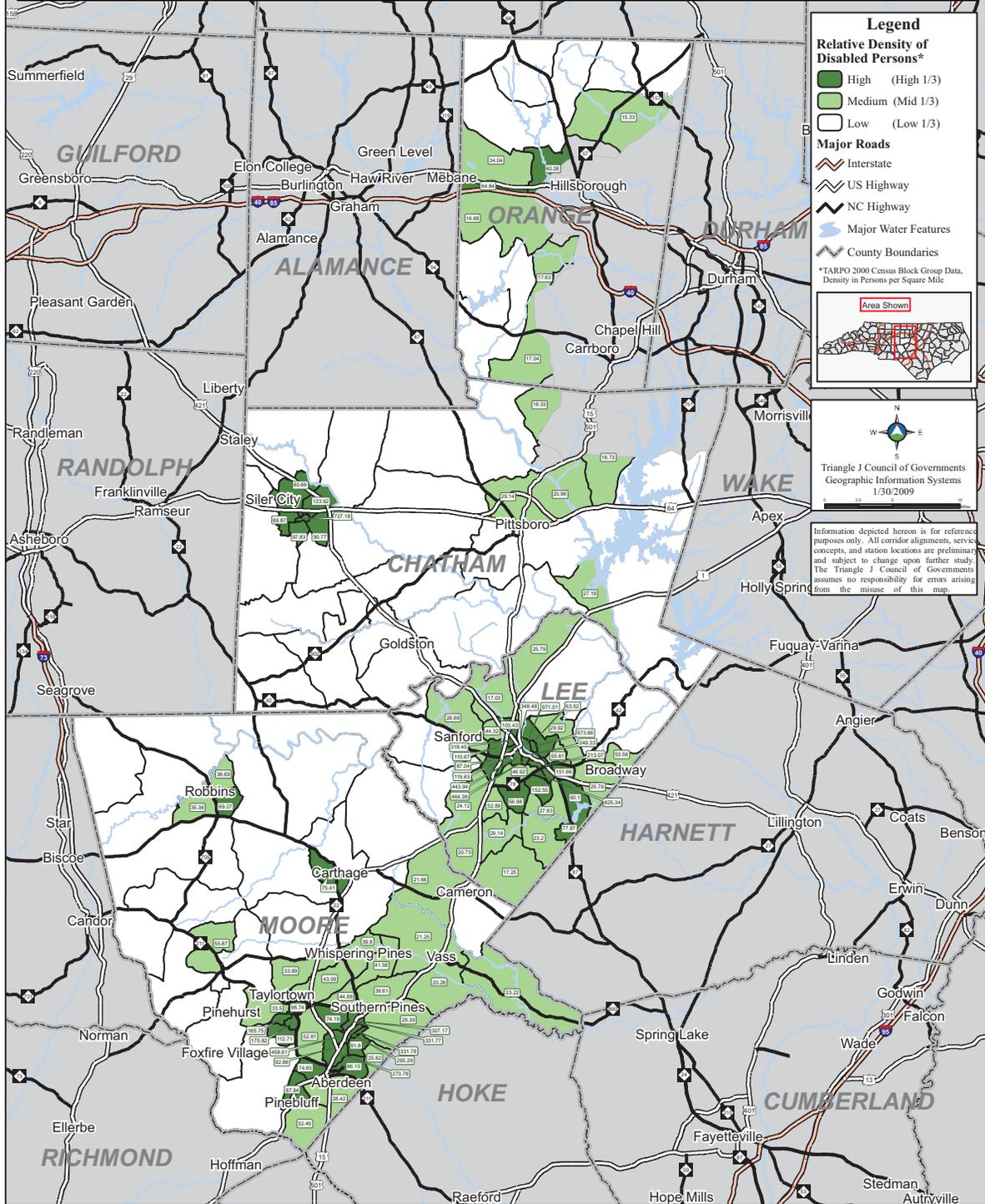
# Lee County FY2007 OPSTATS Report Form

1	<b>CTP Grantee's Legal Name</b>	County of Lee							
2	<b>Transit Contact Person</b>	Jim Cook							
9	How Many Volunteer Drivers?	0	How many personal vehicles in service?				0		
<b>FY 2007 ANNUAL OPERATING STATISTICS</b>									
10	Total operational vehicles	17	<b>Administrative Employees employed by system</b>						
11	Total seating capacity of operational vehicles	149	How many	4	Tot hrs paid	6,885	FTE	3.31	37
12	Total ADA accessible vehicles	8	<b>Drivers employed by system</b>						
13	Total vehicles in peak service	14	How many	19	Tot hrs paid	29,243	FTE	14.06	38
			<b>Maintenance Employees employed by system</b>						
14	Annual # of Operating Days - Monday-Friday	251	How many	0	Tot hrs paid	0	FTE	0.00	39
15	Annual # of Operating Days - Saturdays	0	<b>Other Operational Employees employed by system</b>						
16	Annual # of Operating Days - Sundays	0	How many	0	Tot hrs paid	0	FTE	0.00	40
	Total Operating Days	251	Total Employee FTE				17.37	41	
	<b>Monday to Friday Annual Service</b>	<b>Transit System</b>	<b>Other Providers</b>	<b>Other CT Systems</b>	<b>Volunteers</b>	<b>Total</b>			
17	Vehicle Service Hours (M-F)	27,816	0	0	0	27,816			
18	Vehicle Service Miles (M-F)	467,081	0	0	0	467,081			
19	Vehicle Revenue Miles (M-F)	422,508	0	0	0	422,508			
