Chapter 5

Five-Year Plan

INTRODUCTION

This five-year plan is the product of the WPRTA CTSP, which has been developed over the course of the nine-month planning process. The recommended projects were derived through detailed analysis of existing community transportation services, a transit needs analysis, alternatives analysis, and public discussion. While there have been two regional transit planning projects for the study area within the last seven years, this CTSP represents the first regional transit ***service*** planning project undertaken for the Authority. The previous studies focused primarily on the ***organizational*** issues leading to the development of the WPRTA, rather than on service planning.

Public transportation services in the region have not grown significantly in recent years, largely due to financial constraints and the focus on organizational consolidation. This five-year plan does include a series of service improvements and expansions, though it should be noted that these projects are dependent upon available federal, State, and local funding. Future funding levels are somewhat unknown, with the federal transit funding legislation expired and yet to be re-authorized, though federal transit funding has historically risen over the years. The CTSP does include a recommendation to pursue dedicated local funding, but there is no guarantee that each of the Boards of County Commissioners will approve this recommendation.

WPRTA has been working on a number of initiatives independent of the CTSP process, and these projects are included in this draft plan, along with the CTSP recommended projects.

This five year plan is organized in the following eight sections:

- Service Plan
- Organizational Plan

- Implementation Schedule
- Capital Plan
- Financial Plan
- Performance Measurement Plan
- Public Involvement Description
- Summary of Recommendations

SERVICE PLAN

The service plan includes all of the public transit service projects planned for inclusion over the five-year planning horizon. It is organized into the following sections:

- Urbanized Area Fixed-Route Public Transit Services
- New Public Transportation Services
- Changes to the Demand-Response Network
- Quality of Service Improvements
- Targeted Transit Assistance Program

A brief description of each service is provided in tabular format, rather than repeating the full discussion of each project that was provided in Chapter 4.

Urbanized Area Fixed-Route Public Transit Services

This section includes recommendations that pertain to the fixed-route transit services that are currently provided in the Cities of Hickory, Conover, and Newton. There are several fixed-route transit network improvements recommended for the five-year planning horizon. These improvements include strategies to improve productivity as well as recommendations for service expansions to better meet the needs of riders and to attract new riders. The TAB and staff have prioritized these projects, which are presented in Table 5-1, in order of TAB/staff priority. In reviewing the previous technical memoranda and public comments, an additional project has been added for the urbanized area fixed-route network (Newton-Conover Circulator). The TAB and staff can discuss whether and where to place this potential additional project upon review of this draft plan.

As shown in Table 5-1, there are eight recommended projects for the fixed-route network, five of which are expansionary in nature. If all of these projects are implemented, the number of vehicle service hours will grow substantially, from a current base of just under 15,000 annual vehicle revenue hours to about 36,800 annual

Table 5-1: Recommended Urbanized Area Fixed-Route Transit Projects

Priority	Project	Purpose	Service Area	Rev. Service Hours	Prop. Year	Annual Operating Cost	Capital Cost	Proposed Funding Sources
1	Adjust the Tate Blvd./ Conover Route	To improve productivity	Hickory, Conover	Minor reduction	FY 2011	$ -	$ -	n.a.
2	Improve Service Frequency	To provide more travel options for riders, offering greater flexibility and convenience.	Hickory, Conover, Newton	7,140	FY 2013	$ 396,270	$ 640,000	Fares, S.5307; Vehicle Reg. Fee.
3	Split the NC127/Springs Road Route	To provide north-south linear service along NC127 and to allow service to be extended to several currently un-served apartment complexes.	Hickory	3,604	FY 2013		$ 160,000	Fares, S.5307; Vehicle Reg. Fee.
4	Split the Hickory-Conover-Newton Route	To allow for improved interlining and schedule reliability and creat a mini-transit hub in the Catawba Valley Medical Center area.	Hickory, Conover, Newton	-	FY 2012	$ -	$ -	n.a.
5	Adjust the Interlining of the Routes	To reduce travel time between residential areas and commercial areas.	Hickory, Conover, Newton	-	FY 2012	$ -	$ -	n.a.
6	Extend the Service Day	To provide riders with more flexibility to access jobs, evening classes, and typical errands.	Hickory, Conover, Newton	5,620	FY 2014	$ 310,224	$ -	Fares, S.5307; JARC, Vehicle Reg. Fee.
7	Provide Sunday Service	To provide mobility for transit riders on Sundays.	Hickory, Conover, Newton	2,080	FY 2015	$ 115,440	$ -	Fares, S.5307; JARC, Vehicle Reg. Fee.
New	Newton-Conover Circulator	To improve mobility for people whose origins and destinations are both in the Newton-Conover areas and potentially shorten the HCN route.	Newton, Conover	3,604	FY 2014	$ 200,022	$ 160,000	Fares, S.5307, Vehicle. Reg. Fee
			Totals	22,048		$ 1,021,956	$ 960,000	

vehicle revenue hours. This increase reflects improved frequency of service, extended hours, and improved geographic coverage.

Figure 5-1 provides a map of the highest priority urbanized-area fixed-route project, which is to adjust the Tate Boulevard/Conover Route to improve productivity. Figure 5-2 provides a map of the recommended NC127/Springs Road route split, which was ranked as the third highest priority urbanized-area fixed-route project. Figure 5-3 shows the split Hickory-Conover-Newton Route (priority #4), and Figure 5-4 provides a map of the newly proposed Newton-Conover Circulator.

New Public Transportation Services

The transit needs analysis revealed that there are unmet transit needs in several areas of the region. Some of these needs are regional, i.e., connecting one jurisdiction to another, and some are local, i.e., providing public transportation options in jurisdictions that currently have little or no service. The new services can generally be grouped into two types: corridor services and circulator services. For planning purposes we have treated these services as new public transportation services and attached an expansionary price tag; however, once these services are implemented it may be possible for WPRTA to transfer some travel demand from the current demand-response services to the new corridor/circulator services. If this can be achieved, WPRTA can either realize the cost savings or re-deploy the demand-response resources to meet additional mobility needs.

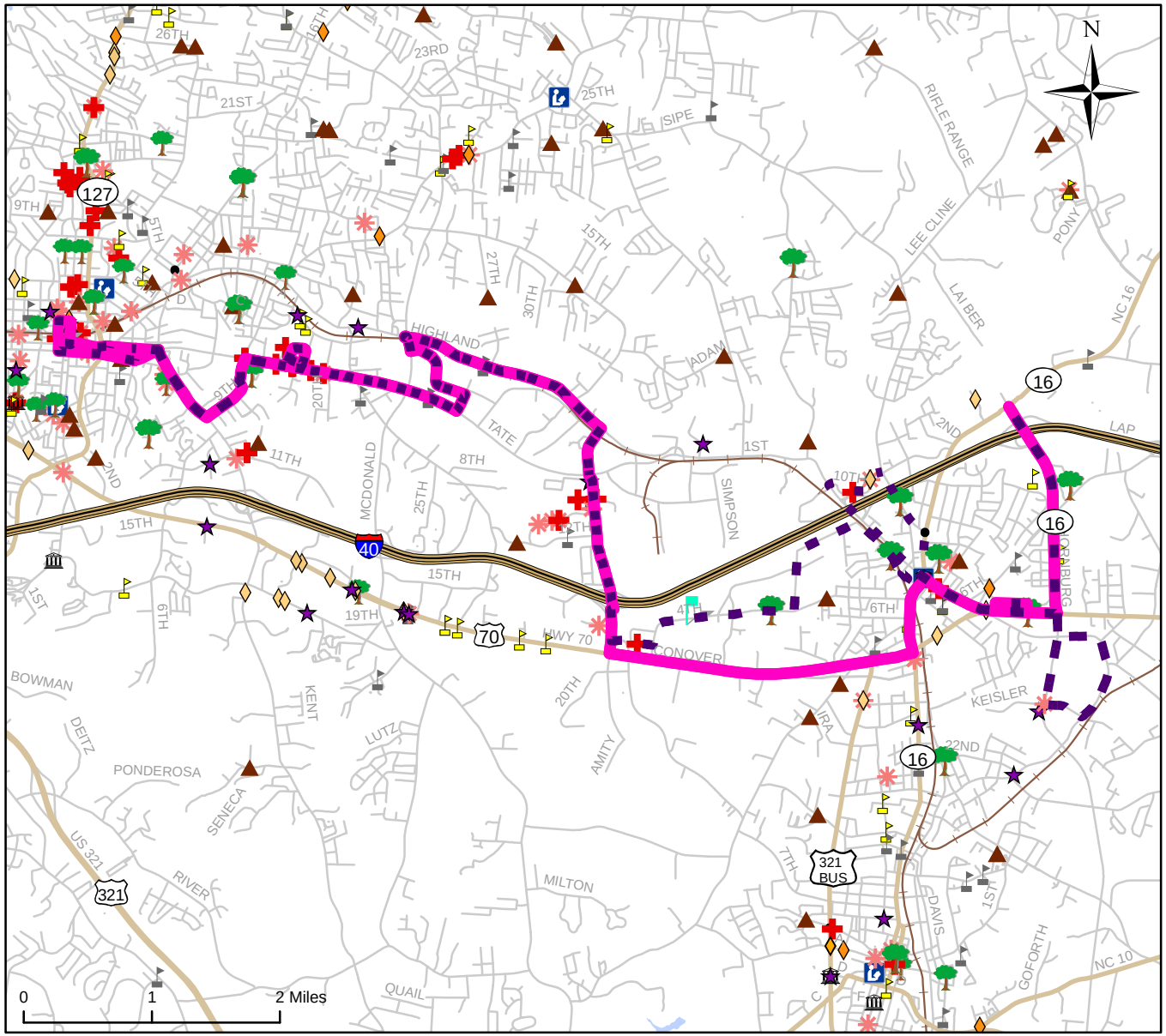
Table 5-2 provides the prioritized list of new public transit services for the WPRTA service area. Four of the five projects (all but the NC 16 Corridor route) are located within the Census-designated urbanized area, which means that they are eligible for funding assistance under the Federal S.5307 program (up to 50% of the net deficit). The NC 16 Corridor route is eligible for funding assistance under the Federal S.5311 rural program (up to 50% of the net deficit). Local match to help fund these new services can come from a new dedicated source of revenue, the jurisdictions/municipalities that are served by the projects, and/or contractual revenue.

Figure 5-5 provides a map of the US 70 Corridor service between Morganton and Hickory, which was ranked as the highest priority by the TAB and staff. The new transit service project ranked second by the TAB and staff, the US 321A Corridor service between Lenoir and Hickory, is shown in Figure 5-6. Circulator service for the City of Morganton, shown in Figure 5-7, was ranked as the third highest priority project by the TAB/staff. Figure 5-8 provides a map of the NC 16 Corridor service between Taylorsville and the Catawba Valley Medical Center (ranked fourth), and Figure 5-9 provides a map of the Lenoir Circulator, ranked fifth by the TAB/staff.

Figure 5-1: Fixed-Route Alternative, Adjust the Tate Boulevard/Conover Route

Legend

- Proposed Tate Blvd/Conover Changes
- Original Tate Blvd/Conover Route
- Streets
- Major Highways
- Interstate Highways
- Railroads
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity
- Transportation Center

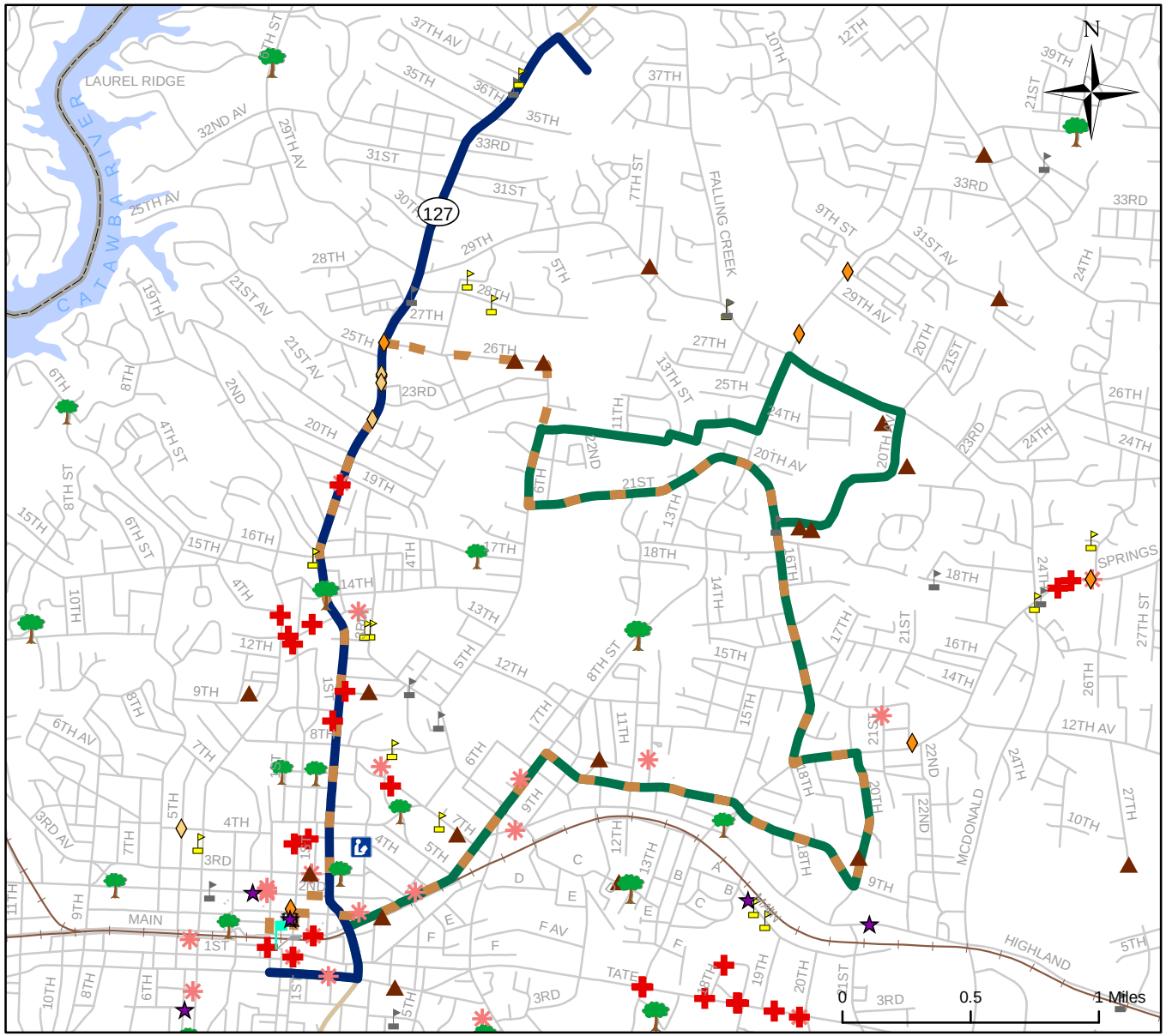


Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, ESRI Data CD.

