

SR 52/MORRISON MOORE PARKWAY SUBAREA STUDY

FINAL RECOMMENDATIONS REPORT

DRAFT

Prepared for:

Georgia Department of Transportation

Prepared by:



Atlanta, GA

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1.0 INTRODUCTION

The Georgia Department of Transportation (GDOT), in partnership with the City of Dahlonega, has undertaken the SR 52/Morrison Moore Parkway (SR 52/MMP) Subarea Study to analyze solutions to address the mobility and accessibility needs along the SR 52/MMP Corridor and other major roadways in the subarea. As illustrated in **Figure 1-1** (next page), the SR 52/MMP Subarea is located wholly within the City of Dahlonega. The subarea consists of Downtown Dahlonega, North Georgia College and State University (NGCSU), and areas east of the SR 52/MMP bypass that include major institutions such as the Chestatee Regional Hospital, new Judicial Center, City Hall, and Wal-mart. Major roadways included in the subarea are the SR 52/MMP Bypass, US 19/SR 60/South Chestatee Street, East Main Street and West Main Street. Potential impacts to these major facilities are the focus of this study.

The purpose of this study is to identify and recommend transportation improvements necessary to meet existing and future transportation needs through the year 2035. To this end, a SR 52/MMP Subarea Travel Demand Model (TDM) has been developed to assess travel trends and assist in the evaluation of potential improvements. Transportation projects considered in this study were identified based on the existing and modeled future travel needs, crash analysis, relevant previous studies, as well as public and stakeholder input. A Stakeholder Advisory Committee (SAC) made up of key local officials, planning staff and community representatives was established to provide guidance on technical and policy issues. This group was engaged at key milestones over the course of the study.

This study is organized into seven tasks. The study process is non-linear and interactive, with each task providing feedback into the overall analysis. Details on each task in the study process can be found in the *Baseline Conditions/Needs Assessment Report* completed in March 2011. This report provides an inventory of the factors that influence the transportation system in the subarea. These factors include the demographics, community facilities, the natural environment, land uses and development patterns in the subarea. Travel demand and system performance models were calibrated to current conditions and projected for future forecasts. The major findings from this report constitute the basis for potential transportation recommendations and associated land use policies intended to improve the mobility and accessibility of the subarea. Stakeholder and Public input informed the evaluation of alternatives, and yielded final recommendations.





Lake Zwemer Lumpkin County Elementary and Middle Schools -Moores-Dr Walmart Way SR 52/Morrison Hughsict Walmart Moore Parkway Subarea Goudlock-St SR 52/Morrison Moore Parkway West-Cir. Study Area City of Fire Station Dahlonega Traffic Signal Community Rinetree Way Facility Street Mechanicsville Rd Waterbody North-Georgia College Gerand State University Judicial Center Parks Yahoola WTP Creek Park City Hall Walker-Dr S Chestatee [19] 52 Morrison Moore Pkwy-W Ansley Dr. Chestatee Regional Hospital Tipton-Dr 60 Music Park Rd 0 400 800 **JACOBS** □ Feet

Figure 1-1: Study Area Map



1.1 Public Involvement

Stakeholder and community input were sought throughout the study process to identify needs and potential solutions. This study reflects the priorities of the stakeholders and previous planning efforts. Efforts for engaging the public included coordination with the Stakeholder Advisory Committee (SAC), corridor residents and employees, elected officials, and partnering agencies. A project website was widely publicized and used as the main avenue for providing status updates and an opportunity for electronic input via an online survey. Additionally, three fact sheets were published to inform the community on major milestones. This section provides a summary of the extensive outreach activities efforts to solicit community input on the travel needs of the study area and potential recommendations. All relevant material from the public involvement including the summaries of SAC meetings, interviews, briefings and fact sheets are included in the appendices.

1.1.1 SAC Coordination

The SAC convened four times over the course of the study to provide guidance on technical and policy issues. Early on, this committee was instrumental in identifying travel needs in the study area. Subsequent meetings were held to discuss the major findings from the assessment of existing conditions and to understand local priorities. It was the general consensus of the SAC that the improvements along the SR 52/MMP Corridor avoid disruption of current activities in surrounding communities and support the City's development strategies. The final meeting confirmed the goals and objectives of the study and to present the final recommendations. All meetings were advertised and open to the general public.

1.1.2 Stakeholder Interviews and Community Briefings

A total of 18 stakeholder interviews were completed as part of the outreach efforts. In order to provide a greater opportunity for participation, interviews were also conducted with those who did not participate as a formal SAC member. Furthermore, a number of community briefings were provided for key organizations and groups including the Rotary Club, Chamber of Commerce, Ministerial Association, Leadership Lumpkin Class, Crown Mountain (office) Condo Association. These briefings provided great opportunities to spread the word about the study and to receive additional public input.





2.0 MAJOR FINDINGS FROM NEEDS ASSESSMENT

The Baseline Conditions/Needs Assessment Report provides a comprehensive inventory of the factors that may justify and influence the types of transportation investment in the subarea. The following discussion provides the highlights and major findings from the assessment of baseline conditions and needs of the study area. These findings provide the basis for transportation project recommendations and associated land use strategies. The factors that influenced the project development process are categorized by major themes.

2.1 Demographics

- Lumpkin County experienced 44.2 percent population growth between 1990 and 2000. Future population growth projections indicate that current trend will intensify over the years to come, with the county expected to grow at a much higher rate than the city. The significant countywide growth indicates the need for the major study area roadways to be analyzed within the context of the regional transportation system, as well as their efficiency within the study area.
- By 2035, Dahlonega's population is projected to grow to approximately 9,700 based on the growth rate provided in the City's Comprehensive Plan. The Comprehensive Plan calls the increasing population at NGCSU the primary source of future population growth in the city. The needs of the university residents as well as the role of the university as a regional activity center should be taken into account in planning transportation improvements in the study area.
- NGCSU is the only Lumpkin County employer to rank among the top ten in the region. The other nine are found in neighboring Hall County. Commuting statistics from Georgia Department of Labor (GDOL) indicate that only half of employed county residents work in Lumpkin County. Therefore, the travel patterns within the study area and the SR 52/MMP Corridor must take into account cross-regional commuter trips as well as local trips.

2.2 Community Resources and Natural Systems

- Expansions plans of NGCSU, as described in its Master Plan (2009), will likely have significant impacts to the study area. The Master Plan envisions a more walkable campus. Pedestrian traffic is therefore expected to increase in the vicinity of campus, placing new emphasis on safe, visible crosswalks on West Main Street and on sidewalk connections from the SR 52/MMP Connector to downtown.
- Dahlonega's historic characteristics and hilly topography are major environmental constraints to implementing transportation improvements. Impacts to parklands and historic sites immediately adjacent to the





SR 52/MMP should be avoided in the development of transportation improvements.