20	Passenger Trips (M-F)	57,950	0	0	0	57,950			
	<b>Saturday and Sunday Annual Service</b>	<b>Transit System</b>	<b>Other Providers</b>	<b>Other CT Systems</b>	<b>Volunteers</b>	<b>Total</b>			
21	Vehicle Service Hours (Sat-Sun)	0	0	0	0	0			
22	Vehicle Service Miles (Sat-Sun)	0	0	0	0	0			
23	Vehicle Revenue Miles (Sat-Sun)	0	0	0	0	0			
24	Passenger Trips (Sat-Sun)	0	0	0	0	0			
	<b>Total Annual Operations Data</b>			<b>Total Annual Service Statistics</b>					
25	Number of denials	0	Total Vehicle Service Hours		27,816			42	
26	Number of no-shows	4,150	Total Vehicle Service Miles		467,081			43	
27	Number of in-service breakdowns of vehicles	6	Total Revenue Miles		422,508			44	
28	Number of mobility impaired passenger trips	4,674	Total Passenger Trips		57,950			45	
29	Number of out-of-county passenger trips	980							
	<b>Service Mode</b>	<b>Service Miles</b>	<b>Service Hours</b>	<b>Non-Contract Trips</b>	<b>Medicaid Trips</b>	<b>Other Contract Human Service Agency Trips</b>			
30	Fixed Route	0	0	0	0	0			
31	Deviated Fixed Route	0	0	0	0	0			
32	Demand Response/Subscription	467,081	27,816	10,598	7,494	39,858			
33	<b>SUBTOTAL</b>			10,598	7,494	39,858			
34	Taxi Trips								
35	<b>TOTAL</b>			10,598	7,494	39,858			
		<b>Miles</b>	<b>Hours</b>	<b>TOTAL Trips</b>		<b>(should be same as Line 45)</b>			
36	<b>Incidental Services</b>	0	0			57,950			

