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1.0 INTRODUCTION

A transportation master plan is an official document adopted by a local government to establish transportation planning and general policies for the development of a community. This transportation plan assesses the existing conditions and operations of the transportation system in and around Bowling Green, and develops a plan for improving transportation conditions from the current needs through the next 20 years based on predicted land uses and development patterns. In accordance with Ohio Revised Code (ORC) 723.01; a municipal corporation shall have special power to regulate the use of the streets, and the legislative authority of a municipal corporation shall have the care, supervision, and control of the public highways, streets, avenues, alleys, sidewalks, public grounds, bridges, aqueducts, and viaducts within the municipal corporation. Given this responsibility, the City of Bowling Green has developed this Transportation Master Plan to assess conditions and determine transportation needs through the next 20 years to ensure that the transportation network will provide a safe and efficient system that services all aspects of transportation in the City while allowing continued development to occur. The City recognizes the need to maintain transportation infrastructure as residential and commercial/industrial growth continues, and with this in mind, has taken the initiative to update the plan to assist and guide the community in determining growth areas, transportation needs, and strategies to implement recommended improvements.

1.1 Transportation Master Plan Update Purpose

The purpose of updating Bowling Green’s Transportation Master Plan is to develop a strategy that outlines existing and future transportation needs for the City to support both motorized and non-motorized transportation modes through the next 20 years. The recommendations of the Plan are developed to support economic and residential growth while maintaining Bowling Green’s historic background and sense of place. Bowling Green is situated such that (Figure 1.1) it is located along a major north-south interstate (I-75) and a primary east-west arterial (US 6) in Northwest Ohio. The City is home to many businesses as well as Bowling Green State University (BGSU), which is a major university with a large number of commuter students. The location of the City within less than an hour drive to Toledo, Findlay, and Lima creates a great deal of commuter traffic.
traffic to and from the City of Bowling Green in addition to those commuters at BGSU, particularly during the work week. The transportation plan will develop recommendations to improve traffic operations within and around the City and address the peak traffic demands placed on the network by commuter traffic as well as other anticipated growth through identifying needed transportation improvements and developing policies and guidelines to protect the transportation infrastructure of the City. Recommendations within the Transportation Master Plan will be utilized to support having projects included on the Toledo Metropolitan Area Council of Governments' (TMACOG) Transportation Improvement Program (TIP). The TMACOG regional planning coverage area includes all of Wood County and Lucas County in Northwest Ohio. Given this, TMACOG is responsible for all programming of projects within these two counties, and for a project to be considered for State or Federal funding opportunities; projects must be listed in the TIP.

1.2 Planning Process

The planning process for the Transportation Master Plan update began in April 2006 with a project kick-off meeting to establish the goals and objectives for the Plan. Research and data collection of existing plans and studies were then performed. Traffic counts (24-hour) were conducted on major roadway sections and turn movement counts (AM & PM peak hours) at major intersections. The collected research and traffic data was utilized to document the existing conditions and to estimate future growth and conditions. The documentation of existing conditions allowed for the identification of traffic conditions, patterns and trends. The future conditions were based on growth trends as well as a review of anticipated future land uses. Future conditions entailed projecting traffic growth to a 20-year horizon to predict future transportation demands and needs. The findings and recommendations were then reviewed by a diversified project oversight committee for input. Once input was received, it was incorporated into the recommendations and cross-checked with existing and future conditions and a final list of recommendations was developed. The recommendations were then offered to the residents of Bowling Green for comments at a public meeting and applicable comments were incorporated into the recommendations to produce a final list of needed improvements. The final Transportation Master Plan will then be presented to the City for formal adoption of the Plan.

1.2.1 Oversight Committee

The Oversight Committee for the update of the Transportation Master Plan consisted of representatives from the following:

- City’s Planning Department
- City’s Engineering Department
- City’s Police Department
- City Council
- Bowling Green City Schools
- Bowling Green State University
- Planning Commission

The Oversight Committee met three times throughout the development of the Transportation Master Plan to provide local input on the recommendations and policies being developed for the document. Once draft recommendations were developed, they were presented to the general public at a public involvement meeting for comments.
1.2.2 Public Involvement

A public meeting was held on Monday July 30, 2007 from 4:00 – 7:00 PM at the Bowling Green Community Center to solicit public input on the recommendations developed from the update of the Transportation Master Plan. Comments were incorporated into the final list of recommendations. A summary of the comments received and the Oversight Committee responses to the comments are provided in Appendix A, along with the meeting sign-in sheet and public meeting handout.

1.3 Plan Vision, Goals & Objectives

Plan Vision:
The City of Bowling Green desires to maintain and promote a transportation network that facilitates safe and efficient circulation within and through the community that supports both motorized and non-motorized modes of transportation and promotes economic development for the area. The transportation system must strive to develop more efficient and safer roadways; plan for anticipated growth areas based on future land uses; ensure adequate access to I-75 and US 6; provide a more pedestrian/bicycle friendly community; develop a list of improvements and implementation strategies; and update the City’s Access Management Policies & Guidelines in a separate document.

Plan Goals & Objectives:
The key goals & objectives of the Transportation Master Plan will assist in achieving the vision of the Plan. These goals address current and future related transportation issues in the City:

Goal #1: Develop more efficient and safer roadways
Objectives:
- Evaluate current and future capacity operations to determine needed improvements to reduce congested areas and move traffic more efficiently
- Determine the high crash intersections and sections within the City and provide recommendations to reduce crash occurrences

Goal #2: Plan for anticipated growth areas based on future land uses
Objectives:
- Identify various growth areas of the City based on the future land use plan
- Utilize high growth areas to project traffic increases to determine potential lane needs, intersection needs, and access to arterial roadways

Goal #3: Ensure adequate access to I-75 and US 6 for the next 20 years to support commuter traffic demands and support economic development
Objectives:
- Inventory existing operations of access to I-75 and US 6
- Determine if future growth areas over the next 20 years will require improved or new access to both I-75 and US 6
Goal #4:  
Create a more pedestrian/bicycle friendly community

Objectives:
- Create a plan to improve pedestrian friendly facilities in the City of Bowling Green
- Develop improvements such as the use of ADA compliant curb ramps; pedestrian signals/pushbuttons at signalized intersections; development of multi-use paths; bicycle parking facilities and improved connectivity to sites

Goal #5:  
Develop a list of improvements and implementation strategies for the next 20 years

Objectives:
- Develop a comprehensive list of improvement recommendations to maintain a safe and efficient transportation network for the City over the next 20 years
- Provide planning level costs for each improvement; an implementation strategy; and potential funding sources to consider

Goal #6:  
Integrate the City’s Access Management Policies & Guidelines into the Transportation Master Plan and provide updates

Objectives:
- Integrate the City’s Access Management Policies & Guidelines into the Transportation Master Plan
- Update the policies & guidelines as necessary to reflect current access management practices and current City transportation facility maintenance needs so as to maintain the integrity of the roadways

1.4 Master Plan Use

Bowling Green’s Transportation Master Plan will provide a planned approach for improving the safety and efficiency of the roadway network in the City. The recommendations of the plan will provide improvements needed over the next 20 years based on current and projected conditions. In addition to providing recommended construction improvements and further studies, it also provides policy and guideline recommendations as well as assessment strategies to monitor maintenance items related to transportation (such as repaving, type of pavement, sign inventory, etc.). Finally, the document will provide implementation suggestions and potential funding sources that may be available for each identified improvement. The plan will also assist the City with having recommended projects added to the TMACOG Transportation Improvement Program (TIP).
2.0 TRANSPORTATION SYSTEM ASSESSMENT

The development of a transportation master plan involves conducting an overall system assessment. This is accomplished by reviewing existing data and previous studies; requesting available data from various agencies; conducting primary data where not available; and then performing analyses to determine existing conditions and future needs based on current and anticipated trends. Improvements and recommendations are then developed based on operations and future needs.

2.1 Roadway Network

The first step involved determining the intersections and roadway sections in the City of Bowling Green that are considered critical for transportation efficiency and safety for the community and for future economic development. This was accomplished by guidance from the City's Planning and Engineering departments; a review of roadway connectivity; a review of traffic volumes; field visits; and access to I-75 and US 6.

2.1.1 Study Area and Roadways Reviewed

The roadways and intersections reviewed for the Transportation Master Plan are displayed on Figure 2.1. This figure also displays the Study Area as indicated by the black dashed line.

2.1.2 Programmed Roadway Improvements & Regional Planning

Aside from the general maintenance and repaving that is performed on a regular basis in the City, the major programmed projects were inventoried to document forthcoming improvements. The major projects currently programmed are displayed on Table 2.1.

<table>
<thead>
<tr>
<th>Facility</th>
<th>Project Limits</th>
<th>Project Scope</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction (2008)</td>
</tr>
<tr>
<td>SR 25 (N. Main St.)</td>
<td>Poe to Newton</td>
<td>Roadway Widening</td>
<td>ROW Acquisition (2009)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction (2010)</td>
</tr>
</tbody>
</table>

No other major projects currently have secured funding in the next few years. The SR 25 (N. Main St.) project will be a major undertaking as it will involve property impacts to many businesses. The SR 25 project is currently under design and was therefore not analyzed as part of this study given it is being designed per on-going preliminary engineering analyses.

In regards to regional planning, the Toledo Metropolitan Area Council of Governments (TMACOG) coordinates transportation projects within both Wood and Lucas Counties through the development of the Transportation Improvement Program (TIP). The potential for Federal & State funding of projects is dependent upon the project being listed in the TIP. Given this, it is essential that the City of Bowling Green maintain a Transportation Master Plan that regularly updates project listings so they can be requested to be included on TMACOG’s TIP so Federal & State funding options can be sought.
2.2 Functional Classifications

Functional Classification is the grouping of roads, streets, and highways into a hierarchy based on the type of highway service they provide. In general, roadways provide two types of service that include either traffic mobility or land access and can be ranked in terms of the proportion of service they perform. Classifications are within either a rural area or an urban area. The roadways focusing more on mobility include Arterials which emphasize a high level of mobility for the through movement of traffic and land access is secondary to this primary function. Generally, travel speeds and distances are greater on these facilities compared to the other classes. The highest classes of arterials, Interstates and freeways, are limited access to allow the free flow of traffic. The intermediate roadways between the Arterials and the Locals are the Collectors. They collect traffic from the lower facilities (Locals) and distribute it to the higher (Arterials). Collectors provide both mobility and land access. Generally, trip lengths, speeds, and volumes are moderate. The roadways that have the primary service of providing access to land areas are the Local streets and roads. Travel speeds, distances, and volumes are generally low, and through traffic usually discouraged.

