



Dare County *Community Transportation Service Plan*

FINAL REPORT



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Acknowledgements

The *Dare County Community Transportation Service Plan* has resulted from a collaborative process involving local staff, the North Carolina Department of Transportation, the Steering Committee, and numerous stakeholders. In addition, the contributions from concerned citizens of Dare County provided valuable feedback during the planning process. The efforts of everyone are greatly appreciated.

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Chapter 1 – Introduction & Planning Process

Introduction

To ensure community transportation systems in North Carolina make strategic responses to the future mobility needs of the general public and targeted populations in their service areas, the North Carolina Department of Transportation (NCDOT) is partnering with communities in the development of Community Transportation Service Plans (CTSPs). These plans review the current performance and organizational direction of the public transportation system and recommend alternative operational or managerial strategies that increase mobility options for passengers and improve the efficiency and effectiveness of the organization and transportation services. NCDOT has designed a planning process for CTSPs that provides consistency yet allows flexibility to assess unique systems across the state.

Purpose of the Plan

The geography, economy, and demographics of Dare County present a set of challenges unique to the coastal community. The *Dare County CTSP* documents these challenges as well as identifies, evaluates, develops, and recommends strategies that enhance the mobility options for targeted populations and the general public. The long-term outcome should allow passengers to travel where and when they want and need to go.

Today, the community transportation needs in the county are provided by the Dare County Transportation System, a division of Dare County's Department of Older Adult Services. The system mainly serves the elderly, persons with disabilities, and clients of Dare County Department of Social Services. The purpose of the CTSP is to evaluate the system's current management and operations methodology, assess the system's current direction, identify strengths, and forward realistic and implementable recommendations. The resulting plan will assist NCDOT's Public Transportation Division in allocating resources to facilitate continuous improvement of the system over a 5-year planning horizon.

Community Transportation Program Overview

The purpose of NCDOT's Community Transportation Program (CTP) is "to enhance the provision of the rural human service and general public transportation in North Carolina." The CTP provides capital and administrative funds to eligible counties. Eligible counties must meet criteria in the following areas:

- Planning
- Involvement of specified community and agency stakeholders
- Appropriate service design
- Service alternatives for human service, employment, and general public transportation
- Training and conference participation for transportation coordinators
- Reporting of information and data
- Other requirements, including an approved and implemented drug and alcohol testing program, assurance of compliance with federal regulations, etc.

More details regarding these requirements can be found in the annual CTP application for funding.





Public Involvement

The *Dare County CTSP* is rooted in a public education and involvement process that includes private and non-profit transportation providers, human service providers, local staff and officials, and the general public. The result of this planning effort should produce an overall plan that the community can support. The public involvement campaign for the *CTSP* is detailed below.

Steering Committee

A steering committee participated throughout the planning process. From the start, it was acknowledged that the steering committee should represent the broad base of local interest, viewpoints, and concerns to develop the foundation for building consensus within the community. For the *Dare County CTSP*, it was critical that the steering committee be able to recognize the unique characteristics of the coastal community's demographics and economy, communicate previous transportation planning efforts, and express the existing level of service and potential expansion of service. Representation by NCDOT on the steering committee provided a direct line of communication with the state. Members of the steering committee helped collect background information, identify key issues, and develop goals and objectives. The steering committee also provided guidance during development of draft and final documents.

Meeting #1 — Project Kick-Off Meeting

The first scheduled meeting with the Steering Committee (SC) occurred July 30, 2009 at the Dare County Administrative Building. The SC gathered for a project kick-off meeting. The objective of this meeting was to introduce the project team and committee members, provide an overview of the planning process, roles, and responsibilities, and conduct a needs assessment. Prior to adjourning, the SC helped formulate a list of potential stakeholders and discussed details for the first round of public workshops.

During the needs assessment exercise, members of the steering committee expressed their interests and reasons for participating in the *CTSP* process and outlined their expectations of the plan. The group discussed general trends and specific concerns in a large group question-and-answer format. The discussion was recorded on easel pads. In addition, study area maps were used to note the geographic location of ideas and concerns. Identified issues and action items from this exercise included:

- Review and understand the public transportation plan produced by the Outer Banks Transportation Task Force.
- Consider how the downturn in the economy may have affected demand or created shifts in origins/destinations.
- Recognize the Hispanic population may have shifted.
- Explore ways to provide more service to the general public.
- Help get people to work during the summer.
- Do not limit our focus to the workers in the Pathways program. Reach out to those without driver's licenses, the Hispanic community, and local residents.
- Expand people's ability to work beyond a few blocks from where they live.
- Understand what resources are available.
- Explore the opportunity to establish a rideshare program.





- Learn how employees currently get to work and what actions can make employment more accessible.
- Determine if the need exists to provide or supplement rides home for late night patrons at restaurants and bars.
- Investigate how property management companies organize transportation for service workers.
- Realize the current system perception is that it serves the elderly only and 90% of public need to be educated (flyers, advertise, campaign, public awareness, marketing).
- Investigate the potential for fixed route service, including a tourist-focused bus that visits attractions.
- Inquire about grants through the visitor/tourist bureau.
- Find out availability of grant funding programs and see if a grant can fund a successful pilot project.

Meeting #2 — Inventory

The second scheduled meeting with the SC occurred October 21, 2009 at the Dare County Administrative Building. At this meeting, the SC reviewed *Technical Memorandum 1* (which constitutes **Chapters 1** and **2** of this report). The committee discussed the results of the public outreach efforts and inventory of existing services before developing a preliminary list of administrative/management recommendations and strategies to overcome gaps in service. The outcome of the meeting a list of recommendations and strategies in which the project team vetted through additional analysis and discussions with DCTS and other stakeholders.

Meeting #3 — Inventory

The third scheduled meeting with the SC occurred January 27, 2010 at the Dare County Center. At this meeting, the SC reviewed *Technical Memorandum 2* (which comprises **Chapters 3** and **4** of this report), which documents the results of analysis, needs assessment, and preliminary recommendations. The committee refined several recommendations and discussed potential funding sources and general implementation phasing. The meeting helped the project team determine the structure of the implementation plan, including prioritizing recommendations.

Meeting #4 — Final Review

The fourth and final Steering Committee meeting occurred March 25, 2010 at the Dare County Center. At the meeting, the project team presented the Draft Plan with an emphasis on the phasing and financial elements. The Steering Committee provided final comments on the plan and reviewed the Financial Scenario Toolkit. Based on comments received at this meeting, the report was finalized.





Public Workshops

Residents interact with the community transportation system in a variety of ways. Some ride vans regularly for medical trips, while others have friends or relatives that ride often. Some residents do not currently use the system or even know someone who does, but they recognize the benefit of providing such service. Given these unique experiences and the public’s understanding of the strengths and weaknesses of the system a series of two public workshops were scheduled to gather feedback during the inventory phase and examine recommendations during the feedback phase.



Public Workshop Series One — Visioning

A series of three workshops (three meetings on three consecutive days) was conducted Tuesday September 15 through Thursday September 17, 2009. The three workshops were scheduled in the evening at three locations throughout the County (Buxton, Manteo, and Kill Devil Hills) to maximize public involvement and encourage a diversity of viewpoints. To advertise, a meeting flyer was distributed to members of the Steering Committee and sent via email to a distribution list maintained by the Outer Banks Chamber of Commerce. The three workshops were designed with identical formats to convey information and offer opportunities to receive feedback from participants. The level of attendance at the workshop, however dictated how the meeting proceeded. Collectively, the interactive workshops helped develop project goals, identify issues and concerns within the service area, and generate ideas for potential solutions.

The purpose of Public Workshop Series One was to develop a citizen-based needs assessment for community transportation services in Dare County. No members of the public attended the first meeting in Buxton, however the time proved helpful as the project team spoke at length with the Public Services Director and the coordinator of Dare County Transportation System. The second meeting in Manteo followed a session with the Transportation Advisory Board (TAB) and a series of stakeholder interviews.

The workshop in Kill Devil Hills provided the highest attendance and most participation from the public. At this workshop, more than 10 residents joined members of the project team and Steering Committee to discuss community transportation in the county. The level of attendance at this workshop allowed the project team to meet with attendees in small group settings. In these small groups, the team explained the purpose of the CTSP, described the planning process, and expressed how participants could actively participate throughout the process. The conversation then turned to the specific needs, service gaps, and performance issues of the current system. The small groups also discussed opportunities for service expansion. The purpose of the workshop series was to openly discuss strengths and opportunities for existing service and gather a broad list of potential recommendations. The subsequent analysis and recommendations phase will be designed to compare and contrast these recommendations to develop a feasible list of proposed improvements. The outcome of Public Workshop Series One is reflected in the Guiding Principles presented later in **Chapter 1**.



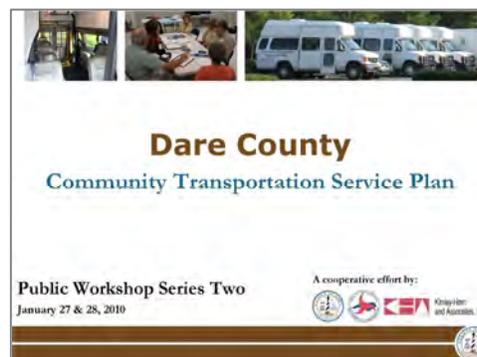


Public Workshop Series Two — Feedback

Two workshops on consecutive days were conducted Wednesday January 27, 2010 and Thursday January 28, 2010. Like Public Workshop Series One, the meetings were scheduled in the evening at different locations (Manteo and Kill Devil Hills) to maximize public involvement and encourage a diversity of viewpoints. A meeting flyer was distributed to members of the Steering Committee as well as attendees at the first round of workshops. The flyer also was posted in DCTS vehicles and at locations throughout the county including libraries, community centers, grocery stores, and other high volume locations. While the purpose of both meetings was similar, the differing number of attendees and their interests allowed the project team to utilize two formats to achieve the same result. In Manteo, a smaller crowd provided opportunity for one-on-one discussions, while the higher attendance in Kill Devil Hills called for a more formal presentation and large-group question and answer session.

Public Workshop Series Two was conducted following the development of *Technical Memorandum 2 (Chapters 3 and 4 of this report)*. These workshops were designed to inform the public about the plan and its recommendations and afforded the public an opportunity to comment on the plan. The agenda for the second series of public workshops included an overview of the CTSP process and project timeline, a description of what we heard at the first series of workshops and what we learned through analysis, a discussion of the findings and recommendations, and a question and answer session. An added benefit was the ability to introduce the new DCTS Transportation Coordinator to groups of engaged citizens concerned about the future of the county's community transportation system.

At both workshops, the evening concluded with a voting exercise designed to gauge public support for recommendations most likely to impact riders and the general public on a day-to-day basis. After describing the benefits, costs, and time associated with each recommendation, attendees were given dots to place on a poster that listed the recommendations. The results of this exercise were considered during the development of the action plan presented in **Chapter 5**. In general, those in attendance favored recommendations that provided more visibility to DCTS and expanded the services offered by the county.





Stakeholder and Focus Group I Interviews

The project team, in consultation with the Steering Committee, identified individuals and small groups for stakeholder interviews and focus group discussions. These gatherings included discussions with:

- DCTS staff
- Members of Dare County departments (Department of Social Services, Department of Older Adult Services, and Department of Parks and Recreation)
- Elected or appointed officials at the county and municipal level
- Transportation Advisory Board members
- Planners for incorporated towns in the county
- Major employers
- Health care providers
- Interest group members such as retirement communities
- Private taxicab operators



The content of the discussions varied by stakeholder but a core objective for each interview was to determine the needs the stakeholder or focus group in respect to community transportation services. In total, 26 people were interviewed in either one-on-one sessions or as part of a larger group. The majority of interviews occurred during the day of public workshop series one, though some interviews occurred via telephone. The results of the interviews are reflected in the Guiding Principles presented later in **Chapter 1**.

Transportation Advisory Board Session

DCTS has an active Transportation Advisory Board (TAB) that meets quarterly. As part of the stakeholder and focus group interviews, the project team met with the TAB. The meeting included a question and answer session to provide insight into the board's composition and diversity, direction, guidance, and organization structure. The meeting also included a discussion of the vision and goals for the *Dare County CTSP*. The results of this session are reflected in the Guiding Principles presented later in **Chapter 1**. A more detailed description of the TAB, including its purpose, composition, and procedures can be found in **Chapter 2**.





Public Questionnaire

A brief public questionnaire distributed to participants at the public workshops and given to riders on DCTS vehicles provided valuable information. The questionnaire included a variety of questions designed to assess the needs of existing riders and explore potential enhancements to service throughout the county. The questionnaire also assessed the quality of service and reasons potential riders are not currently using the service.

Demographic Trends

Demographic questions are helpful not only to gain insight into who is completing the questionnaires but also to understand who is participating in the overall planning process. These questions revealed the following:

- 51% have lived in Dare County for more than 10 years
- 46% live in Manteo; 25% live in Kill Devil Hills
- 33% are 64 to 84 years old; 25% are 40 to 59 years old
- 78% of riders completing the questionnaire do not have access to a reliable car
- 59% of riders completing the questionnaire cannot drive a car due to their age or disability

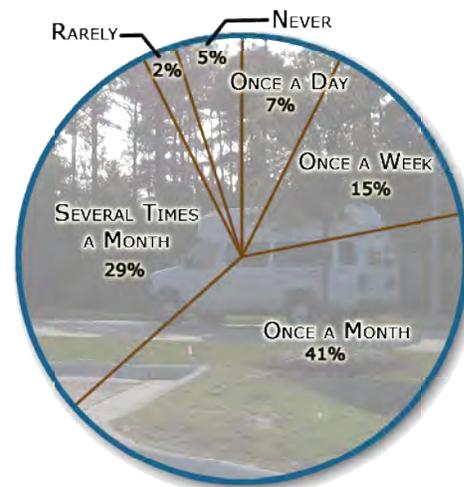
General Trends

One question asked participants what places they regularly need to visit. The questionnaires listed the doctor’s office as a place they regularly need to visit (67% of respondents). Other popular destinations include the grocery store (38%), hospital (31%), and work (27%). When asked what type of transportation they use for different trip types (i.e. to work, shop, medical, or personal), medical trips were listed most often for public transportation.

In general, the perception of service is excellent as expressed when participants were asked to rate the overall service provided by DCTS. More than 76% rated the service as excellent and only 10% rated service as fair or poor. When asked if the scheduling cutoff time should be reduced from 48 hours to 24 hours, 65% said yes.

While the questionnaire was not intended to be a scientifically valid survey, the responses proved helpful in assessing the perception of community transportation in Dare County and determining some of the needs of current and potential riders. Nearly 50 questionnaires were completed. In addition to the outcomes presented on this page, the overall trends expressed in the questionnaire results are reflected in the Guiding Principles presented later in **Chapter 1**.

How often do you ride with DCTS?



The percentage of responses indicating the frequency of the following:

	Always	Mostly	Sometimes	Seldom	Never
The driver is courteous.	100.0%	—	—	—	—
The vehicle is clean.	100.0%	—	—	—	—
I get to my destination on time.	97.2%	—	2.8%	—	—
I have to travel a long time.	10.0%	—	10.0%	43.3%	36.7%





Previous Planning Efforts

The *Dare County CTSP* should be coordinated closely with other state, regional, county, and local plans and/or policies that impact community transportation in the county. This section summarizes a general review of previous plans and highlights issues, policies, and directives that may influence the recommendations and implementation of the *Dare County CTSP*.

Local Coordinated Plan (LCP)

A Local Coordinated Plan was developed by the Albemarle Rural Planning Organization in partnership with the NCDOT Public Transportation Division in May 2009. The planning team for the study included staff from the Albemarle RPO, planning mobility development staff from the NCDOT, and six area public transit systems. This planning team came together to lead the coordinated planning effort for the ten-county region. In coordination with federal transit laws and SAFETEA-LU's requirements, the LCP set forth the primary objectives to afford elderly citizens, persons with disabilities, and low income populations greater access to transportation services, to reduce duplication of services and to gain greater efficiencies in the distribution of human transportation services.

With this in mind, the LCP planning process conducted an inventory assessment, needs assessment survey, and a public workshop series to review available services, define needs and develop strategies to address deficiencies for target populations. Stakeholders from the ten-county Albemarle RPO area were invited to participate in the workshops to identify needs and gaps in the current transportation service. Unmet needs were identified and strategies to meet those needs prioritized during each workshop. The results of this effort were the foundation for the LCP planning report and guided the application process and project selection for the three grants (5310, 5316, and 5317) over the next two to three years. The LCP planning process included the following key elements of a coordinated plan:

- Assess available services (public, private and nonprofit).
- Identify transportation needs for individuals with disabilities, older adults, and people with low incomes.
- Develop strategies and/or activities to address the identified gaps and achieve efficiencies, where possible, in service delivery.
- Identify priorities for implementing the strategy/activities based on resources, time, and feasibility for implementation.

The results from the workshop series indicate that the door-to-door paratransit service and express employment transportation service rank as the top strategies to help meet the needs of the Albemarle RPO area. These services and others listed in the document are among those eligible for funding by one of the three aforementioned grants from Federal Transit Administration (FTA).





Performance Plan and Analysis

The Performance Plan and Analysis was conducted by the NC State Institute for Transportation Research and Education (ITRE) at the request of DCTS and NCDOT. The purpose of the Performance Plan is to provide the transit system with a guide to achieve higher performance measures and improve business practices. The system also has the opportunity to independently update the plan to track performance and create a solid foundation for future improvements.

The study used select analytical filters to assess the current DCTS performance. Independent tools such as the Business Practices Questionnaire and Employee Information Worksheet as well as a site visit and meeting with the DCTS administrators provided the necessary base information for the results and findings. Several observations relative to the current administrative, managerial, and structure were identified as well as recommended improvements. These observations included the following:

- Areas of Strength: staff coordination, customer service
- Public has a false impression that the system operates only for elderly and disabled
- Attract new riders and improve performance
- Revisit having a full-time driver outstationed in Buxton
- Reduce scheduling cut off time from 48 hours to 24 hours and revise the no-show policy
- Prepare for growth by implementing TrIP_Maker or other scheduling software that allows for billing and tracking
- Accurately record service times
- Expand service by working with public and private potential funding sources; Seek grants
- Coordinate with neighboring transportation systems (ICPTA)
- Expand service hours to become viable option for employment transportation
- Determine the true cost of service and a billing rate based on this true cost; Use this billing rate to draw down funds

The Performance Plan was agreed upon on July 24, 2009 by DCTS and ITRE. This mutual agreement stipulates their commitment to advancing the performance, service, and operation of the transit system.