2.3 LAND USE AND DEVELOPMENT CHARACTERISTICS

- The most prominent existing category of land use is the Public and Institutional sector, which makes up over one-third of total land use. Primary among these land uses is the NGCSU campus, which takes up the majority of the study area's southern end. The new Judicial Center, Dahlonega's City Hall and Chestatee Regional Hospital are also major components of this land use category. These locations are particularly relevant since they have implications for the local and regional transportation network.
- Since the study area overlaps with downtown Dahlonega, commercial land uses are the second most prevalent in the study area. Downtown Dahlonega is characterized by many smaller commercial lots typical for a traditional downtown. As such, providing a safe pedestrian environment with contiguous sidewalks, pedestrian crossings and streetscapes are particularly applicable to this area.
- Residential uses account for 12.8 percent of land uses. Historic neighborhoods from Park Street to Mechanic Street make up a large portion of the residential uses and may require further consideration when evaluating potential impacts of transportation improvements. Many other residential uses are also found outside of the study area, particularly to the northwest and south. As such, new local routes may be considered to enhance roadway connectivity and the grid network in the study area.
- Vacant lands account for nearly ten percent of land uses, which signals that there is some land available for infill and other development within the study area into the future. In fact, the City has an aggressive future land use plan in which almost all its land will be developed by 2025, leaving only one percent of its land vacant. The development of vacant land and potential redevelopment of other, underused properties, as described in the City's Master Plan (2008), will have impacts to the transportation system in the study area.
- The City of Dahlonega states in its Comprehensive Plan (2005) that it intends to prioritize commercial development over residential development over the next twenty years. Accordingly, new commercial development is projected to replace residential land uses along SR 52/MMP from SR 60N to East Main Street in the northern portion of the study area, and replace vacant land uses along SR 52/MMP in the vicinity of the university in the southern portion of the study area. These shifts in land uses are likely to translate to higher number of trips to account for employees, customers, vendors and others associated with commercial uses.





2.4 Transportation System

- All the roadways in the subarea are narrow two-lane facilities and may not have the capacity to support the future growth planned by the City.
- Heavy through-traffic, particularly trucks, in Downtown Dahlonega was a major community concern in the past. Since then, the state highway designation has been removed for the segments of SR 60/South Chestatee Street north of SR 52/MMP and West Main Street to discourage truck usage of these corridors.
- SR 52/MMP serves as a bypass around the city and is the most traveled corridor in the subarea. The northeastern segment of SR 52/MMP carries almost 14,000 vehicles per day. It is the main corridor in the study area, serving both local and through trips, and travel demand is projected to increase with the additional commercial developments planned along the corridor. Capacity and operational improvements may be needed to provide a functional bypass.
- As another measure to reduce congestion along SR 52/MMP, inter-parcel connectivity and promotion of the grid network on the eastern side of SR 52/MMP should be considered to enhance mobility and connectivity in the subarea.
- As the main entry point to GA 400, the intersection of SR 52/MMP and SR 60/South Chestatee Street is the heaviest utilized intersection in the subarea. The southbound left-turning movement frequently experiences excessive queuing during peak periods.
- With the completion of the Downtown Master Plan, Complete Streets principles have been emphasized in the redevelopment of downtown. To this end, the City has recently received \$720,000 in Federal Tiger II Grant help pay for design and engineering of sidewalks, bicycle lanes, on-street parking and streetscapes along South Chestatee Street and West Main Street. The implementation of this project may lead to a reduction in vehicular lane capacity in some locations. As such, there is a need to investigate SR 60/South Chestatee Street's capacity to operate efficiently into the future.
- Riley Road is home to the new Lumpkin County Judicial Center and Dahlonega's City Hall. There are plans in place to expand this site into a County Government Services Complex, which would have significant traffic impacts on the surrounding roadways. There is a need to examine various opportunities to improve the intersection of SR 52/MMP and Riley Road. This could mean signalization and/or addition of turn lanes, or even the consolidation with the Mechanicsville Road intersection to accommodate the additional demand.





- Providing safe pedestrian connections to schools along North Grove Street is a key element in this study and is an integral part of Georgia's Safe Routes to Schools initiative.
- The six intersections in the subarea with the highest crash frequencies are located along SR 52/MMP including the top three at SR 60/South Chestatee Street, East Main Street and Crown Mountain Place. The high number of accidents associated with the intersections of SR 52/MMP at SR 60/South Chestatee Street and East Main Street is likely a function of the high vehicular volume and capacity constraints. However, the intersection of SR 52/MMP and Crown Mountain Place may be in need of realignment and upgrades to the current design to ensure safety and alleviate the conflict between drivers from Crown Mountain Place and those on SR 52/MMP trying to get on the right-turning bay. Enhancing intersection operations and design should be a major consideration in improving the overall travel environment in the subarea. To this end, intersection realignment and/or providing additional access to this commercial area may better facilitate the movement of traffic and to ensure safety.
- Adequate and convenient parking for visitors in the downtown area, as well as NGCSU students, is a great concern in light of the anticipated growth in the subarea. To this end, providing safe pedestrian connections to and from the proposed parking areas is a key element in this study.
- Currently, no fixed route transit service is available in Dahlonega. Lumpkin County Dial-A-Bus system is a demand-response service through the GDOT public rural system that provides curb-to-curb transportation service for the county residents. However, future satellite parking at NGCSU and the needs of students, visitors, residents and the businesses in Downtown Dahlonega could support a shuttle as a safe and effective mobility alternative. .

2.5 Trip Making and Travel Conditions

- According to the assessment of travel conditions, there were approximately 86,000 daily trips throughout the subarea in 2010. By 2035, this number is expected to increase to 150,000 trips, an increase of 73 percent. This anticipated trip growth is consistent with the population and employment projected for the City of Dahlonega and the greater Lumpkin County area.
- Currently, portions of SR 52/MMP north of SR 60/South Chestatee Street exhibit the worst congestion in the subarea. By 2035, all the major roadways are expected to exceed capacity and operate at failing LOS E or F. However, if right of way is unavailable, or resources are limited, capacity improvements may be focused on key parts of the system. To identify priority improvements, the analysis has identified those that are





most cost-effective and with the highest community support. Furthermore, although facilitating efficient vehicular travel is one of the priorities of the study, it also prioritizes safe access for all users to the developments along SR 52/MMP.

 By 2035, analysis results indicated the need for capacity and operating improvements at all the major intersections in the subarea. Potential needs include extending or adding turning lanes, adding thru capacity and signalization. These needs were explored in further detail during the project development and evaluation process.



3.0 PROJECT IDENTIFICATION AND EVALUATION

This section documents the steps taken to identify the candidate transportation projects for consideration in this study. This section also includes the details in the approach used in project evaluation as well as the results that led to the final recommendations.

3.1 Project Identification

Potential solutions identified in this report are designed to accommodate development as well as maintain mobility along SR 52/MMP. More than 23 potential projects, including roadway, traffic operations, bike/pedestrian and transit improvements, were identified during the study process based a review of previous studies, analyses of traffic conditions and safety as well as community input. **Table 3-1** shows the major elements considered when identifying potential projects for consideration in this study.