Figure 5-2: Fixed-Route Alternative, Split NC 127/Springs Road Route

Legend

- Proposed NC 127 Route
- Proposed Northeast Hickory Route
- Original NC 127/Springs Road Route
- Streets
- Major Highways
- Railroads
- WPRTA Service Area Counties
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity
- Transportation Center



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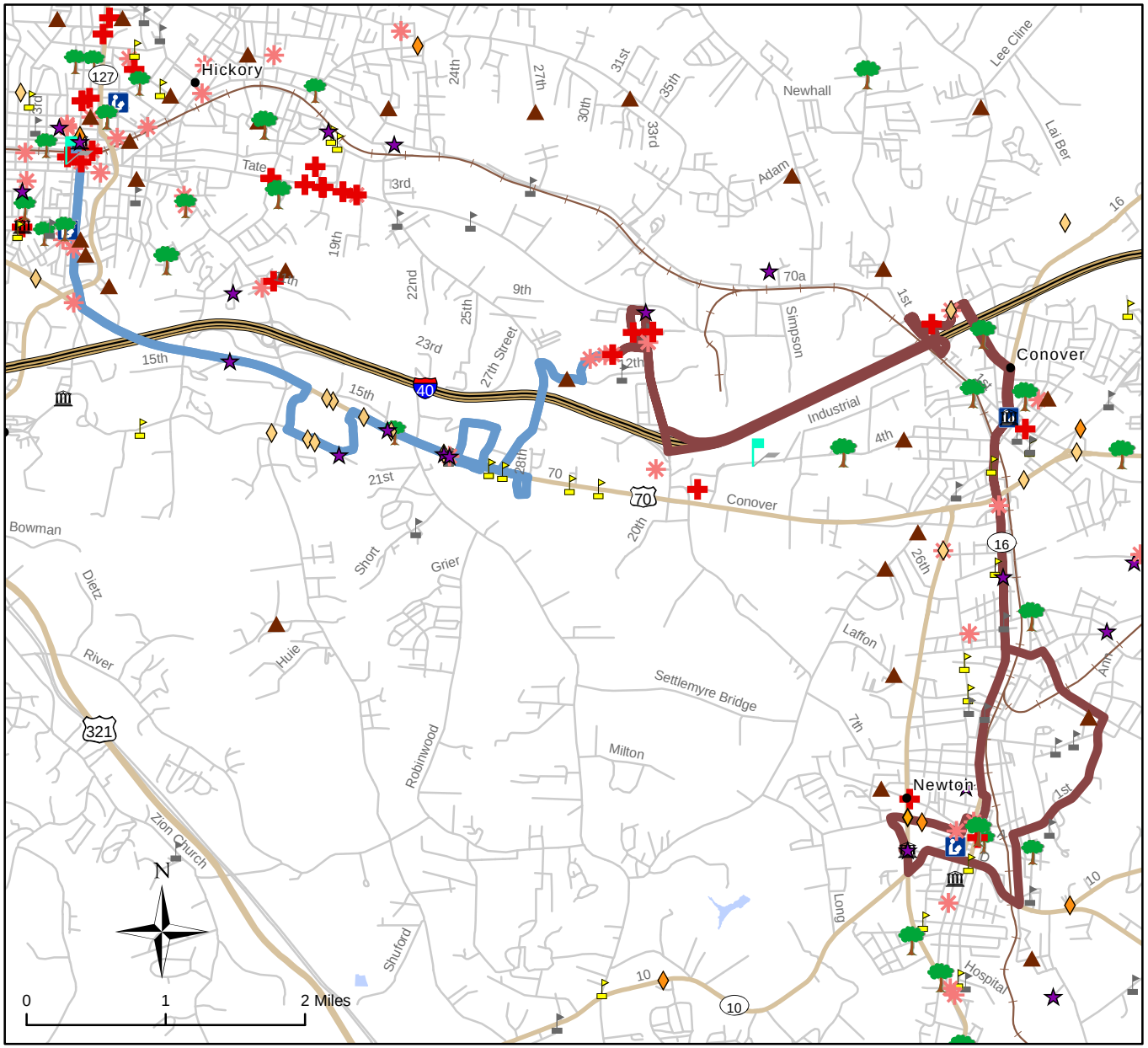
Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, ESRI Data CD.

Figure 5-3: Fixed Route Alternative, Split the Hickory/Conover/Newton Route

Legend

- Proposed Hickory-Conover Route
- Proposed Conover-Newton Route
- Streets
- Major Highways
- Interstate Highways
- Railroads
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity
- Transportation Center



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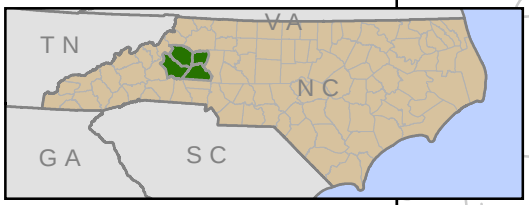
Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, WPRTA, ESRI Data CD.

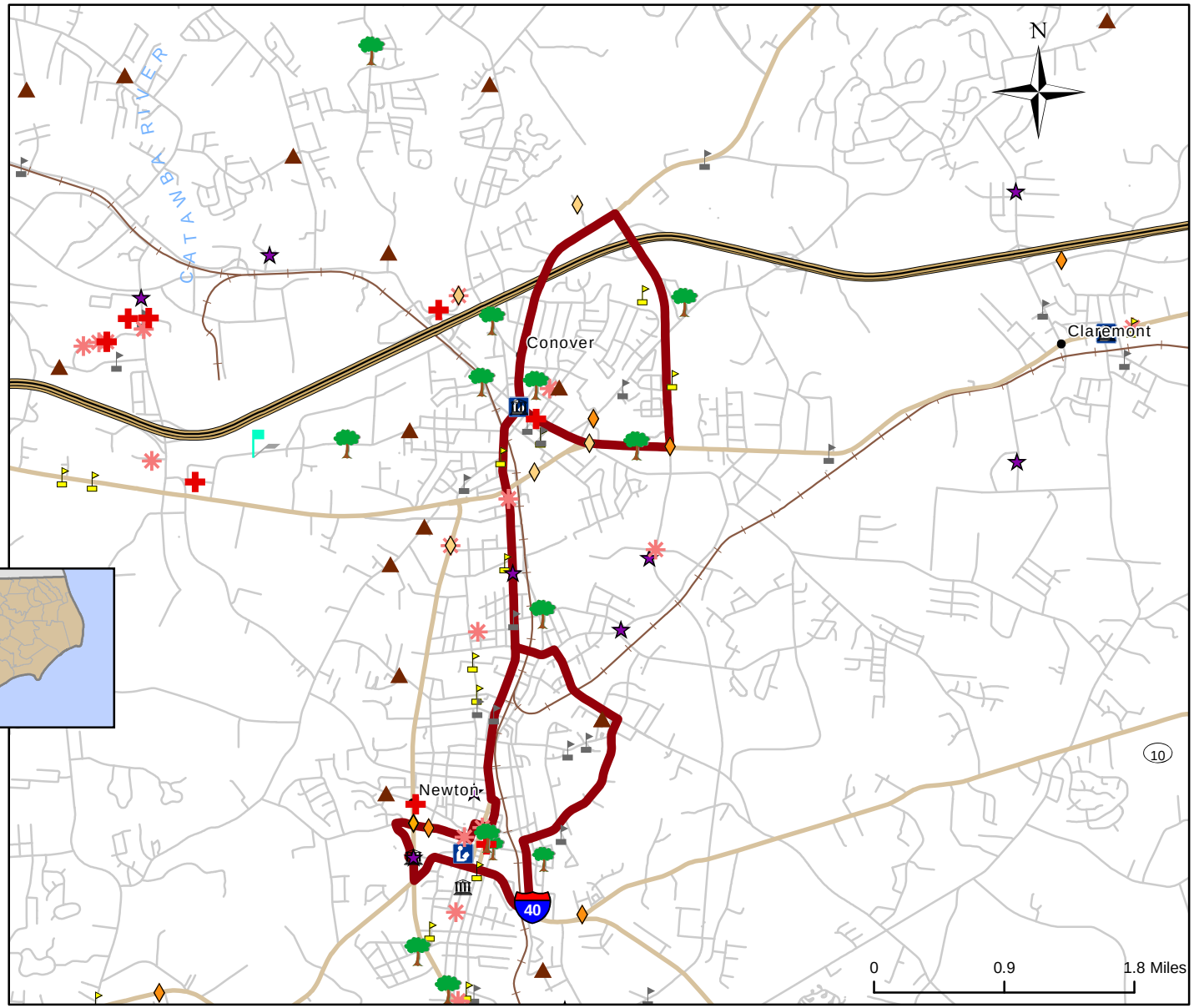
Figure 5-4: New Service Alternative, Circulator Service between Newton and Conover

Legend

- Newton-Conover Circulator
- Streets
- Major Highways
- Interstate Highways
- Railroads
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity



Greenway Public Transportation Service Area



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Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, ESRI Data CD.