OPSTATS

The latest OPSTATS report (FY2008) is updated on a yearly basis and provides a wealth of information related to DCTS operations and program funding. This information is required by NCDOT program administrators in an effort to quantify performance measures and program expenditures. Ultimately, the OPSTATS report helps justify federal and state grant applications. Several operational and funding statistics are included in the most current OPSTATS report.

System & Operational Statistics:

- 7 operating vehicles; 15 operational employees or drivers; 2 administrators
- Vehicle service hours: 11,300 (Monday through Friday); Vehicle service miles: 234,300





- 1,350 mobility impaired passenger trips; 1,240 out-of-town passenger trips; 13,050 total passenger trips
- Cost per passenger trip: \$27.94
- Total Revenues: \$397, 443
 - Federal (Section 5311 Funds) - \$88,317
 - State (ROAP & CTP Funding) - \$135,480
 - Contract/Other revenue - \$78,287
 - Local assistance funding - \$95,358
- Total Administrative and Operational Expenditures: \$364,642

NEAT

The NEAT (North Eastern Area Transportation) initiative was created to establish a transportation system partnership to adequately serve the citizens throughout the 10-county Northeastern Region of North Carolina. With the prevailing low-income and large aging population and rural nature of the 10-county region, transit often is the only means for these population groups to acquire medical treatment, groceries, social interaction, and other amenities. Statistics obtained for this plan indicate that many counties have far more citizens working (commuting) outside of the county, requiring greater distance and time when traveling. For these reasons, the NEAT initiative developed a plan that focused on two key aspects for the region:

- Develop a coordinated transportation plan that is cost effective and maximizes the services offered through transportation systems throughout the region.
- Identify resources and collaborations to make the transportation plan and transit authority collaborations cost effective, while providing good customer service.

A main purpose of the NEAT initiative was to examine potential cooperation between the Tyrell and Washington transit systems. However, part of the NEAT effort included a brief overview of the DCTS agency including administration, management, and organizational structure. This information, along with other transit program initiatives will be integrated into the *Dare County CTSP* planning process.

Outer Banks Transportation Study

Sponsored by the Outer Banks Task Force, the Outer Banks Transportation Study (February 2006) was developed by ITRE and attempts to address the multimodal needs of transportation services and facilities within the context of the Outer Banks region. The Task Force's primary goal was to develop a process to gather public input and reach consensus on recommendations for transportation improvements to improve mobility and alleviate highway congestion. Its desire was to create short- and long-term improvements to the highway congestion problem, while emphasizing the short-term "implementable" solutions.

As part of the study, nine case studies of other vacation destinations were conducted with the idea that they might offer some lessons for the Outer Banks in terms of how they have dealt with transportation problems. The outcome of this exercise was the creation of a holistic and multimodal plan that could be implemented through phased improvements.





The Plan produced several recommendations for alleviating various transportation problems that were identified through the steering committee, staff and public outreach. The key transportation focus areas included:

- *Public Transportation* — Several trolley bus routes were proposed for consideration.
- *Bicycle and Pedestrian Facilities* — Several recommendations were made in regard to bicycle and pedestrian facilities, including recommended goals, policies and standards for such facilities, and specific facility improvements.
- *Traffic Solutions* — Several short-term traffic engineering improvements, many of which were suggested in the community meetings, were recommended. These include better informational signage that would help to eliminate confusion, maintain traffic speed, and reduce accidents (especially on US 158), adding left turn lanes and traffic calming measures in villages between Whalebone and Hatteras, and adding more right turn lanes on US 158.

Although this study's focus was on shorter-term "implementable" improvements, in the longer-term one of the most frequent comments at the community meeting in Southern Shores was in regard to the need to build the proposed Mid-Currituck Bridge.

- *Transportation Demand Management* — Transportation demand management is the practice of dealing with traffic congestion by influencing trip demand rather than by simply building new road capacity. The Plan recommendations include conducting a study of parking management possibilities as a way of limiting automobile usage, continuing the exploration of shifting more rental turnover from Saturday to Sunday or Friday, and conducting publicity or educational programs that would encourage people to use transit when at the Outer Banks, do more carpooling, or shift their travel to times or places where traffic congestion is not a problem.
- *Organizational/Institutional* — Because of the special geographic nature of the Outer Banks and its special transportation problems, the creation of a Transportation Management Association (TMA) was recommended.

Guiding Principles

Within the context of DCTS, numerous stakeholders (26), the Steering Committee, the Transportation Advisory Board (TAB), and the general public collaborated to establish a baseline to assess needs and determine plan objectives. It is here that the underlying goal of the *Dare County CTSP* was established:

To identify system and organizational improvements and strategies aimed to enhance access and mobility for all residents of Dare County, particularly those who cannot drive (elderly, persons with disabilities and those that cannot afford a car).

Many issues were discussed and vetted through the stakeholder and public outreach efforts, including but not limited to:

- "Make the Plan realistic"
- Make it implementable within a 5-year timeframe
- Evaluate the need for other funding opportunities (i.e., Grants, etc.)





- Collaborate with other municipal representatives (i.e., Roanoke Island, southern beaches, northern beaches)
- “We have social service reps doing transportation”
- Volunteers are only used for long distance
- Is there a need to expand/enhance services?
- Is there an interest in a consolidated system?
- “Do we bring Greyhound into area?” – use intercity funds
- Major fluctuation in demand throughout the year – lots of dead-time and high peak demand
- “village-to-village has a demand”
- “Can we use taxi services to provide backup service?”
- Complaints – gaps in service and trying to fit appointments into existing system
- Complaints – reliability
- Loss of Hispanic workers due to lack of transportation options
- “Need public education of services”
- Need to identify user origin and destinations
- State was advocating a regional consolidation
- Re-evaluate fixed-route service
- Fixed-route (night) for Pathways

The overall vision for transit is for it to become a preferred and reliable mode of transportation for those citizens and visitors in need. The common themes described below attempt to establish a baseline of goals and objectives that will be utilized throughout this planning process.

- There is an inherent limitation to the DCTS services and what the program can afford to provide - financial constraints result in service constraints.
- DCTS has limited hours and frequency of services.
- The need exists for enhanced quality information on existing services.
- Community perception is that DCTS only serves the elderly and disabled population. Service to rural general public is very limited.
- The program has grown and now service demands have exceeded current capacity.
- The current organizational structure (administration, scheduling/processing, operations) may not be cost-efficient.





Report Overview

The *Dare County CTSP* consists of three parts:

- **Technical Memorandum #1:** Incorporates the introduction and inventory of existing conditions. (Chapters 1 and 2 of the Final Report)
- **Technical Memorandum #2:** Include demographic trends as well as findings and assessment. (Chapters 3 and 4 of the Final Report)
- **Final CTSP Report:** Encompasses both technical memorandum content as well as the implementation and financial plan. (Chapters 1 through 6)

This process of providing the report in segments allows a more expeditious and efficient review of the final document. Likewise, the process should allow a consistent planning process and understanding of the content within the final document. The findings, analysis, and recommendations for community transportation in Dare County have been created in tandem to produce a series of actions that to improve services in the county. The recommendations presented in this plan represent the collective vision for a safe, efficient, and reliable transportation system that supports choice for all users. The final deliverable of the *Dare County CTSP* will be submitted to NCDOT and the Dare County Board of Commissioners for adoption. In addition to the introductory chapter, the following elements complete the *Dare County CTSP*:

Chapter 2 – Inventory of Existing Services

Reviews DCTS and other transportation providers existing services relative to the overall mission, goals, and objectives. Includes a review of organizational structure and staffing levels, support systems (administration, service and operations, and marketing), vehicle fleet and technology; operating statistics/performance measures, and funding and financial management.

Chapter 3 – Demographic Trends and Analysis

Assesses the geographic distribution of transportation disadvantaged groups and identifies natural and man-made obstacles affecting transportation. Combines objective and subjective methods, resulting in a general description of the community transportation needs within the service area.

Chapter 4 – Findings and Assessment

Summarizes the organizational findings and assessment related to the recommended organizational structure of DCTS and the Transportation Advisory Board. Presents the service modifications and strategies to enhance marketing efforts based on the outcome of the Performance Plan as well as the public involvement and analysis conducted as part of the *Dare County CTSP*.

Chapter 5 – Recommendations & Action Plan

Provides a phased implementation plan that includes immediate, short-term, and mid-term action items tied directly to the recommendations.

Chapter 6 – Financial Plan

Highlights the financial plan, including budgetary considerations for administrative, operating, and capital expenses and revenues.





Chapter 2 – Inventory of Existing Services

Introduction

The inventory of existing services of the community transportation system in Dare County merges the results of the public outreach initiatives and the review of previous planning efforts (described in **Chapter 1**) with the collection of additional information related to the administration, service, capital, and funding of the county's community transportation system. This inventory provides a comprehensive understanding of existing services prior to determining the improvements necessary to achieve a more efficient and balanced system. As the primary provider of transportation services in the county, the focus of this chapter is the Dare County Transportation System. However, services offered by other transportation providers are summarized.

Dare County Transportation System (DCTS)

Mission Statement, Goals, Objectives

Dare County Transportation System (DCTS) is the primary provider of transportation services in Dare County. However, the system does not have a defined mission statement, goals, or objectives, which typically are adopted by the Transportation Advisory Board.

Organizational Structure

DCTS operates under Older Adult Services, which falls under the purview of the Public Services Director. Funding for DCTS comes from federal and state grants as well as county funds. As the lead agency for transportation services in the county, DCTS is responsible for the application for federal and state grants as well as submitting annual budget requests to the county.

Staffing

All full and part-time staff within DCTS are county employees. The department is led by the **Transportation Coordinator**, a position that reports to the Director of Older Adult Services. The Director of Older Adult Services reports to the Director of Public Services who reports to the County Manager. The Transportation Coordinator supervises system operations, including writing grants, creating reports, developing budgets, maintaining TAB contact, and preparing policies and procedures. Typical management tasks such as hiring and training also fall under the purview of the Coordinator. As a small department, the Coordinator also shares responsibility for answering phones and scheduling passenger rides.

Three other full time county employees support the Transportation Coordinator. All full-time employees work 37.5 hours per week.

- **Administrative Assistant** — Main responsibilities for the Administrative Assistant include billing (EDTAP, RGP, and Medicaid), completing Medicaid procedures, scheduling trips, and compiling operating statistics. Other tasks include maintaining contact with the Department of Social Services, coordinating volunteer rides, and conducting general office duties. The Administrative Assistant shares responsibility for answering phones and scheduling passenger rides with the Transportation Coordinator and Lead Driver.





- **Lead Driver** — The Lead Driver is responsible for training drivers, administering the System Safety and Security Plan, scheduling vehicle maintenance, and record keeping. The Lead Driver shares responsibility for answering phones and scheduling passenger rides with the Administrative Assistant and Transportation Coordinator.
- **Vehicle Driver** — The Vehicle Driver is the only full time driver employed by DCTS. This employee is assigned a vehicle and outposted in the Village of Buxton, approximately 70 miles south of the DCTS office in Manteo.

With the exception of the outposted Vehicle Driver, the DCTS employees are housed in the Dare County Administrative Building that is near the county-owned maintenance garage and fueling station. In addition to the full time staff, fourteen part time van operators are employed. Each driver works less than 1,000 hours annually, with a normal weekly schedule that includes two days (7 to 10 hours each) of work per week. All drivers participate in safety training according to the DCTS System Safety and Security Plan, and all drivers are drug and alcohol tested according to FTA Drug and Alcohol Testing Policy. DCTS van drivers are paid per hour, with the hourly wage set by the Dare County Board of Commissioners.

Three of the van operators also serve as volunteer drivers. Volunteer drivers operate their personal vehicles to provide more distant, out-of-county medical trips to clients. Volunteers are compensated \$0.55 per mile, the current Federal IRS allowable mileage rate.

Transportation Advisory Board (TAB)

DCTS is required by the NCDOT Community Transportation Program (CTP) to have a Transportation Advisory Board (TAB) appointed by the Dare County Board of Commissioners. The TAB oversees the policy direction of DCTS. The TAB is expected to maintain a minimum level of coordinated transportation service and to maintain ongoing communications as a means of seeking public involvement and ongoing administrative oversight. The board operates in a true advisory role and does not have decision making power.

The TAB Bylaws were last updated in June 2008 and approved by the Dare County Board of Commissioners at their subsequent meeting. Modifications reflected changes in the transportation system's operations that evolved after the system's relocation to its new facility at the Dare County Administration Building in Manteo. According to the Bylaws, responsibilities of the TAB include:

- Assisting DCTS in maintaining its status as a Community Transportation Program provider.
- Advising the Dare County Board of Commissioners on any new steps that may be needed to be taken from time to time in order to ensure that the DCTS remains eligible for state and federal funding for its operations.
- Reviewing, periodically, the operating costs and budget for the DCTS.
- Reviewing, periodically, the Policies and Procedures for operation of the DCTS and recommending changes, as appropriate.
- Evaluating the services provided by the DCTS on a continuing basis, and recommending changes, as deemed advisable or appropriate.

The TAB meets quarterly, and minutes are prepared by the Transportation Coordinator and distributed via email to TAB members for their review. Copies also are provided to the NCDOT Public Transportation Division Mobility Development Specialist. The TAB is composed of 13 members that represent human service agencies, Dare County and its municipalities, local medical facilities, private businesses, the school





system, the Employment Security Commission, local citizenry, and other interests. Each year the TAB appoints one member as the Chairperson. The membership as of October 2009 follows. Currently, one seat is vacant.

Andy Szakos (Chairperson)	Realtor
Jay Burrus	Dare County Department of Social Services
Pete Groom	Hatteras Island Representative
Maria Heiffeon	Ethnic Minority Representative
Marla Heuston	East Carolina Health Care
Kenny Key	Job Link (NC Employment Security Commission)
Paul Keller	Pathways
Brandi Rheubottom	Dare County Older Adult Services
Gina Scarborough	Dare County Dialysis Center
Jack Shea	Dare County Commissioner
Anne Thomas	Dare County Health Department
John Winston, Jr.	Dare County Schools

Support Systems

Administration and Management

DCTS provides door-to-door demand response transportation as well as some subscription service. The primarily responsibility for taking reservations and developing the transportation schedule falls upon the Administrative Assistant for DCTS. However, the Transportation Coordinator and Lead Driver also assist the Administrative Assistant when they are not occupied with other job tasks and responsibilities. All scheduling currently is done by hand, though DCTS uses Microsoft ACCESS as its primary database for maintaining client information. The database includes the rider’s name, address, phone number, date of birth, family members riding, and any disability that may require assistance and/or wheelchair lift. The database also includes how the rider heard about the DCTS services. The stats of services, deadhead and revenue miles, time, number of trips, ADA riders, out of county medical trips, and billing also are recorded.

Service and Operations

DCTS administration operation hours of 8:30 a.m. to 5:00 p.m. coincide with other Dare County departments. As mentioned, full time personnel work 37.5 hours per week. The work schedules for van operators depend upon the required travel times to reach passengers’ destinations on time. For example, a Buxton resident who needs a ride to a 9:30 a.m. doctor appointment at Norfolk General Hospital must be ready for a DCTS pick up at approximately 3:30 a.m. The operating hours remain 8:30 a.m. 5:00 p.m., which limits the viability of DCTS to serve employment trips and restricts the scheduling time for out-of-county trips.

DCTS does not provide transportation services at night, on weekends, or on county observed holidays.





Reservations, Scheduling, Dispatching

DCTS scheduling system consists of a Microsoft ACCESS database for scheduling trips and a vehicle-oriented spreadsheet for tracking other numbers such as mileage and passenger trips. This system evolved from the volunteer transportation system that operated prior to the formation of DCTS. While the current scheduling system is easy to use, it stops short of collecting all necessary information and future expansion of service may put added pressure on the current software.

Trip reservations are taken via telephone by DCTS staff. For the hearing impaired, a text phone is available. DCTS requires a two-day (48 hour) notice of scheduled trips. However, exceptions sometimes are made when the schedules can accommodate such instances. The Administrative Assistant confirms all reservations via telephone the day before a scheduled trip and riders are required to be ready for pick-up 15 minutes before and after the scheduled pick-up time.

With the exception of dialysis riders, persons going to the same destination at the same time located within Dare County are limited to 36 one-way or 18 round-trips per calendar year. This policy is in place because such riders will limit the ability of DCTS to serve demand-response medical appointments to residents. Because DCTS does not provide charter service, all riders must request transportation as individuals and not group transportation from any special group. Riders are informed that the public may be riding the same van and they will be transported according to destinations and time allowed.

Marketing

Several marketing strategies currently are being used to increase awareness to DCTS services and current program initiatives. Based on information provided by the Transportation Coordinator, NCDOT provides a separate funding source for DCTS to be used toward limited marketing efforts. Specific marketing efforts to date include:

- **DCTS Brochure** — The brochure was created three years ago and provides basic facts including mission/purpose, organizational structure, contact information, description of current services, and policy and procedures.
- **Advertising Card** — The advertising card represents a “one time” marketing initiative intended to enhance public awareness of DCTS services to conference participants. Initially, the brightly colored ad cards were inserted into conference program packets, public meetings, and “open house” celebrations.
- **Pencil Promo** — A supply of pencils providing the DCTS logo and phone number.
- **DCTS Website** — The DCTS website, a page on the Dare County website, provides information including mission/purpose, organizational structure, description of current transit services, and contact information.
- **Newspaper** — DCTS has had front page color newspaper articles on the department and “Driver(s) of the Year” award.