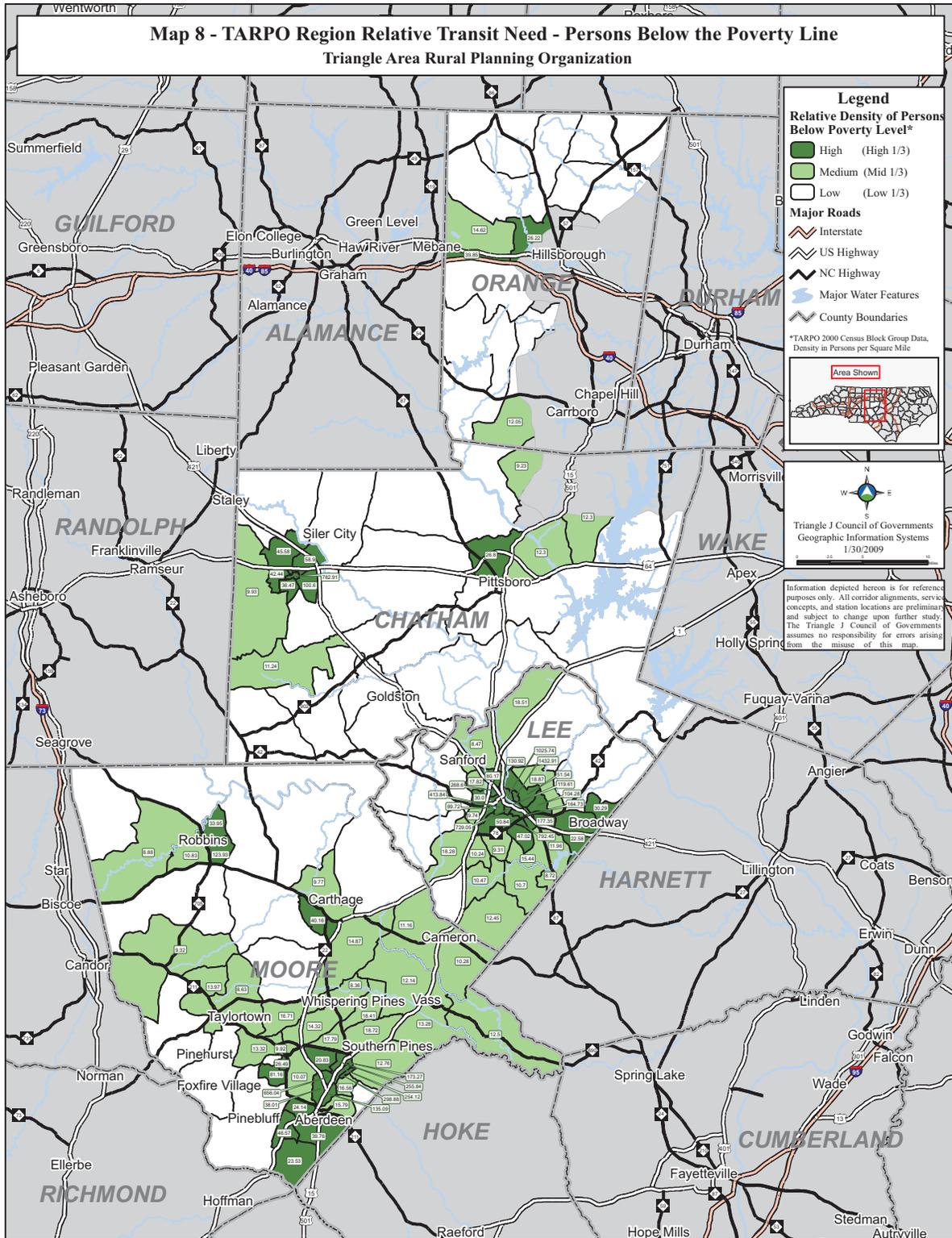
# Appendix D



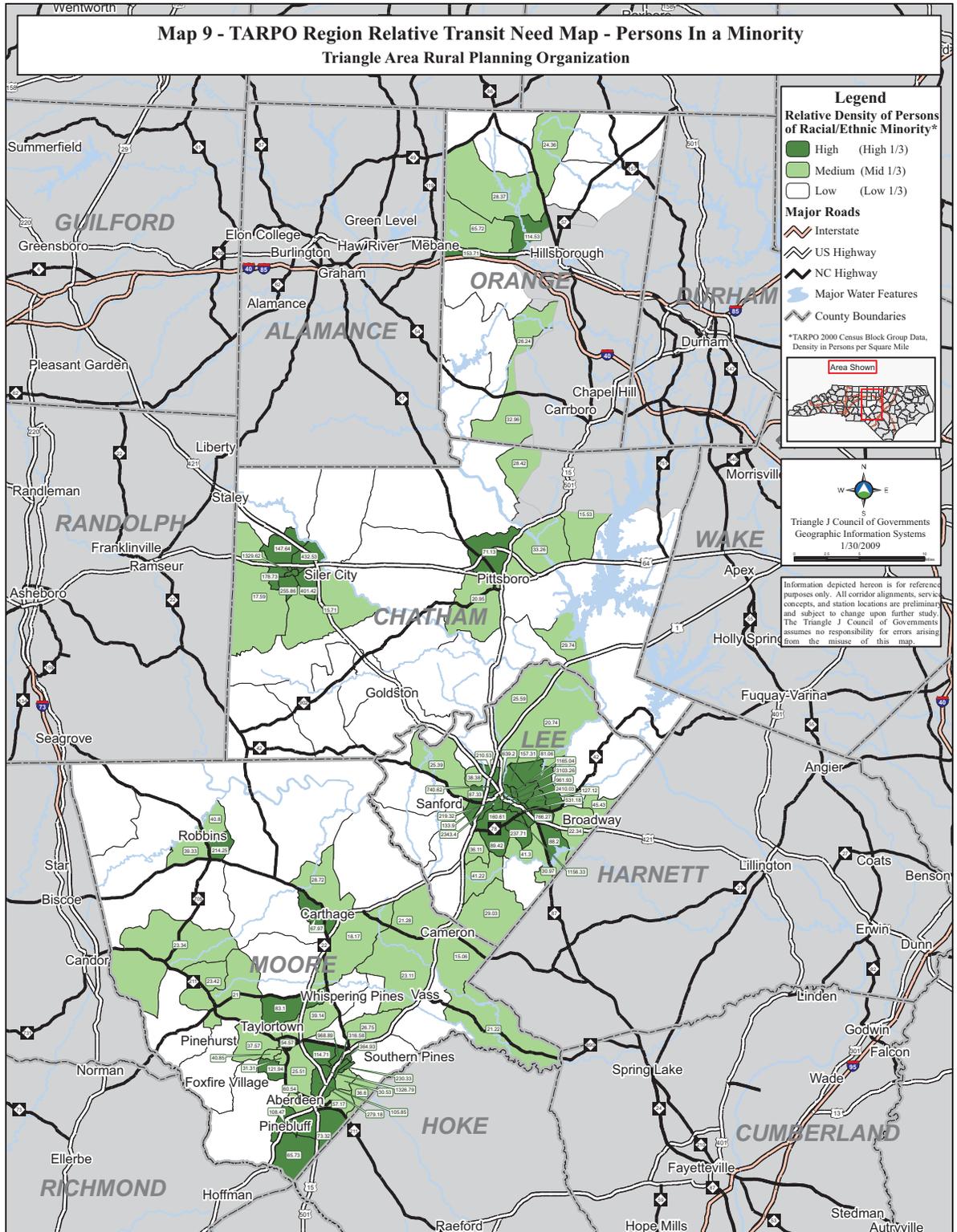
**Map 7 - TARPO Region Relative Transit Need Map - Disabled Persons**  
 Triangle Area Rural Planning Organization