Table 3-1: Elements Considered in Project Identification

Review of Previous Studies	 Access management and traffic improvements are needed on SR 52/MMP, SR 60/South Chestatee Street and Main Street Take advantage of redevelopment /infill opportunities in downtown NGCSU has an aggressive facilities plan to accommodate the anticipated population growth
Level of Service Analysis	 By 2035 all major roadways are projected to operate at LOS E/F Operational deficiencies are anticipated at all the major intersections
Safety Analysis	 Safety improvements are needed at SR 52/MMP and S. Chestatee St, SR 52/MMP and East Main St and SR 52/MMP and Crown Mountain PI
Stakeholder Interviews and Community Briefings	 Importance of SR 52/MMP in its ability to move traffic and provide commercial access Peak hour traffic is a major concern for the subarea Need for improved bicycle and pedestrian facilities in downtown Need for preservation of historic characteristic of downtown

Many of the improvements to the existing transportation system were identified based on the current operating conditions and anticipated future travel demand. For each candidate project, logical termini as well as purpose and need statements were developed and refined as the study progressed. Logical termini is the term used to describe the preferred beginning and ending points of a





proposed transportation improvement. The selection of these points must have a rational basis when viewed from an environmental perspective and they must have independent utility. **Tables 3-2 and 3-3** present the complete list of projects subcategorized by two major project types — Roadway Improvements and Multi-modal Projects. **Figure 3-1** illustrates the project locations and extents within the study area. The IDs shown on the map correspond to the Project IDs in the tables.

3.1.1 Roadway Improvements

Roadway improvements include *general capacity improvements* such as widenings or construction of a new roadway and *traffic operational projects*, which also involve intersection upgrades and signalization projects. Capacity improvements are necessary to increase throughput and relieve congestion. However, these projects require additional rights of way and can have significant impacts to the surrounding communities. Approximately \$63.1 million in capacity improvements were identified as part of this study. Traffic operational improvements can increase throughput capacity especially in recurring congestion conditions. Bottlenecks typically occur at intersections with high share of left-turning traffic, particularly those operating without improvements. Providing additional turn lanes and/or signalization are among the ways to improve the flow of traffic without acquiring a significant amount of right of way.

3.1.2 Multi-modal Improvements

Multi-modal projects consist of enhancements to the pedestrian and bicycle network, including the application of Complete Streets principles for all new construction. Complete streets are those that allow safe movement and crossing opportunities for all users: automobiles, pedestrians, bicyclists, and transit riders. Because of the sub area's urban character, this concept should be applied on every major transportation project. The Downtown Master Plan recommends a network of complete streets especially along Main Street and South Chestatee Street to promote a safe walking environment for the University students and tourists to the downtown. The bicycle and pedestrian projects identified in this study support the recommendations in the Master Plan.

Review of local and institutional plans, demographic projections, and economic development strategies all indicate a growing emphasis on urbanization as a means of attracting and accommodating growth in the subarea. This urbanization, combined with Dahlonega's continuing role as Lumpkin County's market center, will provide the ridership base for a small specialized shuttle transit system operating in the subarea. Ridership and ongoing support for such a system can be derived from diverse sources, strengthening its base. As such, a flexible shuttle system that could serve both the students and tourists was also identified as a potential multi-modal project. This system could potentially build on the existing Lumpkin County demand-response system (Dial-a-Ride) and would have the following objectives:





- Implement the City's downtown parking strategy by centralizing parking in downtown
- Support the safe and efficient implementation of NGCSU satellite parking strategy by providing daytime shuttle from lots south of SR 52/MMP to a single distribution point on campus during hours of school operation
- Provide flex-time shuttle service along the Main Street corridor to serve community and resident student needs during off-peak hours – weekday afternoon/evenings

Dahlonega's linear business district and compact urban form along Main Street also offer the opportunity for an efficient shuttle system that links parking and campus housing along West Main Street to dining and entertainment in downtown, and retail and housing on East Main Street. Such service could be offered after hours, again maximizing the use of the shuttle equipment. Service could grow in each niche as demand and resources dictate.





Lake Zwemer Lumpkin County Elementary and Middle Schools #2: SR 52/MMP - Widen to 4 Lanes with a Median #12 (SR 52/SR 60 Split to S. Chestatee St) SR 52/Morrison Walmart Moore Parkway Subarea: #10 Draft Transportation #1: SR 52/MMP - Center Turn Lane Improvements (SR 52/SR 60 Split to S. Chestatee St) West-Cir. Recommendations: #13 Widening ire Station = = New Street Bicycle/Pedestrian #4: Parallel Connector Improvements Ph 1: Legion Rd to Riley Rd Traffic Operation Einetree Way Intersection Upgrade chanicsville Rd Pedestrian Facility #8 North-Georgia College Geand State University Judicial Center WTP Yahoola Creek Park City Hall Walker-D Study Area #5: Parallel Connector Ph 2: Riley Rd to S. Chestatee St City of #9 Dahlonega #6: SR 60/S. Chestatee St - Widen to 4 Lanes Community (SR 52/MMP to Hospital Dr) Facility Street Ansley D Chestatee -Tipton-Dr Regional Hospital Waterbody #3: SR 52/MMP - Widen to 4 Lanes with a Median 60 Parks (S. Chestatee St to W. Main St) Music Park Rd N 0 400 800 **JACOBS** __Feet

Figure 3-1: Draft Projects Map



Table 3-2: Candidate Roadway Projects

ID	Project Name	e Project Type Project Description		ject Type Project Description Logical Termini Purpose and Need		PE	ROW	Utility	CST	Preliminary Total Cost
1	SR 52/MMP - Center Turn Lane	Traffic Operation	Add a center turn lane from SR 60/S. Chestatee St to SR 52/SR 60 split. (1.0 mile)	Northern terminus is where SR 52 splits to the east as over half of the trips on Morison Moore Pkwy diverges at this intersection. Southern terminus is at the SR 60/S. Chestatee St. intersection as the majority of trips follow SR 60/S. Chestatee St east to access GA 400.	SR 52/MMP is the most traveled corridor in the subarea, and thus, safety and congestion are major issues to consider. This segment of SR 52/MMP currently experiences delay and high v/c ratio during the peak periods and this condition is expected to worsen significantly by 2035. Long queues occur at unsignalized intersections as a result of left-turning traffic. As such, a center turn lane is needed on SR 52/MMP to maximize throughput by removing left-turning vehicles from the thru traffic.	\$559,272	\$837,818	\$1,342,200	\$6,990,906	\$9,730,197
2	SR 52/MMP - Widening to 4 Lanes with a Median (East)	Capacity	Widen to 4 lanes with a raised center median from SR 60/S. Chestatee St to SR 52/SR 60 split. (1.0 mile)	Northern terminus is where SR 52 splits to the east as over half of the trips on Morison Moore Pkwy diverges at this intersection. Southern terminus is at the SR 60/S. Chestatee St. intersection as the majority of trips follow SR 60/S. Chestatee St east to access GA 400.	SR 52/MMP is the most traveled corridor in the subarea, and thus, safety and congestion are major issues to consider. This segment of SR 52/MMP currently experiences delay and high v/c ratio and this condition is expected to worsen significantly by 2035. Widening to 4 lanes will provide significant congestion relief.	\$835,533	\$9,935,127	\$1,342,200	\$10,444,163	\$22,557,024
3	SR 52/MMP - Widening to 4 Lanes with a Median (West)	Capacity	Widen to 4 lanes with a raised center median W. Main St/Barlow Rd to SR 60/ S. Chestatee St (0.78 mile)	Western terminus is at the W. Main St/Barlow Rd intersection as approximately half of the trips on SR 52/MMP are headed to downtown via W. Main St. Eastern terminus is at the SR 60/S. Chestatee St. intersection as the majority of trips follow SR 60/S. Chestatee St east to access GA 400.	SR 52/MMP is the most traveled corridor in the subarea, and thus, safety and congestion are major issues to consider. This segment of SR 52/MMP is anticipated to experience significant growth partly due to the expansion plans of NGCSU and thus result in high v/c ratio by 2035. Widening to 4 lanes will provide significant congestion relief.	\$645,886	\$6,534,982	\$1,075,860	\$8,073,582	\$16,330,310
4	New SR 52/MMP Parallel Connector - (Phase 1)	Capacity	Construct a new parallel connector on the east side of SR 52/MMP from Legion Rd to Riley Rd. The new connector will be constructed based on 'complete streets' concept with sidewalks and bicycle lanes. (0.36 mile)	Northern terminus at Legion Rd provides access to existing and proposed commercial development. Southern terminus is at Riley Rd which	The new parallel route (Phase 1) will be designed to provide congestion relief in addition to the much needed inter-parcel connectivity for the commercial and institutional uses on the east side of SR 52/MMP. Although facilitating efficient vehicular travel is one of the priorities of the study, it is also equally important to provide safe access for pedestrians and bicyclists to the developments along SR 52/MMP. Note that all areas between Mechanicsville Rd and Riley Rd along the SR 52/MMP frontage are publicly owned, and may offer the opportunity to consolidate these entry roads as the first phase.	\$721,871	\$168,541	\$0	\$9,023,390	\$9,913,803