- **Radio Broadcast** — Radio broadcasts have been conducted in select previous marketing efforts to provide a higher awareness of the DCTS services.
- **Van Advertisement** — The vans include lettering that details contact information as well as a new slogan that declares “Anyone can Ride!”
- **Word-of-Mouth** — An effective marketing strategy has been to rely on word-of-mouth advertising from rider to rider and from medical facility to client.



Vehicle Fleet and Technology

Vehicles operated by DCTS are purchased with NCDOT grant funding and owned by the county. As of October 2009, DCTS owned 7 vehicles as shown in **Table 2.1**. The fleet includes two conversion vans, four lift equipped vans, and one minivan for a total of 68 seats. The vans have a total of 8 wheel-chair stations.

Table 2.1 – DCTS Vehicle Fleet

Model Year	Model	Vehicle Type	Seating Capacity	Wheel-Chair Stations
2002	Dodge	Conversion Van	13	0
2000	Dodge	Conversion Van	13	0
2006	Ford	Lift Equipped Van	9	2
2006	Ford	Lift Equipped Van	9	2
2002	Dodge	Lift Equipped Van	9	2
2000	Dodge	Lift Equipped Van	9	2
2006	Dodge	Minivan	6	0
Total			68	8

Vehicle Maintenance

Maintenance of the DCTS vehicle fleet is performed by the Dare County Fleet Maintenance Department. The Lead Driver has the primary responsibility for tracking preventive maintenance standards and scheduling repairs and services for the vehicles. He also receives the daily pre- and post-trip inspection reports completed by the van operators at the end of their work shifts. The Lead Driver sometimes performs minor repairs to the equipment but typically schedules the vans for services at the Fleet Maintenance Department. The Lead Driver also has oversight for the vehicle inspection program, ensuring the presence of safety apparatus and operating supplies and adherence to the DCTS’s cleaning standards by the van operators.

DCTS does a good job of maintaining its vehicles, as evidenced by the current practice of the county to keep vehicles that DCTS disposes after their useful life rather than selling them to an outside party. In the past, the vehicles were used by other county agencies for passenger transport. However, today the vehicles are used strictly as cargo vans by the county mechanics and Department of Public Works employees.





Technology

As a small system and one that evolved from a network of volunteers, the current use of technology in respect to reserving, scheduling, and dispatching trips is limited. This level of technology has served DCTS well given its current size, though future growth may place strain on the system. The current system utilizes Microsoft ACCESS to store information about riders and scheduled trips.

Currently, onboard communications between the driver and administration occurs via cellular telephones. In previous years, the county provided communication services. However, in 2008 DCTS had to assume the cost (approximately \$3,500 per year) to contract directly with the service provider. Prior to its most recent budget containment plan, the county planned to upgrade its communications system, and DCTS vehicles were intended to be linked to the county’s radio communications system. However, the purchase of the system has been delayed. As a result, DCTS is expected to renew its current contract with the telephone service provider.

Operating Statistics / Performance Measures

In terms of weekday average daily passengers, Dare County is one of the smallest community transportation systems in the state. However, the unique geography, dispersed population base, and seasonal economy of the coastal county make direct comparisons with peer groups difficult. **Table 2.2** shows the most recent available vehicle utilization data for DCTS. Several trends emerge from these statistics:

- DCTS should expect greater service and revenue hours to account for the 11% of average daily passengers being wheelchair-bound.
- The lack of “No Shows” likely is the result of DCTS policy to call all passengers the day before their scheduled trip.
- Errors in how revenue hours and revenue miles were recorded have led to higher deadhead miles than might be expected. (Note: DCTS has corrected how they report revenue hours and revenue miles and future statistics should reflect a more accurate representation.)

	Number	Percent
Average Daily Passengers	57	
Average Daily No Shows	0	0%
Average Daily Wheelchair Passengers	6	11%
Total Vehicles	7	
Lift Vehicles	4	57%
Service Hours	41	
Revenue Hours	35	85%
Deadhead Hours	6	15%
Service Miles	746	
Revenue Miles	652	87%
Deadhead Miles	95	13%
Passengers per Service Hour	1.40	
Passengers per Revenue Hour	1.66	
Passengers per Service Mile	0.077	
Passengers per Revenue Mile	0.088	





While this data is useful, from a performance measure standpoint, it is helpful to have a basis for comparison. **Table 2.3** shows key operating statistics over the past three years. The table includes vehicle utilization data for 2006, 2007, and 2008 as well as the percent change from the first collection period. Statistics shown in both tables were reported by DCTS to NCDOT as part of the annual Operating Statistics (OPSTATS) reports. This information also was provided in the Performance Plan and Analysis conducted by the Institute for Transportation Research and Education

Table 2.3 – DCTS Performance Measures

	2006		2007		2008		% Difference*
	Spring	Fall	Spring	Fall	Spring	Fall	
Average Daily Passengers	55	50	55	56	64	57	3.6%
Passengers per Service Hour	1.64	1.59	1.23	1.33	1.53	1.40	-14.6%
Passengers per Revenue Hour	1.89	1.80	1.43	1.57	1.69	1.66	-12.2%
Passengers per Service Mile	0.076	0.079	0.057	0.070	0.069	0.077	1.3%
Passengers per Revenue Mile	0.088	0.090	0.068	0.083	0.076	0.088	0.0%

According to these statistics, Dare County has sustained approximately the same number of passengers over the three-year period. However, increases in service and revenue hours have resulted in lower rates for passengers per service hour and passengers per revenue hour. Also of note is the stability of passengers per service mile and passengers per revenue mile.

Funding and Financial Management

Two reporting documents were used to report the existing financial element of DCTS. The OPSTATS report (FY2008) provides a detailed synopsis of the administrative, operating and capital revenues, and expenditures for the DCTS program. The ROAP (Rural Operating Assistance Program) Application was used to report transportation services related funding for elderly and disabled individuals (EDTAP), employment, and rural general public programs. This information was used to establish a baseline of existing funding programs and expenditures. **Tables 2.4** and **2.5** show the administrative and operating revenue and expenses and capital revenue and expenses for DCTS, respectively. The information in the tables was reported in the FY2008 OPSTATS for DCTS.

Funding Statistics (FY 2008)

- **Total DCTS Program Revenues:** \$397,443
 - Federal (Section 5311 Funds) - \$88,317
 - State (ROAP & CTP Funding) - \$135,480
 - Contract/Other revenue - \$78,287
 - Local Dare County assistance funding - \$95,358
- **Total Administrative and Operational Expenditures:** \$364,642
- **Cost per passenger trip:** \$27.94





Table 2.4 – DCTS Administrative and Operating Revenue and Expenses

	Revenue and Expense	FY2007 Data	FY2008 Data	Percent Changes
77	Federal Assistance - Section 5311 - CTP Funds - Administrative	\$88,536	\$88,317	
78	Federal Assistance - Section 5311 - CTP Funds - Operating	\$0	\$0	
79	Federal Assistance - Section 5316 - JARC Funds	\$0	\$0	
80	Federal Assistance - Section 5317 - New Freedom Funds	\$0	\$0	
81	Federal Assistance - Other (provide description on Line 138)	\$0	\$0	
82	State Assistance - CTP Funds - Administrative	\$5,533	\$5,520	
83	State Assistance - ROAP Funds - Suballocated to the Transit System	\$120,902	\$129,960	
84	State Assistance - Other (provide description on Line 138)	\$0	\$0	
85	Local Assistance - Administrative Funds	\$16,600	\$16,559	
86	Local Assistance - Operating Funds	\$72,687	\$78,799	
87	Contract Revenue	\$55,086	\$69,826	
88	Fares/Donations from passengers	\$0	\$0	
89	Proceeds from Sale of Vehicle(s) - (used for Admin or Operating only)	\$0	\$0	
90	Interest Income	\$0	\$0	
91	Advertising Revenue	\$0	\$0	
92	Other Revenue (provide description on Line 138)	\$7,727	\$8,461	
93	Subtotal Revenue	\$367,071	\$397,443	
94	Debit to Revenue - Unspent ROAP Funds (suballocated to Transit System)	\$0	\$0	
95	TOTAL REVENUE	\$367,071	\$397,443	8.3%
96	Expenses - Administrative - Personnel Salaries & Fringes - CTP Object Codes G121 to G189	\$90,377	\$88,474	
97	Expenses - Administrative - Advertising and Promotion - CTP Object Codes G371 to G373	\$2,926	\$2,000	
98	Expenses - Administrative - Employee Development - CTP Object Code G395	\$0	\$0	
99	Expenses - Administrative - Vehicle Insurance Premiums - CTP Object Code G452	\$5,682	\$6,461	
100	Expenses - Administrative - Indirect Services - CTP Object Code G481	\$11,103	\$8,660	
101	Expenses - Admin - CTP Codes G190toG359; G380toG394; G396toG451; G454toG480; G482toG491	\$4,504	\$4,801	
102	Expenses - Administrative - Other Admin Expense (provide description on Line 138)	\$7,727	\$8,461	
103	Subtotal Administrative Expenses	\$122,319	\$118,857	
104	Expenses - Operating - Driver Salaries & Fringes	\$137,300	\$145,859	
105	Expenses - Operating - Other Operating Staff Salaries & Fringes	\$33,051	\$34,586	
106	Expenses - Operating - Mechanics Salaries & Fringes	\$0	\$0	
107	Expenses - Operating - Indirect Services	\$0	\$0	
108	Expenses - Operating - Fuel/Oil	\$38,965	\$47,502	
109	Expenses - Operating - Vehicle Maintenance	\$6,444	\$6,185	
110	Expenses - Operating - Payment of Insurance Deductible(s)	\$0	\$0	
111	Expenses - Operating - Disposal of Vehicle(s)	\$0	\$0	
112	Expenses - Operating - Management/Operation Services	\$0	\$0	
113	Expenses - Operating - Volunteer Reimbursement	\$6,867	\$8,293	
114	Expenses - Operating - Other Transit Provider Services	\$0	\$0	
115	Expenses - Operating - Other (provide description on Line 138)	\$947	\$3,360	
116	Subtotal Operating Expenses	\$223,575	\$245,785	
117	Credits to Expense - i.e. gas tax refunds, sales tax refunds	\$0	\$0	
118	TOTAL EXPENSES	\$345,894	\$364,642	5.4%
119	Performance Calculation Adj. - Credit to Expense - Cost of Other Services	\$0		
120	Performance Calculation Adj. - Total Expenses	\$345,894	\$364,642	





Table 2.5 – DCTS Capital Revenue and Expenses

CAPITAL STATEMENT		FY2007 Data	FY2008 Data	Percent Changes
121	Revenue - Capital - Vehicles & Others (Federal/State)	\$0	\$123,269	
122	Revenue - Capital - Facility (Federal/State)	\$0	\$0	
123	Revenue - Capital - Advanced Technology (Federal/State)	\$0	\$0	
124	Revenue - Capital - Capital Funding (Local)	\$0	\$13,697	
125	Revenue - Capital - Insurance Proceeds from Accident	\$0	\$0	
126	Revenue - Capital - Proceeds from Sale of Vehicle (used for capital only)	\$0	\$0	
127	Revenue - Capital - Other (provide description on Line 138)	\$0	\$0	
128	Capital Revenue	\$0	\$136,966	
129	Expense - Capital - Capital Purchases	\$0	\$136,966	
130	Expense - Capital - Body Work on Wrecked Vehicle	\$0	\$0	
131	Expense - Capital - Facility Renovation or Construction	\$0	\$0	
132	Expense - Capital - Advanced Technology Purchases	\$0	\$0	
133	Expense - Capital - Other (provide description on Line 138)	\$0	\$0	
134	Capital Expense	\$0	\$136,966	

Based on the funding levels over the past two years (i.e., 2007 and 2008), DCTS has experienced an overall increase of 8.3% in total revenue. Within that same timeframe, the program has seen an annual increase of 6.8% from Dare County, while the federal 5311 funds virtually have stayed the same. Annual expenditures have experienced an annual increase of 5.4% in 2008. The federal and state capital funding was \$136,966, with a 10% local match for capital purchases.

Tables 2.6 and 2.7 show historic (2006, 2007, and 2008) operating statistics and person trip statistics for DCTS, respectively. The information in the tables was reported in the FY2008 OPSTATS for DCTS.

Table 2.6 – DCTS Historic Operating Statistics

	2006	2007	2008	% Change 07-08
Total Service Miles	180,425	239,257	234,259	-2.09%
Transit System Service Miles	139,043	214,685	206,590	-3.77%
Total Service Hours	13,202	11,380	11,300	-0.71%
Total Passenger Trips	13,904	13,004	13,050	0.35%
Total Transit System Trips	13,277	12,787	12,814	0.21%
Total Admin/Oper Revenue	\$308,016	\$367,071	\$397,443	8.27%
Total Contract Revenue	\$60,356	\$55,086	\$69,826	26.76%
Fare Revenue	\$588	\$0	\$0	
Total Admin/Oper Adj. Expense	\$334,192	\$345,894	\$364,642	5.42%
Peak Vehicles	6	6	6	0.00%
Driver FTE	6.80	6.09	6.01	-1.26%





Table 2.7 – DCTS Person Trip Statistics and Cost

	2006	2007	2008
Passenger Trips per Hour (M-F)	1.05	1.14	1.15
Passenger Trips per Mile (M-F)	0.08	0.05	0.06
Total Passenger Trips per Hour	1.05	1.14	1.15
Total Passenger Trips per Mile	0.08	0.05	0.06
Cost per Passenger Trip	\$24.04	\$27.05	\$27.94
Cost per Hour	\$25.31	\$30.39	\$32.27
Cost per Mile	\$1.85	\$1.45	\$1.56
Service Miles per Peak Vehicle	23,174	35,781	34,432
Trips per Driver FTE	1,953	2,100	2,131

Based on the historic operating statistics and cost tables, DCTS has limited deadhead miles and hours to provide enhanced service. DCTS revenue collections have increased due to the increase in the number of Medicaid trips. The transportation system has continued to increase van rides and decrease volunteer rides. Even though the cost per passenger trip has increased by 3.3%, the total passenger trips continue to increase.

Other Transportation Service Providers

Private transportation providers exist in Dare County, each offering different services and using different vehicles to meet the demands of the citizens and tourists. Vehicles vary from four-person passenger sedans to 16-passenger stretch Hummer limousines. Other transportation service providers include private taxicab and limousine companies, vanpools operated by independent companies and local employers, and other services.

Private Taxicab Companies

Several private taxi companies operate throughout the Outer Banks. The owner of Coastal Cab, Inc., who was one of the stakeholders interviewed, said he contracts with ten to twelve other people who own six-passenger mini-vans. None of the equipment has ramps to accommodate the persons with disabilities, and only one request of accommodation has been made since he started his company in 2000. The special needs transport was provided, however, by assisting the passenger to a stationary van seat and storing the wheelchair in the back storage compartment.

This particular company's office is located in Kitty Hawk. The owner said that more than 90% of the vehicles are parked at the vehicle owners' residences rather than his office, and rides are dispatched via cell phone. The service area primarily is Southern Shores, Kitty Hawk, Nags Head, and Kill Devil Hills. The taxis currently do not regularly serve Hatteras, Duck, or Rodanthe. According to the owner, the Dare County Department of Social Services periodically uses his company's service under an 'On-Call Service Contract', compensating the company on a meter rate plus mileage basis.

It is expected that the trends expressed by Coastal Cab, Inc. are representative of other taxicab companies.





Vanpools

Vanpools form when groups of commuters ride together and share the monthly costs of operating the vanpool. Monthly passenger fares generally cover vehicle costs, maintenance, gasoline, and insurance expenses. Sometimes the cost is completely covered by the employer. Vanpools provide an attractive transportation alternative for employee groups who live near one another and who work similar and more regular hours. Vanpools can offer flexibility to design schedules and create routes to meet the specific travel needs of the group. With an influx of workers from nearby counties such as Pasquotank, Camden, and Hyde, vanpool are a necessary mode of transportation for many employees in Dare County.

2Plus, a private non-profit corporation based in the Raleigh area, coordinates several vanpools to Dare County. Currently, the company provides a total of eleven 15-passenger vans each of which is supplied by NCDOT. The majority of the vans leave from Elizabeth City, Camden, Edenton, or Columbia and transport employees of the hospitality industry. While ridership increases during the summer peak period, all vans remain in operation year-round. In a stakeholder interview, 2Plus declined to provide ridership statistics and trends, though they mentioned the vans average 8 to 9 people per vehicle and they have recognized an increase in ridership over the last few years.

Some employers provide vehicles for their employees. For example, the Town of Nags Head provides town-owned vehicles as a vanpool to transport trash collector employees from the Elizabeth City and Columbia areas to the Town. The operating expenses are paid by the town and the vanpools operate six days per week. It is expected that more vanpooling exists throughout the county, though accurate statistics are unavailable.

Other Services

Spring Arbor is the largest assisted living facility in Dare County and has its own van to transport residents to medical appointments and to the Hospital for outpatient services. Administrators have made the decision to provide transportation only within a 5-mile radius of the facility. DCTS provides services that exceed the facility's service area, which most commonly include out of county medical trips to Virginia and rides to the Dialysis Center in Manteo.

Two non-profit agencies (Outer Banks Cancer Support Group and Hatteras Island Cancer Foundation) in Dare County have a group of volunteer drivers who provide transportation for persons undergoing cancer treatments. Like the county-administered volunteer driver program, these volunteers are reimbursed for mileage.





Chapter 3 – Demographic Trends & Analysis

Introduction

Daily life requires some level of mobility, whether commuting to work, shopping, going to the doctor, or visiting friends. As the United States suburbanized in the second half of the 20th century, people were forced to travel longer distances to reach their destination and increasingly relied on private automobiles. In Dare County, the ill effects of these national trends are compounded by the county’s unique geography. The linear orientation of the county and abundance of natural barriers has made it harder for citizens to move between destinations. Individuals who have limited access to personal transportation due to their age, disability, or income have the most difficult time.



This chapter of the *Dare County Community Transportation Service Plan (Dare County CTSP)* assesses the geographic distribution of transportation disadvantaged groups and identifies natural and man-made obstacles affecting transportation. The assessment combines objective and subjective methods, and the result is a general description of the community transportation needs within the service area.