In regards to funding, the Functional Class of a roadway determines eligibility for funds. In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) created the National Highway System (NHS). The ISTEA continued the requirement that a street, road, or highway had to be classified higher than a Local in urban areas and higher than a Local and Minor Collector in rural areas before federal funds could be spent on it. The selection of routes eligible for NHS funding was also based on functional criteria. In 1998, the Transportation Equity Act changed eligibility requirements slightly. The Act allows up to 15% of amounts reserved for rural areas to be spent on rural minor collectors. In urban areas, an eligible facility must still be above an Urban Local.

2.2.1 State Functional Classification Categories

The functional classifications utilized by the State of Ohio are shown in Table 2.2. The Ohio Department of Transportation (ODOT) assigns all roadways in the State one of these classifications.

<table>
<thead>
<tr>
<th>Table 2.2</th>
<th>ODOT's Functional Classification Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional Class Identification Number</td>
<td>Functional Class</td>
</tr>
<tr>
<td><strong>Rural Classifications</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Principal Arterial – Interstate</td>
</tr>
<tr>
<td>2</td>
<td>Principal Arterial – Other</td>
</tr>
<tr>
<td>6</td>
<td>Minor Arterial</td>
</tr>
<tr>
<td>7</td>
<td>Major Collector</td>
</tr>
<tr>
<td>8</td>
<td>Minor Collector</td>
</tr>
<tr>
<td>9</td>
<td>Local</td>
</tr>
<tr>
<td><strong>Urban Classifications</strong></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Principal Arterial – Interstate</td>
</tr>
<tr>
<td>12</td>
<td>Principal Arterial – Other Freeway/Expressway</td>
</tr>
<tr>
<td>14</td>
<td>Principal Arterial – Other</td>
</tr>
<tr>
<td>16</td>
<td>Minor Arterial</td>
</tr>
<tr>
<td>17</td>
<td>Collector</td>
</tr>
<tr>
<td>19</td>
<td>Local</td>
</tr>
</tbody>
</table>
2.2.2 Functional Classifications in Study Area

Existing Functional Classifications
The current (2007) functional classifications within the study area of the Transportation Master Plan as determined by ODOT are displayed on Figure 2.2. The two Urban Principal Arterials within the City include SR 25 (Main St.) for the entire length within the City, and SR 64 (E. Wooster St.) from N. Main St. to I-75. All of US 6 which traverses the southwestern and southern limits of the City is a Principal Arterial and I-75 is an Interstate. There are also several Minor Arterials and Urban Collectors as well shown.

Future Functional Classifications
The future functional classifications within the study area are shown in Figure 2.3. The future changes primarily involve classifying all proposed new roadways or roadway extensions as Urban Collectors. In addition to the proposed roadways, there are also several locations where existing roadway sections are upgraded to a higher functional class to provide improved planning for the facility.

2.3 Land Use Influences on Traffic

One of the major influences on traffic volumes of a roadway is the land uses that are being serviced. Land uses vary greatly in the intensity of traffic they generate. Therefore, it is critical to identify and evaluate future growth areas and their anticipated land uses to assist in determining future traffic growth potentials for roadways servicing these areas.

2.3.1 Land Use and Trip Generation

The type and size of a land use greatly determines the amount of trips that will be generated. Land uses such as retail, restaurants, convenience stores, etc. have high trip generation whereas uses such as residential, parks, and hotels have lower trip generation. In between these extremes are trips generated by industrial, offices, and manufacturing uses. Given these variations in trip generation, it is important to identify anticipated future growth areas in Bowling Green and the anticipated type of land use that would be expected to develop in the future.

2.3.2 Potential High Growth Areas

High growth areas were identified in Bowling Green through the use of various sources. These included review of the future land use plan from Bowling Green’s Land Use Plan; review of recent development trends; and input from the City’s Planning Department. The anticipated high growth areas are shown on Figure 2.4. There were three general types of future land use growth areas identified including:

- Industrial/Office/Manufacturing
- Residential
- Commercial/Highway

2.3.3 Land Use Analysis Conclusion

Annual growth rates on roadways being studied in the Transportation Master Plan were assigned based on the type of anticipated future growth area they were primarily servicing. Growth rates of 1%, 2%, and 3% annual increases were used to predict future traffic growth. The higher growth rates are in the fringe areas where more land is available.
for development and within the older urban areas smaller growth rates were used given land is essentially built out already. The annual growth rates applied to the studied roadways are displayed on Figure 2.5.

2.4 Identified High Crash Locations by Highway Safety Program (HSP)

The State’s Highway Safety Program (HSP) has a High Crash Location Identification System (HCLIS) that develops annually a listing of high crash locations on all State Routes, Federal Routes, and Interstates in Ohio for the most recent three year period. Several lists are developed for both Non-Freeway and Freeway facilities. The two lists that are applicable to the City of Bowling Green are the “Hot Spot” Non-Freeway List and the HSP Non-Freeway List. These lists not only provide valuable information on where crash problems exist, but are also used to determine where safety program funding should be utilized to reduce crashes.

2.4.1 Non-Freeway “Hot Spot” and High Crash Location Listings

The 2003-2005 high crash listings for the City of Bowling Green are displayed on Table 2.3 as well as on Figure 2.6. The “Hot Spot” listings are 2-mile long corridors in which there were more than 150 crashes in the three year period.

<table>
<thead>
<tr>
<th>Hot Spot Non-Freeway List</th>
<th>Location</th>
<th>Rank</th>
<th>Accidents</th>
<th>Accident Rate</th>
<th>State Log Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SR 64 (I-75 to Summit St.)</td>
<td>80</td>
<td>424</td>
<td>22.09</td>
<td>0.00 – 2.00</td>
<td></td>
</tr>
<tr>
<td>2. SR 25 (US 6 Ramp to W. Oak St.)</td>
<td>144</td>
<td>341</td>
<td>11.55</td>
<td>8.00 – 10.00</td>
<td></td>
</tr>
<tr>
<td>3. SR 25 (W. Oak St. to Bishop Rd.)</td>
<td>150</td>
<td>335</td>
<td>12.91</td>
<td>10.00 – 12.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2005 HSP Non-Freeway List (2003-2005)</th>
<th>Location</th>
<th>Rank</th>
<th>Frequency</th>
<th>Accident Rate</th>
<th>State Log Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. SR 64 (S. Church St. to Parker Ave.)</td>
<td>179</td>
<td>30</td>
<td>5.86</td>
<td>2.26 – 2.76</td>
<td></td>
</tr>
<tr>
<td>6. SR 64 (Williams St. to N. Prospect St.)</td>
<td>189</td>
<td>96</td>
<td>14.00</td>
<td>1.32 – 2.07</td>
<td></td>
</tr>
<tr>
<td>7. SR 64 (Alumni Dr. to State St.)</td>
<td>448</td>
<td>122</td>
<td>20.41</td>
<td>0.69 – 1.21</td>
<td></td>
</tr>
<tr>
<td>8. SR 64 (Wooster &amp; Mercer)</td>
<td>569</td>
<td>30</td>
<td>2.61</td>
<td>1.07</td>
<td></td>
</tr>
<tr>
<td>9. SR 25 (Main &amp; Washington)</td>
<td>818</td>
<td>30</td>
<td>1.87</td>
<td>9.69</td>
<td></td>
</tr>
<tr>
<td>10. SR 64 (Main &amp; Wooster)</td>
<td>910</td>
<td>22</td>
<td>2.95</td>
<td>9.40</td>
<td></td>
</tr>
<tr>
<td>11. R 64 (Wooster &amp; Haskins)</td>
<td>970</td>
<td>28</td>
<td>5.00</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td>12. SR 25 (Main &amp; Napoleon)</td>
<td>1212</td>
<td>34</td>
<td>2.12</td>
<td>9.12</td>
<td></td>
</tr>
<tr>
<td>13. SR 64 (Wooster &amp; Prospect)</td>
<td>1276</td>
<td>23</td>
<td>2.52</td>
<td>2.08</td>
<td></td>
</tr>
<tr>
<td>14. SR 25 (Main &amp; VanPle)</td>
<td>1530</td>
<td>26</td>
<td>2.06</td>
<td>11.40</td>
<td></td>
</tr>
<tr>
<td>15. SR 25 (Main &amp; Gypsy)</td>
<td>1552</td>
<td>26</td>
<td>1.94</td>
<td>8.62</td>
<td></td>
</tr>
<tr>
<td>16. SR 64 (Wooster &amp; Enterprise)</td>
<td>1673</td>
<td>17</td>
<td>1.86</td>
<td>1.94</td>
<td></td>
</tr>
<tr>
<td>17. SR 64 (Wooster &amp; College)</td>
<td>1819</td>
<td>26</td>
<td>2.84</td>
<td>1.57</td>
<td></td>
</tr>
<tr>
<td>18. SR 25 (Main &amp; Dale)</td>
<td>2286</td>
<td>21</td>
<td>1.83</td>
<td>0.75</td>
<td></td>
</tr>
</tbody>
</table>

There were a total of three “Hot Spot” corridors identified in Bowling Green, two involving SR 25 (Main St.) and one involving SR 64 (Wooster St.). In addition to these three high crash corridors, there were 15 other identified high crash locations, of which 4 were sections and 11 were intersections (as noted in Table 2.3). All of these locations have the potential to receive safety program funding given they are documented as high crash locations.
2.4.2 Bowling Green Police Division – 2006 Traffic Crash Analysis

In addition to the crash data obtained from the HSP, the City of Bowling Green’s Police Division supplied data in the form of a report titled 2006 Traffic Crash Analysis. The report provided additional data to further document the locations identified by HSP are in fact high crash locations within the City. The recommendations of the report acknowledges that both SR 25 (Main Street) and SR 64 (Wooster Street) contain a majority of the crashes in the City (particularly in the vicinity of downtown) and that both increased enforcement as well as coordination with engineering solutions should be performed. The study is also beneficial in that it highlights all locations in the City where high crash occurrences are located whereas the HSP crash data only provides data on State and Federal routes. The high crash intersections and corridors identified by the City’s report are displayed on Figure 2.7.