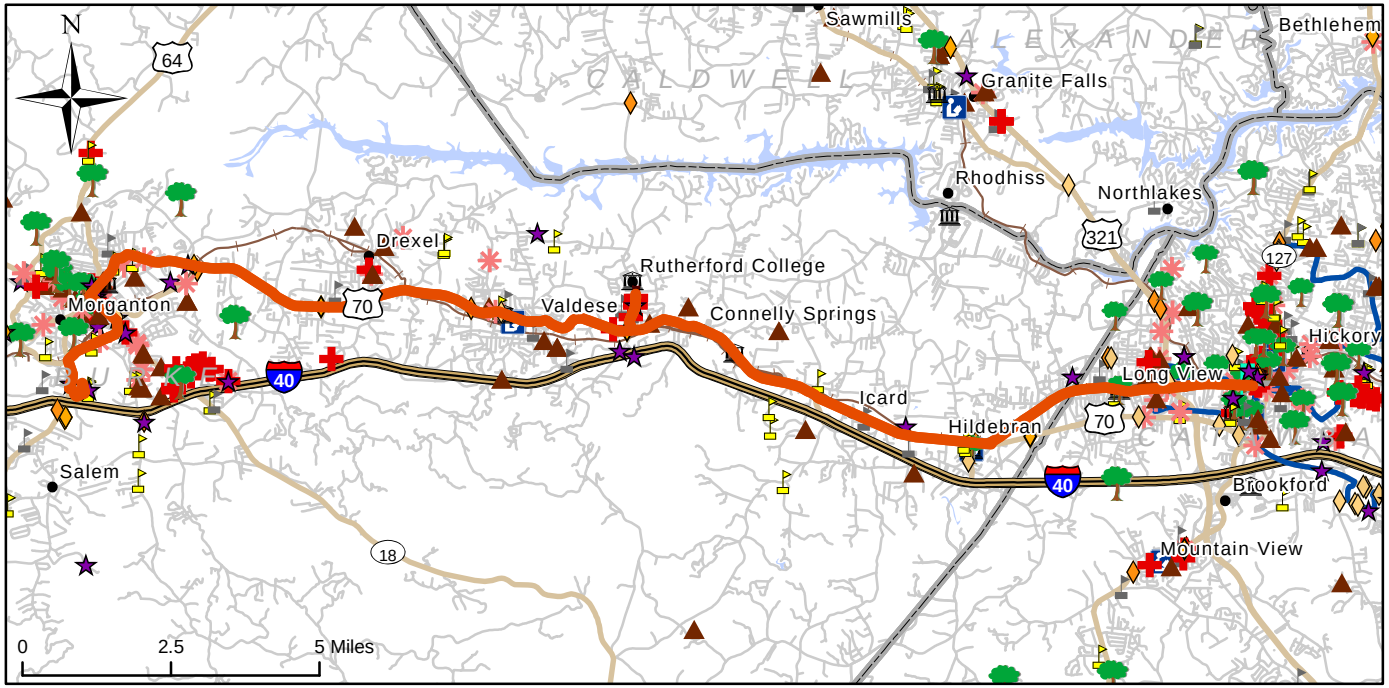
Table 5-2: Recommended New Projects

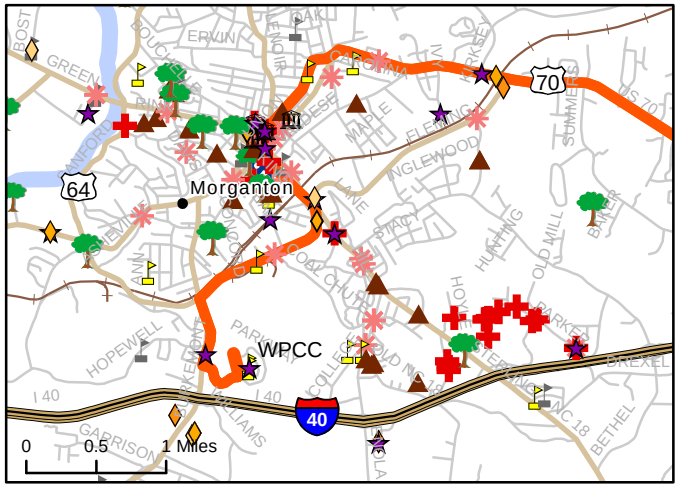
Project	Purpose	Service Area	Rev. Service Hours	Prop. Year	Annual Operating Cost	Capital Cost	Proposed Funding Sources
Targeted Transporatation Program	To provide additional mobility options for elderly people, people with disabilities, and low-income people.	Alexander, Burke, Caldwell and Catawba Counties	5,233	FY 2011	$ 282,600	$0.00	S. 5310, S. 5316, S. 5317
Travel Demand Management Program	To promote alternative transportation options to the single occupant vehicle.	Alexander, Burke, Caldwell and Catawba Counties	-	FY 2012	$ 80,000	$0.00	State TDM Program
US 70 Corridor Service between Morganton and Hickory	To connect Morganton to Hickory, serving a number of communities along the way and meeting one of the most frequently requested needs from the public survey, including service to the Western Piedmont Community College.	Hickory, Long View, Hildebran, Icard, Rutherford College, Valdese, Drexel, Morganton. Burke and Catawba Counties.	2,040	FY 2012	$ 104,040	$160,000	Fares, S.5307, Vehicle. Reg. Fee
US 321A Corridor Service between Lenoir and Hickory	To connect Lenoir and Hickory, serving a number of communities along the way and the Caldwell Community College and Technical Center.	Northwest Hickory, Granite Falls, Sawmills, Hudson, and Lenoir. Catawba, Burke, and Caldwell Counties.	2,040	FY 2013	$ 104,040	$160,000	Fares, S.5307, Vehicle. Reg. Fee
Circulator Service in Morganton	To connect residential, retail, governmental and employment locations within the City of Morganton.	Morganton. Burke County.	3,536	FY 2014	$ 171,156	$160,000	Fares, S.5307; Vehicle Reg. Fee., City of Morganton
NC 16 Corridor Service between Taylorsville & the Catawba Valley Medical Center	To connect Taylorsville and Hickory, serving the Catawba Valley Community College along the way.	Taylorsville, Millersville, Oxford, Cline Village, Conover. Alexander & Catawba Co..	2,040	FY 2015	$ 104,010	$160,000	Fares, S.5307, Vehicle. Reg. Fee
Circulator Service in Lenoir	To connect residential, retail, governmental and employment locations within the City of Lenoir.	Lenoir. Caldwell County.	3,536	FY 2015	$ 171,156	$160,000	Fares, S.5307; Vehicle Reg. Fee., City of Lenoir
			18,425		$ 1,017,002	$800,000	

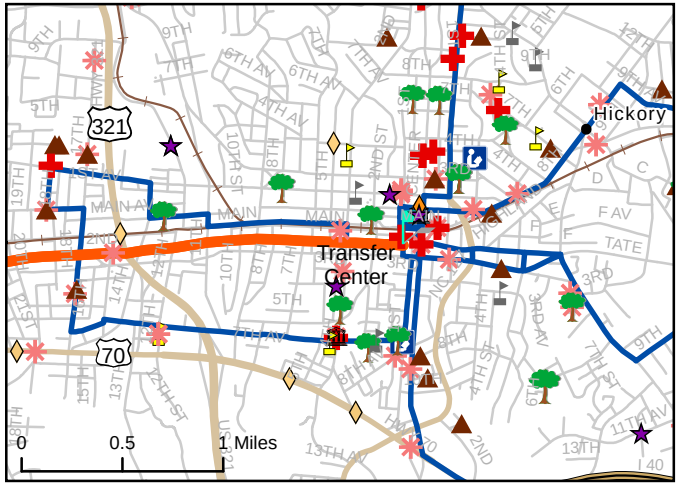
Figure 5-5: New Service Alternative, Corridor Service between Morganton and Hickory

Legend

- US 70 Corridor Service
- Existing Fixed-Route Service
- Streets
- Major Highways
- Interstate Highways
- Railroads
- WPRTA Service Area Counties
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity
- Transportation Center





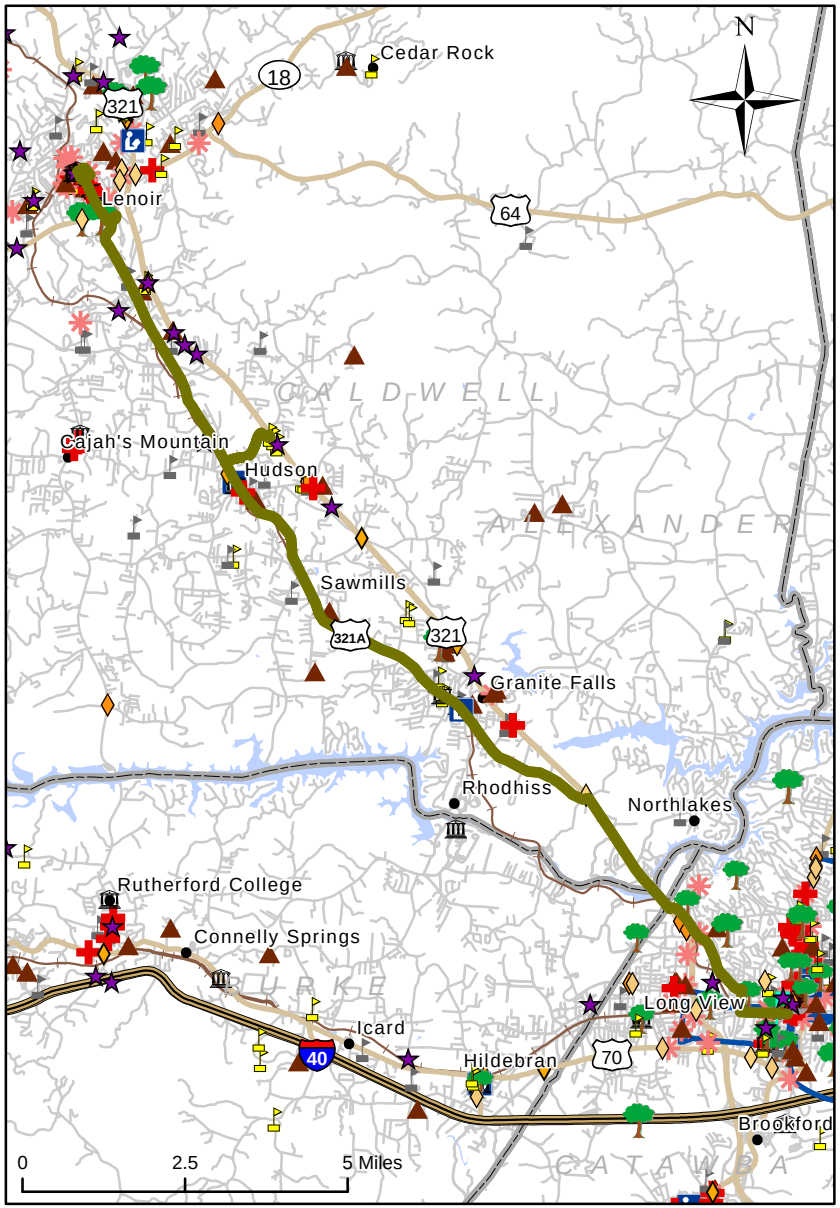


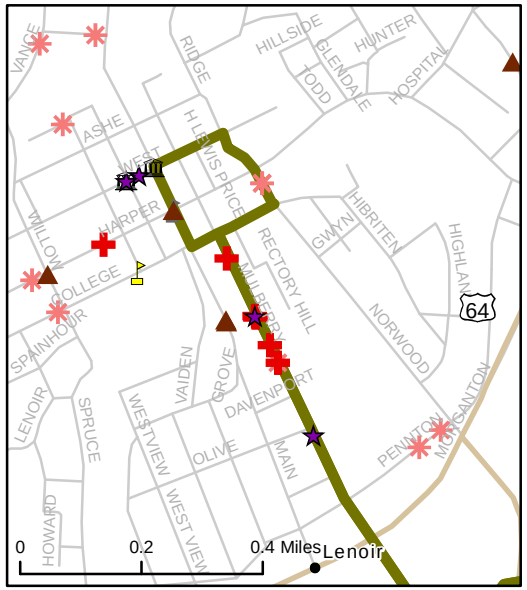
Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, ESRI Data CD.

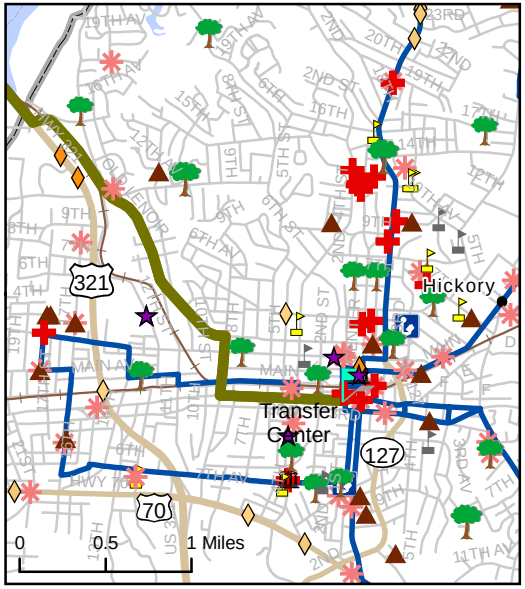
Figure 5-6: New Service Alternative, Corridor Service between Lenoir and Hickory

Legend

- US 321/321A Corridor Service
- Existing Fixed-Route Service
- Streets
- Major Highways
- Interstate Highways
- Railroads
- WPRTA Service Area Counties
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity
- Transportation Center