Demographic Trends

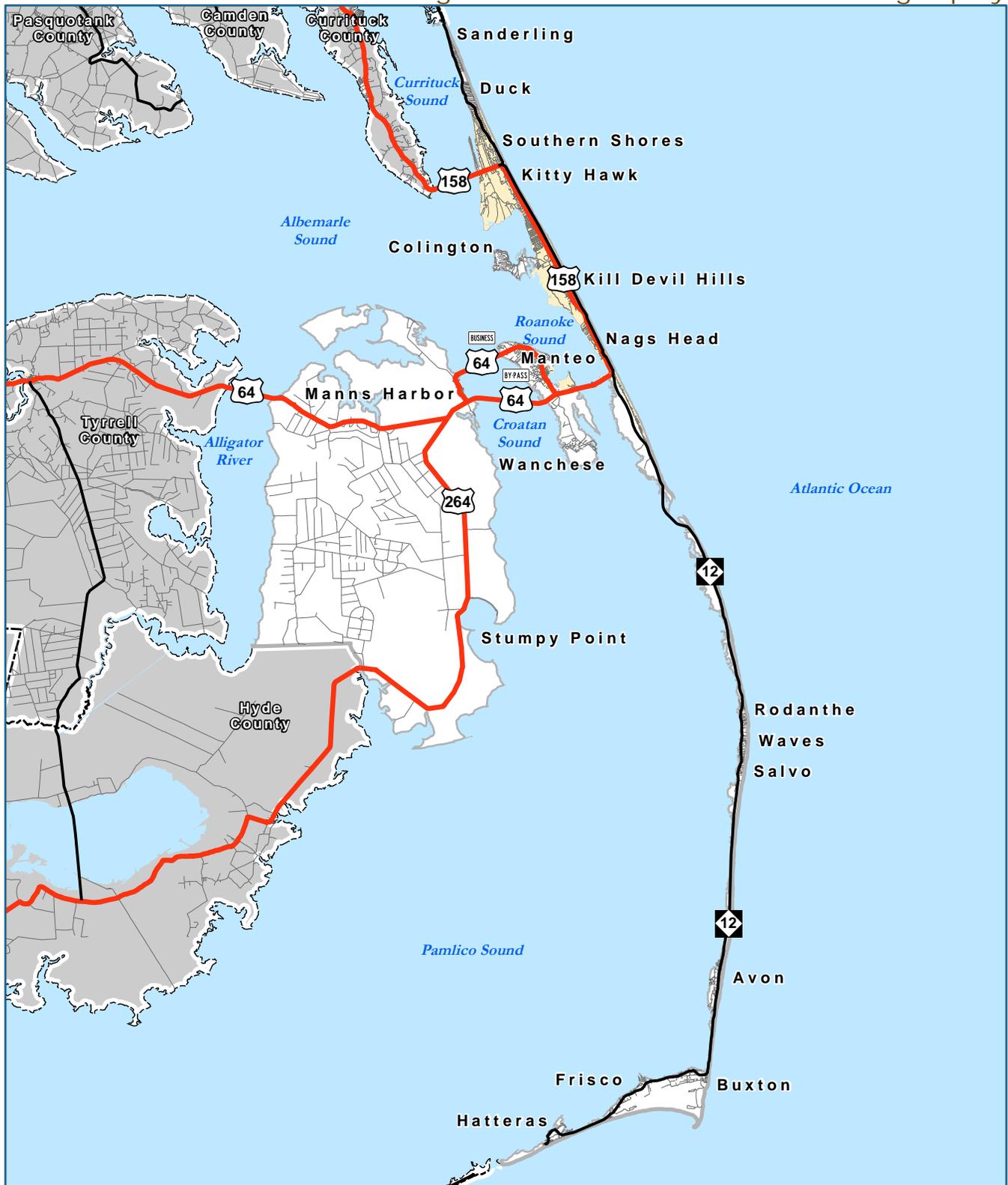
Given its purpose of reviewing the current performance and organizational direction of DCTS and recommending alternative strategies to increase mobility options for passengers and improve the efficiency of the organization, a logical preliminary step of the *Dare County CTSP* is to understand the demographic profile of the service area. The general profile that follows allows a better understanding of the county’s demographics. Where possible, trends are discerned using historical population data.

Service Area

The Dare County Transportation System (DCTS) service area is Dare County, North Carolina, a coastal county in northeast North Carolina. The county includes six incorporated cities/towns/villages (Duck, Kill Devil Hills, Kitty Hawk, Manteo, Nags Head, and Southern Shores) as well as numerous unincorporated communities. The U.S. Census Bureau indicates the county covers an area of 1,562 square miles (384 sq. mi. of land and 1,178 sq. mi. of water). Adjacent counties include Currituck County (to the north), Hyde County (to the southwest), and Tyrrell County (to the west). **Figure 3.1** illustrates the geography of Dare County, including municipalities and major water features.



Figure 3.1 - Service Area Geography



Legend

- US Highway
- Dare County
- Other County
- State Highway
- State Route
- Other Road



General Population Profile

Because the next decennial census will not occur until April 2010 (with the results to be released in the months and years thereafter), the *Dare County CTSP* must rely on data compiled in 2000 to show population trends. While interim estimates at the county and city level are available from the U.S. Census Bureau, the 10-year increment was chosen to depict trends and geographic distribution at smaller census geographic areas.

In 2000, the U.S. Census reported 29,967 year-round permanent residents in Dare County. This represents a growth of 32 percent (7,221 persons) since 1990 and 124 percent (16,590 persons) since 1980. The population of the county more than doubled in the 20 years between 1980 and 2000. However, the growth has not been evenly distributed among the municipalities. **Table 3.1** shows the changes in population for the county and its municipalities from 1980 to 2000.

Table 3.1 — Population Change (1980 to 2000)

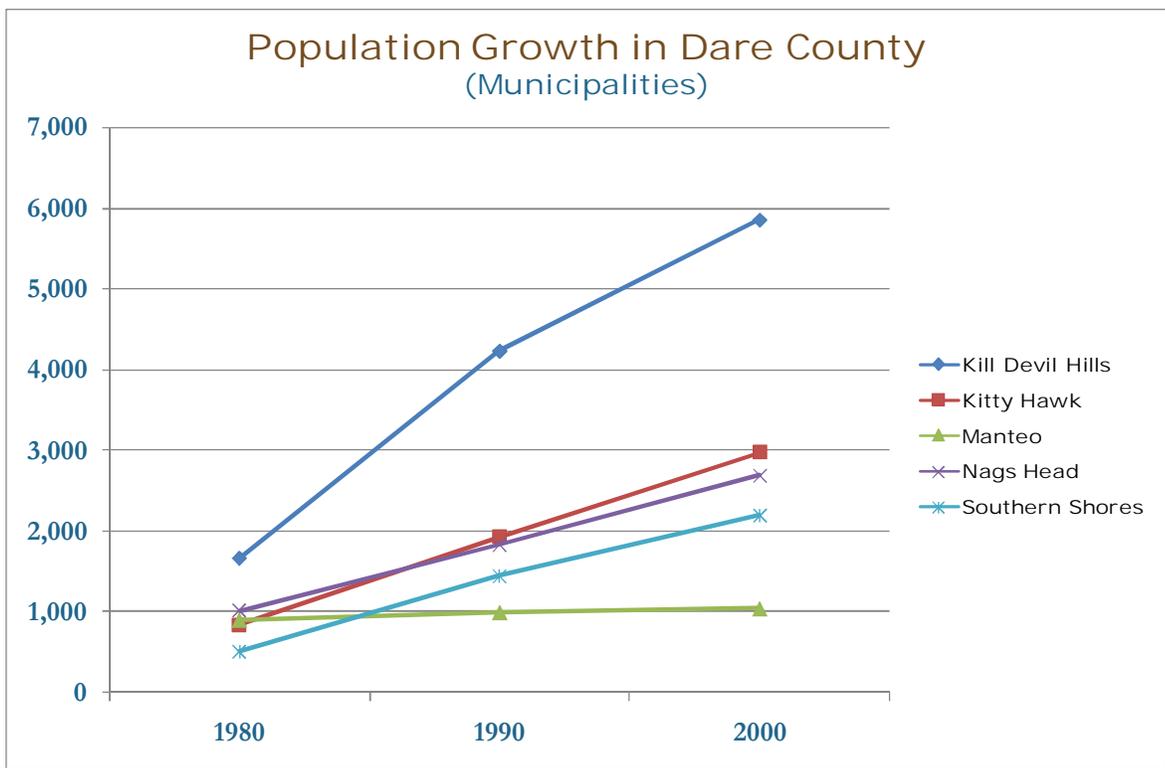
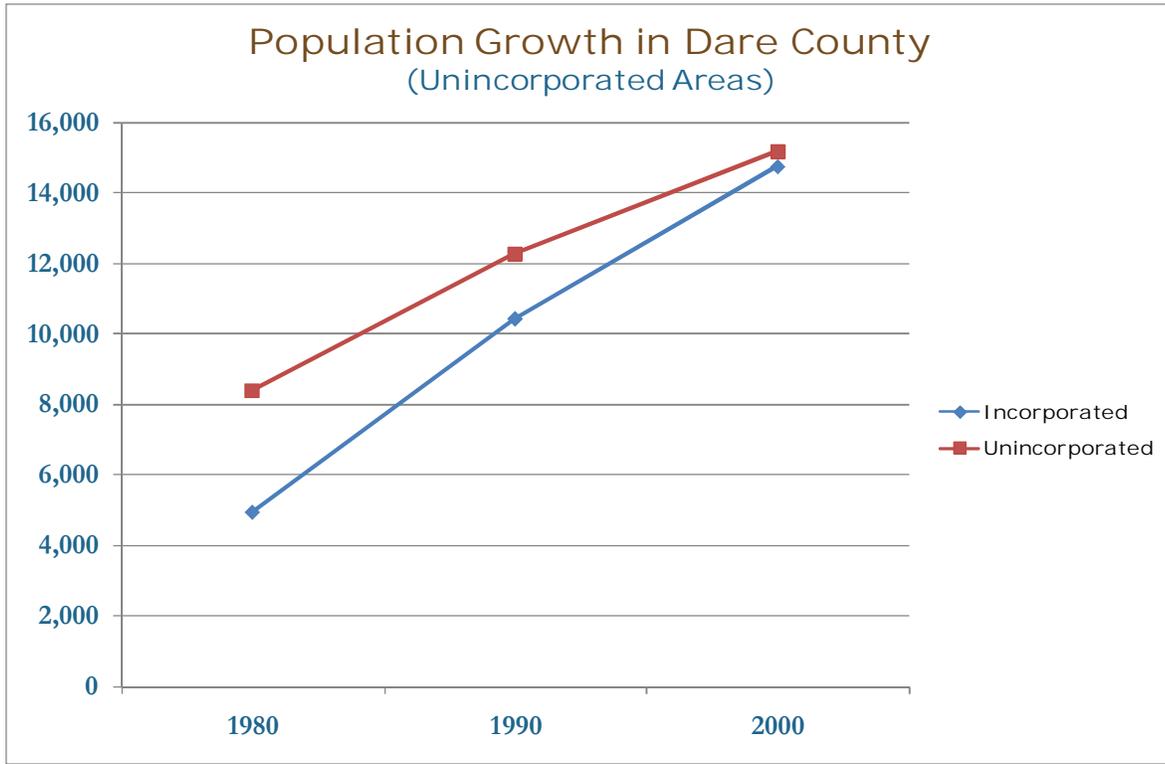
Location	1980	1990	2000	% Change	
				1990 to 2000	1980 to 2000
Kill Devil Hills	1,671	4,238	5,863	38%	251%
Kitty Hawk	849	1,937	2,974	54%	250%
Manteo	902	997	1,045	5%	16%
Nags Head	1,020	1,838	2,691	46%	164%
Southern Shores	520	1,447	2,201	52%	323%
Dare County	13,377	22,746	29,967	32%	124%
Municipal	4,962	10,457	14,774	41%	198%
Non-municipal	8,415	12,289	15,193	24%	81%
% non-municipal	63%	54%	51%		

In total, Kill Devil Hills added the most population for both the 10- and 20-year periods ending in 2000. The town added 1,625 persons in the last 10 years and 4,192 in the last 20 years. By percentage, the greatest growth over the past 20 years has been in Southern Shores, which grew 323 percent. In the 10 years from 1990 to 2000, Kitty Hawk edged Southern Shores as the municipality with the greatest percent growth, increasing 54 percent compared to 52 percent in Southern Shores.

The unincorporated areas of the county also have added population over the last 20 years, growing from 8,415 to 15,193. The growth rate has been lower, and the unincorporated population’s share of the total county population has declined for each census year (63 percent in 1980, 54 percent in 1990, 51 percent in 2000). The faster growth in the incorporated areas of Dare County is due in part to the rapid annexation found throughout North Carolina. The graph at the top of the following page illustrates the population trends for the incorporated and unincorporated areas of Dare County. The second graph illustrates the population for each of the five municipalities shown in **Table 3.1**.

A profile of Dare County population must include a discussion on tourists, considering permanent and seasonal residents as well as tourists are eligible to use DCTS services. The seasonal population peak is approximately 220,000, meaning at its peak of visitation the county must support a population seven times that of its permanent residents. While the traditional peak period occurs between Memorial Day and Labor Day, the non-peak “shoulder season” has grown and extends the tourist season from Easter weekend to Thanksgiving weekend.







Transportation Disadvantaged Population Profile

According to the 2000 census, 35.1 million people in the United States were over age 65, 44.5 million people over age 21 were disabled, and 33.9 million people were living below the poverty level (see text box to right for definitions). For many of these people, mobility options available to them daily are limited and the ability to fulfill their basic needs is challenged.

The federal government identifies three subsets of the population as transportation disadvantaged groups — the elderly, persons with disabilities, and low income individuals. Though not identified by the federal government, households without access to a personal vehicle also are transportation disadvantaged, especially in Dare County.

Among these disadvantaged groups, mobility issues vary. For example, many elderly persons are used to the freedom that comes with car ownership, and consequently, their expectations for public transportation generally are much higher than other transportation disadvantaged groups. A brief discussion of national trends as well as the local impact for these groups follows. Summary statistics for Dare County, North Carolina, and the United States can be found in **Tables 3.2** and **3.3**.

Elderly

Given the growth of the elderly population nationally and within Dare County, a critical component of DCTS will continue to be serving this population. According to the 1990 census, approximately 2,841 people in Dare County were over the age of 65. By 2000, the number of elderly residents in the county had increased 45.2 percent to 4,124. For comparison, the overall county growth rate was 31.8 percent. The growth rate from 1990 to 2000 for persons over the age of 65 in Dare County outpaced both the state and nation (20.5 percent and 12.0 percent growth, respectively). See **Table 3.3**.

A review of the geographic distribution of older adults indicates a wide distribution of this population segment across the county. However, a significant concentration of this population group exists in the Southern Shores area. The beachside section of Nags Head also includes higher percentages of adults over the age of 65. The elderly component of the population in Dare County is composed of individuals from varying economic classes and with varying degrees of disabilities, resulting in an assortment of mobility needs. Elderly people also are more likely than other population segments to have difficulties accessing public transit due to the many physical disabilities (including those reported in the census and those that are not) that result from aging.

On March 27, 2009, Dare County hosted the first State of the Older Adult Conference in an effort to gather input about four issues facing older adults in the county: communication, senior friendly businesses, access to medical care, and aging in the home. In a report that detailed the outcomes of the conference, it was

Definitions

For purposes of the *Dare County CTSP*, transportation disadvantaged persons have been defined as follows:

Elderly — Age 65 and over.

Persons with Disabilities — Based on census definition for disability that refers to persons with a long-lasting physical, mental, or emotional condition that makes it difficult for a person to perform activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition also can impede a person from being able to go outside the home alone or to work at a job or business.

Low Income — Based on census definition for poverty status derived from answers to income questions on the 2000 census. Poverty status is determined by comparing a person's total family income with the poverty threshold appropriate for that person's family size and composition. Reported here by household.

Vehicle Availability — Occupied households with no vehicles available.





noted that the county's percentage of residents age 60 and over is one of the highest in the state. The report estimated that the percentage of the county's total population age 60 and over will continue to grow, and by 2030 will account for nearly 2/3 of all residents in the county. Well before 2030 (and in fact, in the next few years), more senior citizens will call Dare County home than school-aged children.

Persons with Disabilities

According to a National Organization on Disabilities survey conducted in 2000, 30 percent of respondents with disabilities reported difficulty accessing transportation, compared to 10 percent of respondents without disabilities. This trend reflects the main concern for persons with disabilities — the availability of transportation options that accommodates specific disabilities while fulfilling their need for independence. According to the 2000 census, approximately 4,327 people aged 5 and over in Dare County reported at least one disability according to the census definition ("The existence of a long-lasting physical, mental, or emotional condition that makes it difficult for a person to perform activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. The existence of a long-lasting physical, mental, or emotional condition that makes it difficult for a person to perform activities such as walking, climbing stairs, dressing, bathing, learning, or remembering."). Based on these figures, the disabled population in the county was 15.4 percent in 2000. This rate falls below both averages for the state (21.0 percent) and nation (19.3 percent). Differences in how the census gathered information on persons with disabilities from 1990 to 2000 limits the practical ability to discern trends among this disadvantaged transportation group.

Within Dare County, some areas exhibit a higher overall percentage of disabled persons. The northern portion of Kill Devil Hills, as well as the community of Hatteras exhibit percentages of disabled persons in excess of 20%. The distance of Hatteras from other county population centers and activity nodes make access for the disabled community harder to achieve.

Low Income

The transportation disadvantaged group that may require the most flexibility in community transportation are families in poverty. This need for flexibility stems from their need for employment transportation (many of which are second or third shifts) as well as the likelihood these families also face cultural/language obstacles. Compared to state and national averages, the share of low income households in Dare County is lower. In 2000, 8.0 percent of households were below poverty in Dare County, down 0.3 percent from 1990. The state and national averages in 2000 were 12.0 percent and 12.4 percent, respectively. However, this segment of the population is growing more quickly in Dare County than in the state and nation as a whole. As shown in **Table 3.3**, the overall growth rate of low income families in the county is much higher than at the state or federal levels. Simply considering how many households reported being below poverty in 1990 compared to 2000 reveals an increase of 27.9 percent. This rate outpaces the state (15.5 percent) and national (6.8 percent) averages. This trend indicates that while the low income population in the county did not grow as fast as the county in general, the enormous growth in the county from 1990 to 2000 has introduced a greater share of low income families than state and national averages.