2.4.3 Safety Recommendations

Based on the high crash areas identified in the Highway Safety Program (HSP) and also the City’s 2006 Traffic Crash Analysis, the following safety recommendations are made:

- Conduct a citywide signal system study to develop recommendations for improving traffic progression and coordination through the city to reduce the number of stops. An improved signal system would improve capacity, reduce congestion, and improve signal visibility. All of these factors would reduce the number of crashes.
- Corridor Safety Study of SR 25 (Main St.) from US 6 to W. Oak St.
- Corridor Safety Study of SR 64 (Wooster St./Haskins Rd.) from Thurstin Ave. to Parker Ave.
- Corridor Safety Study of SR 25 (Main St.) from W. Oak St. to Bishop Rd. (It should be noted that a major widening project is anticipated for construction in 2010, from Poe Rd. to Newton Rd. which will improve safety on a large portion of this corridor, the project is currently in the design phase)
- Conduct a citywide overhead guide sign study to determine key locations needing overhead signs to guide motorists to the major arterials and also to provide overhead lane use signs at key intersections
- Corridor Safety Study of Poe Rd. from Haskins Rd. to Park Ave.

In addition to these specific safety recommendations, the improvements developed for the Transportation Master Plan considered the existing conditions (including high crash locations) and projected conditions to assist in developing the recommended improvements.
### City of Bowling Green Locations on the High Crash Listing Identification System (HCLIS) for 2003-2005

**Hot Spot Non-Freeway List**

<table>
<thead>
<tr>
<th>Location</th>
<th>Rank</th>
<th>Accidents</th>
<th>Accident Rate</th>
<th>State Log Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SR 64 (I-75 to Summit St.)</td>
<td>80</td>
<td>424</td>
<td>22.09</td>
<td>0.00 - 2.00</td>
</tr>
<tr>
<td>2. SR 25 (US 6 Ramp to W. Oak St.)</td>
<td>144</td>
<td>341</td>
<td>11.55</td>
<td>0.00 - 10.00</td>
</tr>
<tr>
<td>3. SR 25 (W. Oak St. to Bishop Rd.)</td>
<td>150</td>
<td>335</td>
<td>12.91</td>
<td>10.00 - 12.00</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Location</th>
<th>Rank</th>
<th>Frequency</th>
<th>Accident Rate</th>
<th>State Log Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. SR 25 (W. Gypsy Ln. to N. of Date Dr.)</td>
<td>52</td>
<td>346</td>
<td>10.47</td>
<td>8.66 - 10.97</td>
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<tr>
<td>5. SR 64 (to church st to Parker Ave.)</td>
<td>115</td>
<td>30</td>
<td>5.96</td>
<td>2.28 - 2.76</td>
</tr>
<tr>
<td>6. SR 04 (Williams St. to N. Prospect St.)</td>
<td>189</td>
<td>96</td>
<td>14.00</td>
<td>15.32 - 2.67</td>
</tr>
<tr>
<td>7. SR 04 (Alumni Dr. to State St.)</td>
<td>448</td>
<td>122</td>
<td>20.41</td>
<td>0.60 - 1.21</td>
</tr>
<tr>
<td>8. SR 04 (Wooster &amp; Mercer)</td>
<td>569</td>
<td>30</td>
<td>2.51</td>
<td>1.97</td>
</tr>
<tr>
<td>9. SR 04 (Main &amp; Washington)</td>
<td>518</td>
<td>30</td>
<td>1.29</td>
<td>0.69</td>
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<tr>
<td>10. SR 04 (Main &amp; Wooster)</td>
<td>910</td>
<td>22</td>
<td>2.95</td>
<td>9.40</td>
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<tr>
<td>11. R 04 (Wooster &amp; Haskins)</td>
<td>970</td>
<td>28</td>
<td>5.00</td>
<td>2.08</td>
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<tr>
<td>12. SR 04 (Main &amp; Napoleon)</td>
<td>1242</td>
<td>34</td>
<td>2.13</td>
<td>9.02</td>
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<tr>
<td>13. SR 04 (Wooster &amp; Prospect)</td>
<td>1276</td>
<td>23</td>
<td>2.53</td>
<td>2.08</td>
</tr>
<tr>
<td>14. SR 25 (Main &amp; VanCamp)</td>
<td>1530</td>
<td>26</td>
<td>2.06</td>
<td>11.40</td>
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<tr>
<td>15. SR 25 (Main &amp; Gypsy)</td>
<td>1555</td>
<td>26</td>
<td>1.34</td>
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<tr>
<td>16. SR 04 (Wooster &amp; Jefferson)</td>
<td>1824</td>
<td>39</td>
<td>1.70</td>
<td>1.94</td>
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<tr>
<td>17. SR 04 (Wooster &amp; College)</td>
<td>1819</td>
<td>28</td>
<td>2.54</td>
<td>1.57</td>
</tr>
<tr>
<td>18. SR 25 (Main &amp; Date)</td>
<td>2288</td>
<td>21</td>
<td>1.83</td>
<td>0.75</td>
</tr>
</tbody>
</table>
2.5 Traffic Volumes

The traffic volumes for the study were obtained through several sources. These included existing Bowling Green counts; ODOT traffic data; TMACOG traffic data; and traffic data from various traffic studies and design projects. In addition, the City of Bowling Green and the Mannik & Smith Group, Inc. (MSG) coordinated collecting primary data at 10 hose count locations as well as conducting both AM and PM turn movement counts at 22 intersections (see Appendix B for listing of locations). All counts were conducted in 2006 and volumes were projected to 2007 (utilizing the growth rates shown on Figure 2.5). The intersection turn counts were collected to construct a Synchro traffic model to assist in analyzing congestion and assessing needed intersection improvements.

2.5.1 Existing 2007 Traffic

The average daily traffic (ADT) volumes for a 24-hour period are shown on Figure 2.8. These volumes indicate that Wooster St. (particularly E. Wooster) currently carries over 20,000 vehicles between Main St. and I-75. The SR 25 (Main St.) corridor carries anywhere from 12,300 to 19,600 vehicles per day depending on location. Other notable roadways carrying 8,000 to 10,000 vehicles per day include portions of Poe Rd., Napoleon Rd., W. Wooster, and Thurstin Ave.

2.5.2 Future 2027 Traffic

Traffic volumes were projected to a 20 year horizon (2027) to determine transportation needs for the future (Figure 2.9). The growth rates utilized for these projections are shown on Figure 2.5. The previous high volume roadways noted in 2007 continue to increase their volumes as shown on the figure. In addition to these roadways, several others are predicted to grow to volumes in the 8,000 to 10,000 range including Bowling Green Road West; Manville Ave.; Mercer Rd.; Campbell Hill Rd.; Dunbridge Rd.; and Gypsy Ln.

2.5.3 Traffic Patterns

The review of existing ADT volumes reveals that the primary commuter route is E. Wooster St. as it is the primary roadway that interchanges with I-75. This corridor was recently improved with a widening project. The corridor contains many BGSU students as well as those residents commuting to regional employment areas such as the Toledo Area to the north and Findlay & Lima to the south. Current traffic operates adequately given the recent improvements; however, if traffic projections hold true there could be over 30,000 vehicles per day by 2027 which could cause operational constraints. This creates a need to explore the justification of providing an additional I-75 access north of the current Wooster St. interchange to provide a second access for northern parts of the City, including BGSU. The BGSU Master Plan also documents the need for a northern interchange for the long term needs of the campus. The other two primary gateways into and out of the City are S. Main St. from US 6 and N. Main St. near Newton Rd. There is currently a planned widening project for SR 25 from Poe to Newton which would improve operations greatly and help accommodate future traffic growth on this corridor.

2.5.4 Truck Traffic

In addition to documenting traffic volumes, the mixes of traffic on State Routes through the City were also reviewed to determine short term and long term truck routes for special events and detours. Truck traffic percentages were obtained from ODOT’s Traffic Survey
Report (2006). The truck percentages and 24-hour volumes are displayed on Figure 2.10. The largest number (and percentage) of trucks occurs on SR 25 through the City. The next highest truck route is E. Wooster St. from I-75 to SR 25.

The short term (green route) and long term (red route) truck routes developed for the City are shown on Figure 2.10. These routes were developed to plan for truck traffic being detoured from the State Routes through the City when there are road closures. This occurs primarily for two reasons. One is for planned special events where often the downtown area is closed to vehicles. The other instance is when there is an emergency road closure due to an unforeseen event such as a traffic crash; large fire; felled tree; or some other natural event. Periodically a crash on I-75 also creates traffic detouring onto City streets. The recommended truck routes shown would facilitate trucks in guiding them to the State Routes without having to enter the downtown and residential areas where often turning movements are quite tight for trucks. These routes can be posted with signs or also encouraged with changeable message signs (especially if the detour will occur for a day or several hours).

The short term route is recommended based on current roadway facilities in place. The long term route is recommended once future roadway improvements become available such as the Newton Road extension to Mitchell Road; Mitchell Road improvements; and a new northern interchange with I-75. The three intersections where blue squares are displayed are locations where turning radii improvements would facilitate truck turning.

2.6 Traffic Control Inventory

An inventory of existing traffic control that can cause traffic delays were inventoried to assist in developing a traffic model for the City. Traffic control that typically can lead to delays, particularly during peak traffic periods, involve multiway stops and traffic signals as discussed below.

2.6.1 Signals

The City of Bowling Green at the time of this update (2007) for the Transportation Master Plan had a total of 28 signals in the City. The locations of these signals are displayed on Figure 2.11 as small traffic signal symbols. In addition to the existing signals, there are nine (9) locations where potential future signals could be located when they are found to meet applicable signal warrants, and they are represented by a different signal symbol.