Table 3-2: Candidate Roadway Projects (Continued)

ID	Project Name	Project Type	Project Description	Logical Termini	Purpose and Need	PE	ROW	Utility	CST	Preliminary Total Cost
5	New SR 52/ MMP Parallel Connector - (Phase 2)	Capacity	Construct a new parallel connector on the east side of SR 52/MMP from Riley Rd to SR 60/ S. Chestatee St. The new connector will be constructed based on 'complete streets' concept with sidewalks and bicycle lanes. (0.18 mile)	Northern terminus at Riley Road is the southern terminus to Phase 1. Southern terminus is at SR 60/ S. Chestatee St as majority of trips follow SR 60/S. Chestatee St east to access GA 400.	Phase 2 will extend the new parallel route south to tie in with SR 60/S. Chestatee St. If implemented, this facility will provide congestion relief on SR 52/MMP as well as the intersection at SR 60/S. Chestatee St.	\$550,000	\$85,457	\$244,875	\$6,875,006	\$7,755,339
6	SR 60/S. Chestatee St - Widening to 4 Lanes	Capacity	Widen to 4 lanes from SR 52/ MMP to Hospital Dr (0.29 mile)	Northern terminus is at SR 52/MMP where a significant share of trips utilize SR 52/MMP to bypss the downtown. Southern terminus is at Hospital Dr which provides access to the Chestatee Regional Hospital.	SR 60/S. Chestatee St provides direct access to GA 400 and is the second most traveled corridor in the subarea. It is anticipated to experience significant growth and thus result in high v/c ratio by 2035. Widening to 4 travel lanes will provide significant congestion relief. Majority of this segment of SR 60/S. Chestatee St has 3 existing lanes (2 lanes southbound/1 lane northbound) and thus right of way impacts will likely be minimal.	\$289,000	\$2,345,891	\$372,795	\$3,616,055	\$6,624,025
7	SR 52/MMP and SR 60/S. Chestatee St	Intersection Improvement	Upgrade intersection by providing double left turn lanes on SR 52/MMP southbound and construct double receiving lanes on SR 60/S. Chestatee St eastbound. (SR 60/S. Chestatee St has 2 eastbound travel lanes 300 ft from the intersection) Add pedestrian improvements such as sidewalks, pedestrian signals and crosswalks.	N/A	SR 52/MMP and SR 60/S. Chestatee St intersection carries the highest vehicular volume in the subarea. Additional left-turning lane capacity is needed to accommodate the expected traffic growth in the study area.	\$30,424	\$352,721	\$166,568	\$380,306	\$930,019
8	SR 52/MMP and Riley Rd/ Mechanicsville Rd	Signalization/ Intersection Improvement	Signalize and provide adequate turn lane capacity to accommodate left turning movement on all approaches. (Signal warrant analysis is needed to determine a need for a signal with associated operational improvements) Add pedestrian improvements such as sidewalks, pedestrian signals and crosswalks.	N/A	Severe delays occur at this intersection from left-turning traffic on SR 52/MMP as well as on Riley Rd during peak periods. Riley Rd is heavily utilized by travelers associated with the new judicial center, city hall and the recreational center. The government complex has expansion plans which could have significant implications to traffic circulation in the surrounding streets.	\$44,991	\$345,628	\$357,000	\$562,395	\$1,310,015



Table 3-2: Candidate Roadway Projects (Continued)

ID	Project Name	Project Type	Project Description	Logical Termini	Purpose and Need	PE	ROW	Utility	CST	Preliminary Total Cost
9	SR 52/MMP and Crown Mountain Pl	Intersection Improvement	Realign Crown Mountain PI to perpendicular intersection to SR 52/MMP	N/A	Crown Mountain Pl intersects SR 52/MMP in the middle of northbound right-turn storage lane, creating conflict between drivers entering SR 52/MMP from Crown Mountain Pl and those on SR 52/MMP trying to get on the right-turning bay. With an average of 11 crashes per year, the intersections has the highest volume-adjusted crash rate in the study area. The traffic island installed to deter drivers from prematurely entering the right turn lane has been ineffective. Intersection realignment and/or additional access to this commercial area will better facilitate the traffic movement and ensure safety.	\$51,065	\$41,891	\$0	\$638,319	\$731,276
10	SR 52/MMP and E. Main St	Signal Upgrade/ Intersection Improvement	Upgrade intersection by realigning Wal-Mart Wy approach and providing additional storage space for turning movements. Add protected left-turn phase on SR 52/MMP.	N/A	SR 52/MMP at E. Main St has the second highest number of accidents in the study area. Due to the skewed design, sight distance is an issue for the vehicles on Wal-Mart Wy turning onto SR 52/MMP. Intersection improvements are needed to provide additional thru capacity on SR 52/MMP and westbound left turn approach. The improvements should also include the addition of a left-turn phase to better facilitate turning traffic and clear the intersection.	\$24,628	\$156,393	\$158,063	\$307,860	\$646,945
11	SR 52/MMP at Pinetree Wy/Memorial Dr	Intersection Improvement	Add right turning lane on Memorial Dr approach. Add left turning lane on Pinetree Wy approach. Implement pedestrian upgrades such as sidewalks and countdown pedestrian signals.	N/A	This intersection serves as access to downtown to the west and the industrial and commercial uses to the east. Intersection improvements are needed to provide sufficient left turning capacity on eastbound approach.	\$36,478	\$154,307	\$158,063	\$455,981	\$804,830
12	E. Main St at N. Grove St	Intersection Improvement	Provide left turn lane on the southbound approach	N/A	Providing safe connections to schools along North Grove St is a key element in this study Additional turning capacity on the southbound approach would alleviate the long queues particularly associated with school traffic.	\$18,747	\$2,780,160	\$91,875	\$234,349	\$3,125,132
13	SR 52/MMP at SR 60	Intersection Improvement	Lengthen left turn lane on westbound approach to provide additional storage for turning traffic.	N/A	This intersection serves as the main access to downtown Dahlonega (as well as the bypass around the city) from northern Lumpkin County.	\$8,747	\$36,864	\$91,875	\$109,349	\$246,836