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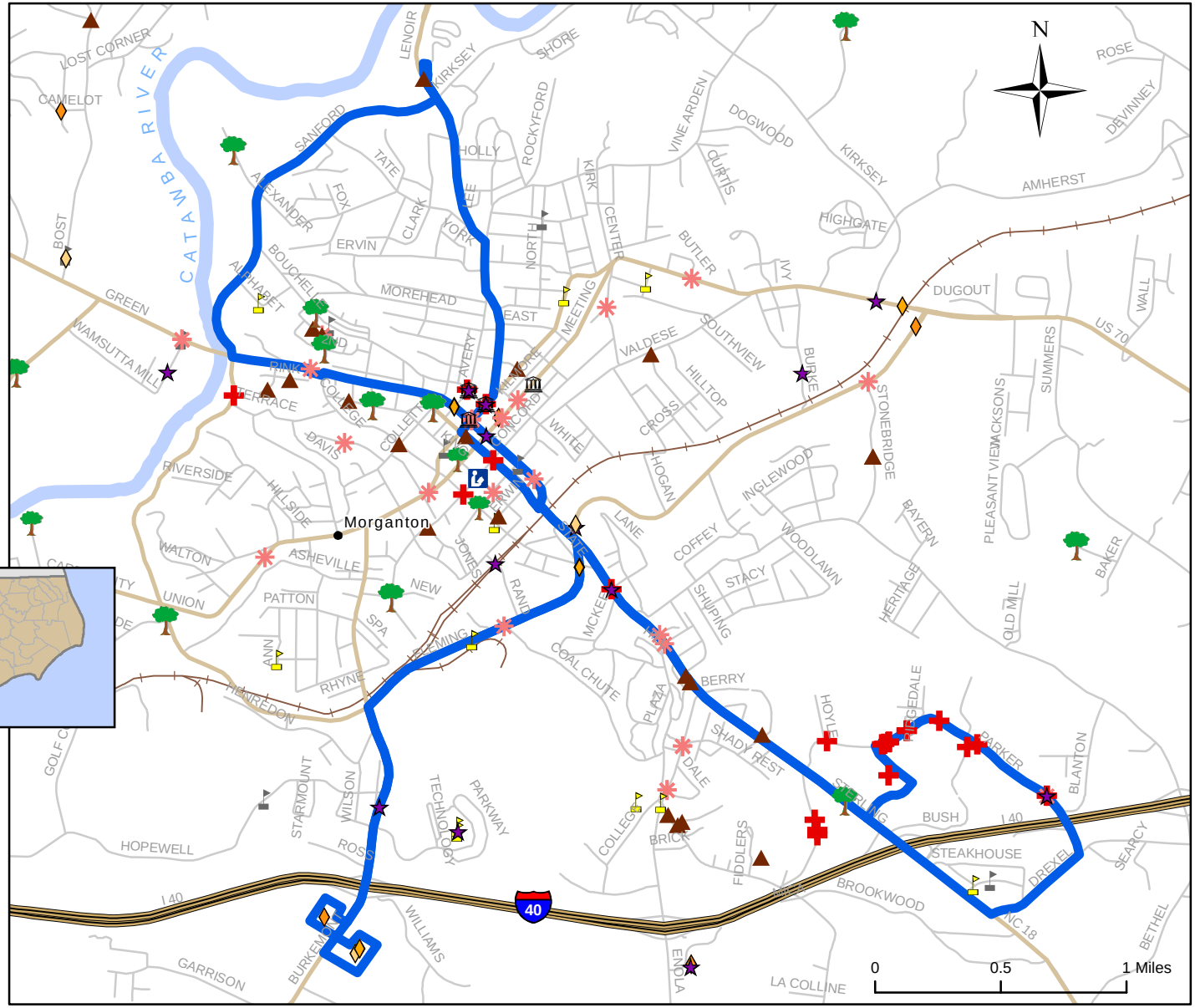
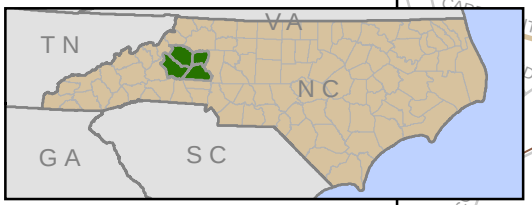
Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, ESRI Data CD.

Figure 5-7: New Service Alternative, Circulator Service in Morganton

Legend

- Morganton Circulator
- Streets
- Major Highways
- Interstate Highways
- Railroads
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity





Greenway Public Transportation Service Area

GREENway PUBLIC TRANSPORTATION

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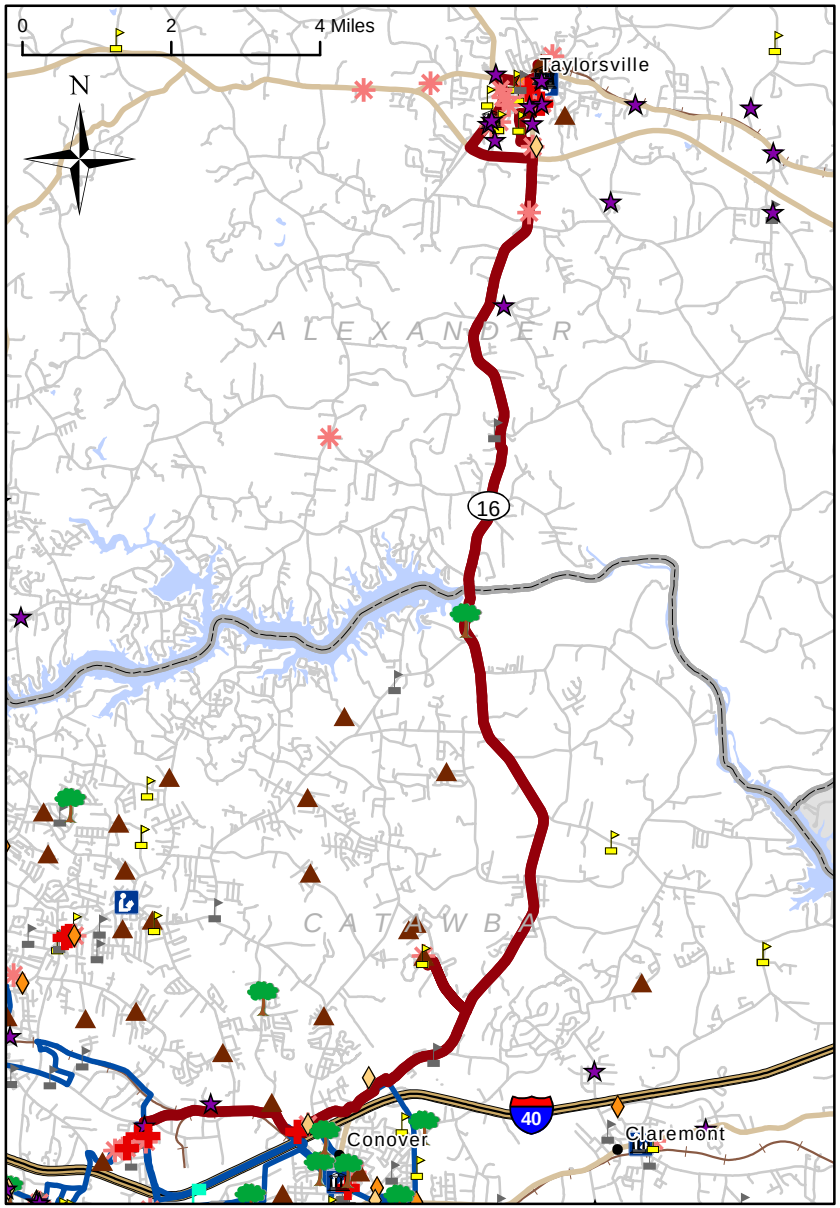
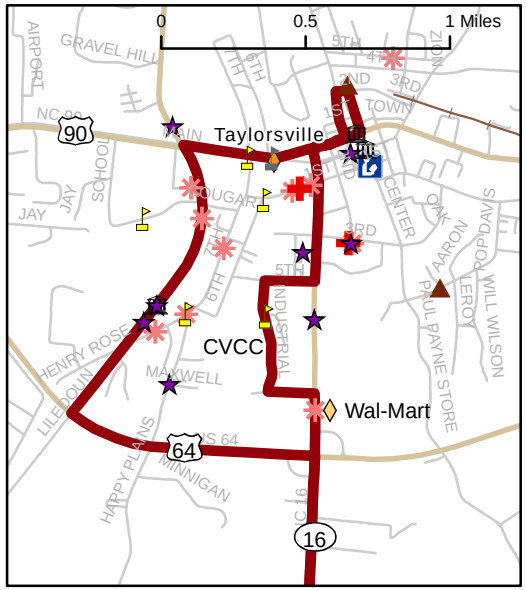
Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, ESRI Data CD.

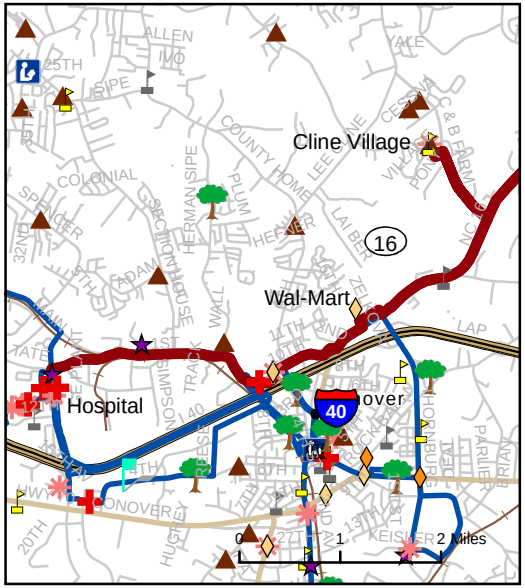
Figure 5-8: New Service Alternative, Corridor Service between Taylorsville and Conover

Legend

- NC 16 Corridor Service
- Existing Fixed-Route Service
- Streets
- Major Highways
- Interstate Highways
- Railroads
- WPRTA Service Area Counties
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity
- Transportation Center







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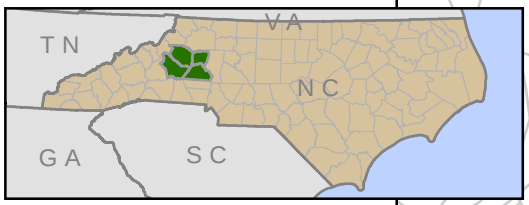
Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, ESRI Data CD.

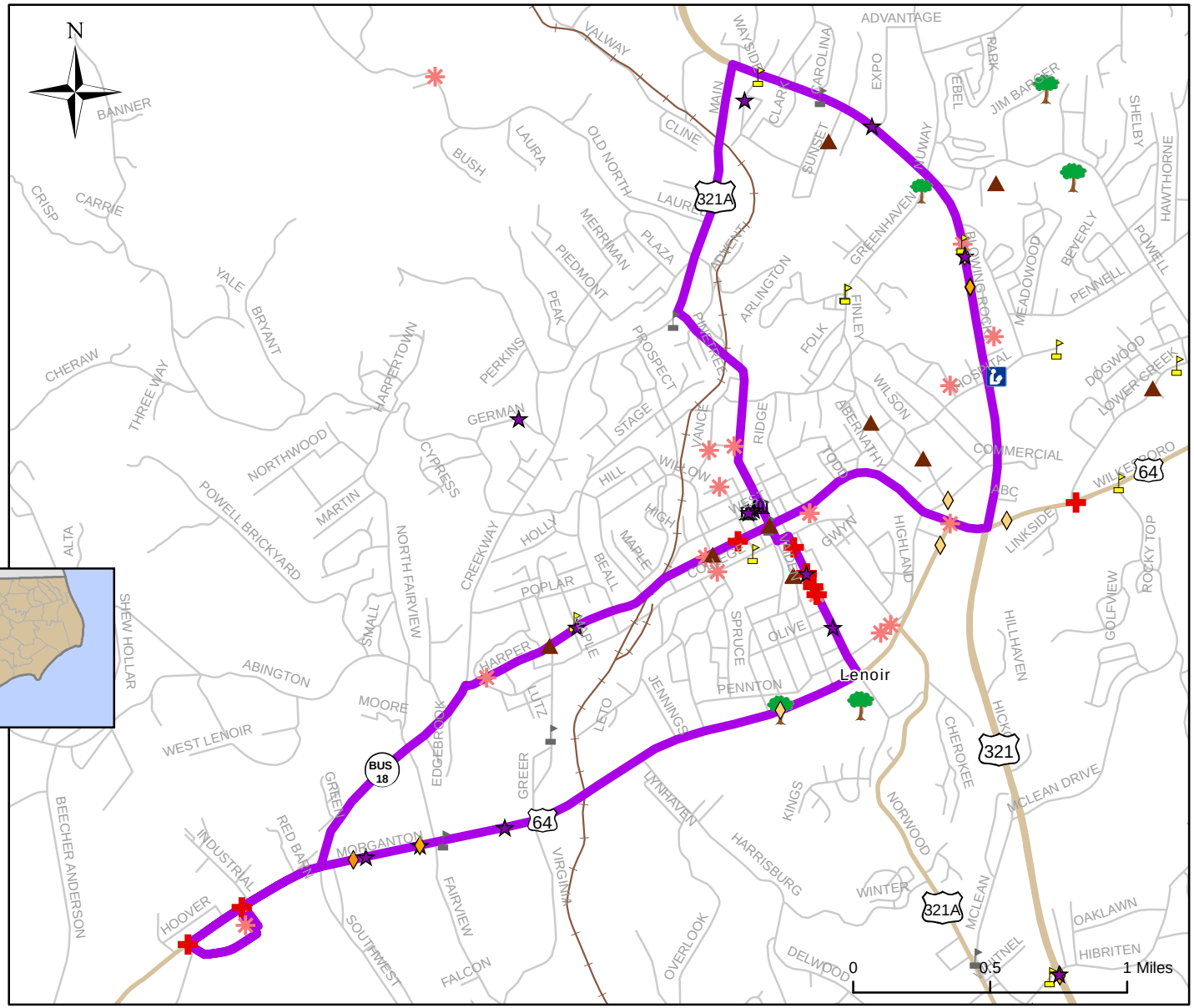
Figure 5-9: New Service Alternative, Circulator Service in Lenoir

Legend

- Lenoir Circulator
- Streets
- Major Highways
- Interstate Highways
- Railroads
- Multi-Unit Housing
- Major Employer
- Medical Services
- Educational Facility
- Day Care Center
- Public Library
- Municipal Services
- Human Service Agency
- Retail Destination
- Grocery or Pharmacy
- Park/Recreational Opportunity



Greenway Public Transportation Service Area



Notes: Trip generators compiled through a variety of online sources, including county, city, and town websites; agency/organization websites; and Google searches. Sources: Western Piedmont Council of Governments, ESRI Data CD.

Taylorsville Shuttle

During the course of the CTSP, a fixed-route circulator service was implemented by WPRTA in the Town of Taylorsville, at the request of the Town of Taylorsville. This route has not performed well thus far, likely due to the relatively low population densities found in Taylorsville and the long and looping route pattern.