A review of the signal locations revealed that only 3 of the 28 signals are located on non-state route designated roadways. The remaining 25 signals include 15 on State Route 25 (Main St.) and 10 on SR 64 (Wooster St./Haskins Rd.). The presence of so many signals on the two primary arterials through the City emphasizes the critical need for optimal coordination/progression so as to maximize the capacity of the roadways. Studies have shown that improved signal coordination/progression can add anywhere from 15% to 30% capacity without widening any roadways. It is therefore recommended that the City of Bowling Green conduct a citywide signal system study to determine signal upgrade needs for all traffic signals to develop a coordinated signal system to take advantages of improved technologies that will improve signal operations, signal visibility, vehicular detection, and signal communications.
Figure 2.8
Existing 2007 Traffic
(24-Hour Volumes)

Legend

- School
- River/Stream
- Slippery Elm Bike Trail
- Rail Road
- Corp Limits

Traffic Volumes (ADT)

- 2000 or Less
- 2001 - 4000
- 4001 - 6000
- 6001 - 8000
- 8001 - 12000
- 12001 - 16000
- 16001 - 20000
- 20001 - 24000
- 24001 or Greater
- Low Volume or Not Counted

Notes
Project # BOWC3A  February 2007
BOWC3A.Traffic.mxd

1" = 3,000'

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Fax: (419) 891-2222
Civil Engineering, Surveying and Environmental Consulting
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Traffic Volumes (ADT)

- 2000 or Less
- 2001 - 4000
- 4001 - 6000
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- 8001 - 12000
- 12001 - 16000
- 16001 - 20000
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Notes
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MAUMEE   CLEVELAND   MONROE   CANTON
Future truck routes would access new interchange. (Which could be Newton, Nims or somewhere between.)
2.6.2 Multiway Stops

A total of 20 multiway stops were inventoried in the City as shown on Figure 2.11 by the stop sign symbols. Multiway stops should not be installed simply as a means of slowing traffic on a roadway. Multiway stops are typically used where volumes on the intersecting roads is approximately equal. The guidelines outlined in Section 2B.07 of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) should be followed in deciding on the installment of a multiway stop.

2.7 Traffic Model

A traffic model was developed to analyze traffic at key intersections within the City. The model was developed for both AM and PM peak traffic conditions using the Synchro traffic simulation software package. A total of 22 intersections were counted for the Transportation Master Plan for developing the traffic model. The model was used to document traffic operations in both 2007 and 2027 and to assist in developing intersection lane needs and to test the impacts that proposed improvements at the intersections would provide. The outputs of the model provide the necessary data required for several funding sources to construct projects to improve traffic flow.

One output of the model is the Level of Service (LOS) of traffic movements at an intersection, which are based on the delay (in seconds) a vehicle experiences in waiting to move through an intersection. The LOS is similar to a grade card in that the values range from “A to F”. The LOS A represents minor delays, whereas a LOS F represents large delays and is basically gridlock traffic at peak periods. Typically a LOS A, B, or C is considered acceptable; a LOS D or E starts to experience moderate delays and congestion during peak periods; and the LOS F is representative of serious delays and major congestion.

2.7.1 Traffic Operations in 2007

The traffic model for 2007 reveals that various intersections studied around the City contain moderate delays and congestion during peak traffic periods as shown on Figure 2.12. The majority of delays are found on SR 25 (Main St.) and SR 64 (Wooster St.) as these are the two heaviest traveled corridors in the City. The intersections between Poe and Newton were not studied given this section of roadway is in detailed analyses and design for widening the project in 2009/2010. The obvious delays along these two corridors indicate a need to conduct a signal system study to determine if upgraded signals, timing/phasing, progression, and coordination would improve these operations.

2.7.2 Traffic Operations in 2027

In the year 2027, as shown on Figure 2.13, additional locations experience moderate delays (indicated by yellow symbols) as well as serious delays (indicated by red symbols). Despite the recent widening improvements to E. Wooster St. by 2027 there are once again serious delays as traffic is anticipated to reach over 30,000 in some locations. This supports the need to develop a second interchange north of Poe Rd. to provide a second access for BGSU commuters as well as residents living in the northern half of the City. There are also some unsignalized intersections with delays that could possibly be corrected by a traffic signal or roundabout. The southern gateway into the City on SR 25 from US 6 also indicates capacity constraints in 2027. This supports the need to begin planning for a possible southwestern interchange to as to provide a second access into the City. One such potential location is the US 6 and Mitchell/Sand Ridge intersection.
Figure 2.11
Existing Signal and All-Way Stop Locations and Potential Signal Locations

Legend
- School
- River/Streams
- Slippery Elm Bike Trail
- Rail Road
- Corp Limits
- Study Area
- Existing Signal
- Potential Signal
- (or All Way Stop if Signal not Warranted)
- Existing All-Way Stop

Unwarranted Signal Removal Recommended

Notes
Project # BOWCJA January 2007
BOWCJA.Signals.mxd
2007 AM & PM Levels of Service (LOS)

Legend
- School
- River/Stream
- Slippery Elm Bike Trail
- Rail Road
- Corp Limits

Signalized Intersections
- All Movements LOS C or Better
- Some Movements LOS D & E
- Some Movements LOS F

Unsignalized Intersections
- All Movements LOS C or Better
- Some Movements LOS D & E
- Some Movements LOS F

Note:
Left half of circle or square indicates the AM LOS & right half is the PM LOS

Figure 2.12

Unsignalized Intersections

Note:
Left half of circle or square indicates the AM LOS & right half is the PM LOS

Legend
- School
- River/Stream
- Slippery Elm Bike Trail
- Rail Road
- Corp Limits

Signalized Intersections
- All Movements LOS C or Better
- Some Movements LOS D & E
- Some Movements LOS F

Unsignalized Intersections
- All Movements LOS C or Better
- Some Movements LOS D & E
- Some Movements LOS F

Note:
Left half of circle or square indicates the AM LOS & right half is the PM LOS
Figure 2.13
2027 AM & PM
Levels of Service (LOS)

Legend

- School
- River/Stream
- Slippery Elm Bike Trail
- Rail Road
- Corp Limits

Signalized Intersections

- All Movements LOS C or Better
- Some Movements LOS D & E
- Some Movements LOS F

Unsignalized Intersections

- All Movements LOS C or Better
- Some Movements LOS D & E
- Some Movements LOS F

Note:
Left half of circle or square indicates the AM LOS & right half is the PM LOS

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Notes
Project # BOWC3A
July 2007
BOWC3A.LOS.mxd
1" = 2,500'
2.7.3 Summary of Capacity Constraint Locations

The traffic model indicates there are currently delay and congestion problems on SR 25 (Main St.) as well as on portions of SR 64 (Wooster St.) during peak traffic periods. It is recommended that a citywide signal system upgrade study be conducted to determine needed signal improvements to provide a more efficient system. In addition, several widening projects and intersection improvements are recommended as outlined in Table 3.1. These projects would improve operations at specific locations throughout the City and assist in dispersing traffic to other roadways.

2.8 Pedestrian & Bicycle Facilities

The City of Bowling Green is a community in which parks and recreation are very important to the residents as documented by surveys that have been conducted by the Parks and Recreation Department. A survey indicated that the second highest need in the City regarding parks and recreational activities is Paved Walking/Biking Trails (which was second only to Social and Cultural Programs). The Master Plan of the Parks and Recreation Department has developed a long-range plan of projects and the Top Priority of projects to pursue is Recreational Trails.

In developing recommendations in the Transportation Master Plan for pedestrian/bicycle facilities a meeting was held with the director of the Parks and Recreation Department for input on community preferences and key destinations to provide facilities that connect them.

2.8.1 Types of Pedestrian/Bicycle Facilities

The types of bicycle facilities fall into two broad categories which are either Roadway-Based Bicycle Facilities or Independent Bicycle Facilities. The different types of bicycle facilities of each category are briefly discussed below:

Roadway-Based Bicycle Facilities

1. Shared Roadways – Approximately 98% of Ohio’s streets and roads are shared roadways. The roadways that prohibit bicycles and pedestrians from using them are typically interstates and limited access or controlled access freeways. Sometimes shared roadways that are frequently used by bicyclists may have bicycle route signs posted or share the roadway signs.

2. Signed Bike Routes – A signed, shared roadway (also called a bike route), is the same as a shared roadway with the addition of bicycle route signs posted alongside it.

3. Wide Curb Lanes – These facilities perform well as shared roadways given motorists can pass bicyclists while not crossing the center line, and bicyclists travel unimpeded. The width of wide curb lanes varies from place to place. Often the wide curb lanes are marked with an edge line to indicate to motorists where they are to travel in the wide lane, and this somewhat provides an unofficial bike lane as it leaves the outside portion of the lane for bikes.

4. Bike Lanes – Bike lane pavement markings are required when Bike Lane signs are used. Signs and symbols can be found in Chapter 9 of the OUMTC. Typically a width of 4’ is desired for roadways with no curb & gutter and a width of 5’ is needed for those with curb & gutter.
5. **Paved Shoulders** – Paved shoulders are built as part of the roadway rather than to provide a place for bicyclists to ride, although they perform that function well. There is no need to mark bike lanes on these shoulders.

6. **Shoulder Bike Lanes** – Shoulders of 4’ to 6’ in width are typical and these facilities are not much different than paved shoulders. These facilities have characteristics of both paved shoulders and bike lanes. The pavement buildup is the same as for a roadway shoulder, and a pavement stripe separates it from motorized traffic lanes.

**Independent Bicycle Facilities**

1. **Shared Use Paths on New Alignments** – This is a path that follows a stream, river, property line, sewer line, or crosses open fields on new alignment. New alignments are the most costly type of shared use paths given more environmental and survey work, design decisions, and construction materials are needed.

2. **Rail-Trails** – These are built on well-graded base materials originally put into place for tracks and ties and railroad operation. The right-of-way is typically wide enough to construct a two-way shared use path. The railroad alignment is not dependent upon roadways, thus, railroads go through fields and forests and can provide an aesthetic experience to the user.

3. **Rails-with-Trails** – This is a shared use path developed parallel to an active railroad track. The railroad safety officials have concerns on these types of facilities involving trespassing and liability issues, which limits the number of these types of facilities.