Table 3-3: Candidate Multi-modal Projects

ID	Project Name	Project Type	From/To	Project Description	Length (Feet)	Source	Preliminary Total Cost
M01	Memorial Dr	Pedestrian Facility	E. Main St to SR 52/MMP	Sidewalks, parking, streetscape	920	Downtown Master Plan (2008)	\$672,750
M02	Church St	Pedestrian Facility	Hawkins St to W. Main St	Wide sidewalks, parking, textured crosswalks, themed	530	Downtown Master Plan (2008)	\$388,125
M03	N. Chestatee St	Pedestrian Facility	N. Park St to W. Main St	Sidewalks, parking, planting strip, curb and gutter	1,100	Downtown Master Plan (2008)	\$741,750
M04	S. Chestatee St	Pedestrian Facility	W. Main St to SR/60 S. Chestatee St	Wide sidewalks, parking, textured crosswalks, themed landscape	2,610	Downtown Master Plan (2008)	\$2,403,500
M05	S. Grove St/ Riley Rd	Pedestrian Facility	Choice Ave to SR 52/MMP	Sidewalk, parking, rustic fencing	2,130	Downtown Master Plan (2008)	\$1,121,250
M06	N. Grove St	Pedestrian Facility	Woodward Wy to Choice Ave	Sidewalks, planting strips, trees, curb and gutter	1,700	Downtown Master Plan (2008)	\$667,000
M07	S. Park St/ N. Park St/ Jones St	Pedestrian Facility	N. Grove St to SR 52/MMP	Sidewalk, parking, planting strip with trees	4,130	Downtown Master Plan (2008)	\$2,783,000
M08	E. Main St/W. Main St (including Public Square)	Pedestrian Facility	College Ln to N. Grove St	Sidewalks, parking, textured crosswalks, pedestrian bulbouts	1,950	Downtown Master Plan (2008)	\$1,536,975
M09	W. Main St	Complete Streets	SR 52/MMP to Church St	Complete Streets principle with sidewalk, bike lanes, planting strip with trees	2,400	Downtown Master Plan (2008)	\$1,656,000
M10	E. Main St	Complete Streets	N. Grove St to SR 52/MMP	Complete Streets principle with sidewalk, bike lanes, planting strip with trees	2,780	Downtown Master Plan (2008)	\$1,932,000
M11	W. Main St and Sunset	Pedestrian Facility	N/A	Pedestrian upgrades such as countdown pedestrian signals, textured crosswalks and streetscapes are planned by NGCSU to improve the safety of this intersection. (Construction is already underway and scheduled to be completed by the fall semester)	N/A	SR 52/MMP Subarea Study	N/A
M12	E. Main St and Memorial Dr	Pedestrian Facility	N/A	Construct a pedestrian refuge on the south side of the intersection as a safe means to protect from the wide radius right turn from E Main St to Memorial Dr	N/A	SR 52/MMP Subarea Study	< \$5,000
M13	Downtown/NGCSU Shuttle	Transit	N/A	Mitigate commuter and tourism related congestion on SR52/MMP and S. Chestatee St and support tourism development in downtown Dahlonega by providing a flexible shuttle service.	N/A	SR 52/MMP Subarea Study	\$300,000 (Capital) \$1.1M (O&M)



3.2 Evaluation Framework

A combination of technical assessment and community input was used to evaluate and prioritize the transportation projects identified in this study. GDOT's Project Prioritization Plan (PrPP) is a technical tool that place emphasis on project performance to help determine statewide transportation priorities. As such, the PrPP was used as one of the tools to evaluate potential capacity improvements and some traffic operational projects. Quantitative performance measures such as forecast reduction in vehicle hours of travel (VHT) and vehicle miles of travel (VMT); improved levels of service (LOS) as measured in volume to capacity ratio (v/c); and estimated project costs were applied in the project evaluation. The subarea travel demand model (TDM) was utilized to calculate the changes in VHT, VMT and LOS under the No-Build and the Build Scenarios. VISSIM modeling was applied to evaluate the performance of intersection improvements. Refer to the *Baseline Conditions/Needs Assessment Report* for additional details on the assumptions and approach used in the modeling analysis.

Construction cost estimations were conducted using GDOT's cost estimation software (CES) and right of way cost estimations were conducted using the ROW and Utility Estimation Tool (RUCEST). These tools were developed to ensure that planning level cost estimates (in today's dollars) are reliable and based on the latest project information.

The guidelines for PrPP state that when quantifiable data is used, the local needs and priorities must be also considered. Consistency with local plans is a qualitative measure that recognizes the importance of being consistent with the recommendations of other related plans in the county. Projects that have been included in previous studies are indicative of having endorsement from the local and regional stakeholders. To this end, the candidate projects were prioritized based on community input and consistency with the following reoccurring themes identified from locally adopted plans:

- Improve accessibility and mobility of people and goods
- Reduce crash frequencies at major intersections
- Increase opportunity for multi-modal transportation corridors by expanding the bicycle and pedestrian network
- Preserve and improve the existing system, environment, and quality of life
- Coordinate land use and transportation

3.3 Evaluation Results

The subarea travel demand model was used to compare the anticipated network performances of the No-Build Condition against the Build Condition which includes all the roadway improvements identified in **Table 3-2**. Ideally, the Build





Condition would yield in a lower overall VMT and/or VHT because the additional capacity improvements would result in travel time savings for drivers. The model results showed that by 2035, the subarea is anticipated to acquire 287,000 VMT and 16,550 VHT under the No-Build. When the capacity improvements were modeled, the subarea is anticipated to experience 4.3% and 26.8% reductions in VMT and VHT, respectively. The significant reduction in VHT is indicative of how much the transportation network in the subarea will benefit from the additional capacity improvements in the future.

Figure 3-2 presents the LOS analysis results of the Build Condition. The widening of SR 52/MMP to four lanes with a median is anticipated to significantly improve the general traffic flow on the highly congested corridor. However, some bottleneck conditions are still expected along the busier sections of SR 52/MMP between SR 60/South Chestatee Street and Memorial Drive and north of East Main Street during the peak periods. These findings support the need for capacity improvement along SR 52/MMP to accommodate the anticipated traffic growth in the future.

The intersection upgrades described previously have been modeled and the anticipated LOS for the major intersections under the Build Condition are also illustrated on **Figure 3-2** and presented in **Table 3-4**. The results of the intersection upgrades show a significant improvement in the LOS for all the intersections. With the exception of the intersection of SR 52/MMP at SR 60/South Chestatee Street, all the intersections are anticipated to operated at LOS C or better under the improved conditions. Although the application of dual left turn lanes on the SR 52/MMP southbound approach significantly improved the operations of the north-south movement, the east-west movement will need to be further examined to determine the feasibility of an extended right-turn lane on SR 60/South Chestatee Street. Right of way may be a major issue as the northeast corner is constrained by a significant drop in elevation.