Unlike the elderly and disabled population groups, low-income populations tend to reside in specific communities within the region. A spatial analysis of 2000 census data shows the largest concentrations of households in poverty are located in the western portions of Roanoke Island, and in the mainland portion of Dare County. These areas contain percentages of population below poverty that are greater than or equal to the state average.





The poor likely will account for an increasing share of DCTS riders. Based on discussions with the Steering Committee, stakeholders, and the public their current use is not as high as other transportation disadvantaged groups. The limited flexibility of service and not knowing what services are available are two reasons cited for a lack of low income ridership at DCTS. As a result, low income families remain more auto-dependent and incur the expense of car ownership to have the necessary mobility.

Vehicle Availability

The most noticeable group in need of alternative transportation are those households without access to a personal automobile. The census reports the occupied housing units by block group with no vehicles available for use by household members. Vehicles refer to passenger cars, vans, and pick trucks kept at home and available for use by members of the household. In 1990, 7.6 percent of households in Dare County did not have access to a personal vehicle. The percentage remained relatively unchanged in 2000, dropping slightly to 7.5 percent. The county’s percentage was equal to the state average (7.5 percent) and significantly less than the national average (10.3 percent), though the county’s percentage is not declining as fast as the comparative groups. However, the total change as shown in **Table 3.3** indicates a drop of 40.9 percent from 1990 to 2000 (710 households in 1990, 420 households in 2000).

Within Dare County, the western section of Roanoke Island shows elevated percentages of the population without access to a vehicle. The percentage in this section exceeds the county and statewide average. This fact may pose particular difficulties given the geographic location of this population sector. Access to employment centers and other basic necessities located beyond the boundary of Roanoke Island is limited for this population group with no access to vehicular transportation. Portions of Kill Devil Hills, Manteo, and Nags Head also exhibit elevated levels of population without vehicle access.

Table 3.2 — Disadvantaged Population Group Comparison
(Percent of Total Population or Households, 1990 to 2000)

	Dare County			North Carolina			United States		
	1990	2000	Change	1990	2000	Change	1990	2000	Change
Elderly*	12.5%	13.8%	1.3%	12.1%	12.0%	(0.1%)	12.6%	12.4%	(0.2%)
Persons with Disabilities*	N/A	15.4%	N/A	N/A	21.0%	N/A	N/A	19.3%	N/A
Low Income^	8.3%	8.0%	(0.3%)	13.0%	12.3%	(0.7%)	13.1%	12.4%	(0.7%)
No Vehicles Available^	7.6%	7.5%	(0.1%)	9.6%	7.5%	(2.1%)	11.5%	10.3%	(1.2%)

* persons ^ households

Table 3.3 — Disadvantaged Population Group Comparison
(Total Change, 1990 to 2000)

	Dare County			North Carolina			United States		
	1990	2000	Change	1990	2000	Change	1990	2000	Change
Elderly*	2,841	4,124	45.2%	804,341	969,048	20.5%	31,241,831	34,991,753	12.0%
Low Income^	1,861	2,381	27.9%	829,858	958,667	15.5%	33,899,812	33,899,812	6.8%
No Vehicles Available^	710	420	(40.9%)	241,711	235,339	(2.6%)	10,602,297	10,861,067	2.4%

* persons ^ households





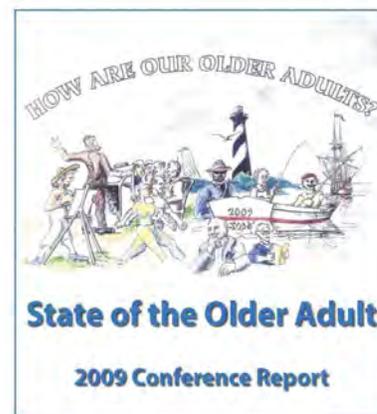
Natural and Manmade Obstacles

As shown in **Figure 3.1**, the land area of Dare County includes a portion of the mainland (the majority of which is the Alligator River National Wildlife Refuge), Roanoke Island, and the barrier islands on which most of its municipalities and population are located. The natural features that attract up to 200,000 visitors per week in the peak season create obstacles for the effective and efficient delivery of transportation services. These obstacles were first discussed by the Steering Committee at the project kick-off meeting and remained a major theme throughout the public outreach efforts. The following list summarizes the natural and manmade issues facing DCTS.

- **Linear geography**
- **Length of the county** (78 miles or approximately 2 hours driving from Hatteras to Duck)
- **Remoteness to specialized healthcare**
- **Lack of alternatives to main highway** (NC 12)
- **Limited crossing of major waterways**
- **Seasonal population swells**
- **Threat of natural disasters**
- **Abundance of on-site parking for seasonal tourists**

Transportation Needs

The State of the Older Adult Conference revealed that those in attendance acknowledged many services were available but felt older adults may not be aware of those services. In addition to the need for more information regarding the available services, the attendees noted the need for transportation to be available for same day services. Information gathered through such conferences is helpful to target specific subgroups of the population and to supplement data received through the U.S. Census Bureau, particularly when the data is being received near the end of the 10-year census cycle. Still, the conferences and census data fails to account for unique features of the county such as the growing seasonal community of foreign temporary workers coordinated through Pathways.



It is important to note that public transportation is available throughout Dare County. However, some destinations or trips by specific transportation disadvantaged groups may be less accommodated by the existing service provided by DCTS. The service hours, ridership eligibility, reservation process, and general protocols are reasons this disparity exists. Many current and potential riders are frustrated by what they perceive to be limited service hours, a lack of flexibility by DCTS, and the difficulty in gathering information on the services offered, policies, and procedures.

Chapter 4 validates the transportation issues that surfaced as part of the public outreach efforts and subsequent analysis. The chapter also explores the feasibility of potential recommendations aimed at





alleviating Dare County's transportation needs. Issues covered in **Chapter 4** include but are not limited to the following:

- Service enhancement for the general public, including those without a driver license
- Relocation of DCTS from Older Adult Services
- Transportation for summer employees
- Perception of the system as only serving the elderly
- Opportunity for fixed-route service, including a tourist-focused shuttle
- Potential need for other funding opportunities
- Interest in a consolidated system
- Using taxi services to provide a back up service
- Practicality of using/adapting existing administrative software as the system grows
- Expansion of hours or frequency of services
- Changes to policies and procedures, particularly the 48-hour reservation window and penalties for late cancellation and no shows
- Marketing, education, and outreach initiatives





Chapter 4 — Findings & Assessment

Introduction

The *Dare County CTSP* is based on the understanding that the geography, economy, and demographics of the county create both challenges and opportunities to serve residents with effective transportation. The findings and assessment that follow in this chapter are the collective result of input by the Steering Committee, stakeholders, and general public. The details of key recommendations will be finalized in the financial and implementation plan to be completed following a review of *Technical Memorandum 2*.

The chapter begins by assessing the organizational structure of Dare County Transportation Service (DCTS) and the Transportation Advisory Board (TAB). The planning process for the Dare County CTSP respects the work previously completed, particularly the Performance Plan and Analysis (PPA) introduced in **Chapter 1**. Given the similarity in scope and desired outcome between the PPA and the CTSP, the project team in consultation with DCTS used the findings and outcomes of the Performance Plan as a starting point for developing recommendations. All findings and assessments presented here are considered in relation to the underlying goal of the *Dare County CTSP* presented in **Chapter 1**:

To identify system and organizational improvements and strategies aimed to enhance access and mobility for all residents of Dare County, particularly those who cannot drive (elderly, persons with disabilities and those that cannot afford a car).

Organizational Assessment

Dare County Transportation Service

The DCTS Transportation Coordinator currently reports to the Director of the Dare County Department of Older Adults. This person reports to the Director of Public Services, who reports to the County Manager. This arrangement is a legacy from the origins of DCTS as a volunteer-based organization for meeting medical-based transportation needs for senior citizens. The current organization structure contributes to the public perception of DCTS as strictly a senior services transportation provider rather than a transportation resource to the greater community. Such a perception is not consistent with its current funding sources, which incorporate a much broader range of services (including Rural General Public – RGP) transportation. Additionally, the current organization structure does not encourage broader community use and support.

Heightened public visibility for community transportation providers tends to result in increased public support for such operations, which is often reflected in greater ridership and an enhanced willingness of the local community to provide support (and funding) for such operations. The overall result of expanded community transportation operations are consistent with those generally associated with public transit:

1. Increased public mobility
2. More efficient use of public resources (including energy)
3. Reduced congestion
4. Reduced environmental impacts.

Accordingly, the optimal, long-term structure for community transportation organizations should be one that maximizes public visibility while encouraging greater transportation connectivity. Such organizations





typically are independent governmental agencies or transit non-profits, ideally part of (or linked to) a regional, coordinated community transportation/transit operation.

In recent years, Dare County explored the possibility of merging DCTS with the Inter-County Public Transportation Authority (ICPTA), which is based in nearby Elizabeth City. As a multi-county, regional transit system located adjacent to Dare County, this merger appears to be a viable and potentially desirable option for enhancing regional transportation coordination, providing additional service options and potentially reducing combined system costs. Regardless of the reasons, the merger has not proceeded despite apparent benefits, including (but not limited to) leveraging staff, management personnel, and/or support systems over a larger base of operations. The potential result of this merger could have been reduced costs or expanded service opportunities.

Recommended Organizational Structure

With respect to non-merger DCTS organizational options, the current size of DCTS combined with the nature of the Dare County service area (relatively small year-round population, scattered over a unique geographic area with limited logistical options) make it unlikely that DCTS can justify the necessary resources to support a fully stand-alone operation within the next 5 years. As a result, DCTS should remain a part of another department to benefit from shared resources it otherwise could not afford. Organizational alternates include:

1. Relocating DCTS within the Dare County organization structure to lessen the link to a single client type (i.e. Older Adult Services)
2. Moving DCTS to another local governmental entity or non-profit.

Of these two options, having DCTS report to another more visible position within Dare County government is easier to accomplish, especially given the lack of another local alternative. Such a move would only require the DCTS Transportation Coordinator report to another position within Dare County government and would not require personnel to relocate.

Within this arrangement, the most visible position would be to have DCTS report directly to the County Manager. However, discussions with Dare County management personnel have tended to discourage this option in favor of having DCTS director report to the Director of Public Services, effectively moving DCTS up one tier within Dare County government. While such a placement would increase organizational viability, "Public Services" still is not a functional area where the general public typically would expect community transportation to be housed. However, because upper management within smaller government organizations such as Dare County must take on diverse responsibilities, the logic of this suggestion makes sense. Revising the Director of Public Services job title to include a transportation inference (such as "Director of Public Services and Transportation") should alleviate public confusion. Greater organizational visibility of DCTS would reduce the perception of the system being limited to only welfare or Medicaid-related services and likely would result in more interest (and potentially greater funding support) for transportation by county elected officials.

It is unclear why DCTS/ICPTA merger option ultimately was not chosen. However, other options exist to achieve many of the goals of system merger while avoiding political and/or organizational "turf" battles (to the extent these may have contributed to the failure of this initiative). The most straightforward option is for DCTS to contract with ICPTA to have them perform some or all of the administrative/service support functions (such as scheduling or dispatching) currently provided by Dare County. In this scenario, Dare County would retain its local management of drivers, vehicle maintenance, and coordination with user





agencies/entities. Such an arrangement would provide DCTS with greater management/administrative resources while freeing local management personnel to perform higher value-added activities (such as marketing services and pursuing transportation grant opportunities). These activities historically have proven difficult for DCTS to accomplish.

Equally importantly, this option would allow DCTS to leverage ICPTA's advanced service scheduling and dispatching system, technologies for which Dare County is not projected to qualify for NCDOT funding support within the next five years¹. Such systems significantly reduce the administrative time needed to comply with NCDOT/FTA reporting requirements while simplifying client billing and transit fund-based budget tracking. These demands will increase if the county implements a service billing system and as it performs ongoing fund monitoring (these recommendations are detailed later in this chapter). While the actual cost of having these activities performed by ICPTA would have to be determined through negotiation and mutual agreement, this option could potentially reduce DCTS's total cost of providing transportation services (with the cost of contracting such services offset by the savings associated with a reduction in force of relevant DCTS personnel or by reassigning the affected personnel to vacant county positions for which they are qualified). This option is discussed further within the discussion of recommended operational changes later in the chapter. Ultimately, it is recommended that DCTS/Dare County pursue this option.

Transportation Advisory Board

As mentioned in **Chapter 2**, the NCDOT Community Transportation Program (CTP) requires DCTS to have a Transportation Advisory Board (TAB) appointed by the Dare County Board of Commissioners. The board operates in a true advisory role and does not have decision making power. The TAB is composed of 13 members that represent human service agencies, Dare County and its municipalities, local medical facilities, private businesses, the school system, the Employment Security Commission, local citizenry, and other interests. (Currently, one seat is vacant.) The overall structure and composition of the Dare County TAB complies with NCDOT guidelines and, therefore, has no fundamental flaw. However, the following aspects of its composition are noteworthy and warrant possible change:

- Only one TAB member (the Chairperson) does not appear to have clear ties to a targeted geographical location, client agency, or specific population target group. As such, the general public seems underrepresented on the TAB.
- One of the TAB members is an elected representative (County Commissioner). Overall, the TAB contains numerous county administrators and/or organizations that rely on the sponsorship of the Dare County Board of Commissioners for support (financial or otherwise). This TAB composition may represent an inequality in power/influence among its members.
- It is unclear whether the representation of Dare County Schools is as a client agency or is a repetition of other human service agencies represented.
- The recipient of JARC and vanpool funding for Dare County (*2Plus*) is not represented on the TAB or otherwise engaged with DCTS.

In addition to the above considerations, conversations with TAB members during various outreach efforts including the TAB session conducted as part of the Stakeholder and Focus Group Interviews suggest the

¹ Per "North Carolina Community Transportation System Technology Implementation Planning," February 4, 2009





need for some additional education of TAB members on NCDOT/FTA funding use restrictions and the varying match required by users, client agencies, and/or the county. Because Dare County likely will not qualify for urban fixed route transit funds in the foreseeable future, a more viable use of the TAB's focus and energies is on service options supported with existing funding sources or additional sources identified through the CTSP.

Recommended TAB Structure

As mentioned above, no change to the TAB is needed to meet NCDOT guidelines. However, the following changes would improve the long-term effectiveness of the organization:

- Evaluate whether any of the existing members (beyond the Chair) could be assumed to represent the general public. To the extent the existing TAB composition does not meet this criterion, consider adding additional TAB members. Should Dare County or NCDOT have concerns about increasing the overall size of the TAB to add members from underrepresented groups, Dare County Schools appears to be a logical choice for possible replacement.
- Revise the TAB rules to suggest Dare County have a County Commissioner serve as a liaison to the TAB but without voting rights.
- Consider inviting the relevant JARC/van pooling provider (currently *2Plus*) to the TAB.

TAB Vision and Goals

As part of the Stakeholder and Focus Group Interviews, the project team met with the TAB not only to gain insight into its organizational structure but also to discuss the board's vision and goals. The session revealed the absence of direction for the board and a general lack of involvement from several members. The TAB was created to provide a diversity of viewpoints while representing the people of Dare County. Lack of participation by some of the TAB members indicates that some of the groups seemingly represented by the board through its membership mix may not have their needs truly represented in policy decisions. At the TAB session, the opportunity was discussed to conduct a facilitated retreat at which TAB members and DCTS leadership would work to develop a defined vision and goals and help clarify their role and expectations. It is the recommendation of this plan that such a retreat should be conducted.

Policy Review and Service Modifications

The Performance Plan and Analysis (PPA) conducted by the Institute for Transportation Research and Education (ITRE) for Dare County identified suggested policy, administrative, and operational changes. Like Community Transportation Service Plans, the purpose of the PPA is to help community transportation systems achieve higher performance measures and improved business practices. PPAs also adhere to a 5-year planning cycle. Given these similarities and the recent (July 2009) completion of the Dare County PPA, the recommendations for the *Dare County CTSP* began by evaluating the PPA, discussing its recommendations with DCTS leadership, and determining to what extent the recommendations should be reiterated in the CTSP.

Table 4.1 shows the finding or recommendation of the Performance Plan and Analysis on the left and the CTSP response on the right. The table also indicates the page of the PPA on which the finding or recommendation is located. The complete PPA can be found in the appendix to this report. The result of the policy review is a series of service modifications, including alternative delivery strategies, internal coordination opportunities, and regional collaboration initiatives.