4. **Sidepaths** – These are built parallel to roadways in the usual location for sidewalks, but differ from sidewalks in that they are 10’ wide, designed for shared use, and require a barrier of 5’ or greater separation from the roadway. These facilities are often called “Sidepaths” because often local laws prohibit bicycles on “Sidewalks”.

A combination of these types of facilities is likely to be incorporated into the recommended corridors of pedestrian/bicycle facilities displayed on Figure 2.14. All future roadway design projects should incorporate bicycle and pedestrian facilities into their design where feasible. Funding sources such as transportation enhancements and other programs should be considered to obtain additional money to implement these facilities.

**2.8.2 Pedestrian/Bicycle Destinations**

The primary pedestrian/bicycle destinations are displayed on Figure 2.14 as green numbered circles. These destinations were determined based on information supplied by the Parks and Recreation Department, input from the City and Oversight Committee, review of the land use plan, and through site visits. The pedestrian/bicycle corridors were developed such as to connect these facilities and were based on accessibility, directness, continuity within the City, connecting to regionally planned corridors by TMACOG, route attractiveness, minimizing conflicts with vehicles, costs, and ease of implementing.
2.8.3 Pedestrian/Bicycle Facility Recommendations

It is recommended that the City adopt a policy that requires all new or re-construction roadway projects to consider providing pedestrian/bicycle facilities as part of the project, especially if the roadway is on one of the corridors recommended on Figure 2.14. Any proposed private developments or re-developments along these corridors should also at minimum be required to set aside right-of-way or an easement for these facilities or be required to construct a facility.

Various funding sources should be pursued in developing these corridors. The Share Use Paths on New Alignments are the highest quality and safest option, however these types of facilities are costly given they typically require additional right-of-way and involve new construction as new alignment has no existing base to utilize. Sources such as Transportation Enhancements, Safe Routes to Schools, or public-private partnerships should all be explored in developing the facilities.

All bike routes, trail crossings, and pedestrian crossings on the roadways should have improved signing such as the fluorescent green-yellow warning signs as well as improved pavement markings for crossings and bike lanes. Any bicycle routes that are recommended on roadways within the City should also consider the feasibility of eliminating parking on these routes, particularly if the majority of houses have driveways and businesses have off-street parking. This would greatly increase the visibility of bicycles and pedestrians on these designated routes through the City.

Community Priority
One identified community priority of the pedestrian/bicycle facilities shown on Figure 2.14 is developing the corridor that connects destinations (City Park), (BG Community Center), and (Fairgrounds Area). This priority has been identified by surveys conducted by the Parks and Recreation Department and also by Community Leaders. Given this, the corridor has been listed on Figure 3.1 (Future Improvements). The remaining corridors listed on Figure 2.14 have no set priority and should be implemented as opportunities present themselves through the various funding sources mentioned and as roadway and site development projects occur.

2.9 Parking

The primary concerns involving parking entail the downtown area of Bowling Green where there is a great deal of competing land uses for parking such as retail businesses, apartments, eating/drinking establishments, banking and other services, and public business. The recent update of the City of Bowling Green’s Downtown Plan offers details on the existing conditions of parking in and around the downtown area.

Given the numerous issues involving parking in the downtown area, it is recommended that the City conduct a comprehensive parking facilities study to determine the ideal utilization of existing parking facilities and if there is a need for additional parking facilities.

Also, as mentioned previously, consideration should be given to removing on-street parking on those streets where bicycle routes have been designated, especially if off-street parking is available. This would increase bicycle safety, and possibly allow for a bike lane to be striped on the roadway.
Figure 2.14
Pedestrian/Bicycle Facilities and Destinations

1. City Park
2. Garden Park
3. Conneaut/Haskins Park
4. Wintergarden/St. John's Nature Preserve
5. Carter Park
6. Dunbridge Rd. Soccer Fields
7. BG Community Center
8. Fairgrounds Area
9. BG High School
10. Woodland Mall
11. West BGSU Campus
12. East BGSU Campus
13. East Retail & Business Parks
14. Downtown Area
15. Slippery Elm Trail head
16. South Retail Area
17. Numerous Apartments/Student Housing
18. Wood County Complex
19. Apartments/Municipal Court Area
20. Route to East
21. Route to North
22. Route to West
23. Route to Weston
24. Route to South (Slippery Elm)

Legend
- School
- River/Streams
- Slippery Elm Bike Trail
- Corp Limits
- Recommended Multi-use Path or Shared Lane or Signing
- Future Multi-use Path or Shared Lane or Signing
- Alternate Multi-Use Path or Shared Lane or Signing
- Downtown Bicycle Circle Route
2.10 Public Transportation

Interest in public transportation has increased in recent years with the large rising costs of gasoline. The City of Bowling Green currently has one public transportation service and one semi-public service operating within the City. The one system is a demand-based taxi service available to the general public, and the other is the BGSU Shuttle Services which provide service to students for on-campus and off-campus destinations.

2.10.1 Demand-Based Taxi Services

The demand-based taxi service in Bowling Green is named B.G. Transit. This service is funded through various funding programs as well as through user fees. In fiscal year 2007 the funding was nearly $500,000 as shown in Table 2.4.

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Federal Government Grant (through FTA)</td>
<td>$276,106</td>
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<tr>
<td>State Government Grant (through ODOT)</td>
<td>$87,479</td>
</tr>
<tr>
<td>Elderly/Disabled Grant</td>
<td>$43,948</td>
</tr>
<tr>
<td>CDBG Funds</td>
<td>$50,000</td>
</tr>
<tr>
<td>Bowling Green City General Funds</td>
<td>$37,918</td>
</tr>
<tr>
<td><strong>TOTAL (Non-User Fee Sources)</strong></td>
<td><strong>$495,451</strong></td>
</tr>
<tr>
<td>Anticipated Revenues from User Fees</td>
<td>$70,000 - $80,000</td>
</tr>
<tr>
<td>(Regular Rider Fee is $3.50)</td>
<td></td>
</tr>
<tr>
<td>(Elderly, Disabled, &amp; Children 4-13 Fee is $1.75)</td>
<td></td>
</tr>
</tbody>
</table>

A majority of the grant funding received by BG Transit requires the taxi service to remain a demand-based service and not to go to fixed routes. If the service were to go to fixed routes they would be required to provide paratransit routes and buses which would greatly increase operating costs. BG Transit currently has a total of 7 vehicles (all vans) that are all ADA compliant, with two of them having wheelchair lifts and the remaining have ramps. The long range plans are to maintain current services being provided to the community.

2.10.2 Bowling Green State University (BGSU) Shuttle Services

The current goal of the BGSU Shuttle Services is to maintain current operations with no plans for future expansion of services. These services are funded 100% through BGSU revenue sources. The shuttles are used regularly by students for both the on-campus and off-campus routes. The BGSU shuttle service has a total of 7 buses that provide four primary routes that operate as fixed routes with fixed operating time frames. The routes offer a bus every 10 to 20 minutes during the time frame of operation.

2.10.3 Public Transportation Recommendations

It is recommended the current transportation services being offered in Bowling Green maintain their current operations. The two services should remain separate as they service two different types of riders and needs. The combining of the two services would require fixed routes which would greatly reduce the funding currently obtained by B.G. Transit and also require offering paratransit routes and buses thereby increasing costs to provide services.
2.11 Airports

A mode of transportation not often considered by a community in development of a transportation master plan is air transport, primarily due to the fact that most airports are located outside of communities where open space is readily available. The City of Bowling Green has the benefit of having the Wood County Regional Airport in the northeastern fringe of the community adjacent to the BGSU campus and the corporation limits of the City. Given this, it was necessary to include discussion of air transport in the plan.

2.11.1 Wood County Regional Airport

The Wood County Regional Airport Master Plan (2006) was utilized to assess future plans for airport operations. The airport is constrained by four roadway facilities including I-75 (eastern constraint); N. College Rd. (western constraint); Poe Rd. (southern constraint); and Newton Rd. (northern constraint). All of these constraints limit the expansion of the runways to an ultimate length of 7,760’ needed to serve large airplanes. The maximum length that can be reached at the Wood County Regional Airport is 5,245’ for the east-west runway, which is the main runway.

The recommendations of the airport master plan involve improving the east-west runway by expanding it to the west by 1,265’ to reach a total length of 5,245’ and widening the runway by 25’ to reach a width of 100’. In addition, the airport plan documented a need to increase hanger storage since there is a waiting list for hangar space at the airport. Finally, in 2005 a new terminal/administration building (3,000 SF) was opened at the airport and is forecasted to be adequate through the next 20 years.

2.11.2 Bordner Airstrip

This airstrip is located near the intersection of Hodgman and Wingston Roads, which is approximately four miles southwest of downtown Bowling Green. The airstrip is privately owned and consists of hangers, plane tie-downs, and one runway (designated 09-27) which is 2,703’ in length and 30’ wide. The runway is constructed of a 1,000’ asphalt concrete middle section with tar-and-chip and turf runway extensions. The runway is illuminated at night with low intensity runway lights. Aviation fuel is not available at the airstrip. The short length and narrow width of the runway allows only small general aviation aircraft to access the airstrip. These conditions dictate that the future of the airstrip is to maintain operations for only small general aircraft.

2.11.3 Airport Facility Recommendations

The proposed recommendations of expanding the east-west runway at the Wood County Regional Airport to a final length of 5,245’ by 100’ wide would provide a facility that can support larger airplanes than those currently serviced. The expansion of hanger space is also recommended based on the current waiting list for such space. These improvements would provide an airport facility that would be attractive to local businesses/industries that have corporate aircraft, and would thus be an incentive to include in promoting the Bowling Green area to prospective developments.
3.0 TRANSPORTATION MASTER PLAN RECOMMENDATIONS & IMPLEMENTATION

The conclusion of the Transportation Master Plan involves detailing the recommended improvements as developed from research, analyses, and local input throughout this Transportation Master Plan. The recommendations are presented graphically through use of Table 3.1 as well as Figure 3.1 to facilitate review by the audience and to provide a quick reference of future improvements recommended over the next 20 years. Recommended improvements were placed into one of six categories depending on the nature of the improvement. These six categories include:

- Infrastructure Management
- Pedestrian Improvements
- Improvement Studies
- Intersection Improvements
- Existing Roadway Section Improvements
- New Roadway Section Improvements

The first column of Table 3.1 called "Map Key #" is used to identify the improvement location on Figure 3.1. Not all of the improvements listed in the first three categories are shown on the figure since several of them are more policy or citywide recommendations and would be difficult to represent on a map.