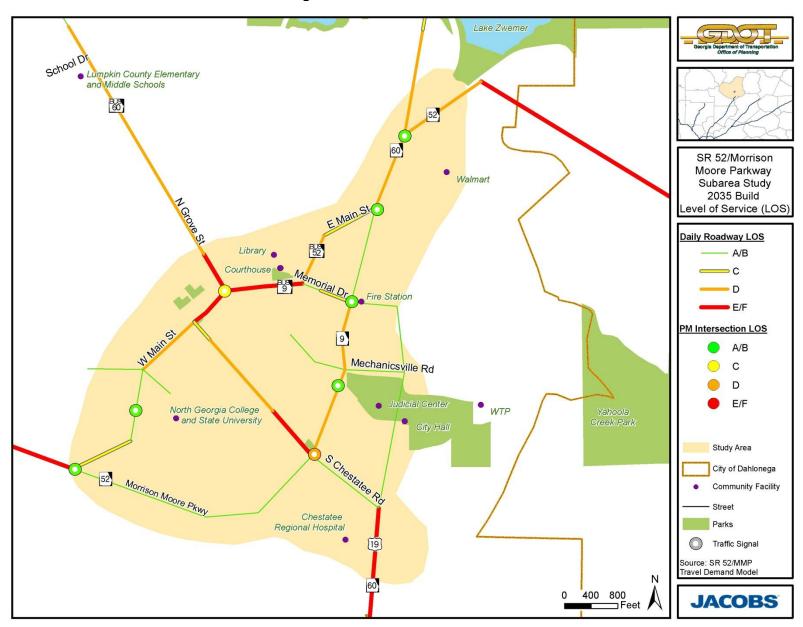


Figure 3-2: 2035 Build Scenario LOS



Table 3-4: 2035 Build Scenario Peak-Hour Intersection LOS

			AM Pea	ak Hour		PM Peak Hour			
Intersection	Approach	Demand Volume	Model Volume	Delay (sec)	LOS	Demand Volume	Model Volume	Delay (sec)	LOS
	NB	687	687	11.1	В	824	726	14.2	В
	SB	827	793	16.8	В	868	845	16.2	В
SR 52/MMP at	EB	552	529	72.9	Ε	695	568	62.3	Ε
SR 60/S.	WB	771	764	77.0	Ε	714	717	65.0	Ε
Chestatee St	Intersection	2859	2773	42.7	D	3101	2856	37.1	D
	NB	814	817	11.4	В	970	916	9.8	Α
	SB	854	830	6.1	Α	926	866	5.9	Α
SR 52/MMP at	EB	219	226	7.1	Α	243	247	5.7	Α
Riley Rd	WB	373	204	3.8	Α	338	206	3.6	Α
(Signalized)	Intersection	2260	2077	7.2	Α	2477	2235	6.4	Α
	NB	941	824	3.9	Α	1041	847	6.0	Α
CD FO/MMD at	SB	949	956	4.6	Α	1000	954	5.1	Α
SR 52/MMP at Pinetree	EB	293	272	6.9	Α	388	317	11.7	В
Way/Memorial	WB	53	70	15.3	В	127	139	9.4	Α
Dr	Intersection	2236	2122	5.0	Α	2556	2257	6.6	Α
	NB	667	642	2.9	Α	868	773	9.2	Α
	SB	1024	1014	2.6	Α	923	907	9.0	Α
	EB	388	376	12.4	В	503	456	8.4	Α
SR 52/MMP at	WB	282	284	12.4	В	619	612	11.1	В
E Main St	Intersection	2361	2316	5.5	Α	2913	2748	9.4	Α
	NB	119	113	16.2	В	130	123	20.2	С
	SB	700	530	32.5	С	629	461	55.9	Ε
	EB	564	544	8.7	Α	449	364	7.5	Α
E Main St at N	WB	641	567	6.7	Α	587	381	7.0	Α
Grove St	Intersection	2024	1754	15.7	В	1795	1329	25.3	С
	NB	149	147	17.8	В	180	158	15.7	В
	SB	303	274	60.0	Ε	230	180	24.8	С
	EB	986	896	25.6	С	977	742	30.7	С
SR 52/MMP at	WB	766	685	4.2	Α	814	761	4.6	Α
W Main St	Intersection	2204	2002	22.4	С	2201	1841	18.0	В
	NB	490	438	4.1	Α	382	247	24.0	С
W Main St at	SB	395	360	5.0	Α	315	257	8.3	Α
Sunset	EB	144	149	15.3	В	153	125	39.2	D
Dr/NGCU	WB	82	83	15.4	В	107	81	38.2	D
Entrance	Intersection	1111	1030	7.0	Α	957	710	22.6	С
CD EO/MAND -+	NB	741	715	6.8	Α	936	837	5.1	Α
SR 52/MMP at SR	SB	517	474	7.5	Α	561	513	8.6	Α
60/Clarkesville	WB	606	642	11.9	В	486	525	11.3	В
St	Intersection	1864	1831	8.8	Α	1983	1875	7.8	Α



3.3.1 Potential Fatal Flaws

In addition to the modeling analysis, a fatal flaw analysis or a high-level technical assessment based on environmental and engineering constraints as well as community input were considered in the project evaluation. During the project evaluation process, the following potential fatal flaws were identified:

- Many stakeholders opposed the widening of SR 52/MMP to four lanes due to the significant right of way and community impacts along the corridor. Furthermore, the stakeholders believed that a four-lane arterial would not be consistent with the City's plans to create and maintain a walkable environment. The stakeholders recognized that wider arterials become much more difficult for traffic and pedestrians to get across, creating a "river" of traffic. Traffic congestion also begins to devalue an area if it is perceived to be too difficult or crowded to attempt to reach nearby businesses.
- The City and County have plans to improve and build upon the new Judicial Complex, including a proposal for a new library, which may constrain development of a parallel road. The design of that road should be done in coordination with the master plans for the area.
- The parallel connector road between Riley Road and SR 60/South Chestatee Street could have major environmental and topographical issues at the South Chestatee intersection. These include utilities, sharp horizontal curve, right of way, and the crossing of Tanyard Branch. Detailed analysis is required to evaluate the feasibility of this project.
- Any major roadway improvement that could result in an adverse impact to the historic character of the downtown should be avoided. Severe queuing occurs at the intersection of East Main Street at North Grove Street. Although additional turning-lane storage could greatly improve its operations, especially on the southbound approach at this intersection, the intersection's proximity to historic buildings poses limitations.





4.0 RECOMMENDED PROJECTS AND POLICIES

This chapter presents a list of recommended projects based on the evaluation methodology described in the previous chapter. The baseline conditions, relevant studies, and stakeholder input provided a basis for the identification of potential projects considered for evaluation. In addition to the project list, a number of associated policies have been developed in order to foster an environment that will support the project recommendations from this study. It is important to keep in mind that the improvements recommended in this study serve to not only address specific travel needs but also to improve the overall transportation system in the subarea.

4.1 Tiered Implementation Plan

Three tiers of recommendations have been developed based on project performance and community input **(Figure 4-1)**.



Figure 4-1: Tiered Implementation Plan

4.1.1 Tier 1 Recommendations

Tier 1 projects have the highest community support and are recommended due to their low cost and ability to maximize the effectiveness of the existing system. A traditional highway engineering approach to address traffic congestion has been to add more capacity to existing roadways by widening them. However, as traffic volumes have continued to increase exponentially over time, traditional approaches to solving congestion should be reevaluated as limits to capacity additions are reached.