Table 4.1 — Performance Plan and Analysis (PPA) Recommendation Overview

PPA Finding or Recommendation	CTSP
Page 3	
<p>1. In the next five years, the system should be moving forward by expanding services, adding vehicles, staff and new technology.</p>	<p><u>We concur with this recommendation.</u></p> <p>Stakeholder outreach efforts clearly indicate a desire to expand service and our analysis suggests that service has been intentionally constrained to meet available budget within the existing revenue and service delivery approach.</p>
<p>2. At this time, the DCTS should be a “stand-alone” department. This would enable the department head to have direct contact with the county administration. The public also has a false impression that the system operates only for elderly and disabled riders.</p>	<p><u>We concur with this recommendation.</u></p> <p>Suggested changes are identified under the heading, “Recommended Organizational Structure.”</p>
<p>3. The DCTS vehicles should have two-way radios on the vehicles and in the office. This expense would be reimbursed at the rate of 90% by DOT/PTD. The county would no longer be responsible for cell phones now used in the vans.</p>	<p><u>We currently disagree with this recommendation.</u></p> <p>It is unclear to what extent radio coverage is available in Dare County. However, radio coverage clearly will not suffice for out of town trips. Accordingly, unless/until the questions related to radio coverage can be addressed, cell phones represent the preferred approach even with higher operational costs. Additionally, cell phones provide drivers the ability to easily call clients from the vehicle and provide a way to confirm a client’s readiness.</p>
<p>4. The DCTS should apply for grants that will enable an expansion of vehicles. Additional vehicles may lead to additional services needed south of the Oregon Inlet Bridge. The DCTS may explore a shopping route shuttle on Saturdays because few medical appointments usually occur on weekends.</p>	<p><u>We agree that additional vehicles ultimately will be needed to expand service.</u></p> <p>However, ridership levels also can be increased through operational changes, which are described in more detail in <u>item 22</u>. Contracted, shared-ride taxi service also may be a viable service alternative for weekend and after-hours services. Obviously, the county will need to understand the revenue/expense impact of providing these additional services, considerations also discussed in items <u>10</u> and <u>22</u>.</p>





PPA Finding or Recommendation	CTSP
<p>5. The daily office hours should be expanded.</p>	<p><u>We agree with the intent of this recommendation but note additional considerations and means of accomplishing the intended outcome.</u></p> <p>According to discussions with the drivers, this recommendation likely is focused on the need for clients to cancel a scheduled trip after office hours. While expanding office hours is one way to address this issue other options also exist, such as having after-hours calls routed to the Transportation Director’s cell phone or having an after-hours call center service field those calls and communicate with the appropriate driver/dispatcher, etc. Currently, callers can leave a voice message after hours.</p> <p>Along with other advantages of contracting for support services from ICPTA (described in the “Recommended Organizational Structure” section), expanded office hours would be a benefit and consistent with the expanded scope of a regional transportation operation.</p>
<p>6. The DCTS should explore contracted services with county agencies and businesses and charge riders a fare to gain additional operating funds.</p>	<p><u>We concur with this recommendation.</u></p> <p>With the exception of Medicaid-based medical trips, all other trips require some degree of local funding match, with Rural General Public (RGP) requiring the largest match (50%). It is appropriate and a preferred practice to have users participate in some level of cost sharing to encourage prudent use of public resources.</p> <p>For trips of any type in which the combination of user fees and reimbursement amounts exceed cost, Dare County should provide as many trips as demand exists. While county-owned vans represent one service option, shared-ride taxi service and other contracted transportation providers also can help meet this need.</p>
<p>7. If and when billing for contracted services begins and/or fares are collected, the department will require additional employees, new software and technology and training.</p>	<p><u>We concur with the underlying logic of this recommendation but note other options for achieving the desired outcome.</u></p> <p>Additional DCTS staffing is an option but so is contracting for billing support from other Dare County agencies or outsourcing back office operations to ICPTA. The ICPTA option also would enable greater service coordination and (potentially) lower system costs.</p>





PPA Finding or Recommendation	CTSP
Page 5	
8. Immediately – Begin tracking and reporting service and revenue miles/hours according to the NC DOT/PTD definition.	<p><u>We concur with this recommendation.</u></p> <p>This change was made prior to launching the <i>Dare County CTSP</i>.</p>
9. Revisit the practice of having the full time driver outstationed in an area that may not have 40 hours of work per week.	<p><u>We concur with this recommendation.</u></p> <p>Buxton area logistics dictate the need to have a driver(s) in that location. However, full time drivers should only be domiciled where full time demand for services exists. With respect to Buxton, a part-time need suggests a part-time driver(s) is more appropriate.</p>
10. Reduce the scheduling cut off time from 48 hours to 24 hours	<p><u>We concur with this recommendation but note a number of additional considerations and associated implications for DCTS and Dare County government.</u></p> <p>The 48-hour scheduling cut-off reflects current DCTS operational practices and the capacity of its system, which can be filled by requests tendered 48-hours in advance. However, it also reflects the substantial cost of no shows (in terms of both driver/vehicle productivity and cost) in an environment where a significant number of DCTS clients are located far from other clients. When coupled with a historical resistance of Dare County elected officials and county administrators to enforce policies aimed at discouraging no shows, the 48-hour schedule cut-off currently in place at DCTS makes sense.</p> <p>Implementing the ITRE-recommended reduction in scheduling cut off time from 48 to 24 hours inevitably will create additional opportunities to add client trips that complement currently scheduled trips. However, it also effectively will eliminate DCTS’s ability to call all clients the day prior to a scheduled trip (due to time/resource constraints). The anticipated result is an increase in client no shows and a greater emphasis on DCTS policy compliance if the desired ability to serve more clients at greater efficiency is to be achieved. These considerations are covered further in items <u>11</u> and <u>12</u>.</p>





PPA Finding or Recommendation	CTSP
<p>11. Revise the no show policy so the driver is not forced to wait 5 minutes after the pickup time, even though the passenger is required to be ready 15 minutes before the pickup time. The current policy may result in vehicles with passengers having to wait up to 20 minutes for a no show.</p>	<p><u>We concur with the general direction of this recommendation and suggest some additional changes.</u></p> <p>Eliminating the requirement that drivers wait until 5 minutes after the scheduled time is a positive step, but further enhancements are possible. To this end, Dare County/DCTS should shift from providing clients a specific “pick-up time” in favor of having a “pick-up window.” This pick-up window would consist of plus-or-minus 15 minutes from a target pick-up time, with the client requested to be available for immediate departure anytime within that window. The driver’s revised pick-up instruction would be to only wait for an established consistent and advertised time (such as 5 or 10 minutes) before leaving. This approach encourages greater client responsibility, promotes even greater driver efficiency, and provides DCTS opportunities to serve more clients and/or provide more trips.</p> <p>Given that DCTS provides drivers county-owned phones to support their work, DCTS also should include client telephone numbers with their dispatch manifests to allow drivers to call clients from prior stops or when they have arrived at the client’s location to confirm the client is ready. Such calls should be at the driver’s discretion and only encouraged to the extent that prior client behavior suggests the necessity of such a call. In all instances, drivers should be prohibited from using these phones when the vehicles are in motion.</p>





PPA Finding or Recommendation	CTSP
Page 6	
<p>12. Revisit the late cancellation and no show policies to ensure customers are rewarded for cancelling instead of no showing.</p>	<p><u>We concur with this recommendation.</u></p> <p>Late cancellation and no show policies attempt to balance customer-friendliness against the desire to provide the best service possible within the constraint of available resources. DCTS policies that are not supported or enforced are counterproductive and limit the community’s access to shared resources.</p> <p>Conversations with Dare County personnel suggest county administrators and elected officials generally have been unwilling to enforce policies that discourage client behavior that leads to operational inefficiency. Since Dare County is striving to provide more transportation services for more people, the county must be willing to adopt and adhere to practices that encourage efficiency.</p> <p>Acquiring the necessary policy support will require a multi-month, DCTS-led information and education campaign. This effort will require making a compelling case of how the enforcement of late cancellation and no show policies (among others) allow DCTS to serve more clients with existing resources (or better leverage any new resources provided). Once the support of county leadership is secured, DCTS will need to educate client agencies and riders on policy changes (as well as DCTS’s willingness to enforce existing policies more aggressively and consistently). All parties should be provided a grace period to adjust to the new policies and procedures. Through such systematic education efforts, DCTS can implement the needed changes while minimizing user resistance or inconvenience.</p>
<p>13. Attend ITRE’s Paratransit Foundations courses</p>	<p><u>We concur with this recommendation.</u></p> <p>This recommendation is particularly important given that Dare County has a new transportation director.</p>





PPA Finding or Recommendation	CTSP
<p>14. Prepare for growth by adapting the scheduling database and spreadsheets to track all required information, allow for billing, and create performance reports. If the existing software cannot be adapted, begin implementing TrIP_Maker or any other scheduling software that will prepare the system for growth.</p>	<p><u>We concur with this recommendation but note additional options and alternatives for accomplishing the intended outcome</u></p> <p>Rather than spend time and effort on the database developed by previous DCTS leadership, DCTS should use an existing product with a current community of users that can help support and enhance this product. Under NCDOT guidelines, options for which Dare County currently is eligible include TrIP_Maker and basic software products offered through CTS Software Inc. TrIP_Maker is free, while the CTS basic software currently is an eligible 5311 Administration expense. However, it is important to note the CTS software currently is eligible but may not continue to be in the future. Some systems build CTS costs into their operating expenses and charge it back to their agencies. If Dare County chose to lease the CTS basic software, it will need to use appropriate procurement procedures, especially if State or Federal funds are used.</p> <p>Unfortunately, neither TrIP_Maker nor the CTS basic software incorporate interactive routing and trip optimization features (among other advanced technologies). NCDOT’s willingness to provide funding assistance for such technology enhancements is described in its technology planning document, which projects anticipated trip volume by system for the upcoming 3 years. Systems projected to exceed 300 trips per day are eligible for additional technology automation, subject to funding availability. At its current growth projection, Dare County is not expected to reach these benchmarks within the next 5 years.</p> <p>One option that could provide Dare County the benefit of advanced transit software without having to wait to qualify for NCDOT funding support would be for ICPTA to perform scheduling, routing, and billing for DCTS on an outsourced basis. ICPTA already owns the advanced software and may be able to handle these functions remotely, allowing DCTS leadership to focus on managing its drivers, marketing its services, and pursuing additional value-added activities such as grant writing. The proximity of Elizabeth City to Dare County increases the attractiveness of this option, as does the fact that a significant number of DCTS trips pass through ICPTA client counties. This arrangement would allow ICPTA personnel to easily identify ICPTS/Dare County service coordination opportunities and provide additional benefits to all parties. Other considerations associated with the ICPTA outsourcing option are discussed in items <u>16</u>, <u>17</u> and <u>18</u>.</p>





PPA Finding or Recommendation	CTSP
<p>15. Begin tracking salaries, benefits, and other expenses currently paid by the County. Determine the true cost of service and a billing rate based on this true cost.</p>	<p><u>We concur with this recommendation.</u></p> <p>NCDOT has a spreadsheet model for determining a fully-burdened cost. However, determining an optimal service billing approach is more complicated and requires both DCTS and its agency customers (DSS, etc.) understand the process, implications, and trade-offs of the various alternatives (e.g., per trip, per shared mile, per hour, etc.).</p> <p>NCDOT/ITRE has indicated a strong preference for a zone-based costing approach (with fares based on a fixed schedule of charges for travel between service zones (adjusted periodically) as a means of encouraging overall system efficiency. We agree with the NCDOT/ITRE assessment and note that a zone-based fare approach simplifies service billing. However, since ICPTA currently uses a shared trip-mile approach, it is important to note that a zone-based service billing approach may complicate attempting to outsource support services to this agency..</p>
<p>16. Apply for Federal and State grants that will increase the mobility of the community without costing the county.</p>	<p><u>We concur with this recommendation but note the following additional considerations.</u></p> <p>With the exception of JARC funds (which are going to 2Plus), Dare County is receiving the federal and state transit funds for which it is eligible. However, other potential funding sources include private and community grants (among others), which require Dare County to pursue via grant writing efforts (see item 17).</p> <p>To the extent that the DCTS Transportation Coordinator and/or other county personnel lack the time or skills to pursue such grants, the county should consider outsourcing this activity. Alternately, should the ICPTA outsourcing options be pursued, the Transportation Coordinator likely would be able to perform this function, albeit with some training and/or assistance to acquire the necessary skills.</p>
<p>17. Expand service by working with public and private potential funding sources in the community.</p>	<p><u>We concur with this recommendation.</u></p> <p>As indicated in item 16, we consider grant writing a critical activity to expanding the transportation services available to Dare County citizens. While DCTS management personnel have struggled to find available time to pursue such activities in the past, these activities are critical, even if outsourcing this activity is required (to consultants or other county personnel, as indicated in item 16). Alternately, outsourcing certain support functions to ICPTA would free DCTS resources for higher value-added activities such as grant writing.</p>





PPA Finding or Recommendation	CTSP
<p>18. Coordinate with neighboring transportation systems.</p>	<p><u>We concur with this recommendation.</u></p> <p>Given the geographical and logistical constraints of the Dare County area, actual service coordination opportunities likely will be limited. However, as indicated, contracting with ICPTA for support activities probably provides the most viable option to have such coordination in the near term.</p>
<p>19. Draw down county controlled transportation funds using a billing rate based on the true cost of service.</p>	<p><u>We concur with this recommendation.</u></p> <p>See item <u>15</u> for additional details. However, adopting a service billing model will significantly increase the accounting and other back office support requirements for DCTS, which will likely require additional staff or county support if handled in-house. Depending on the actual price and scope of any outsourced support services agreement with ICPTA, Dare County may be able to avoid some/all of these incremental costs while gaining additional service redundancy (provided by ICPTA's greater staff size).</p>
<p>20. Expand service hours to become a viable option for employment transportation</p>	<p><u>We concur with the intent of this recommendation but note a number of additional considerations.</u></p> <p>To become a more viable source of employment transportation (providing the more consistent and predictable service levels necessary to support employment transportation), DCTS would need to shift from its primarily demand-responsive mode of operation to more of a deviated fixed route service. Operating the system in this fashion likely would significantly increase funding needs if existing services were to be continued at current or expanded levels.</p> <p>The extent employment trips can be coordinated with <i>2Plus</i> or that DCTS is willing to pursue JARC funds in lieu of <i>2Plus</i> must be determined.</p>
<p>21. Constantly evaluate the fleet mix of lift and non-lift vehicles to ensure that the fleet is configured appropriately to meet the mobility needs of the community</p>	<p><u>We generally concur with this recommendation but note some additional considerations.</u></p> <p>The larger the fleet and service volume, the easier it is to schedule service around equipment capability constraints. Conversely, the smaller the fleet and lower the service volume, the more difficult it is to manage these limitations.</p> <p>Given the small system size, dispersed geography, higher than typical level of wheelchair service demand, and (current) low load levels, Dare County should pursue purchasing wheelchair-capable vehicles exclusively until the fleet size and service volume allows more operational flexibility in meeting client needs.</p> <p>Taxis and volunteer-provided vehicles reflect additional resources that can meet the needs of non-wheelchair bound clients.</p>





Additional Details on Outsourcing Concept

As described in “Recommended Organization Structure” and further elaborated upon a number of the above issues, contracting with ICPTA for service schedule, routing, dispatching, and billing would provide Dare County administrative, operational, and technology-related benefits. Essentially, these benefits are derived from ICPTA already performing these functions on a much larger scale and with existing technologies and processes established to handle significantly higher trip volume. The estimated incremental volume of identified Dare County services could be handled by roughly one ICPTA employee (or represented by the fractional allocation of multiple ICPTA employees performing the outsourced Dare County work). Obviously, Dare County would need to bear these incremental ICPTA costs in the form of a contract for services. DCTS could pay for these outsourced services by eliminating its existing administrative person and/or avoid hiring additional personnel to provide recommended service billing (although ICPTA’s actual charges for these services would have to be negotiated). The following is a “back of the envelope” estimate of Dare County monies that could be diverted to pay for the identified outsourcing through the recommended arrangement:

\$ 28,000	Existing DCTS Assistant Salary
<u>\$ 14,000</u>	Incremental Billing Assistance (50% of time)
\$ 42,000	Total Salary Costs
\$ 12,600	Cost of Benefits (@ 30% of salary)
<u>\$ 54,600</u>	Total Amount available for diversion

As indicated, the benefits to Dare County of ICPTA performing the identified services include:

- Utilization of advanced transit software already in use at ICPTA
- Expansion of office hours
- Allowing the DCTS Transportation Coordinator to pursue grant writing, marketing, and other higher value-added activities without the distractions of trying to back-up existing DCTS administrative personnel in handling service scheduling calls or creating the administrative processes required to comply with the service billing recommendations

It is noted that previous ICPTA/Dare County merger discussions (NEAT) envisioned not having a Dare County based manager and required an actual merger of operations, an approach that involved considerable political complications. However, the described approach provides the benefit of having a local manager to handle some tasks (drivers, customer complains, service expansion planning, vehicle maintenance, safety training, etc.) and provide the necessary visibility to the community while avoiding the complications of an actual merger.





Other Service Recommendations

Lead Driver

The outsourced support service approach (described above) also brings into question the need for a lead driver in its current role given this person basically coordinates vehicles services and safety training, etc. These functions likely could be handled by the local manager, with many of the maintenance-related coordination activities directly performed by the Dare County Fleet Maintenance Department. This approach places the lead driver in a more traditional role — serving as a substitute for the Transportation Coordinator when that person is unavailable or filling-in for drivers that have an unplanned absence.

Use of Taxis

Although the use of taxis is an excellent resource to provide expanded services, Dare County currently does not contract with taxi services for any trips. The benefits of utilizing taxi services are particularly notable for trips not easily combined with other service requests (either because of the requested time/date, such as weekends or at night, or because of unique origins/destinations). By contracting for these services on a “Shared-Ride” basis (where clients agree to share a taxi with other clients when compatible trips are available), these trips can use the same funding sources for which they are eligible through existing, county-owned vehicles. Although this practice does not directly increase the total transportation funding available, it may attract additional funds/grants because of its additional service flexibility.

Remote Domiciling of Vehicles

Dare County should consider housing more vans remotely (at fire/police stations or locations where security is not an issue) and having drivers report to those locations instead of a central location (i.e. Manteo). This approach would reduce driver deadhead miles and likely would increase the number of trips that reasonably could be completed within available hours. Issues related to providing driver manifests can be addressed via email, fax, or other means. Vehicle fuel can continue to be obtained from the county or purchased from commercial stations via vehicle fuel cards (ideally, on a net-of-tax basis by establishing a contract with a provider of government fuel cards²). Maintenance can be coordinated by having drivers rotate vans through the county garage when service is due or by contracting with local service providers.

Locating vehicles remotely would need to be evaluated on a case-by-case basis in order to minimize potentially having to send drivers cross-county to pick-up these vehicles when the scheduled drivers are unavailable. However, some efficiency advantages are inherent to using this approach and DCTS is encouraged to revisit this option periodically.

² An example of such a program is available from US Bank via their *Voyager* card program for governmental entities.