3.1 Recommended Transportation Improvements and Priorities

The recommended improvements were developed based on a review of existing conditions and analyses as well as projected conditions based on future land uses and current trends. The initial list of recommendations was reviewed by the City and Oversight Committee and weighted scores were developed to create an initial priority listing within each category of projects. This initial priority list was then evaluated based on existing conditions and projected needs. Minor revisions to the initial priority list based on the weighted scores were made based on results of the analyses. The list of improvements was then presented to the general public at a public meeting held on Monday July 30, 2007 from 4:00 to 7:00 PM. The final listing of improvements in Table 3.1 has projects listed in the order of priority within each category. For example, in the Recommended Improvement Studies category, S1 (Citywide Signal System Study) is the highest priority study project and in the Recommended Intersection Improvements category, I1 (S. Main & Gypsy) is the highest priority intersection project. It should be noted that locations within the SR 25 (N. Main St.) section from Poe Rd. north to Newton Rd. were not evaluated individually since this is section is a programmed project anticipated for construction in 2010 and was in detailed engineering design at the time of this master plan update. The entire programmed project is listed as a top priority project.

3.2 Implementation & Funding Strategies

In addition to the listing of projects in Table 3.1 and their priorities, there is also information on an estimated timeframe range, a preliminary planning cost estimate (in 2007 dollars), and an implementation strategy and potential funding sources for each project. The timeframe range listed is a combination of considering both the priority as well as the ease of implementing a project. For example, the construction of a new northern interchange with I-75 is a rather high priority in the New Roadway Section Improvements category which likely makes it a short range need, but given the large planning efforts to accomplish this project it is more realistically a long range timeframe. The timeframe categories listed include Current (1-2 years); Short (3-5 years); Medium (6-10 years); and Long (10-20 years). The table also lists a brief implementation strategy and lists potential funding sources to explore.
Table 3.1

<table>
<thead>
<tr>
<th>Project Listings and Implementation Strategies</th>
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<tbody>
<tr>
<td>Map Key #</td>
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<tr>
<td>----------</td>
</tr>
<tr>
<td>N/A</td>
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<td>P1</td>
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<td>N/A</td>
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<td>S9</td>
</tr>
</tbody>
</table>
Table 3.1

<table>
<thead>
<tr>
<th>Map Key #</th>
<th>Project Facility</th>
<th>Project Description</th>
<th>Project Limits</th>
<th>Timeframe</th>
<th>Preliminary Planning Constr. Cost Estimate</th>
<th>Implementation Strategy and Potential Funding Sources</th>
<th>Focus Group Weighted Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>I2</td>
<td>SR 25 (S. Main &amp; Napoleon)</td>
<td>Add northbound right turn lane and improve turn radius, also improve signal timing/phasing &amp; detection. Add southbound left turn if feasible.</td>
<td>Intersection</td>
<td>Short</td>
<td>$300K - $350K</td>
<td>Investigate potential safety funding for project with ODOT D2 and also CMAQ funds with TMACOG. This could possibly be part of a project identified through a citywide signal system study.</td>
<td>3.25</td>
</tr>
<tr>
<td>I3</td>
<td>SR 64 (E. Wooster &amp; Prospect)</td>
<td>Signal timing/phasing improvements and signing.</td>
<td>Intersection</td>
<td>Current</td>
<td>$1K - $2K</td>
<td>Minimal project that could be part of a signal system project, or paid for through City funds.</td>
<td>3.38</td>
</tr>
<tr>
<td>I4</td>
<td>SR 64 (W. Wooster &amp; Haskins)</td>
<td>Signalize intersection if meets warrant, add eastbound left turn lane if feasible, and improve signage.</td>
<td>Intersection</td>
<td>Current</td>
<td>$250K - $350K</td>
<td>Investigate potential safety funding for project with ODOT D2 and also CMAQ funds with TMACOG. This could possibly be part of a project identified through a citywide signal system study.</td>
<td>3.00</td>
</tr>
<tr>
<td>I5</td>
<td>Sand Ridge (New Alignment)</td>
<td>Construct new roadway (Re-align existing roadway)</td>
<td>Wintergarden to Gypsy</td>
<td>Medium</td>
<td>$150K - $200K</td>
<td>Coordinate with County and determine if a sharing of costs for the project is possible since it is both in the City and the County.</td>
<td>3.14</td>
</tr>
<tr>
<td>I6</td>
<td>SR 25 (S. Main &amp; Washington)</td>
<td>Signal timing/phasing improvements &amp; signing improvements.</td>
<td>Intersection</td>
<td>Current</td>
<td>$1K - $2K</td>
<td>Investigate potential safety funding for project with ODOT D2 and also CMAQ funds with TMACOG. This could possibly be part of a project identified through a citywide signal system study.</td>
<td>3.13</td>
</tr>
<tr>
<td>I7</td>
<td>SR 25 (N. Main &amp; Poe)</td>
<td>Determine feasibility of a roundabout to improve intersection operations and reduce crashes via reducing congestion.</td>
<td>SR 25 (N. Main &amp; Poe) Intersection and Approaches</td>
<td>Short</td>
<td>Include in programmed N. Main (SR25) Widening Project</td>
<td>Although this intersection is part of the N. Main St. widening project, the feasibility of a roundabout should be explored. Safety funds or CMAQ funds may be potential sources, or have it included as part of the SR 25 project.</td>
<td>2.75</td>
</tr>
<tr>
<td>I8</td>
<td>SR 64 (Haskins &amp; W. Poe)</td>
<td>Construct modern roundabout if feasible. If not, then construct left turn lanes on Haskins, right turn lanes for all approaches, and improve the signal &amp; signage.</td>
<td>Intersection</td>
<td>Medium</td>
<td>$600K - $800K</td>
<td>Potential funding may be available through CMAQ funds. Otherwise the project should be added to the City’s capital improvements list.</td>
<td>2.75</td>
</tr>
<tr>
<td>I9</td>
<td>W. Poe &amp; Fairview</td>
<td>Improve signal timing/phasing and signage.</td>
<td>Intersection</td>
<td>Medium</td>
<td>$1K - $2K</td>
<td>Minimal project that could be part of a signal system project, or paid for through City funds.</td>
<td>2.75</td>
</tr>
<tr>
<td>I10</td>
<td>SR 25 (N. Main &amp; Bishop)</td>
<td>Add turn lanes to intersection and improve sight distance limited by the fencing on the northwest corner of intersection.</td>
<td>SR 25 (N. Main) &amp; Bishop Intersection Approaches</td>
<td>Current</td>
<td>$350K - $400K</td>
<td>Project is outside the City, but both ODOT and County should be contacted to be made aware of a potential project need.</td>
<td>2.63</td>
</tr>
<tr>
<td>I11</td>
<td>SR 105 (E. Wooster &amp; Dunbridge)</td>
<td>Add right turn lanes for the southbound, eastbound, &amp; northbound approaches, and update signal timing/phasing.</td>
<td>Intersection</td>
<td>Short</td>
<td>$300K - $430K</td>
<td>Investigate potential safety funding for project with ODOT D2 and also CMAQ funds with TMACOG. This could possibly be part of a project identified through a citywide signal system study.</td>
<td>2.50</td>
</tr>
<tr>
<td>I12</td>
<td>E. Poe &amp; Dunbridge</td>
<td>Signalize intersection if meets warrant, and provide additional turn lanes where feasible given turn volumes and consideration of the large ditch along south side of roadway. Provide sign improvements at the intersection and for the approaches to the intersection.</td>
<td>Intersection</td>
<td>Medium</td>
<td>$500K - $550K ($150K if signal only)</td>
<td>Coordinate with County and determine if a sharing of costs for the project is possible since it is both in the City and the County.</td>
<td>2.63</td>
</tr>
<tr>
<td>I13</td>
<td>Conneaut &amp; Wintergarden</td>
<td>Consider feasibility of a roundabout and in the interim, look at reversing the stop signs to the minor movement approaches. Provide sign improvements at the intersection and for the approaches to the intersection.</td>
<td>Intersection</td>
<td>Medium</td>
<td>$120K - $150K</td>
<td>Determine feasibility of a roundabout. Likely funding source would be the City's capital improvements list.</td>
<td>2.38</td>
</tr>
<tr>
<td>I14</td>
<td>SR 64 (Haskins &amp; Conneaut)</td>
<td>Signalize intersection if meets warrant (possible school warrant), improve southbound right turn radius, and improve signage, particularly for school crossing.</td>
<td>Intersection</td>
<td>Medium</td>
<td>$140K - $150K</td>
<td>Safe Routes to School funding should be considered to improve the intersection as these are 100% funding sources.</td>
<td>2.25</td>
</tr>
<tr>
<td>I15</td>
<td>Dunbridge &amp; Napoleon</td>
<td>Signalize intersection if meets warrant, and provide left turn lanes to all approaches.</td>
<td>Intersection</td>
<td>Current</td>
<td>$600K - $800K</td>
<td>Coordinate with County and determine if a sharing of costs for the project is possible since it is both in the City and the County.</td>
<td>1.75</td>
</tr>
<tr>
<td>I16</td>
<td>SR 64 (Haskins &amp; Newton)</td>
<td>Construct southbound left turn lane, and re-construct additional turn lanes when extension to Mitchell occurs.</td>
<td>Intersection</td>
<td>Medium</td>
<td>$150K - $200K</td>
<td>Coordinate with County and determine if a sharing of costs for the project is possible since it is both in the City and the County.</td>
<td>1.88</td>
</tr>
<tr>
<td>I17</td>
<td>Clough &amp; Crim</td>
<td>Provide sign improvements at the intersection and for the approaches to the intersection.</td>
<td>Intersection</td>
<td>Current</td>
<td>Less Than $1K</td>
<td>Minimal improvement – City can implement at little cost.</td>
<td>1.63</td>
</tr>
<tr>
<td>I18</td>
<td>SR 25 (N. Main &amp; Clay)</td>
<td>Construct a right-in/right-out only curb island and improve signage to restrict left turns at this intersection or make Clay St. one-way to the west.</td>
<td>Clay St. Approach to N. Main</td>
<td>Current</td>
<td>$1K - $3K</td>
<td>Minimal improvement – City can implement at little cost.</td>
<td>1.25</td>
</tr>
</tbody>
</table>