WPRTA has recently worked with the Town of Taylorsville to make adjustments to this route, including shortening the route to make it more direct, shifting the service mode to deviated fixed-route, changing the hours, and reducing service from five days to three days. These changes are likely to improve the productivity of the route and allow it to be viable. The new route map for the Taylorsville Shuttle in provided as Exhibit 5-1.

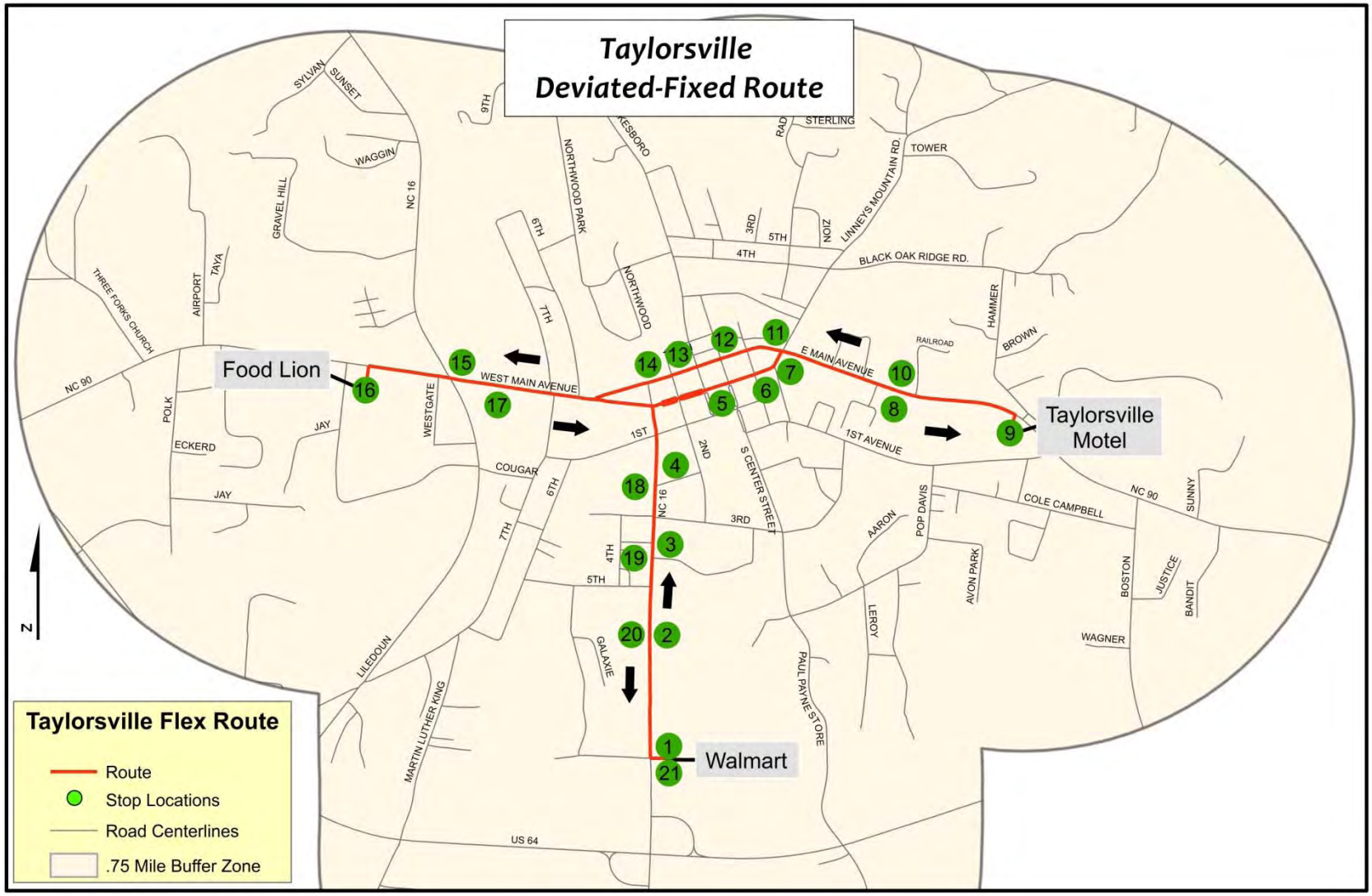
Changes to the Demand-Response Network

As discussed in Chapter 4, the demand-response component of the WPRTA network is currently the largest service component, operating about 67,000 annual service hours at a cost of just over $ 2.9 million. As such, improvements in productivity for the demand-response component of transit program provide a significant opportunity to either extend service to more people and/or reduce operating expenses.

WPRTA staff have recognized this and have been taking steps independent of the CTSP to improve productivity, including purchasing larger vehicles so that more riders can be scheduled per vehicle trip (both ambulatory and wheelchair), and transitioning selected subscription routes from demand-response to deviated fixed routes. The first three pilot routes are focused on the Catawba County DSS senior nutrition routes. The new deviated fixed routes will serve most of the clients currently served by the subscription route; will tie into the fixed-route network; and will be open to the public. Riders can call ahead if they wish to be picked up within ¾ mile of the route, or they can meet the route at designated time points/stops. The areas that will be served by these routes are: West Hickory, East Hickory, and Newton.

The CTSP recommendation with regard to the demand-response network is to continue to transition demand-response routes to deviated fixed routes, as is feasible, beginning with the ongoing subscription routes and phasing in the larger vehicles to accommodate additional general public demand. The concept is to maximize the capacity of the vehicle trips that WPRTA is already running, both to add more general public availability and to increase productivity. This concept is only viable where there is already some demand and some density of origins and destinations. The suggested runs that could potentially be operated as deviated fixed routes are:

Exhibit 5-1: Taylorsville Deviated-Fixed Route



- Alexander County
  - Alexander In-Town
  - Hickory
  - Possibly the Friendship and Stony Point Nutrition runs

- Burke County
  - Burke-Morganton Area run
  - Vocational Rehabilitation
  - Hickory
  - Nutrition

- Caldwell County
  - Caldwell County Community College and Technical Institute
  - Caldwell Nutrition
  - McLeod Center, Hickory

- Catawba County
  - East Hickory Nutrition(currently under development)
  - West Hickory Nutrition (currently under development)
  - Newton Nutrition (currently under development)

This concept may also be a way to offer corridor and/or circulator services (see previous section) without incurring significant new expenses or duplicating existing services in the region.

Mobile Digital Computers (MDCs) and Automatic Vehicle Locators (AVL)

WPRTA has been approved for MDCs and AVL via an American Recovery and Reinvestment Act (ARRA) grant. MDCs are computers that are installed on-board each vehicle. The MDCs transmit the drivers' manifests and allow the driver to record the details of the trip, as each rider is picked up. This eliminates the need for the paper records to be entered at the end of each service day. AVLs are devices that attach to each vehicle and record the geographic position, transmitting that data back to the dispatcher. AVLs are a valuable tool for demand-response programs, as the dispatcher can assign a trip (such as a will-call) by seeing where the vehicles actually are, rather than calling drivers via the radio and asking them. Both of these technologies typically improve productivity.

Quality of Service Improvements

Improved Telephone Customer Service

The following recommendations are designed to reduce telephone wait time and generally improve telephone customer service for riders and callers.

- Identify the busiest time for the call-center, along with how long it takes to respond during this time. Place an outgoing message on the hold line that indicates when the busy time is and when a better time to call may be.

- Stagger the work hours of the three people who answer the phone to:
  - Make sure all three are available during the busiest period
  - Allow for a longer period of coverage for "live voice"

- Consider funneling cancellations to an automatic line so a person is not tied up for that type of call.

- Ensure that "where is my ride" calls are funneled to the dispatcher, rather than tying up a reservationist.

If these measures are still inadequate to provide a reasonable level of customer service (i.e., hold time of two minutes or less), then WPRTA should consider adding a part-time position during the busiest calling period and one or two additional incoming lines. If a part-time staff person and an additional line are needed, the estimated annual costs are $24,000 in staffing (based on $12 per hour, six hours per day, 255 days per year, with 30% fringe) and $800 per year for two additional phone lines.

Bus Stop Amenities

Survey respondents indicated that there is a need for additional bus stop amenities. WPRTA is already in the process of providing these amenities through a bus stop improvement program, using ARRA funding. The grant includes funding for 25 shelters, 6 solar lighting fixtures, and 350 bus stop signs and information tubes. These amenities will help improve the transit experience for riders and will also help with system marketing and the provision of transit information throughout the community.

Targeted Transportation Assistance Program

In response to a call for projects from NCDOT-PTD, WPRTA submitted grant applications for funding under the federal S.5310, S.5316, and S.5317 programs. The S.5310 program provides funding for public transportation services in support of

elderly people and persons with disabilities; the S.5316 program (Job Access Reverse Commute (JARC)) provides funding assistance to help low-income people access job opportunities; and the S.5317 program (New Freedom) supports the provision of transportation for people with disabilities, going above and beyond the services provided for under the Americans with Disabilities Act (ADA).

WPRTA is hoping to secure funds for a two-year period (FY 2011 and FY 2012) for projects in each of these categories. The financial match ratio for this program (operating funds) is 50% federal and 50% local.

These projects are as follows:

- **S.5310:** WPRTA will use these grant funds to provide additional trips for elderly people and persons with disabilities.

- **S.5316:** WPRTA will use this grant to expand transportation services to area community colleges for job re-training aimed at increasing access for persons receiving assistance for job re-training and/or low-income persons needing employment or employment-related transportation.

- **S.5317:** WPRTA will use this grant to develop a "ride buddy" pilot program for passengers requiring assistance beyond what is required to be provided under ADA regulations.

ORGANIZATIONAL PLAN

The focus of the organizational plan is on how the Authority can make organizational changes and improvements to better serve the community, achieve long-term financial stability, and/or save money. This organizational plan addresses revenue generation, community outreach, facilities, maintenance, partnerships, and TDM.

Develop Dedicated Local Transit Revenue

There are a number of expansionary projects included in this CTSP. While some projects can be implemented using existing funding, long-term financial stability and the ability to provide more transit services is needed for WPRTA. One way to achieve this stability is by developing a dedicated source of local revenue that can be used to match state and federal funds.

As documented in Chapter 4, there are two mechanisms that can be used by counties in North Carolina to allow for the generation of dedicated revenue for public transportation programs. These two mechanisms are a ¼ cent sales tax and a vehicle registration fee of up to $8.00 per vehicle.

Stakeholders, the TAB, staff, and the public had mixed opinions about which source would: 1) be feasible given the current economic conditions, and 2) provide enough revenue to implement new services and provide long-term financial stability.

After analysis and discussion, the recommended mechanism for the generation of local revenue for WPRTA is a vehicle registration fee of $5.00 per vehicle per year. This fee, if approved, will generate the following local revenue for WPRTA:

- Alexander County: $ 211,130
- Burke County: $462,310
- Caldwell County: $ 400,480
- Catawba County: $ 890,000

TOTAL: $ 1,963,920

It is important to note that this revenue cannot supplant the revenue that each jurisdiction currently provides to WPRTA, but it can allow those amounts to stay level while services are expanded.

Educational Campaign

WPRTA will need to form a working group of area stakeholders to help craft an educational campaign aimed at showing the benefits of implementing the fee, not only what it could allow in terms of transit service, but also how it could alleviate pressure on county budgets. This working group should include representatives from the local human service and senior citizen communities; Chambers of Commerce and economic development groups; major employers; hospitals; community college representatives; and users. It may be effective to form a separate group for each county, focusing on one county at a time. This tactic would allow familiarity between the working group and the commissioners, which may offer an increased chance of success.

Standardize Billing Rate

As discussed in Chapter 4, WPRTA will continue to standardize rates for all contracts using the newly developed shared-mile rate (to be updated with 2010 data), and work towards developing a flat/zone-based fee structure in the future, perhaps for FY 2012. WPRTA has had a staff change in the Finance Manager position, and the new

Finance Manager needs to fully review contractual expense data to ensure that it is correct prior to setting flat/zone rates.

Become a Ticket Agent for Intercity Bus Service

Intercity bus service is due to be re-instated in the Western Piedmont region, with a route that will connect Boone to Charlotte via the US 321 Corridor. This route is being subsidized by the S.5311(f) program and is scheduled to begin in October, 2010.

The City of Hickory's new downtown transfer center, staffed and operated by WPRTA, is the locally preferred stop for the intercity bus carrier. If the transfer center is chosen as the Hickory intercity bus stop, then it is recommended that WPRTA become the ticket agent, selling tickets on behalf of the intercity bus carrier, for a small commission. This will maximize the use of the staff person assigned to the transfer center and also bring in a modest amount of revenue, depending upon the number of tickets sold.

Transportation Demand Management Program

WPRTA is interested in pursuing the development of a TDM Program. The goal of a TDM program is to promote alternative transportation options to the single occupant vehicle, including carpooling, vanpooling, telecommuting, transit, bicycle, flexible work hours, compressed work weeks, and parking policies/pricing strategies. NCDOT became active in supporting TDM programs as a way to decrease ground level ozone pollution from motor vehicles and mitigate the effects of increasing vehicle miles traveled (VMT) and NOx emissions.[1]

Beginning in 2004, NCDOT began a funding assistance program for local TDM programs to fund 50% of their administrative costs. Eligible organizations must be public bodies responsible for promotion of TDM activities, with only one grantee per region.