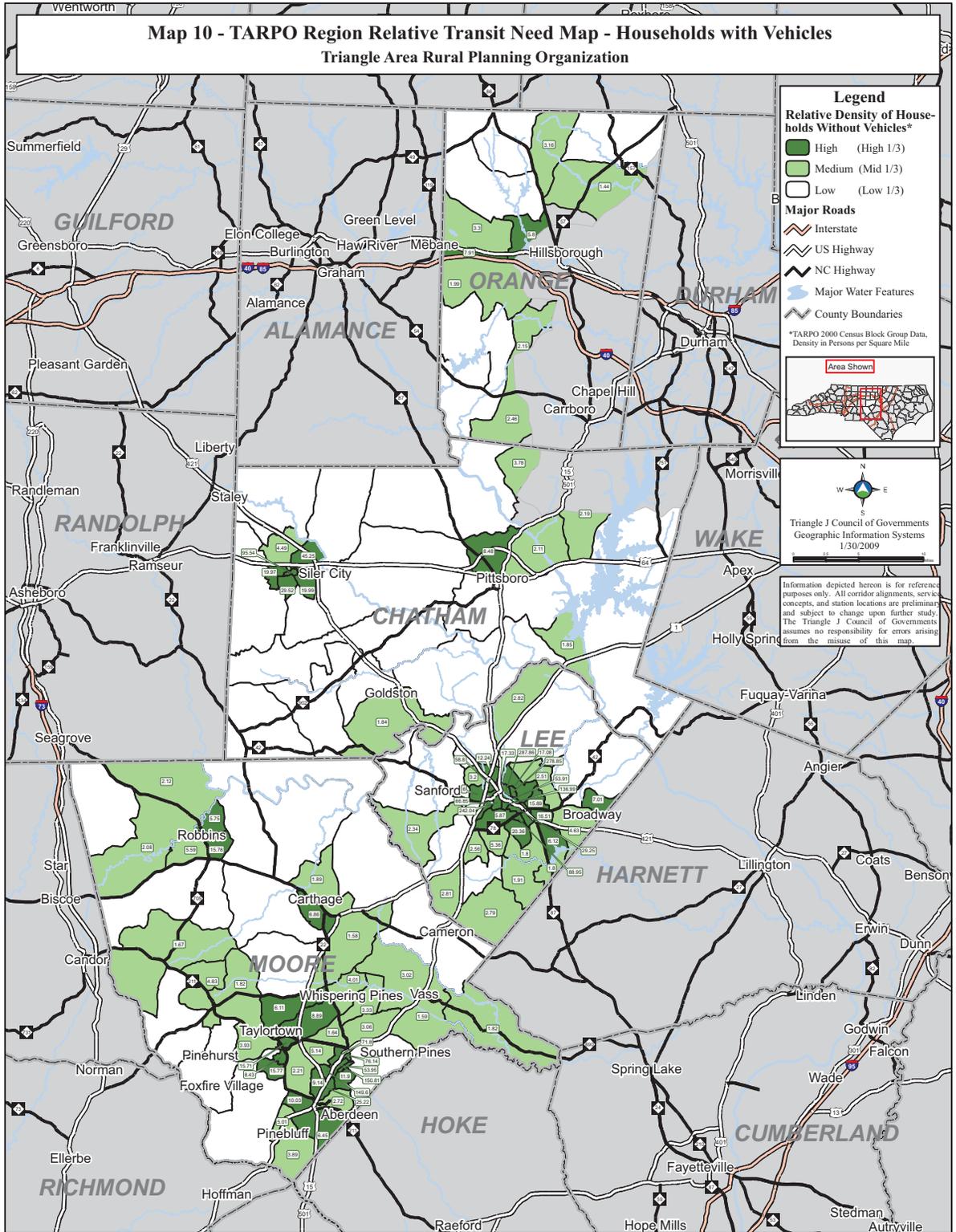


**Map 8 - TARPO Region Relative Transit Need - Persons Below the Poverty Line**  
 Triangle Area Rural Planning Organization