Recommended Existing Roadway Section Improvements

<p>| R1        | SR 25 (N. Main) | Programmed Project – Widening of N. Main | Poe to Newton | Current | Programmed Project | Programmed Project | 4.63 |</p>
<table>
<thead>
<tr>
<th>Map Key #</th>
<th>Project Facility</th>
<th>Project Description</th>
<th>Project Limits</th>
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<th>Implementation Strategy and Potential Funding Sources</th>
<th>Focus Group Weighted Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
<td>W. Poe</td>
<td>Widen roadway to provide a center two-way left turn lane and additional turn lanes at intersections for key movements. Incorporate access management to private drives and intersections within the corridor.</td>
<td>SR 64 (Haskins) to Lafayette</td>
<td>Current</td>
<td>Programmed Project</td>
<td>Programmed Project</td>
<td>3.38</td>
</tr>
<tr>
<td>R3</td>
<td>SR 25 (N. Main)</td>
<td>Improve signing and signal progression between Poe &amp; Downtown, incorporate access management to private drives and intersections within the corridor.</td>
<td>Wooster to Poe</td>
<td>Short</td>
<td>Costs &amp; specific improvements would be determined in the Safety Study &amp; Citywide Signal Study</td>
<td>Investigate potential safety funding for project with ODOT D2 and also CMAQ funds with TMACOG. A safety study would document detailed crash problems and specific improvements.</td>
<td>3.71</td>
</tr>
<tr>
<td>R4</td>
<td>SR 25 (S. Main)</td>
<td>Improve signing and signal progression between Wooster &amp; US 6. Incorporate access management to private drives and intersections within the corridor.</td>
<td>US 6 to Wooster</td>
<td>Short</td>
<td>Costs &amp; specific improvements would be determined in the Safety Study &amp; Citywide Signal Study</td>
<td>Investigate potential safety funding for project with ODOT D2 and also CMAQ funds with TMACOG. A safety study would document detailed crash problems and specific improvements.</td>
<td>3.14</td>
</tr>
<tr>
<td>R5</td>
<td>SR 64 (E. Wooster)</td>
<td>Widen roadway and/or remove parking to obtain a consistent center two-way left turn lane, improve intersections with turn lanes where feasible, improve signal progression, and provide improved signing. Incorporate access management to private drives and intersections within the corridor.</td>
<td>Prospect to RR Crossing</td>
<td>Short</td>
<td>$90K - $110K</td>
<td>Investigate potential safety funding for project with ODOT D2 and also CMAQ funds with TMACOG. A safety study would document detailed crash problems and specific improvements and a citywide signal study could provide potential projects for improving progression.</td>
<td>3.13</td>
</tr>
<tr>
<td>R6</td>
<td>E. Poe</td>
<td>Widen roadway to provide a center two-way left turn lane and additional turn lanes at intersections for key movements. Incorporate access management to private drives and intersections within the corridor.</td>
<td>N. College to Mercer</td>
<td>Long</td>
<td>$550K - $600K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP, otherwise the project is likely a City capital improvements project.</td>
<td>3.14</td>
</tr>
<tr>
<td>R7</td>
<td>W. Poe</td>
<td>Widen roadway to provide a center two-way left turn lane and additional turn lanes at intersections for key movements. Incorporate access management to private drives and intersections within the corridor.</td>
<td>N. Main to SR 64 (Haskins)</td>
<td>Medium</td>
<td>$450K - $510K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP, otherwise the project is likely a City capital improvements project.</td>
<td>3.00</td>
</tr>
<tr>
<td>R8</td>
<td>SR 64 (Haskins)</td>
<td>Improve with resurfacing (as needed), signing, and pavement markings. Improve pedestrian crossings for school and any other pedestrian/bicycle crossings.</td>
<td>Wooster to Poe</td>
<td>Medium</td>
<td>Include signing &amp; pedestrian crossings into Resurfacing Program for project</td>
<td>Project is likely to simply be part of City's resurfacing program.</td>
<td>3.00</td>
</tr>
<tr>
<td>R9</td>
<td>W. Poe</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections.</td>
<td>Lafayette to Mitchell</td>
<td>Long</td>
<td>$270K - $320K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP, otherwise the project is likely a City capital improvements project.</td>
<td>2.88</td>
</tr>
<tr>
<td>R10</td>
<td>Brim</td>
<td>Improve with resurfacing (as needed), signing, and pavement markings. Improve pedestrian crossings for fairgrounds and any other pedestrian/bicycle crossings.</td>
<td>Poe to Jefferson</td>
<td>Medium</td>
<td>Include signing &amp; pedestrian crossings into Resurfacing Program for project</td>
<td>Project is likely to simply be part of City's resurfacing program.</td>
<td>2.88</td>
</tr>
<tr>
<td>R11</td>
<td>SR 64 (W. Wooster)</td>
<td>Widen roadway and/or remove parking to obtain a consistent center two-way left turn lane, improve intersections with turn lanes where feasible, improve signal progression, and provide improved signing. Incorporate access management to private drives and intersections within the corridor.</td>
<td>Main to Haskins</td>
<td>Medium</td>
<td>$360K - $400K</td>
<td>Investigate potential safety funding for project with ODOT D2 and also CMAQ funds with TMACOG. A safety study would document detailed crash problems and specific improvements and a citywide signal study could provide potential projects for improving progression.</td>
<td>2.63</td>
</tr>
<tr>
<td>R12</td>
<td>Mercer</td>
<td>Widen roadway, improve intersections &amp; approaches, improve signing &amp; pedestrian crossings on corridor. Incorporate access management to private drives and intersections within the corridor.</td>
<td>SR 64 (E. Wooster) to Poe</td>
<td>Long</td>
<td>$950K - $1,000K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore partnership with BGSU to fund project, otherwise the project is likely a City capital improvements project.</td>
<td>2.60</td>
</tr>
<tr>
<td>R13</td>
<td>SR 64 (Haskins)</td>
<td>Improve with resurfacing (as needed), signing, and pavement markings. Improve pedestrian crossings for fairgrounds and any other pedestrian/bicycle crossings.</td>
<td>Poe to Newton</td>
<td>Long</td>
<td>Include signing &amp; pedestrian crossings into Resurfacing Program for project</td>
<td>Coordinate with ODOT and County as this project is partially in the City and in the County on a State Route.</td>
<td>2.75</td>
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<tr>
<td>Map Key #</td>
<td>Project Facility</td>
<td>Project Description</td>
<td>Project Limits</td>
<td>Timeframe Range</td>
<td>Preliminary Planning Constr. Cost Estimate</td>
<td>Implementation Strategy and Potential Funding Sources</td>
<td>Focus Group Weighted Rating</td>
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</tr>
<tr>
<td>R14</td>
<td>Brim</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections.</td>
<td>Jefferson to Newton</td>
<td>Long</td>
<td>$400K - $500K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP; otherwise the project is likely a City capital improvements project.</td>
<td>2.75</td>
</tr>
<tr>
<td>R15</td>
<td>Newton</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections. Improve any pedestrian/bicycle crossings.</td>
<td>SR 25 (N. Main) to N. College</td>
<td>Long</td>
<td>$290K - $340K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP; otherwise the project is likely a City capital improvements project.</td>
<td>2.63</td>
</tr>
<tr>
<td>R16</td>
<td>W Gypsy</td>
<td>Widen roadway to provide a center two-way left turn lane and additional turn lanes at intersections for key movements. Incorporate access management to private drives and intersections within the corridor.</td>
<td>SR 25 (S. Main) to Rudolph</td>
<td>Medium</td>
<td>$770K - $820K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project; otherwise the project is likely a City capital improvements project.</td>
<td>2.45</td>
</tr>
<tr>
<td>R17</td>
<td>E. Poe</td>
<td>Incorporate access management to private drives and intersections within the corridor, and improve signing.</td>
<td>N. Main to N. College</td>
<td>Short</td>
<td>Include signing &amp; access management into City's resurfacing program</td>
<td>Minimal improvement – City can implement at little cost.</td>
<td>2.29</td>
</tr>
<tr>
<td>R18</td>
<td>E. Poe</td>
<td>Widen roadway to provide a center two-way left turn lane and additional turn lanes at intersections for key movements. Incorporate access management to private drives and intersections within the corridor.</td>
<td>Mercer to Dunbridge</td>
<td>Long</td>
<td>$650K - $700K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore partnership with ODOT given the overpass of I-75; otherwise the project is likely a City capital improvements project.</td>
<td>2.25</td>
</tr>
<tr>
<td>R19</td>
<td>Bishop</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections.</td>
<td>SR 25 to Brim</td>
<td>Medium</td>
<td>$360K - $410K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the majority is within the County, otherwise the project is likely a City capital improvements project should the roadway become incorporated into the City.</td>
<td>2.63</td>
</tr>
<tr>
<td>R20</td>
<td>Rudolph</td>
<td>Improve with resurfacing (as needed), signing, and pavement markings. Improve any pedestrian/bicycle crossings.</td>
<td>Sand Ridge to US 6</td>
<td>Medium</td>
<td>Include signing &amp; pedestrian crossings into Resurfacing Program for project</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the majority is within the County, otherwise the project is likely a City capital improvements project should the roadway become incorporated into the City.</td>
<td>2.75</td>
</tr>
<tr>
<td>R21</td>
<td>Brim</td>
<td>Improve with resurfacing (as needed), signing, and pavement markings. Improve any pedestrian/bicycle crossings.</td>
<td>Newton to Bishop</td>
<td>Medium</td>
<td>Include signing &amp; pedestrian crossings into Resurfacing Program for project</td>
<td>Project is likely to simply be part of City's resurfacing program.</td>
<td>2.50</td>
</tr>
<tr>
<td>R22</td>
<td>Sand Ridge</td>
<td>Improve lane widths, shoulders, drainage, and signing.</td>
<td>W. Gypsy to SR 25 (S. Main)</td>
<td>Medium</td>
<td>$730K - $780K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP; otherwise the project is likely a City capital improvements project.</td>
<td>2.38</td>
</tr>
<tr>
<td>R23</td>
<td>E. Gypsy</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections. Incorporate access management to private drives and intersections within the corridor.</td>
<td>N. Main to Campbell Hill</td>
<td>Long</td>
<td>$660K - $710K</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the roadway is a mix of both City and County jurisdictions, otherwise the project is likely a City capital improvements project.</td>
<td>2.13</td>
</tr>
<tr>
<td>R24</td>
<td>Napoleon</td>
<td>Widen roadway to provide a center two-way left turn lane and additional turn lanes at intersections for key movements. Incorporate access management to private drives and intersections within the corridor.</td>
<td>Kenwood to Campbell Hill</td>
<td>Medium</td>
<td>$1.34 – $1.39 Million</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the roadway is a mix of both City and County jurisdictions, otherwise the project is likely a City capital improvements project.</td>
<td>2.13</td>
</tr>
<tr>
<td>R25</td>
<td>Campbell Hill</td>
<td>Improve with resurfacing (as needed), signing, and pavement markings. Improve any pedestrian/bicycle crossings.</td>
<td>Alumni to Napoleon</td>
<td>Medium</td>
<td>Include signing &amp; pedestrian crossings into Resurfacing Program for project</td>
<td>Project is likely to simply be part of City's resurfacing program.</td>
<td>2.25</td>
</tr>
<tr>
<td>R26</td>
<td>Merry</td>
<td>Re-open railroad crossing; improve with resurfacing and signing as needed; and improve any pedestrian/bicycle crossings.</td>
<td>Enterprise to Thurstin</td>
<td>Medium</td>
<td>$50K - $100K</td>
<td>Coordination with the railroads will be needed in re-opening a crossing. This project is likely a City capital improvements project.</td>
<td>2.38</td>
</tr>
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</table>
## Table 3.1
### Project Listings and Implementation Strategies