Each TDM program that is funded is required to conduct specific TDM activities and must also calculate the VMT reductions that result from their efforts. The following six TDM strategies are listed in the grant guidance:

1. Conduct marketing efforts/activities identified in a marketing plan.
2. Coordinate with local transportation and land use planning efforts.
3. Facilitate ridematching services through ShareTheRideNC website.

[1] TDM Program Overview, NCDOT-PTD.

4. Promote the Best Workplaces for Commuter program.
5. Collect and calculate data on VMT reductions through TDM activities.
6. Operate in a manner consistent with the NCDOT goals regarding making the transportation network safer, making the transportation network move people and goods more efficiently, and making the infrastructure last longer.[2]

The first step in the process of developing a TDM program is to conduct a TDM visioning/feasibility study, gathering local stakeholders (including the PTD) to ensure that a TDM program would be viable in the region. S.5307 funds can be used in part to fund a TDM planning study. This type of study would be useful, as TDM programs do not work without interested participants.

Further Develop Partnerships

As WPRTA transitions some of its demand-response service to deviated fixed-route service, there may be some trips that will be very expensive for WPRTA to provide (i.e., trips that dispatch a vehicle for one person). This concept builds on the existing Medicaid brokerage idea, but focuses on further developing partnerships with private operators and/or other private non-profit operators to provide these trips.

There are also peak times when WPRTA does not have the capacity to provide all of the requested trips. Other providers could potentially serve as "overflow" capacity to better meet community transportation needs in the region.

Another partnership opportunity exists with Caldwell Opportunities, Inc. (COI), a private, non-profit that provides adults with work-oriented services including evaluation, developmental skills, training, vocational adjustment, job placement, long-term support and follow-up services to persons with disabilities. COI provides transportation for its customers to access services, but would like to transition its customers to be public transportation users, rather than receive the specialized transportation currently provided by COI. Staff from COI indicated that they would like a partnership arrangement with WPRTA, including allowing WPRTA use of current COI vehicles.

WPRTA should also pursue partnerships with other municipalities in the region, such as Morganton and Lenoir, which may want to join the Authority at some point.

[2] TDM Program Overview, NCDOT-PTD, FY2011 grant guidance.

Facilities

Independent of the CTSP, WPRTA has been working on facility plans, including the development of an operating and maintenance facility, an administrative facility, and satellite facilities.

In 2009, WPRTA completed a facility study, the purpose of which was to identify a site to be used as WPRTA's operating and maintenance facility. The site chosen as a result of that planning process is in Hickory, on the site formerly occupied by S &W Chemical Company. This 5.74-acre site is located at 1530 1st Avenue, SW. The FY2011 capital budget includes funds to purchase the site ($380,000) and to begin architectural and engineering plans ($274,561). The City of Hickory has offered WPRTA a $150,000 incentive to purchase the site. The estimated construction costs for the facility are just over $6.1 million.[3] A financial campaign will be needed to raise funds to construct this project.

In the course of discussing the facility, another potential site was recommended to serve as an administrative center. The Warlong Glove Factory site, located at the intersection of Conover Blvd. E, and 3rd Street, SE in Conover is currently owned by the City of Conover. The City is looking for tenants for the site and has extended an offer for WPRTA to use part of the site at no cost (i.e., rent-free). There will be costs associated with tenant fit-out, and these costs have been included in WPRTA's FY 2011 Capital budget ($400,000).

WPRTA is also in the process of evaluating its satellite facilities in Taylorsville, Burke, and Caldwell Counties. The Taylorsville facility is located on Wittenburg Road, which is about five miles south of Taylorsville. The location of this facility is resulting in a significant level of deadhead mileage, as the large majority of the service in Alexander County ties into Taylorsville. However, the site is tied to the maintenance contract which expires in July 2011 and it is very reasonably priced ($175/month). WPRTA should calculate the deadhead expenses versus the low lease expenses to determine if it should explore the possibility of re-locating the site to one in Taylorsville when the lease is up.

The Burke County facility is located at 300 N. Green Street in Morganton. This lease expires at the end of August 2010 and WPRTA has agreed to a lease extension through June 2011.

[3] Greenway Public Transportation Maintenance, Administration, and Operations Facility Feasibility Study, URS, August, 2009.

In Caldwell County, the facility is located at 840 Connelly Springs Road. The lease is due to expire at the end of June, 2011. Staff indicated that they may wish to re-locate at the end of the lease due to parking constraints at the site.

Bring Maintenance In-House

All of WPRTA's fleet maintenance is currently performed by contractors. Outside of the CTSP process, WPRTA staff evaluated the potential to bring the maintenance function in-house, starting with the vans and eventually including the buses when the Authority has its own facility.

The staff evaluation concluded that it would be beneficial for the Authority to bring maintenance in-house for the following three primary reasons:

- In-house maintenance will be less expensive, with the potential to save over $100,000 annually by directly performing the van maintenance.
- There will be improved control over the quality and timeliness of vehicle maintenance, and
- The construction of a WPRTA facility will allow for bus maintenance.

The schedule for the maintenance transition is as follows:

- The current van maintenance contracts expire in July 2011. At that time the van maintenance should be brought in-house, using a leased facility.
- Maintenance of buses should remain a contracted function until the Authority has an appropriate facility and should be re-bid in June 2011.

Environmental Responsibility

WPRTA has been focusing on becoming an environmentally responsible transit provider, and this focus will continue through the five-year planning horizon. Recent initiatives have included a conversion to biodiesel, plans to purchase a hybrid vehicle, bike racks on the buses, and a commitment to constructing a facility that follows LEED principles. Future initiatives will include a continued commitment to biodiesel, hybrid technologies, environmentally friendly construction practices, and the continued purchase of bike racks for the buses and light transit vehicles.

IMPLEMENTATION SCHEDULE

This section of the plan provides an implementation schedule for the activities that have been described in this plan. It should be noted the implementation of some of the initiatives listed on this schedule and described in the plan are dependent upon available funding, which may necessitate future revisions to this schedule. This schedule does not include the vehicle replacement and expansion activities, as these are presented with the Capital Plan section (page 5-29). Note that the corridor services in a particular corridor are planned for the same years as the corresponding transition to flex routes in a particular county. This was done to take full advantage of the potential to coordinate these services as much as possible.

Year One: Fiscal Year 2010-11

Urbanized Area Fixed-Route Public Transit Services

- Adjust the Tate Blvd./Conover Route.

New Public Transportation Services

- Adjust the Taylorsville Shuttle.

Changes to the Demand-Response Network

- Implement the first three flex routes, to supplant the currently operated East Hickory, West Hickory, and Newton Nutrition routes in Catawba County.
- Begin planning work for Burke County flex routes.
- Implement MDCs and AVL.

Quality of Service Improvements

- Implement telephone customer service recommendations.
- Begin implementation of bus stop amenities.
- Implement a bus system "trip planner" feature on the WPRTA website.

Targeted Transportation Assistance Program

- Provide additional trips for elderly people and persons with disabilities using S.5310 grant.
- Expand transportation services to area community colleges using S.5316 grant.

- Implement a "ride buddy" pilot program using S.5317 funds.

Organizational Initiatives

- Form working group to begin campaign for a vehicle registration fee to support public transportation in the region.
- Complete education process by the end of FY 2011 so that funding can begin in FY 2012.
- Continue work on standardize billing rate.
- Become a ticket agent for intercity bus service.
- Conduct a TDM planning study.
- Further develop partnerships.
- Purchase the S & W property for operations and maintenance facility.
- Begin the architectural and engineering services for the new operations and maintenance facility.
- Upfit the Warlong building for administrative offices.
- Evaluate satellite facility leases that are due to expire in June 2011.
- Prepare to bring van maintenance in-house by implementing new fleet maintenance tracking and management software and securing an interim maintenance site.
- Implement a corporate-sponsored employee wellness program.
- Complete the fleet re-branding.

Year Two: Fiscal Year 2011-12

Urbanized Area Fixed-Route Public Transit Services

- Split the Hickory-Conover-Newton Route.
- Adjust the Interlining of the Routes.

New Public Transportation Services

- US 70 Corridor Service between Morganton and Hickory.

Changes to the Demand-Response Network

- Implement Burke County flex routes.
- Begin planning work for Caldwell County flex routes.

Quality of Service Improvements

- Complete implementation of bus stop amenities.

Targeted Transportation Assistance Program

- Continue with second year of S. 5310-funded service.
- Continue with second year of S. 5316-funded service.
- Continue with second year of S. 5317-funded service
- Write new grants to continue these services, assuming PTD issues a call for projects.

Organizational Initiatives

- Implement the vehicle registration fee in Burke County.
- Lease an appropriate facility and bring van maintenance in-house.
- Continue with architectural and engineering services for the operations and administrative facility.
- Work on funding campaign for new facility.
- Move the administrative offices into the Warlong Building.
- Implement a TDM program, if the planning study indicates that such a program is feasible in the region.

Year Three: Fiscal Year 2012-13

Urbanized Area Fixed-Route Public Transit Services

- Improve Service Frequency.
- Split the NC127/Springs Road Route.

New Public Transportation Services

- US 321A Corridor Service between Taylorsville and the Catawba Valley Medical Center.

Changes to the Demand-Response Network

- Implement Caldwell County flex routes.
- Begin planning work for Alexander County flex routes.

Targeted Transportation Assistance Program

- Continue to provide services under S.5310, S.5316, and S.5317, assuming these programs are funded for this fiscal year.

Organizational Initiatives

- Implement the vehicle registration fee in Catawba County.
- Continue work on financing and constructing the operations and maintenance facility.

Year Four: Fiscal Year 2013-14

Urbanized Area Fixed-Route Public Transit Services

- Extend the Service Day.
- Newton-Conover Circulator .

New Public Transportation Services

- Circulator Service in Morganton.

Changes to the Demand-Response Network

- Implement Alexander County flex routes.

Targeted Transportation Assistance Program

- Continue to provide services under S. 5310, S. 5316, and S.5317, assuming these programs are funded for this fiscal year.

Organizational Initiatives

- Implement the vehicle registration fee in Caldwell County.
- Continue work on financing and constructing the operations and maintenance facility.

Year Five: Fiscal Year 2014-15

Urbanized Area Fixed-Route Public Transit Services

- Provide Sunday Service.

New Public Transportation Services

- NC 16 Corridor Service between Taylorsville and the Catawba Valley Medical Center.
- Circulator Service in Lenoir.

Targeted Transportation Assistance Program

- Continue to provide services under S. 5310, S. 5316, and S.5317, assuming these programs are funded for this fiscal year.

Organizational Initiatives

- Implement the vehicle registration fee in Alexander County.
- Continue work on constructing the operations and maintenance facility.

CAPITAL PLAN

There are a number of important capital projects planned for WPRTA during the five-year planning horizon. While each of these projects has been referenced in other portions of the plan, they are highlighted together below.

Operations and Maintenance Facility

WPRTA has a contractual agreement to purchase a 5.74-acre site in Hickory, located at 1530 1st Avenue, SW. This property was formerly used by the S & W Chemical Company. This site was chosen by WPRTA after the development of a facility feasibility study, completed in August, 2009. The purchase price for the facility is $380,000 and the estimated construction costs are about $6 million. WPRTA has budgeted for architectural and engineering services for FY 2011 and plans to move forward with design and construction as quickly as the environmental and financial processes will allow. When constructed, this facility will allow WPRTA to bring all of its vehicle maintenance in-house and will eliminate the need to lease space for a central facility. Fueling and washing will also occur on-site. The financial plan includes the expenses for this facility and a proposed funding scenario using S.5307 and S. 5311

funds, but it will be difficult to fund this project through the typical annual capital revenue streams and WPRTA will likely need to pursue funding under the competitive Federal S.5309 program.

Administrative Facility

WPRTA is also moving forward with the development of an administrative facility, which will be housed in the former Warlong Glove Factory in Conover. WPRTA will not have to pay rent for this facility, but will be responsible for the tenant fit-out, which is estimated to cost $303,464. These funds are included in WPRTA's FY2011 capital budget. Once this project is complete, WPRTA will save money on monthly rent, as the administrative staff can move out of the current leased facility to the Warlong site.

Satellite Facilities

While the current satellite facilities for WPRTA are leased, WPRTA is interested in pursuing the concept of purchasing satellite facilities. Each of the three satellite facilities (Lenoir, Morganton, Taylorsville) will need to be evaluated individually to determine the cost-effectiveness of continuing to lease (the leases are all relatively low-cost) versus purchasing satellite sites. The focus in the near-term for WPRTA is on the central operations and maintenance facility.

Maintenance Tools and Equipment

As part of the Authority's transition from using contractors for maintenance to conducting maintenance in-house, WPRTA will have to purchase maintenance tools and equipment. The tools and equipment needed for the first phase, van maintenance, will cost about $25,000, which is included in WPRTA's FY 2011 capital budget.

Passenger Amenities

A major bus stop improvement project was funded through an ARRA grant, approved in FY 2010. The project includes funding for 25 shelters, 6 solar lighting fixtures, and 350 bus stop signs and information tubes. These amenities will be installed in FY 2011 and FY 2012.