Consistent with local priorities to preserve the existing businesses along SR 52/MMP, Tier 1 recommendations include mostly operational improvements to SR 52/MMP which are designed to allow more effective management of the supply and use of existing roadway. Projects in Tier 1 cost roughly \$22 million and are proposed to be implemented within the next 10 years. As described below and illustrated in **Figure 4-2**:

• Project #1: Implement center turn lane on SR 52/MMP from SR 60/S. Chestatee St to SR 52/SR 60 split to maximize throughput by removing left-turning vehicles from through traffic. (Total Cost: \$9.7 million)





- Project #7: Upgrade intersection of SR 52/MMP at SR 60/South Chestatee Street by providing double left turn lanes on SR 52/MMP southbound and construct double receiving lanes on SR 60/S. Chestatee St eastbound. Add pedestrian improvements such as sidewalks, pedestrian signals and crosswalks. (Total Cost: \$930,000)
- Project #8: Upgrade intersections of SR 52/MMP at Riley Rd and/or Mechanicsville Road by installing a signal and providing adequate turn lane capacity to accommodate left turning movement on all approaches. Add pedestrian improvements such as sidewalks, pedestrian signals and crosswalks. Inter-parcel connection to Mechanicsville Road and/or consolidation of driveways will also be considered. A signal warrant analysis will need to be conducted to determine the actual need for a traffic signal at this location. (Total Cost: \$1.3 million)
- Project #9: Realign Crown Mountain Place to intersect SR 52/MMP at a right angle with left and right turn bays to better facilitate the movement of traffic and ensure safety. (Total Cost: \$730,000)
- Project #10: Upgrade intersection of SR 52/MMP at East Main Street realigning Wal-Mart Way approach and providing additional storage space for turning movements. Add protected left-turn phase on SR 52/MMP and add sidewalks (GDOT Concept Plans already underway). (Total Cost: \$650,000)
- Project #11: Upgrade intersection of SR 52/MMP at Pinetree Way/Memorial Drive by adding a right turn lane on Memorial Drive and a left turn lane on Pinetree Way. Implement pedestrian improvements such as sidewalks and countdown pedestrian signals. (Total Cost: \$800,000)
- Project #12: Upgrade intersections of SR 52/MMP at SR 60/SR 52 by providing a longer left turn storage bay on the westbound approach. (Total Cost: \$250,000)
- Projects M04, M08, M09 & M10: Implement the following bicycle and pedestrian improvements along East/West Main Street and South Chestatee Street. (Total Cost: \$7.5 million)
 - Sidewalks, parking, textured crosswalks, and pedestrian bulbouts along South Chestatee Street
 - Complete streets with sidewalk, bike lanes, and planting strip with trees along East/West Main Street
- Projects M11 & M12: Implement the following pedestrian Improvements (Total Cost: Less than \$5,000)
 - West Main Street and Sunset Drive: Pedestrian upgrades such as countdown pedestrian signals, textured crosswalks and



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- streetscapes (Construction is already underway and scheduled to be completed by the fall semester).
- East Main Street and Memorial Drive: Construct a pedestrian refuge on the south side of the intersection as a safe means to protect from the wide radius right turn from East Main Street to Memorial Drive.



Lake Zwemer Lumpkin County Elementary and Middle Schools Moores-DI #12: MMP at SR 60/SR 52 -#1: SR 52/MMP - Center Turn Lane Intersection Improvement (SR 52/SR 60 Split to S. Chestatee St) Walmart Way SR 52/Morrison Walmart Moore Parkway Subarea: #11: SR 52/MMP at Pinetree Wy/ Tier 1 Memorial Dr - Intersection Improvement Transportation Improvements E. Main St/Memorial Dr West-Cir. Pedestrian Refuge Island ourthouse **Tier 1 Projects** Traffic Operation #10: SR 52/MMP and E. Main St -Complete Streets Bicycle/Pedestrian S. Chestatee St & Main St Intersection Improvement Improvements Intersection Upgrade W. Main St/Sunset #8: SR 52/MMP and Riley Rd/Mechanicsville Rd -Pedestrian Pedestrian Upgrades Signalization/Intersection Improvement Improvement (currently underway) North-Georgia College Geand State University WTP #7: SR 52/MMP and SR 60/S. Chestatee St -Walker D Intersection Improvement Study Area City of #9: SR 52/MMP and Crown Mountain PI Dahlonega Community Facility Street Ansley Chestatee Regional Hospital Tipton-Di Waterbody Parks 0 400 800 **JACOBS** Feet

Figure 4-2: Tier 1 Recommendations



4.1.2 Tier 2 Recommendations

Approximately \$28 million worth of transportation improvements are included in Tier 2. These projects have community support and will improve mobility and connectivity in the subarea. Tier 2 projects are proposed in the 10 to 20 year time frame and should be considered as funding becomes available. Refer to **Figure 3.1** in the previous chapter for the location and extent of the Tier 2 and Tier 3 projects.

- Projects #4 and 5: Construct a new SR 52/MMP Parallel Connector on the east side of SR 52/MMP from Legion Road to Riley Road (Phase 1) and then extend to South Chestatee Street (Phase 2). (Total Cost: \$17.7 million)
- Project #6: Widen SR 60/South Chestatee Street to four Lanes from SR 52/MMP to Hospital Drive. (Total Cost: \$6.6 million)
- Project #13: Improve intersection of East Main Street at North Grove Street to include additional turn lane capacity on the southbound approach. (Total Cost: \$3.1 million)
- Implement remaining bicycle and pedestrian Improvements from the Master Plan. (Total Cost: \$6.4 million)

4.1.3 Tier 3 Recommendations

Findings from the technical assessment showed a need for additional throughput capacity along SR 52/MMP corridor. As such, Tier 3 projects include large capacity improvements which are necessary to increase throughput and relieve congestion, but require additional rights of way and can have significant impacts to the surrounding communities. As such, these projects are potential long-term solutions (beyond 20 years) that should be explored in greater detail as the community prepares and plans for future growth.

- Projects #2 and 3: Widen SR 52/MMP to four lanes with a center median.
 - Eastern Segment: from SR 60/South Chestatee Street to SR 52/SR 60 split. (Total Cost: \$22.6 million)
 - Western Segment: from West Main Street/Barlow Road to SR 60/South Chestatee Street. (Total Cost: \$16.3 million)
- Project #M13: Provide flex-time shuttle service along the Main Street corridor to serve community and resident student needs during off-peak hours – weekday afternoon/evenings. (Capital Cost: \$300,000; Operating and Maintenance Cost: \$1.1 million)

4.2 Recommended Policies

Within the hierarchy of community development, plans yield policies and are implemented by regulations. Dahlonega and its stakeholders have built a strong





planning foundation at the County, City and institutional level, and are moving toward implementation. This section suggests policies that should be considered to reconcile local plans to conditions identified in the subarea study.

4.2.1 Access Management Strategies

The findings from the Baseline Conditions/Needs Assessment Report confirm that Dahlonega will remain the focus of regional trip making into the future, both for travelers destined elsewhere and a growing population and tourist trade. This traffic supports the subarea's economy, but also threatens to overwhelm transportation system capacity. Vehicular capacity improvements to accommodate projected travel demand risk disrupting local community character and accessibility.

To mitigate the impact of vehicular traffic on the community and the transportation system, Dahlonega should consider action to revise and strengthen access management regulations in its critical corridors, including SR 52/MMP and Main Street. For SR 52/MMP and other high capacity arterials, the effort should supplement existing requirements for inter-parcel access, and prioritize consolidation of driveways over direct access to the highway. Lot and Block Standards should also be reviewed to maximize the elaboration of the street network in these corridors, and to shift access to lower level streets and away from arterials, where possible.