**Map 9 - TARPO Region Relative Transit Need Map - Persons In a Minority**  
 Triangle Area Rural Planning Organization

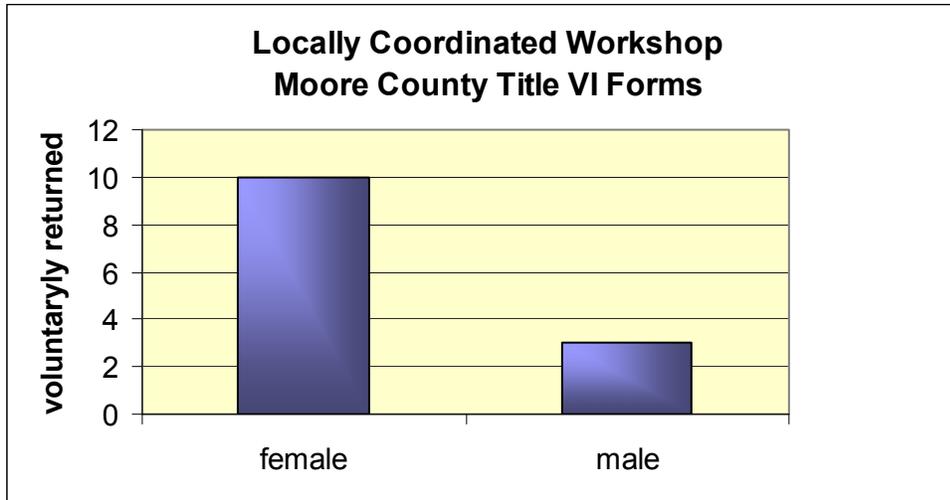




## Appendix E

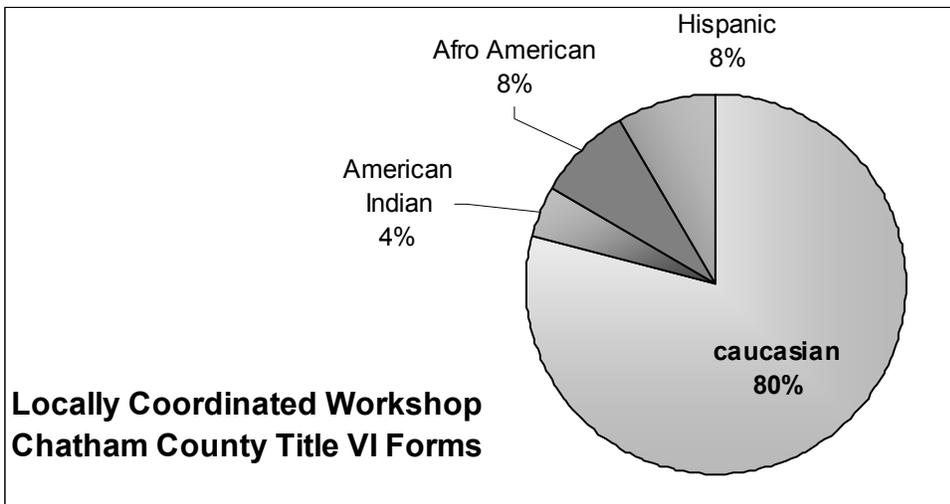
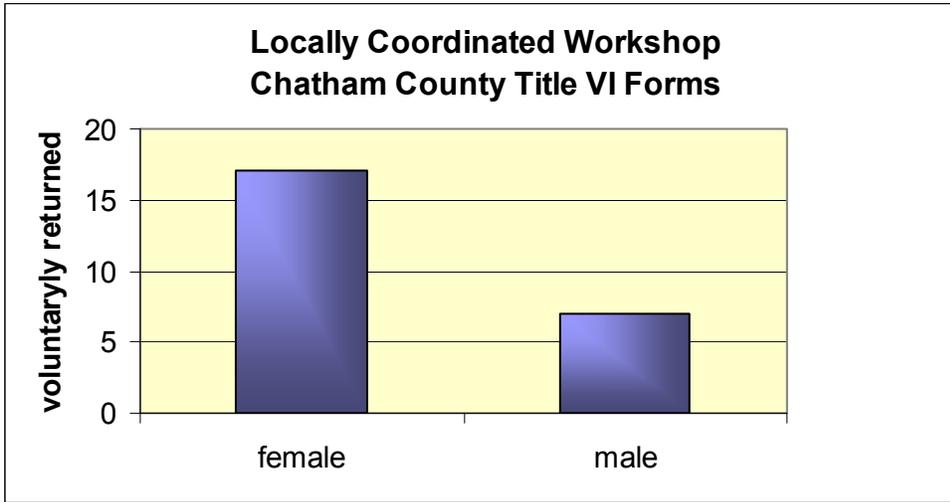
### Voluntary Title VI Public Involvement

Moore County Title VI – chart below (forms on file)



Orange County Title VI – none available

Chatham County Title VI – charts below (forms on file)



**Appendix E  
Voluntary Title VI Public Involvement**

Title VI of the Civil Right’s Act of 1964 requires North Carolina Department of Transportation to gather statistical data on participants and beneficiaries of the agency’s federal-aid highway programs and activities. The North Carolina Department of Transportation collects information on race, color, national origin and gender of the attendees to this public meeting to ensure the inclusion of all segments of the population affected by a proposed project.