Fixed-Route Considerations

To many residents of Dare County, especially those who have moved to the community from larger metropolitan areas, the notion of transit improvements center on fixed-route buses. Throughout the public outreach efforts of this project, stakeholders and the general public have expressed interest in some form of fixed route, scheduled transit service options available to the general public for shopping, employment, and medical trips. The discussion of fixed route service in Dare County typically began with the previous effort to establish fixed route service focused on the needs of Pathway student workers. The route operated from 5:30 p.m. to 9:30 p.m. and served destinations such as Food Lion, Kmart, CVS, and a laundromat. The route lasted a few months. The expense to operate combined with low ridership resulted in a cost per ride ranging from \$80 to \$100.

While the interest for implementing fixed-route service is understood and appreciated, the shortage of funding and an inability to qualify for adequate state and federal funds may make this infeasible for DCTS.

Funding Constraints

The only state or federal funds currently available to Dare County to subsidize a fixed-route service are Rural General Public (RGP) funds. RGP funds can be used only for operational purposes (no capital dollars are available for purchasing vehicles or building bus stops facilities) and the total statewide pool of RGP funds is limited and allocated on a formula basis. In fact, DCTS already fully uses its existing allocation of RGP funds within the current set of services, meaning the county would have no ability to use the RGP funds to operate a new fixed route system.

FTA Urban Transit funding is available only to established systems. Any “new starts” (i.e. start-up systems) must compete for available funding. This competition is fierce and most successful applications tend to be from high density populations, often in suburban areas that have developed around older cities and provide linkages between existing public transportation options. As these descriptions suggest, it is highly unlikely that Dare County could successfully compete for fixed route transit start-up funding, even if questions about how local match funding for such programs could be addressed.

Trolley/Shuttle Service

Existing examples of Dare County-based trolley/transit initiatives historically have been limited to providing transportation within a relatively small service area and have been funded through organizations such as a downtown merchants association. Even so, these initiatives have proven difficult to sustain over time and are complicated by the limited tourism season in Dare County. The highest demand for such a service likely would connect the shops and restaurants of the waterfront with the tourist destinations on Roanoke Island. Such a route would require collaboration among the county, the Town of Manteo, the Outer Banks Visitors Bureau, the Outer Banks Chamber of Commerce, downtown merchants, and the tourist sites on Roanoke Island.

The previous Board of Directors at the Outer Banks Visitors Bureau was willing to commit up to \$1 million for capital expenses related to a trolley system. Such funds could be used to purchase/provide a trolley vehicle (or similar) for the county to create some form of limited fixed route service. However, this proposal would require the county to provide operational funding for this service. Other matters such as what entity would be responsible for maintaining and eventually replacing this vehicle are unclear. To gain some idea of





the county resources required to support such an effort we provide the following, back-of-the-envelope estimate:

Annual Driver Cost Estimate

- \$ 70,000 Trolley operators (2), with a minimum Class B CDL required
- \$ 21,000 Cost of Benefits (@ 30% of salary)
- \$ 91,000 Annual Operator Costs

Annual Vehicle Operating Cost Estimate

- 30,000 Estimated annual vehicle mileage
- \$ 12,500 Estimated fuel costs (\$2.50 @ gallon fuel / 6 MPG)
- \$ 3,000 Insurance costs
- \$ 3,000 Maintenance Costs (brakes, tires, oil changes, etc.)
- \$ 18,500 Annual Vehicle Costs

Vehicle Replacement Costs

- \$ 70,000 Purchase cost
- 8 Projected Vehicle Life (in years)
- \$ 8,750 Straight-line annual depreciation (to create vehicle replacement funds)

\$ 118,250 Annual County Budget Impact

If Dare County (or the operator of the trolley) could collect fares from passengers or reduce the operating season for this service, county costs would be somewhat lower. However, it should be emphasized that it is unlikely state/federal funds could be secured to meet any of these costs, making the funding of such an effort strictly the responsibility of the county/local business-led effort with limited to no benefit to Dare County residents outside the service area.

Marketing, Publicity, and Outreach

As mentioned in **Chapter 2** (*Technical Memorandum 1*), DCTS currently employs several marketing strategies to increase awareness of its services and current program initiatives. These initiatives include a DCTS brochure, an advertising card, a pencil promotion, the DCTS website, van advertisements, and various media such as the newspaper and radio broadcasts. NCDOT provides a separate funding source for DCTS to be used toward limited marketing efforts.

To date, DCTS has been hesitant to actively market their services due to a lack of capacity to serve new riders within the framework that it has been operating. In fact, Dare County should continue to be relatively conservative in marketing new or expanded transportation services until it is successful in implementing the high priority policy and service recommendations. This approach is based on (1) the system's lack of additional service capacity while operating in its current mode (48-hour scheduling cut-off, lack of policy enforcement for no shows, etc.) and (2) the long-term, negative implications of attempting to aggressively market transportation services and then failing to perform as promised.





The initial first steps to enhance the marketing of DCTS are internal. As described in issues 10, 11 and 12 of **Table 4.1**, gaining the support of county administration and elected officials to revise (if necessary) or enforce DCTS service policies are critical to ensure service efficiencies create near term additional capacity needed to expand services. Once this support is gained, DCTS will need to embark on a coordinated, multi-month campaign to educate users and client agencies on how the recommended policy and service changes differ from past practices yet will result in greater mobility options. Once DCTS has successfully accomplished these initial steps, DCTS should be able to aggressively expand marketing efforts in a more traditional fashion. Marketing initiatives should include:

- Placing a link for DCTS on the main page of county and municipal websites
- Enhancing the printed material to include better information about DCTS service in a more attractive format
- Increasing the distribution locations for DCTS printed marketing materials
- Adding a link to the Outer Banks Visitors Bureau website (“Getting Here”)
- Inserting marketing materials in water bills
- Advertising on the local public access channel

As previously mentioned, especially in relation to issues 16 and 17 of **Table 4.1**, expanding DCTS’s grant writing efforts is essential for securing new or additional funds to expand services beyond what can be achieved through operational efficiencies. The ICPTA outsourcing strategy provides an option to free DCTS management time for pursuing such opportunities. However, if Dare County chooses to continue in its current in-house service support model, the county should provide the necessary resources for DCTS to pursue such opportunities, either through the assistance of other county personnel familiar with pursuing grants or outsourcing this activity to consultants.

Implementation and Financial Plans

Technical Memorandum 2 (Chapters 3 and 4) of the *Dare County CTSP* was presented to the Steering Committee and the general public at a series of meetings January 27 and 28, 2010. The memorandum was revised based on comments and feedback received at these meetings. Based on the recommended organizational structure and service and operation improvements, an action plan matrix and financial plan was created based on the 5-year planning horizon. The Final Report combines the information presented in *Technical Memorandums 1 and 2 (Chapters 1 through 4)* with the implementation and financial plans presented in **Chapters 5 and 6**.





Chapter 5 – Recommendations & Action Plan

Introduction

NCDOT initiated development of Community Transportation Service Plans across the state to ensure local systems make calculated responses to the mobility needs of both targeted and general populations in their service areas. For Dare County the planning process outlined by NCDOT allowed flexibility to access the unique constraints and operating environment facing the leadership of Dare County Transportation System (DCTS). This planning process has resulted in a list of recommendations designed to foster continuous improvement of the system through the 5-year planning horizon of the CTSP. This chapter provides a phased implementation plan that includes immediate, short-term, and mid-term action items tied directly to these recommendations.

Overview

The analysis and formulation of recommendations in the *Dare County CTSP* represents an important milestone in creating an accessible transportation system for all residents of the county. However, the true benefit of the plan will depend on a robust implementation plan. Acting on the recommendations in the CTSP requires coordination with various stakeholders who hold differing priorities. To implement the plan, the leadership of DCTS must work proactively with stakeholders such as:

- Citizens and businesses
- Dare County
- North Carolina Department of Transportation
- Municipalities in the county
- ICPTA
- Neighboring counties within the region

Attention also must be paid to the system's ability to secure funding, particularly from alternative sources. (See **Chapter 6** for the financial plan.) During the course of this study, numerous transportation-related issues were raised by stakeholders and citizens, including frustration over policies and gaps in service. Local, state, and private partnerships offer strategic advantages to implementing improvements on a timely basis within the 5-year planning horizon. The action plan recognizes the challenges facing DCTS and suggests strategies to address those challenges within the context of NCDOT's Community Transportation Program.

Recommendations

At Steering Committee Meeting #3, the group reviewed the findings and assessment presented in **Chapter 4**. The meeting focused on critical recommendations, particularly those that have a trickledown effect on other recommendations or the direction of DCTS moving forward. Recommendations requiring major cost or effort also were singled out. Based on discussions at the meeting with DCTS leadership and members of the Steering Committee, several recommendations were refined. The major outcomes of the meeting included the following:

- DCTS should not explore outsourcing administrative/service support functions to ICPTA within the 5-year planning horizon of the CTSP. However, a dialogue with ICPTA needs to be re-established to strategically determine ways to coordinate in the future. The committee discussed finding a way to work with ICPTA on out of county trips.
- DCTS should implement TrIP_Maker as opposed to CTS software.





- DCTS should explore charging a fare within the 5-year timeframe of the CTSP. This process should begin with charging for no shows. A pre-qualified voucher system will need to be implemented to offset costs for those unable to afford the fare.
- DCTS should consider innovative ways to launch a trolley/shuttle service, potentially beginning with a pilot project on Roanoke Island to serve tourist-based demand.
- DCTS should be careful not to over-market its services. That is, DCTS should ensure it will be able to deliver a level of service consistent with its marketing approach.

Other changes to the information presented in Chapter 4 are reflected in the Action Plan Matrix.

Action Plan Matrix

The Action Plan Matrix presented in **Table 5.1** lists the recommendations of the *Dare County CTSP* according to a phased implementation schedule for each fiscal year beginning with immediate items slated for FY 2011. Recommendations are based in part on the Performance Plan but have been vetted through additional analysis, discussions with DCTS staff and the Steering Committee, and feedback provided at Public Workshop Series Two. Each recommendation includes a planning-level cost estimate (Note: The cost estimate reflects the cost beyond reasonable expectations for funding through existing sources.), the party responsible for implementing the recommendation, and required actions. While the listed items may not be completed within the specified fiscal year, the process should be initiated during that year.

Beyond the tasks listed in **Table 5.1**, the long-term growth and success of DCTS hinges on whether the county and NCDOT-PTD continue to work with and educate local citizens and businesses about the benefits of community transportation. While public support will encourage implementation, opposition will erode momentum.

Table 5.1 — Action Plan Matrix

Action Item	Effort/ Cost*	Responsible Party	Required Action
FY 2010 — Ending June 30, 2010			
Revise no show policy to eliminate drivers having to wait 5 minutes after the pickup time.	<i>Initiated</i>	DCTS	Monitor policy change
Eliminate policy that restricts demand response trips to 18 per year.	<i>Initiated</i>	DCTS	Monitor policy change
Reduce schedule cutoff time from 48 hours to 24 hours.	<i>Initiated</i>	DCTS	Monitor policy change
Attend (DCTS leadership) ITRE’s Paratransit Foundations courses.	<i>Initiated</i>	DCTS	Commission approval

* *The cost estimate reflects the cost beyond reasonable expectations for funding through existing sources.*





Action Item	Effort/ Cost	Responsible Party	Required Action
Year 1 — FY 2011			
Apply for grants to increase mobility with limited cost to Dare County.	Moderate	DCTS	Review application process/requirements
Move DCTS from the Department of Older Adult Services and have it report directly to the Director of Public Services.	Minor	BOC	Commission approval
Revise job description of Director of Public Services to “Director of Public Services and Transportation” (or similar) to give more exposure to transportation services.	Minor	BOC	Commission approval
Complete a facilitated visioning work session with the TAB and DCTS leadership to create clearly defined mission, goals, and objectives and identify roles and responsibilities.	Moderate \$1,000	DCTS Consultant	Schedule “one-day” facilitated work session
Revise policy to make a no show more of a disincentive than a late cancellation by initiating a fee.	Minor	DCTS	Commission approval
Add general public representation to the TAB (increase size of TAB or replace existing members).	Moderate	DCTS TAB	Solicit volunteer(s)
Implement more advanced scheduling and tracking software (TriP_Maker).	Major	DCTS NCDOT	Obtain basic training on software
Increase ridership capacity initially through operation improvements.	Moderate	DCTS	Initiate policy/operational recommendations
Equip DCTS vehicle operators with push-to-talk cell phones to ensure ability to communicate with dispatcher (especially for out of town trips) and to allow the operators to call clients if necessary.	Minor	DCTS	Product research
Initiate regularly scheduled discussions with ICPTA to evaluate coordination opportunities (such as passenger transfers for out of county trips).	Moderate	DCTS ICPTA	Meet with ICPTA Administrator
Revamp current DCTS website with clear and concise information about service hours, policies, and procedures.	Minor \$1,000	DCTS	Coordinate with Webmaster
Place a DCTS website link on the main page of county and municipal websites.	Minor	DCTS	Coordinate with Webmaster
Add link to Outer Banks Visitors Bureau “Getting Here” webpage.	Minor	DCTS	Coordinate with Webmaster





Action Item	Effort/ Cost	Responsible Party	Required Action
Year 2 — FY 2012			
Apply for grants to increase mobility with limited cost to Dare County.	Moderate	DCTS	Review application process/requirements
Begin tracking salaries, benefits, and other expenses to determine the true cost of service and develop a billing rate based on this true cost.	Moderate	DCTS	Initiate tracking of all expenditures and overhead
Charge riders a fare to gain additional operating funds to expand services or hours (with a voucher system for clients with limited means).	Major \$10,000	DCTS Consultant ⁺	Audit true cost of trip and determine rider fare based on public acceptance; Conduct appropriate public outreach prior to charging a fare
Advertise services on government access channel.	Minor	DCTS	Coordinate with Dare County Public Relations Department
Enhance printed material about DCTS services and increase distribution locations for material.	Minor \$1,000	DCTS	Develop marketing material
Revise TAB by-laws to have County Commissioner serve as a liaison to the TAB but without voting power.	Minor	BOC	Commission approval
Draw down county controlled transportation funds using a billing rate based on the true cost of service.	Major	DCTS	Enhance billing/scheduling software to monitor cost of service

⁺ *A consultant-led process would include coordination/meetings, a literature review, vendor assessment, recommendations, and a cost estimate.*





Action Item	Effort/ Cost	Responsible Party	Required Action
Year 3 — FY 2013			
Apply for grants to increase mobility with limited cost to Dare County.	Moderate	DCTS	Review application process/requirements
Relocate full-time driver to a central location and maintain a part-time driver in Buxton.	Moderate	DCTS	N/A
Invite an employee transportation representative (such as a vanpool provider) to join the TAB.	Minor	DCTS	Commission approval
Expand ability to provide employment transportation by coordinating with <i>2Plus</i> or pursue JARC funds.	Moderate	DCTS	Review application process/requirements
Expand volunteer driver program to fulfill demand for trips DCTS cannot accommodate.	Moderate \$10,000	DCTS	Secure funding source for mileage reimbursement
Develop a procedure to evaluate fleet mix annually.	Minor	DCTS NCDOT	Implement TrIP_Maker to identify needs
Coordinate with ICPTA to discuss transfer ridership services.	Major <i>Unknown</i>	DCTS ICPTA	Meet with ICPTA Administrator
Contract services with county agencies and businesses.	Major \$20,000	DCTS	Contract through local cab companies and identify additional revenue source

Action Item	Effort/ Cost	Responsible Party	Required Action
Year 4 — FY 2014			
Apply for grants to increase mobility with limited cost to Dare County.	Moderate	DCTS	Review application process/requirements
Switch to a zone-based costing approach as a way to encourage overall system efficiency.	Major \$10,000	DCTS	Conduct ridership survey and market campaign to assess cost and fare per zone
House select vehicles in secure remote locations to reduce deadhead miles and increase the number of trips each vehicle can perform.	Moderate	DCTS	Monitor and assess zonal trip efficiency
Collaborate with municipalities to initiate public outreach campaign (utility bills, newsletters, website, etc.).	Minor \$1,000	DCTS	Municipal approval





Action Item	Effort/ Cost	Responsible Party	Required Action
Year 5 — FY 2015			
Apply for grants to increase mobility with limited cost to Dare County.	Moderate	DCTS	Review application process/requirements
Conduct a comprehensive study to explore the creation of a tourist-based shuttle service.	Major \$50,000	DCTS BOC	Coordinate with Visitors Bureau and secure additional funding source
Extend office hours by contracting with an after-hours call center.	Moderate \$12,500	DCTS	Identify vendor
Expand ability to provide employment transportation (i.e. by switching to a deviated fixed route service).	Major \$1,000	DCTS	Utilize scheduling software to establish trip trend lines

Conclusion

Through the inclusion of a Steering Committee and effective public outreach, the development of the *Dare County CTSP* reinforces the community transportation needs of the region. It is through this collaborative process that we have learned the expectations of local and state officials, community leaders, business owners, and citizens of Dare County. The realization that federal and state dollars are becoming more difficult to secure shows DCTS has reached a tipping point. Do we rely on the status-quo for addressing community transportation needs, or do we proactively move forward and address those needs through innovative funding measures that support the growth of the system? With this in mind, decision-makers must find new ways to fund transportation needs.

The most critical steps toward implementing and funding the recommendations will be carried by champions or leaders within the community. These champions may be part of the TAB, current riders, or citizens interested in community transportation. Ultimately, continued collaboration between NCDOT, local agencies, and the general public will provide more opportunities to foster a well-balanced transportation system.





Chapter 6 – Financial Plan

Introduction

Over the past few years, Dare County Transportation Service has received only small increases in the amount of funds from federal and state sources. In years that DCTS has replaced vehicles or expanded its fleet, the size of the budget has reflected the higher expenses. As DCTS leadership, the TAB, and advocates on the *Dare County CTSP* Steering Committee look to fulfill unmet demand and expand service, appropriate levels of funding must be in place for the highest priority projects. Given the lack of federal and state dollars coming to the system through traditional sources and the desired growth, now is the time to critically assess what can be accomplished with existing revenue streams and to identify additional funding sources. This chapter describes a series of financial considerations tied to the recommendations presented in the Action Plan Matrix (**Chapter 5**). The chapter concludes with a brief description of additional funding options, including a grant submitted by DCTS currently under consideration.