Advanced Technologies

MDC and AVL technologies were funded with an ARRA grant and will be implemented in FY 2011.

Vehicles

This capital plan includes a vehicle replacement and expansion plan that corresponds with the implementation plan presented above. Table 5-3 presents the vehicle expansion and replacement plan, and Table 5-4 provides the vehicle inventory updated with the known and recommended replacement years. This plan incorporates WPRTA's desire to "right-size" the fleet by reducing the number of vans and increasing the number of light transit vehicles. All of the new corridor and circulator services are proposed to be operated with light transit vehicles. The cost estimates for these vehicles (in the financial section, below) assumes that they will be either bio-diesel or hybrid. These types of vehicles are more expensive than standard light transit vehicles but they are in keeping with WPRTA's desire to operate in an environmentally-responsible fashion.

FINANCIAL PLAN

The CTSP financial plan is comprised of three primary components: the financial plan for operations; the financial plan for vehicle replacement and expansion; and the financial plan for facilities, equipment, and other capital.

These components are presented in Tables 5-5, 5-6, and 5-7. For each of the three components, approved budget numbers were used for the base year (FY 2011). For the four subsequent years, estimates have been made using currently available data and assumptions concerning service expansion.

Financial Plan for Operations

The Financial Plan for Operations was constructed by taking the current service hours (FY 2011), and then adding the services as they are scheduled for implementation. The fully-allocated hourly costs ($51/hour for demand-response/flex/new and $55/hour for fixed routes) were then applied to arrive at the total annual operating expenses for each year. A 2% per year escalation was added for subsequent years after implementation. As Table 5-5 indicates, the total annual operating expenses are planned to rise from about $4.5 million in FY 2011 to just under $6.9 million in FY 2015.

For the revenue side of the financial plan, no increases in federal or State funds have been assumed, though it is plausible that federal funding will increase upon the reauthorization of SAFETEA-LU. As the table indicates, service expansions will be heavily dependent upon the passage of the vehicle registration fee. The fee is programmed to be phased in by County, as services to that County are increased. The

Table 5-3: WPRTA Transit Vehicle Replacement and Expansion Program

Vehicle Type	Useful Life	Number in Current Fleet	# *Vehicle Procurements*										Number in Future Fleet
			FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		
			Repl.	Exp.	Repl.	Exp.	Repl.	Exp.	Repl.	Exp.	Repl.	Exp.	
Minivans	5 years	4			1				1				4
Lift and Conversion Vans	5 years	41	3		5		4		6		5		26
Light Transit Vehicles	7 years	8	10		4	2		6	5	2		2	32
Heavy Duty Transit Buses	12 years	5											5
Head Start Bus	7 years	1											0
Support Vehicles	5 years	0		2									2
Total Vehicles		59	13	2	10	2	4	6	12	2	5	2	69
Vehicles Currently Waiting Disposal		4											
Fleet Size		55		57		59		65		67		69	

Notes: (1) Seven of the 10 light transit vehicles listed as replacement vehicles in FY 2011 are replacing vans as part of the fleet conversion to gain capacity and provide more general public trips. This strategy is repeated in FY 2012 and FY 2014 so that the fleet is more balanced.

Table 5-4: WPRTA Vehicle Inventory with Replacement Years

Vehicle Location	Current Local Fleet Number	Model Year	Model	Vehicle Type	Seating Capacity	Wheel-chair Stations	Fuel	Vehicle Use (1)	Replacement Year
Catawba - Admin. Vehicle	00504MV	2000	Dodge	Minivan	6	0	Gas	Admin	Dispose
Catawba - Admin. Vehicle	02250MV	2002	Dodge	Minivan	5	0	Gas	Admin	2010
Alexander County	06814L	2006	Ford	Lift Equipped Van	9	2	Gas	R	2012
Alexander County	06815L	2006	Ford	Lift Equipped Van	9	2	Gas	R	2012
Alexander County	06668MV	2006	Dodge	Minivan	6	0	Gas	R	2012
Alexander County	07751L	2007	Ford	Lift Equipped Van	9	2	Gas	R	2013
Alexander County	08914C	2008	Ford	Conversion Van	12	0	Gas	R	2014
Alexander County	08915L	2008	Ford	Lift Equipped Van	8	2	Gas	R	2014
Alexander County	01077CA	2001	Dodge	Center Aisle Van	14	0	Gas	B	2012
Alexander County	09926L	2009	Ford	Lift Equipped Van	8	2	Gas	R	2015
Alexander County	09003LTV22L	2009	Ford	22-FT LTV	14	2	Gas	R	2016
Burke County	06945L	2006	Ford	Lift Equipped Van	9	2	Gas	R	2012
Burke County	01084CA	2001	Dodge	Center Aisle Van	14	0	Gas	R	Admin
Burke County	01083CA	2001	Dodge	Center Aisle Van	14	0	Gas	B	Admin
Burke County	02343CA	2002	Dodge	Center Aisle Van	14	0	Gas	R	Dispose
Burke County	02344CA	2002	Dodge	Center Aisle Van	14	0	Gas	B	2011
Burke County	03792LTV22L	2003	Ford	22-FT LTV w/Lift	15	1	Gas	R	2011
Burke County	03565LTV	2003	Ford	25-FT LTV	24	0	Gas	R	2012
Burke County	03566LTV	2003	Ford	25-FT LTV	24	0	Gas	R	2012
Burke County	03214C	2003	Dodge	Conversion Van	14	0	Gas	R	2011
Burke County	07910L	2007	Ford	Lift Equipped Van	9	2	Gas	R	2013
Burke County	08897L	2008	Ford	Lift Equipped Van	8	2	Gas	R	2014
Burke County	08896L	2008	Ford	Lift Equipped Van	8	2	Gas	R	2014
Burke County	08092MV	2008	Dodge	Minivan	6	0	Gas	R	2014
Caldwell County	01723C	2001	Dodge	Conversion Van	13	0	Gas	R	2011
Caldwell County	01722C	2001	Dodge	Conversion Van	13	0	Gas	R	Dispose
Caldwell County	03860L	2003	Dodge	Lift Equipped Van	9	2	Gas	R	Dispose
Caldwell County	03883L	2003	Dodge	Lift Equipped Van	9	2	Gas	R	2012
Caldwell County	03885L	2003	Dodge	Lift Equipped Van	9	2	Gas	R	2012
Caldwell County	03898L	2003	Dodge	Lift Equipped Van	9	2	Gas	R	2012
Caldwell County	08929L	2008	Ford	Lift Equipped Van	8	2	Gas	R	2014
Caldwell County	01489HSB	2001	GMC	Head Start Bus	14	0	Gas	B	Dispose

Table 5-4: WPRTA Vehicle Inventory with Replacement Years

Vehicle Location	Current Local Fleet Number	Model Year	Model	Vehicle Type	Seating Capacity	Wheel-chair Stations	Fuel	Vehicle Use (1)	Replacement Year
Caldwell County	09946L	2009	Ford	Lift Equipped Van	8	2	Gas	R	2015
Caldwell County	09962L	2009	Ford	Lift Equipped Van	8	2	Gas	R	2015
Caldwell County	09928L	2009	Ford	Lift Equipped Van	8	2	Gas	R	2015
Caldwell County	09931L	2009	Ford	Lift Equipped Van	8	2	Gas	R	2015
Caldwell County	07793L	2007	Ford	Lift Equipped Van	9	2	Gas	R	2013
Caldwell County	02249MV	2002	Dodge	Minivan	6	0	Gas	R	2011
Caldwell County	10867MV	2010	Dodge	Minivan	6	0	Gas	R	2016
Catawba County	02738L	2002	Dodge	Lift Equipped Van	9	2	Gas	B	Dispose
Catawba County	97014LTV	1997	Ford	25-FT LTV	16	0	Gas	B	Dispose
Catawba County	97162LTV	1997	Ford	25-FT LTV	16	0	Gas	B	Dispose
Catawba County	01919C	2001	Dodge	Conversion Van	13	0	Gas	B	Dispose
Catawba County	02281C	2002	Dodge	Conversion Van	13	0	Gas	R	2011
Catawba County	02697C	2002	Dodge	Conversion Van	13	0	Gas	R	2011
Catawba County	02277C	2002	Dodge	Conversion Van	13	0	Gas	R	2011
Catawba County	02767C	2002	Dodge	Conversion Van	13	0	Gas	R	2011
Catawba County	03823C	2003	Dodge	Conversion Van	13	0	Gas	R	2011
Catawba County	06876L	2006	Ford	Lift Equipped Van	9	2	Gas	R	2012
Catawba County	06977L	2006	Ford	Lift Equipped Van	9	2	Gas	R	2012
Catawba County	07786C	2007	Ford	Conversion Van	12	0	Gas	R	2013
Catawba County	08890L	2008	Ford	Lift Equipped Van	8	2	Gas	R	2014
Catawba County	08889L	2008	Ford	Lift Equipped Van	8	2	Gas	R	2014
Catawba County	06938B	2006	Gillig	Bus	32	2	Diesel	R	2018
Catawba County	06939B	2006	Gillig	Bus	32	2	Diesel	R	2018
Catawba County	06940B	2006	Gillig	Bus	32	2	Diesel	R	2018
Catawba County	06941B	2006	Gillig	Bus	32	2	Diesel	R	2018
Catawba County	06942B	2006	Gillig	Bus	32	2	Diesel	R	2018
Catawba County	01167LTV	2001	Ford	LTV	22	0	Diesel	B	2011
Catawba County	02064LTV	2002	Ford	LTV	22	0	Diesel	B	Dispose
Catawba County	07366L	2007	Ford	Lift Equipped Van	9	2	Gas	R	2014
Catawba County	07367L	2007	Ford	Lift Equipped Van	9	2	Gas	R	2014
Catawba County	07368L	2007	Ford	Lift Equipped Van	9	2	Gas	R	2014

(1) R denotes revenue vehicle, B denotes back-up vehicle.

Table 5-5: WPRTA Financial Plan for Operations

Projects	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Annual Service Hours					
Urbanized Area Fixed Route Services					
Current WPRTA Urban Fixed Routes	14,700	14,700	14,700	14,700	14,700
Improve Service Frequency			7,140	7,140	7,140
Split the NC 127/Springs Road Route			3,604	3,604	3,604
Extend the Service Day				5,620	5,620
Provide Sunday Service					2,080
Newton-Conover Circulator				3,604	3,604
Subtotal, Urbanized Area Fixed Route Service Hours	14,700	14,700	25,444	34,668	36,748
Demand Response/Flex Route/New Services					
Current WPRTA Demand Response Van/LTV Services	66,800	66,300	65,800	65,300	64,800
New Services Provided using S.5310, S. 5316, and S. 5317	5,233	5,233	5,233	5,233	5,233
US 70 Corridor Service between Morganton and Hickory		2,040	2,040	2,040	2,040
US 321A Corridor Service between Lenoir and Hickory			2,040	2,040	2,040
Circulator Service in Morganton				3,536	3,536
NC 16 Corridor Service between Taylorsville and the Catawba Valley Medical Center					2,040
Circulator Service in Lenoir					3,536
Subtotal, Demand Response/Flex Route/New Services	72,033	73,573	75,113	78,149	83,225
Total Transit Service Hours	**86,733**	**88,273**	**100,557**	**112,817**	**119,973**

Table 5-5 (continued)

Projects	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Projected Operating Expenses					
Urbanized Area Fixed Route Services					
Current WPRTA Urban Fixed Routes	$ 815,850	$ 832,167	$ 848,810	$ 865,787	$ 883,102
Improve Service Frequency			$ 396,270	$ 404,195	$ 412,279
Split the NC 127/Springs Road Route			$ 200,022	$ 204,022	$ 208,103
Extend the Service Day				$ 310,224	$ 316,428
Provide Sunday Service					$ 115,440
Newton-Conover Circulator				$ 200,022	$ 204,022
Subtotal, Urbanized Area Fixed Route Service Expenses	**$ 815,850**	**$ 832,167**	**$ 1,445,102**	**$ 1,984,250**	**$ 2,139,375**
Demand Response/Flex Route/New Services					
Current WPRTA Demand Response Van/LTV Services	$ 3,407,830	$ 3,475,987	$ 3,545,506	$ 3,616,416	$ 3,688,745
New Services Provided using S.5310, S. 5316, and S. 5317	$ 282,600	$ 282,600	$ 288,252	$ 288,252	$ 294,017
US 70 Corridor Service between Morganton and Hickory		$ 104,040	$ 106,121	$ 108,243	$ 110,408
US 321A Corridor Service between Lenoir and Hickory			$ 104,040	$ 106,121	$ 108,243
Circulator Service in Morganton				$ 171,156	$ 174,579
NC 16 Corridor Service between Taylorsville and the Catawba Valley Medical Center					$ 104,040
Circulator Service in Lenoir					$ 171,156
Subtotal, Demand Response/Flex Route/New Services	**$ 3,690,430**	**$ 3,862,627**	**$ 4,043,919**	**$ 4,290,188**	**$ 4,651,188**
Other					
Travel Demand Management Program	**$ -**	$ 80,000	$ 82,400	$ 84,872	$ 87,418
TOTAL	**$ 4,506,280**	**$ 4,774,794**	**$ 5,571,421**	**$ 6,359,311**	**$ 6,877,982**