The North Carolina Department of Transportation wishes to clarify that this information gathering process **is completely voluntary** and that you are not required to disclose the statistical data requested in order to participate in this meeting. This form is a public document.

The completed forms will be held on file at the North Carolina Department of Transportation. For Further information regarding this process please contact Sharon Lipscomb, the Title VI Manager, by phone at (919) 508-1830 or email at [slipscomb@dot.state.nc.us](mailto:slipscomb@dot.state.nc.us).

Project Name: <i>Hwy 28/29 Interchange</i>	Date: <i>1-13-09</i>
Meeting Location: <i>Crane Creek, Johnston Road</i>	

Name (please print) <i>James E. Cook</i>		Gender: <input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
General ethnic identification categories (check one):		
<input checked="" type="checkbox"/> Caucasian	<input type="checkbox"/> Hispanic American	<input type="checkbox"/> American Indian/Alaskan Native
<input type="checkbox"/> African American	<input type="checkbox"/> Asian/Pacific Islander	Other: _____
Color: _____	National Origin: _____	

After you complete this form, please fold it and place it inside the designated box on the registration table.

Thanks you for your cooperation!

**Appendix E  
Voluntary Title VI Public Involvement**

Title VI of the Civil Right’s Act of 1964 requires North Carolina Department of Transportation to gather statistical data on participants and beneficiaries of the agency’s federal-aid highway programs and activities. The North Carolina Department of Transportation collects information on race, color, national origin and gender of the attendees to this public meeting to ensure the inclusion of all segments of the population affected by a proposed project.

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Project Name:		Date: 1/31/2009
Meeting Location: Wicker Ctr, Sanford NC		
Name (please print) Roger Bailey		Gender: <input checked="" type="checkbox"/> Male <input type="checkbox"/> Female
General ethnic identification categories (check one):		
<input checked="" type="checkbox"/> Caucasian	<input type="checkbox"/> Hispanic American	<input type="checkbox"/> American Indian/Alaskan Native
<input type="checkbox"/> African American	<input type="checkbox"/> Asian/Pacific Islander	Other: _____
Color:	National Origin:	

After you complete this form, please fold it and place it inside the designated box on the registration table.

Thanks you for your cooperation!

**Appendix E  
Voluntary Title VI Public Involvement**

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Project Name: <u>Human Services</u>	Date: <u>1/13/09</u>
Meeting Location: <u>Civic Center</u>	

Name (please print) <u>Billy Stewart</u>	Gender: <input type="checkbox"/> Male <input checked="" type="checkbox"/> Female	
General ethnic identification categories (check one):		
<input checked="" type="checkbox"/> Caucasian	<input type="checkbox"/> Hispanic American	<input type="checkbox"/> American Indian/Alaskan Native
<input type="checkbox"/> African American	<input type="checkbox"/> Asian/Pacific Islander	Other: _____
Color: _____	National Origin: _____	

After you complete this form, please fold it and place it inside the designated box on the registration table.

Thanks you for your cooperation!

### Appendix E Voluntary Title VI Public Involvement

Title VI of the Civil Right's Act of 1964 requires North Carolina Department of Transportation to gather statistical data on participants and beneficiaries of the agency's federal-aid highway programs and activities. The North Carolina Department of Transportation collects information on race, color, national origin and gender of the attendees to this public meeting to ensure the inclusion of all segments of the population affected by a proposed project.

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Project Name: <i>Luman Service Truck Exam</i>	Date: <i>1-13-09</i>
Meeting Location: <i>Lee Co. Courthouse</i>	

Name (please print) <i>Debbie Davidson</i>	Gender: <input type="checkbox"/> Male <input checked="" type="checkbox"/> Female
General ethnic identification categories (check one):	
<input checked="" type="checkbox"/> Caucasian	<input type="checkbox"/> Hispanic American
<input type="checkbox"/> African American	<input type="checkbox"/> Asian/Pacific Islander
Other: _____	
Color: _____	National Origin: _____

After you complete this form, please fold it and place it inside the designated box on the registration table.

Thanks you for your cooperation!