Financial Considerations

The financial plan shows recommendations in the context of reasonably anticipated future revenues over the 5-year life of the *Dare County CTSP*. The mix of recommendations proposed to meet community transportation needs over the next 5 years is consistent with revenue forecasts. These forecasts were developed after a review of local expenditures, current funding trends, and likely future funding levels. The revenue forecasts involved consultation with the DCTS and NCDOT. All dollar figures discussed in this section initially were analyzed in current year (2010) dollars and then inflated to reflect the projected year of funding. Based on current national standards and applicable local forecasts, an annual inflation rate of 3% was used to forecast expenses and revenues. Because this is a planning level funding exercise, all funding programs, assumptions, and recommendations should be re-evaluated annually.

System Expenses and Revenues

The following series of tables and explanatory text summarizes the 5-year financial considerations for DCTS expenses and revenues. These considerations are separated into the cost categories used by the NCDOT Public Transportation Division. Funding is shown for 2010 (as budgeted) and each fiscal year in the 5-year plan (as projected). The financial plan was developed using the *Financial Scenario Toolkit*. The toolkit, developed specifically for the *Dare County CTSP*, is an Excel-based spreadsheet that systematically compares various financial scenarios.

Administrative/Operating Expenses

Table 6.1 shows the projected administrative/operating expenses, assuming the continuation of current funding sources and levels. Recommendation Expenses are explained in more detail beginning on page 6-4.

Assumptions

- FY 2011 expenses are expected to match FY 2010 due to an NCDOT-imposed funding cap.
- Beginning in FY 2012, expenses are expected to increase at a 3.0% rate of inflation.
- A miscellaneous category was created to simplify the reporting. This category includes, but is not limited to, telephone/postage, shop overhead, and supplies.
- A reserve fund was created to capture additional revenue (from farebox) for later use.
- Funding for the facilitated TAB session and fare study will require reallocation of FY 2011 funds.





Table 6.1 — Administrative/Operating Expenses

	FY 2010	Year 1 FY 2011	Year 2 FY 2012	Year 3 FY 2013	Year 4 FY 2014	Year 5 FY 2015
Administrative Expenses						
Administrative Salaries	\$119,173	\$119,173	\$122,748	\$126,431	\$130,224	\$134,130
Administrative Benefits	\$53,792	\$53,792	\$55,406	\$57,068	\$58,780	\$60,543
Employee Development	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Marketing	\$2,376	\$2,376	\$2,447	\$2,521	\$2,596	\$2,674
Volunteer Reimbursement	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Subtotal	\$185,341	\$185,341	\$181,601	\$187,019	\$192,600	\$198,348
Operating Expenses						
Driver Salaries	\$115,000	\$115,000	\$118,450	\$122,004	\$125,664	\$129,434
Driver Benefits	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance/Repair of Vehicles	\$12,000	\$12,000	\$12,360	\$12,731	\$13,113	\$13,506
Fuel	\$45,000	\$45,000	\$46,350	\$47,741	\$49,173	\$50,648
Insurance & Bonds	\$13,483	\$13,483	\$13,887	\$14,304	\$14,733	\$15,175
Subtotal	\$185,483	\$185,483	\$191,047	\$196,779	\$202,682	\$208,763
Other						
Miscellaneous	\$23,899	\$23,899	\$24,616	\$25,354	\$26,115	\$26,899
Reserve	\$0	\$0	\$8,283	\$8,532	\$8,787	\$0
Subtotal	\$23,899	\$23,899	\$32,899	\$33,886	\$34,903	\$26,899
Recommendation Expenses						
Marketing			\$1,000		\$2,500	
Facilitated TAB Session		\$1,000*				
Fare Study		\$10,000*				
New Hire (Salary & Benefits)			\$35,000	\$36,050	\$37,132	\$38,245
Revamp Website			\$1,000			
Enhanced Volunteer Service				\$10,000	\$10,000	\$10,000
Contract Services				\$20,000	\$20,000	\$20,000
Advanced Software					\$10,000	
Fixed-Route Study						\$50,000
After-Hour Call Center						\$12,500
Subtotal	\$0	\$0	\$37,000	\$66,050	\$79,632	\$130,745
TOTAL	\$394,723	\$394,723	\$442,548	\$483,734	\$509,816	\$564,755

* Funding for the facilitated TAB session and fare study will require reallocation of FY 2011 funds.





Administrative/Operating Revenues

Table 6.2 shows the projected administrative/operating revenues, assuming the continuation of current funding sources and levels. The impact of CTSP recommendations are explained in more detail beginning on page 6-4.

Assumptions

- FY 2011 revenues (with the exception of Medicaid Fees) are expected to equal FY 2010 revenues due to an NCDOT-imposed funding cap.
- ROAP – Workfirst funds are utilized by DCTS rather than assigned to the Department of Social Services.
- Medicaid fees are expected to be higher in FY 2011 to reflect an increase in reimbursement to \$1.55 per mile. Beginning in FY 2012, the fee increases based on a projected 5% increase in the number of miles and the continued reimbursement at \$1.55 per mile.
- Farebox revenue is based on a fee of \$3 per trip regardless of destination. Overall, trips are expected to increase at a rate of 10% per year. The total number of trips charging a fare is reduced in FY 2012 and FY 2013 to reflect a transition period as riders acclimate to the fare.
- DCTS is anticipated to begin charging a fee for no shows, though the revenue is not reflected in **Table 6.2**.

Table 6.2 — Administrative/Operating Revenues

	FY 2010	Year 1 FY 2011	Year 2 FY 2012	Year 3 FY 2013	Year 4 FY 2014	Year 5 FY 2015
CTP/5311 (Admin)	\$128,192	\$128,192	\$132,038	\$135,999	\$140,079	\$144,281
ROAP – Workfirst	\$11,441	\$11,441	\$11,784	\$12,138	\$12,502	\$12,877
ROAP – EDTAP	\$69,251	\$69,251	\$71,329	\$73,468	\$75,672	\$77,943
ROAP – RGP	\$76,549	\$76,549	\$78,845	\$81,211	\$83,647	\$86,157
Medicaid (fees)	\$60,000	\$74,500	\$78,120	\$82,026	\$86,127	\$90,434
Local Match	\$49,290	\$49,290	\$50,769	\$52,292	\$53,861	\$55,476
Farebox	\$0	\$0	\$51,749	\$58,505	\$69,574	\$76,531
TOTAL	\$394,723	\$409,223	\$474,634	\$495,639	\$521,462	\$543,699

Capital Expenses and Revenues

DCTS fleet currently includes a total of seven vehicles (4 lift equipped vans, 2 13-passenger conversion vans, and 1 minivan) that serve all trips. Three vehicles are slated for replacement, and the FY 2011 budget submitted to NCDOT by DCTS includes funds to replace these vehicles and expand the fleet with one additional vehicle. Based on the mileage of the remaining fleet, DCTS likely will request additional replacement vehicles in FY 2013. Section 5311 Capital funds (federal, state, and local match) will meet these replacement needs. Additional fleet expansion will require alternative funds, including supplemental grants from NCDOT or other sources.





Annual Expense/Revenue Considerations

The Action Plan Matrix in **Chapter 5** details all recommendations of the *Dare County CTSP* according to the phased implementation schedule for each fiscal year. The recommendations include a basic cost estimate, the party responsible for implementing the recommendation, and required actions. Some recommendations will have a greater impact on the financial considerations for the system, whether by requiring more funds to plan, implement, and/or maintain or by increasing revenue for future years. A summary of the recommendations that have the greatest impact on the DCTS budget are summarized below. It should be emphasized that the following list does not constitute all recommendations in the plan (see **Table 5.1** for a complete list).

(NOTE: At the time of the Dare County CTSP, DCTS had applied for a grant through NCDOT-PTD to expedite the process for charging a fare. The receipt of this grant will have important implications on the financial plan as presented in this chapter. Please see the section entitled “FY 2011 Grant Opportunity” for more information.)

Current Year — FY 2010

DCTS has initiated numerous policy changes since the inception of the CTSP planning process in July 2009. These changes include revising the no show policy to prevent drivers from having to wait 5 minutes after the pickup time, eliminating the policy that restricts demand response trips to 18 per year, and reducing the schedule cutoff time to 24 hours. These policies will not directly impact the financial performance in the current fiscal year, though improvements in efficiency and customer service as a result of these policies should lead to increased ridership in future years.

Year 1 — FY 2011

The first full year of the CTSP will focus on continuing to revise policies, defining the role of the TAB, and implementing more advanced scheduling and tracking software. The biggest impact for this fiscal year will be the initial steps to charging riders a fare. Considerations for FY 2011 include:

- Complete a facilitated visioning work session with the TAB and DCTS leadership to create clearly defined mission, goals, and objectives and identify roles and responsibilities. The estimated cost (\$1000) will be covered using existing administrative/operating funds.
- Revise policy to make a no show more of a disincentive than a late cancellation by initiating a fee. This recommendation will add modest revenue. The minimal cost involved to implement this program is assumed to balance with revenue.
- Implement more advanced scheduling and tracking software (TrIP_Maker). Utilize existing administrative/operating funds (Employee Development) for appropriate training.
- Prepare to start charging riders a fare by conducting a consultant-led process (including coordination/meetings, a literature review, vendor assessment, recommendations, and a cost estimate). The estimated cost of \$10,000 should be pursued through NCDOT.
- Revamp current DCTS website with clear and concise information about service hours, policies, and procedures. The estimated cost (\$1000) may be reduced by utilizing county staff.





Year 2 — FY 2012

The second fiscal year of the CTSP will continue with the changes made during previous years. The focus of this year will be to fully launch the fare system and enhance marketing and outreach efforts.

- Implement the fare system. It is expected that the fare system will require one new administrative employee (\$25,000 salary plus benefits). Estimated revenue based on the projected number of applicable trips and a \$3 fare is approximately \$51,750.
- Enhance printed material about DCTS services and increase distribution locations for material. The cost of \$1,000 is in addition to the regularly budgeted marketing expenses. This cost should be covered using administrative/operational funds.

Year 3 — FY 2013

The third fiscal year of the CTSP will continue with the changes made during previous years. The focus of this year will be to expand service through volunteer and contract services.

- Expand the use of volunteers to fulfill demand for intra-county trips that DCTS cannot accommodate. The estimated cost of \$10,000 is in addition to the typical amount budgeted for volunteer reimbursement. The annual increase should be recognized in the administrative/operational funds.
- Contract services with county agencies and businesses. An estimated initial annual cost of \$20,000 will be required to contract with local cab companies.

Year 4 — FY 2014

The fourth fiscal year of the CTSP will continue with the changes made during previous years. The focus of this year will be the potential shift to a zone-based costing approach, improving the efficiency of the system, and additional public outreach efforts.

- Switch to a zone-based costing approach as a way to encourage overall system efficiency. A total estimated cost of \$12,500 would cover ridership surveys, a marketing campaign, and software purchase.
- House vehicles in secure remote locations to reduce deadhead miles and increase the number of trips each vehicle can perform. Any cost associated with remotely domiciling vehicles will be absorbed as part of standard operating procedures.
- Collaborate with municipalities to initiate public outreach campaign (utility bills, newsletters, website, etc.). The cost of \$1,000 is in addition to the regularly budgeted marketing expenses. This cost should be covered using existing administrative/operational funds.

Year 5 — FY 2015

The final fiscal year of the CTSP will continue with the changes made during previous years. The focus of this year will be the initial steps to the potential start of a tourist-based shuttle service, extension of office hours, and enhanced employment transportation.

- Conduct a comprehensive study to explore the creation of a tourist-based shuttle service on Roanoke Island. This expansion service would require a local, private, and non-profit partnership





and innovative funding. Cost would be a \$50,000 planning study conducted during FY 2015. The study would determine capital and operating costs.

- Extend office hours by contracting with an after-hours call center. The cost (\$12,500) assumes 3 hours of coverage at \$15 per hour for 250 service days.
- Expand ability to provide employment transportation (i.e. by switching to a deviated fixed route service). The estimated cost of \$1,000 will cover marketing and outreach efforts.

Funding Opportunities

The funding scenario presented in **Table 6.1** and **6.2** represent a business-as-usual scenario. To expedite the phasing of recommendations or to increase the reach of the system beyond what is proposed in the CTSP, DCTS and its local partners will need to explore alternative funding opportunities. The Steering Committee agreed that a proactive approach to funding likely will provide the highest level of benefits with the least burden on the county and its taxpayers. Currently, Dare is eligible to apply for 5310, 5311, 5316, and 5317 federal funds through NCDOT. **Table 6.3** shows these funding sources and the state and local match.

Table 6.3 — Current and Potential Funding Sources

	Type of Assistance	Federal Grant	State Match	Local Match	Target Population
Existing					
ROAP - Workfirst	All		100%		Low Income
ROAP - EDTAP	All		100%		Elderly; Disabled
ROAP - RGP	All		90%	10%	Rural General Public
CTP/5311 - Admin	All	80%	5%	15%	
Potential					
Elderly Person and Persons with Disabilities (Section 5310)	Capital	80%		20%	Elderly; Disabled
Rural and Small Urban Area (Section 5311)	Capital	80%	10%	10%	Rural General Public
	Operating	50%	0%	50%	
Job Access and Reverse Commute (Section 5316)	Capital	80%		20%	Low Income
	Operating	50%		50%	
New Freedom (Section 5317)	Capital	80%		20%	Disabled
	Operating	50%		50%	
Rural Planning Program	Planning Studies	90%		10%	
Rural Transit Assistance Program (Section 5311-B-2)	Training & Technical Assistance	100%			





FY 2011 Grant Opportunity

DCTS has applied for grant funding through NCDOT with relative assurance from Dare County officials that a local match would be guaranteed. The grant would provide an opportunity to implement a fare system in FY 2011. The grant would have the following implications:

- Hire an additional full-time employee to handle scheduling/dispatching duties. The current administrative assistant would oversee the fare system.
- Expansion of the fleet to a total of 10 vehicles.
- Hire four additional part-time drivers to handle subscription service.

Federal Funding Eligibility

Table 6.4 identifies the types of transportation expenses eligible for funding under various federal programs. It should be noted that the state and locality administering the funds may impose additional limitations on items eligible for funding (especially for block grants). The information provided in the Federal Funding Eligibility Matrix is derived from information provided by United We Ride, a federal interagency initiative to improve transportation options for transportation-dependant populations.

Table 6.4 — Federal Funding Eligibility Matrix

	Reimbursed Costs	Mobility Management	Operate Vehicles	Purchase Vehicles
Health and Human Services				
Administration for Children and Families				
Social Service Block Grant	X		X	X
Child Care and Development Block Grant	X			
Head Start			X	X
Refugee and Entrant Asst. State Administered Programs	X			
Refugee and Entrant Targeted Assistance	X			
Refugee and Entrant Asst. Voluntary Agency Programs	X			
State Developmental Disabilities Council and Protection & Advocacy	X	X	X	
Temporary Assist to Needy Families	X			
Community Services Block Grant			X	
Promoting Safe and Stable Families			X	





	Reimbursed Costs	Mobility Management	Operate Vehicles	Purchase Vehicles
Health and Human Services (continued)				
Administration on Aging				
Grants for Supportive Services and Senior Centers			X	
Programs for American Indian, Alaskan Native and Native Hawaiian			X	
Centers for Medicaid and Medicare				
Medicaid	X			
State Health Insurance Program	X			
Home and Community Based Waiver	X	X		
Health Resources and Services Administration				
Community Health Centers	X		X	
Healthy Communities Program	X		X	
HIV Care Formula	X		X	
Maternal and Child Health Block Grant	X			
Rural Health Care Network	X		X	X
Rural Health Care Outreach Program			X	
Healthy Start Initiative			X	
Substance Abuse and Mental Health Services Administration				
Community Mental Health Services Block Grant	X	X		
Prevention and Texas Block Grant	X	X		
Department of Education				
Voluntary Public School Choice	X	X		
IDEA		X		
Centers for Independent Living		X		
Independent Living for Older Individuals Who are Blind		X		
Independent Living State Grants		X		
Vocational Rehab Grants		X		





	Reimbursed Costs	Mobility Management	Operate Vehicles	Purchase Vehicles
Department of Labor				
Bureau of Indian Affairs				
Indian Employment Training and Related Services	X	X		
Indian Employment Services	X	X		
Employment and Training Administration				
Job Corps	X	X		
Migrant and Seasonal Farm Worker	X	X		
Native American Employment and Training	X	X		
Trade Adjustment Assistance for Workers	X	X		
Welfare to Work Grants for Tribes	X	X		
Welfare to Work for States and Locals	X	X		
Work Incentive Grants	X	X		
Workforce Investment Act Adult Services Program		X		
Workforce Investment Act Adult Dislocated Worker Program		X		
Workforce Investment Act Youth Activities		X		
Veterans Programs				
Veterans Employment Program		X		
Department of Transportation				
Elderly and Persons with Disability				X
Job Access Reverse Commute			X	X
Non-Urbanized Formula (rural)			X	X
Urbanized Formula				X
New Freedom Program			X	X
Capital Discretionary Program			X	X





	Reimbursed Costs	Mobility Management	Operate Vehicles	Purchase Vehicles
Housing and Urban Development				
Community Planning and Development				
Community Development Block Grant			X	X
Housing for Ind. w/AIDS	X		X	X
Supportive Housing Programs			X	
Revitalization of Severely Distressed Housing	X			
Homeless Provider Grants			X	X
Medical Care Benefits	X		X	X
Ticket to Work Program	X			
Food Stamp and Employment Training Program	X			

Conclusion

The efficient operation of community transportation in Dare County faces challenges from multiple fronts, including the geography, economy, and demographics of the county. The *Dare County CTSP* process has documented these challenges in order to identify, evaluate, and recommend numerous strategies to enhance mobility for targeted populations and the general public of the coastal community. Within the 5-year planning horizon, the actionable recommendations of the *Dare County CTSP* should meet the immediate challenges of the county. Beyond the planning window of this report, the plan should set the stage for advanced public transportation options that allow passengers of all abilities to travel where and when they want and need to go.





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