Table 5-5 (continued)

Anticipated Funding Sources for Operating	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Federal					
FTA S. 5307	$ 1,476,507	$ 1,506,037	$ 1,536,158	$ 1,566,881	$ 1,598,219
FTA S. 5307 (Roll Forward and ARRA)	$ 250,000	$ -	$ -	$ -	$ -
FTA S. 5311	$ 567,182	$ 578,526	$ 590,096	$ 601,898	$ 613,936
FTA S.5310, S.5316, S.5317	$ 141,300	$ 141,300	$ 144,126	$ 147,009	$ 149,949
Subtotal, Federal	**$ 2,434,989**	**$ 2,225,863**	**$ 2,270,380**	**$ 2,315,788**	**$ 2,362,103**
State					
State Maintenance Assistance Program (SMAP)	$ 204,435	$ 208,524	$ 212,694	$ 216,948	$ 221,287
Elderly and Disabled Transportation Assistance Program	$ 400,994	$ 409,014	$ 417,194	$ 425,538	$ 434,049
Rural General Public	$ 433,490	$ 442,160	$ 451,003	$ 460,023	$ 469,224
Employment	$ 20,464	$ 20,873	$ 21,291	$ 21,717	$ 22,151
Subtotal, State	**$ 1,059,383**	**$ 1,080,571**	**$ 1,102,182**	**$ 1,124,226**	**$ 1,146,710**
Local					
Contract Revenue	$ 630,000	$ 661,500	$ 694,575	$ 729,304	$ 765,769
Member Matching Funds	$ 397,108	$ 397,108	$ 397,108	$ 397,108	$ 397,108
Passenger Fares	$ 235,000	$ 252,450	$ 270,424	$ 295,652	$ 322,021
Vehicle Registration Fee (80% toward operating, FY12, 13)		$ 369,848	$ 1,007,878	$ 1,752,790	$ 1,963,920
Subtotal, Local	**$ 1,262,108**	**$ 1,680,906**	**$ 2,369,985**	**$ 3,174,854**	**$ 3,448,818**
Total Projected/Proposed Operating Revenues	**$ 4,756,480**	**$ 4,987,339**	**$ 5,742,547**	**$ 6,614,867**	**$ 6,957,632**
Surplus to build reserves	$ 250,200	$ 212,546	$ 171,126	$ 255,556	$ 79,650

Table 5-6: WPRTA CTSP Financial Plan for Vehicle Replacement and Expansion

Number of Vehicles	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Replacement	13	10	4	12	5
Expansion	2	2	6	2	2
Total Vehicles	15	12	10	14	7
Vehicle Costs					
Replacement	$ 1,894,600	$ 925,000	$ 204,000	$ 1,136,000	$ 255,000
Expansion	$ 76,800	$ 320,000	$ 960,000	$ 320,000	$ 320,000
Total Projected Vehicle Costs	$ 1,971,400	$ 1,245,000	$ 1,164,000	$ 1,456,000	$ 575,000
Anticipated Funding Sources					
Federal S.5307	$ -	$ 849,600	$ 849,600	$ 1,018,400	$ 250,400
Federal S. 5311	$ 184,000	$ 146,400	$ 81,600	$ 146,400	$ 209,600
ARRA	$ 1,741,400	$ -	$ -	$ -	$ -
State	$ 23,000	$ 124,500	$ 116,400	$ 145,600	$ 57,500
Local	$ 23,000	$ 124,500	$ 116,400	$ 145,600	$ 57,500
Total Vehicle Revenues	$ 1,971,400	$ 1,245,000	$ 1,164,000	$ 1,456,000	$ 575,000

Table 5-7: WPRTA CTSP Financial Plan for Facilities, Equipment, and Other Capital

Projects	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Facilities and Maintenance					
Land Purchase for New Facility	$ 380,000	$ -	$ -	$ -	$ -
Warlong Building Upfit	$ 400,000	$ -	$ -	$ -	$ -
Architectural and Engineering- New Facility	$ 500,000	$ -	$ -	$ -	$ -
Maintenance Tools	$ 25,000	$ 10,000	$ 100,000	$ 10,000	$ 10,000
Construction, New Facility		$ 3,050,000	$ 3,050,000	$ -	$ -
Technology					
On-Board Computers (vans)	$ 322,224	$ 12,000	$ 36,000	$ 12,000	$ 12,000
Video Cameras	$ 192,000	$ 12,000	$ 36,000	$ 12,000	$ 12,000
Computer Upgrades	$ 41,172	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Computer Software	$ 11,644	$ 3,500	$ 3,500	$ 3,500	$ 3,500
Fare Collection					
Fareboxes (vans)	$ 30,800	$ 2,000	$ 6,000	$ 2,000	$ 2,000
Ticket Machine	$ 65,006	$ -	$ 65,000	$ -	$ -
Passenger Amenities					
Bus Stop Signs	$ 106,500	$ 25,000	$ 25,000	$ 25,000	$ 25,000
Shelters	$ 300,000	$ 60,000	$ 60,000	$ 60,000	$ 60,000
Other					
Office Furniture and Equipment	$ 16,172	$ 2,500	$ 50,000	$ 2,500	$ 2,500
Phone System	$ 30,000	$ 3,000	$ 3,000	$ 3,000	$ 3,000
Total Projected Non-Vehicle Capital Expenses	**$ 2,420,518**	**$ 3,190,000**	**$ 3,444,500**	**$ 140,000**	**$ 140,000**

Table 5-7 (continued)

Anticipated Funding Sources	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Federal S. 5307	$ 1,094,800	$ 1,633,280	$ 1,763,584	$ 71,680	$ 71,680
ARRA	$ 1,040,846	$ -	$ -	$ -	$ -
City of Hickory Incentive	$ 150,000	$ -		$ -	$ -
Federal S. 5311	$ 8,938	$ 918,720	$ 992,016	$ 40,320	$ 40,320
State	$ 137,967	$ 319,000	$ 344,450	$ 14,000	$ 14,000
Local	$ 137,967	$ 319,000	$ 344,450	$ 14,000	$ 14,000
Total Projected Non-Vehicle Capital Revenue	$ 2,570,518	$ 3,190,000	$ 3,444,500	$ 140,000	$ 140,000

Notes (1) For the projected expenses, beginning in FY2012, the urban/rural split of 64/36 was used to divide the federal share of the capital expenses between S.5307 and S.5311.

revenue table assumes the fee will begin in FY 2012 in Burke County to coincide with corridor services along US 70. Catawba County is added in FY 2013, followed by Caldwell in FY 2014, and Alexander in FY 2015. This fee was phased in as the local match funds for services were needed, but it may be more politically favorable to start the fees together, all in one year, and use any excess funds collected for capital match.

Financial Plan for Vehicle Replacement and Expansion

Table 5-6 provides the Financial Plan for Vehicle Replacement and Expansion. This plan is based on the current year's approved vehicle purchases, with future replacements and expansions based on vehicle age and new services.

Financial Plan for Facilities, Equipment, and Other Capital

Table 5-7 provides the Financial Plan for Facilities, Equipment, and Other Capital WPRTA was fortunate to have been approved for a significant amount of funding under the ARRA, and several projects will be implemented in FY 2011 as a result of these funds. WPRTA's S.5307 capital budget incorporates a significant level of investment for the new facility. This level of investment was possible, as vehicle needs were largely met using ARRA funds. The construction of the facility is presented in FY 2012 and FY 2013, with the funding split according to the urban/rural split (64/36) between S.5307 and S.5311. As previously mentioned, it may not be possible to fund the facility using S.5307 and S.5311 funds, and WPRTA should pursue a competitive grant through the S.5309 program. Other capital items listed are in support of new services and ongoing capital needs.

Urban/Rural Split

WPRTA provides public transportation in a Census-designated urbanized area as well as providing public transportation in rural areas. Federal transit grants are awarded categorically, with certain funding programs targeted for urbanized areas and other programs targeted for rural areas. In order to sort out which services are eligible to be funded under which program, WPRTA is required to determine how much of the services provided are in the urbanized area versus the rural area.

PTD guidance with regard to the urban-rural split currently uses a three-factor approach that considers service miles, service hours, and passenger trips equally. Using this method, WPRTA's urban-rural split is as follows:

Percent Averaging		
	Urban	**Rural**
Miles	**58%**	**42%**
Hours	**58%**	**42%**
Trips	**77%**	**23%**
Average	**64%**	**36%**

This split is used by WPRTA to divide expenses that are shared across all services and cannot be directly assigned (such as central facility rent and utilities). The current split is based on FY 2008 data and will be updated with FY 2010 data.

It should be noted that trips are included in the calculation, but they do not represent a direct cost in the same manner as miles or hours and they are not under the control of the transit agency.

Congestion Mitigation and Air Quality (CMAQ)

This financial plan has not directly included any projects funded by CMAQ, largely due to the competitive nature of the program and the long list of potential projects in the region. WPRTA should apply for CMAQ funds when there is an opportunity to do so, as transit projects are eligible, but we have not included CMAQ as an ongoing source of funding for transit expansion.

PERFORMANCE MEASUREMENT PLAN

WPRTA has been keeping track of a number of key indicators and this CTSP proposes to continue to use these indicators as a measure of how the Authority is performing. WPRTA should review and update these indicators on at least an annual basis. Table 5-8 provides the FY 2011 Key Indicators.

Table 5-8: WPRTA FY 2011 Key Indicators

Indicator		Target
Total Operating Revenue per Month		
	Farebox	$19,580
	Contract	$52,500
Total Customer Complaints per Month		Less than 12
Reportable Accidents per 100,000 Vehicle Service Miles		Less than 1
Miles between Mechanical Failure		More than 10,000 miles
Workers Compensation Claims per Month		Less than 1
Cost per Vehicle Revenue Hour		53.94
Cost per Passenger Trip		15.47
Passengers per Revenue Hour		3.5
Farebox Recovery Ratio *		18%
On-time Performance		90%

* Fare and contract revenue as a percentage of total operating cost.

PUBLIC INVOLVEMENT DESCRIPTION

Several of the services planned for implementation over the five-year planning horizon for this CTSP came from suggestions made by riders, stakeholders, and the public. The following mechanisms were used to solicit public input for the development of the plan:

- The planning process was guided by WPRTA's Transportation Advisory Board, which is comprised of community stakeholders from a number of key transit constituency groups.
- A public opinion survey was conducted with 390 surveys completed for the effort.
- Rider surveys were conducted, with 131 surveys completed on the urbanized area fixed routes and 94 surveys completed on the demand-response routes.
- Ten stakeholder interviews were held including eight involving community leaders who are not currently on the WPRTA Board or TAB.
- Public meetings were held at the alternatives analysis stage of the project. The comments received at these meetings are provided as Appendix E.

SUMMARY OF RECOMMENDATIONS

Table 5-9 provides a summary of the CTSP recommendations that reference the PTD CTSP objectives that are supported by the projects highlighted in the plan.

Table 5-9: Summary of Recommendations

NCDOT-PTD CTSP Objectives	Supporting Recommendations
PLAN OBJECTIVE #1 - Promote the development and availability of transportation services throughout the state, in partnership with local officials, public and private non-profit agencies, and operators of transportation services, and members of the public	• US 70 Corridor Services • US 321A Corridor Services • NC 16 Corridor Services • Morganton Circulator • Lenoir Circulator • Newton-Conover Circulator • Transition to flex routes • TDM Program
PLAN OBJECTIVE # 2 - Improve the efficiency and effectiveness of federal/state funded transportation programs	• Adjust the Tate Blvd/Conover Route • Split the H-C-N Route • Adjust the interlining of the fixed routes • Transition to flex routes • TDM Program • Change to Taylorsville Shuttle • Implementation of MDCs and AVL • Maintenance transition
PLAN OBJECTIVE # 3 – Support and promote the coordination of public transportation services across geographies, jurisdictions, and program areas.	• US 70 Corridor Services • US 321A Corridor Services • NC 16 Corridor Services • Transition to flex routes • S.5310, S.5316, S.5317 projects • TDM Program
PLAN OBJECTIVE # 4 - Provide dependable transportation to the general public, low income individuals, elderly persons, and/or persons with disabilities within the guidelines and funding levels provided by NCDOT and FTA	• US 70 Corridor Services • US 321A Corridor Services • NC 16 Corridor Services • Improve Service Frequency • Extend the Service Day • Split the NC127/Springs Road Route • Newton/Conover Circulator • S.5310, S.5316, S.5317 projects • Construction of facility to support community transportation program • Development of local revenue source

Table 5-9: Summary of Recommendations

PLAN OBJECTIVE # 5 - Enhance the coordination of existing services for the development of a seamless transportation network	• US 70 Corridor Services • US 321A Corridor Services • NC 16 Corridor Services • S.5310, S.5316, S.5317 projects • Transition to flex routes
PLAN OBJECTIVE # 6 - Build upon the coordination efforts that exist within North Carolina's public transportation system	• S.5310, S.5316, S.5317 projects • Transition to flex routes
PLAN OBJECTIVE # 7 - Serve as a basis for funding requests from NCDOT	The entire CTSP documents the need for the projects that have been recommended for implementation. The financial plan provides estimates of expenses and potential revenue sources and will serve as basis for funding requests from NCDOT.