For urban thoroughfares like Main Street and South Chestatee Street, the regulatory framework should focus on improving the pedestrian and non-motorized travel experience, closing curb cuts and reducing front yard vehicular accommodations. Implementing "build to" lines instead of mandatory setbacks, providing on street parking, and public or private parking behind structures manages access in favor of travelers unburdened by their vehicles.

4.2.2 Recommendations from Downtown Master Plan and Parking Plan

Dahlonega invested in these groundbreaking planning efforts, and has already realized benefit through the award of the TIGER 2 streetscape design grant. But many of the recommendations of these plans are currently impermissible or poorly accommodated in the 1991 Zoning Ordinance. While some mechanisms in the Zoning Ordinance may be employed to achieve some plan recommendations, other restrictions or omissions may yield development that fails to achieve or conflicts with the prescriptions of these plans.

A better approach may be to establish a "zoning overlay" that would specifically implement these plans in the areas of the city where they are focused. By codifying the plan recommendations in the zoning code and allowing for the more intensive improvement of property envisioned in the plans, Dahlonega can be better assured that the policy objectives of these plans will be achieved, largely through private investment.





The October 2010 Downtown Parking Study recommends the development of additional parking capacity on North Chestatee Street to supplement existing facilities on Warwick and Choice Streets, and suggests a fee system that would generate net income of over \$700,000 over a ten-year period. The study also recommends a Payment in Lieu of Parking (PILOP) option for new development that could generate approximately \$15,000 per space required of development, but not supplied. The benefits of the Parking Plan include reduced vehicle congestion, more foot traffic, and a market for transit. Such a program would also free valuable land in central Dahlonega for revenue-producing development.

4.3 Financial Resources

This study has been developed to address the SR 52/MMP subarea's transportation needs through 2035. To support implementation of this plan, the following discussions provide a general overview of funding programs potentially available to help advance project recommendations.

4.3.1 Federal and State Funds

Surface Transportation Program (STP)

The STP provides flexible funding that may be used by Georgia and localities for projects on any Federal-aid highway (non-interstate highway), bridge projects and transit capital projects. Improvements on SR 52 and SR 60 could qualify for STP funding. The distribution of STP funds includes 62.5 percent for use in urban areas (greater than 50,000 population) of the state based on population. Another 27.5 percent can be used in any area of the state at the direction of the State Transportation Board. The remaining ten percent is used for Transportation Enhancement (TE) projects.

Transportation Enhancement (TE)

TE funds are available for non-traditional improvements such as aesthetic enhancements, bicycle and pedestrian facilities, historic preservations, and others. Local jurisdictions must compete for TE funds by submitting an application to be reviewed by the State Transportation board. Pedestrian and bicycle improvements along Main Street and South Chestatee Street are eligible for TE funding.

Safe Routes to School (SRTS)

SRTS funds are available for pedestrian and bicycle projects within two miles of a school. These funds are distributed through GDOT and are available for grades kindergarten through eight. Given that the recommended bicycle and pedestrian projects have an emphasis in providing safe connections to schools, the SRTS program has been identified as an appropriate federal funding source for these projects. Specific recommendations eligible for the SRTS funds include sidewalks on Main Street and North Grove Street.





4.3.2 Local Funds

Local governments receive revenues from a number of sources to support the public facilities and services they provide to citizens. These sources include federal and state funds, "own source" funds, such as property tax revenues and other monies, and discretionary grant funds from federal and/or state agencies.

SPLOST

As such that state funding often lags behind the need, Lumpkin County should consider placing a focus on generating greater local revenues through Special Local Option Sales Tax (SPLOST) and other potential mechanisms. The current six-year SPLOST cycle is scheduled to run through April 2014 and included the Justice Center as the number one priority. In February 2012, Lumpkin County voters will be asked to continue the current SPLOST program with an estimated \$16.4 million in revenue over six years. Traditionally, SPLOST money has been used in the past for paving and bridge upgrades.

Potential Parking Revenues

As recommended from the Downtown Parking Study, an additional parking lot with a fee system could be used to generate revenues that could help pay for transportation improvements in the downtown. The proposed parking facility could potentially generate net income of over \$700,000 over a ten-year period. The study also recommends a Payment in Lieu of Parking (PILOP) option for new development that could generate approximately \$15,000 per space required of development.

Tax Allocation District (TAD)

TAD is a mechanism that allows a local government to capture increases in local property revenues within a specific area (designated as a TAD or also called Tax Increment Financing (TIF) districts), while using the revenue to finance projects within a specified time period. Once the TAD district is established, a base year and tax rate are established in which the tax increment is then collected over a specified period of time and used to meet the debt service payments. TAD funds could be used to pay for various roadway improvements, transit, or specific transportation services targeted for tourism or economic development purposes.

Community Improvement District (CID)

A CID is a means for property owners within commercial areas of Georgia to establish a special tax district to fund infrastructure improvements in their area. CIDs are mechanisms to supplement existing funding streams and can be used to fund roadway improvements, various bike and pedestrian facilities, water and sewage systems, parking, and parks and recreational facilities. CIDs are constitutionally established local governments entirely run by district leaders (typically business/property owners). CIDs assess themselves, but are also able to leverage large sums of state and federal funds. One consideration of CIDs is that their autonomous legal framework and ability to leverage state and federal monies requires the need for accountability to local governments and the general public.





4.3.3 Transportation Investment Act 2010

As part of the Transportation Investment Act of 2010 (TIA2010), local governments have been engaged in developing projects to be potentially funded by a one percent sales tax. The City of Dahlonega and Lumpkin County recommended mobility improvements to SR 52/MMP in addition to the widening of SR 60 from SR 400 to the Hall County Line for inclusion on the Financially Constrained Project List for the Georgia Mountains Region. If the final project list is approved by the Regional Transportation Roundtable (made up of local representatives) in October 2011, it will be voted upon by the citizens in 2012.

If passed, all the roadway improvements under Tier 1 recommendations from this study could be funded and implemented by year 2022. It is also important to note that that 25% of the overall TIA funds, called discretionary funds, will be available to local governments for projects not on the final list. Dahlonega is expected to receive \$113,350 annually and Lumpkin County is expected to receive \$1.3 million in discretionary funds annually.

4.3.4 Transit

There is a broad range of local and state-managed funding sources to fund a flexible shuttle system recommended in this study. Although a high level estimate is provided in this study, a detailed operation plan based on potential demand would be needed as a next step.

Initially, the Lumpkin County's Dial-a-Bus operation could serve as an organizational home for a coordinated effort. This service, currently funded with assistance from the federal government and the state through GDOT, provides demand responsive service to county residents. Expansion of the service to include the Dahlonega Shuttle could compete for grants administered by GDOT through the FTA Section 5311 program, supplemented by local funds such as a paid parking program discussed in the Parking Study to help pay for shuttle operations. Additionally, Hotel/Motel Tax revenues could be allocated to support service to the tourism industry, either from an allocation of existing levies, or an increase. NGCSU could also find the coordinated effort to be a cost effective provider of transportation services to meet its satellite parking needs. Funding could be allocated from student transportation assessments, or derived from parking permit revenues.