<table>
<thead>
<tr>
<th>Map Key #</th>
<th>Project Facility</th>
<th>Project Description</th>
<th>Project Limits</th>
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</tr>
</thead>
<tbody>
<tr>
<td>R27</td>
<td>Maple/Fairview/Conneaut</td>
<td>Provide roadway improvements to facilitate this north-south movement with either: back-to-back left turn lanes on Conneaut from Maple to Fairview, relocating Fairview to align with Maple, or utilizing small urban roundabouts.</td>
<td>Conneaut from Maple to Fairview</td>
<td>Long</td>
<td>$260K - $310K</td>
<td>Partial funding may be available though TMAOC if the project becomes listed on their TIP. The project is likely a City capital improvements project.</td>
<td>2.00</td>
</tr>
<tr>
<td>R28</td>
<td>Sand Ridge</td>
<td>Improve lane widths, shoulders, and signing. Provide left and right turn lanes at key intersections. Incorporate access management to private drives and intersections within the corridor.</td>
<td>US 6 to W. Gypsy</td>
<td>Medium</td>
<td>$400K - $450K</td>
<td>Partial funding may be available though TMAOC if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the roadway is a primarily a County jurisdiction.</td>
<td>1.88</td>
</tr>
<tr>
<td>R29</td>
<td>Bowling Green Rd. West</td>
<td>Widen roadway to provide a center two-way left turn lane and additional turn lanes at intersections for key movements. Incorporate access management to private drives and intersections within the corridor.</td>
<td>Mitchell to Wintergarden</td>
<td>Long</td>
<td>$720K - $770K</td>
<td>Partial funding may be available though TMAOC if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the roadway is a mix of both City and County jurisdictions, otherwise the project is likely a City capital improvements project.</td>
<td>1.88</td>
</tr>
<tr>
<td>R30</td>
<td>Gorill</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections.</td>
<td>Mitchell to Corporation Limits</td>
<td>Long</td>
<td>$110K - $150K</td>
<td>Project is likely to simply be part of City's capital improvements.</td>
<td>1.88</td>
</tr>
<tr>
<td>R31</td>
<td>Mitchell</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections.</td>
<td>Bowling Green Rd. West to W. Poe</td>
<td>Long</td>
<td>$510K - $560K</td>
<td>Partial funding may be available though TMAOC if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the roadway is a mix of both City and County jurisdictions, otherwise the project is likely a City capital improvements project.</td>
<td>1.88</td>
</tr>
<tr>
<td>R32</td>
<td>Newton</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections. Improve any pedestrian/bicycle crossings.</td>
<td>N. College to Mercer Extension</td>
<td>Long</td>
<td>Project would be included in the I/C Project funding</td>
<td>Project is dependent on the northern I-75 new interchange project, and funding would be tied to that obtained for the interchange.</td>
<td>2.00</td>
</tr>
<tr>
<td>R33</td>
<td>Newton/Nims/Barr</td>
<td>Depending on eventual location of a new interchange with I-75, major roadway improvements will be necessary for the roadways servicing the new interchange.</td>
<td>Vicinity Improvements for new I/C</td>
<td>Long</td>
<td>Project would be included in the I/C Project funding</td>
<td>Project is dependent on the northern I-75 new interchange project, and funding would be tied to that obtained for the interchange.</td>
<td>2.00</td>
</tr>
<tr>
<td>R34</td>
<td>Bowling Green Rd. West</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections.</td>
<td>US 6 to Mitchell</td>
<td>Long</td>
<td>$620K - $670K</td>
<td>Partial funding may be available though TMAOC if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the roadway is a mix of both City and County jurisdictions, otherwise the project is likely a City capital improvements project.</td>
<td>1.75</td>
</tr>
<tr>
<td>R35</td>
<td>Bishop</td>
<td>Improve with resurfacing (as needed), signing, and pavement markings. Improve any pedestrian/bicycle crossings.</td>
<td>Brim to SR 64</td>
<td>Long</td>
<td>Include signing &amp; pedestrian crossings into Resurfacing Program for project</td>
<td>Coordinate with ODOT and County</td>
<td>2.00</td>
</tr>
<tr>
<td>R36</td>
<td>Mitchell</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections.</td>
<td>Sand Ridge to Bowling Green Rd. West</td>
<td>Long</td>
<td>$620K - $670K</td>
<td>Coordinate with ODOT and County</td>
<td>1.75</td>
</tr>
<tr>
<td>R37</td>
<td>Mitchell</td>
<td>Improve lane widths, shoulders, drainage, and signing. Provide left and right turn lanes at key intersections.</td>
<td>W. Poe to Newton Extension</td>
<td>Long</td>
<td>$500K - $550K</td>
<td>Partial funding may be available though TMAOC if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the roadway is a mix of both City and County jurisdictions, otherwise the project is likely a City capital improvements project.</td>
<td>1.75</td>
</tr>
<tr>
<td>R38</td>
<td>Dunbridge</td>
<td>Improve with resurfacing (as needed), signing, and pavement markings. Improve any pedestrian/bicycle crossings.</td>
<td>Newton to Poe</td>
<td>Medium</td>
<td>Include signing &amp; pedestrian crossings into Resurfacing Program for project</td>
<td>Project priority is related to the northern I-75 new interchange project, and funding would be tied to the interchange project.</td>
<td>1.75</td>
</tr>
<tr>
<td>N1</td>
<td>Newton (Extension)</td>
<td>Construct new roadway</td>
<td>SR 64 (Haskins) to Mitchell</td>
<td>Short</td>
<td>$420K - $470K</td>
<td>Partial funding may be available though TMAOC if the project becomes listed on their TIP. The City may also explore partnership with the County to fund project as the roadway would benefit both entities, otherwise the project is likely a City capital improvements project.</td>
<td>4.00</td>
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</table>
### Transportation Master Plan Update (2007)

**TRANSPORTATION MASTER PLAN RECOMMENDATIONS & IMPLEMENTATION**

**THE MANNIK & SMITH GROUP, INC.**

**BOWC3A.Bowling Green Transportation Master Plan Update (2007)**

Table 3.1: Project Listings and Implementation Strategies

<table>
<thead>
<tr>
<th>Map Key #</th>
<th>Project Facility</th>
<th>Project Description</th>
<th>Project Limits</th>
<th>Timeframe Range</th>
<th>Preliminary Planning Constr. Cost Estimate</th>
<th>Implementation Strategy and Potential Funding Sources</th>
<th>Focus Group Weighted Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>N2</td>
<td>New Northern I/C with I-75</td>
<td>Construct new interchange</td>
<td>I-75 (Newton Rd. to Nims Rd.)</td>
<td>Long</td>
<td>$5 - $10 Million</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore a partnership with the County and BGSU as this would benefit all entities. Consideration should be given to creating a TID (Transportation Improvement District) to help fund the project. Another option is to pursue funding through the T.R.A.C. process.</td>
<td>3.80</td>
</tr>
<tr>
<td>N3</td>
<td>New Southwestern I/C with US 6</td>
<td>Construct new interchange</td>
<td>US 6 (Sandridge Rd. &amp; Mitchell Rd.)</td>
<td>Long</td>
<td>$5 - $10 Million</td>
<td>Partial funding may be available though TMACOG if the project becomes listed on their TIP. The City may also explore a partnership with the County and BGSU as this would benefit all entities. Consideration should be given to creating a TID (Transportation Improvement District) to help fund the project. Another option is to pursue funding through the T.R.A.C. process.</td>
<td>3.50</td>
</tr>
<tr>
<td>N4</td>
<td>Mercer (Extension)</td>
<td>Construct new roadway</td>
<td>Brianwood to Napoleon</td>
<td>Short</td>
<td>$130K - $180K</td>
<td>The project should consider utilizing a public-private partnership to complete the extension to Napoleon Road as further developments occur south of Brianwood. Otherwise, the project would likely be a City capital improvement project.</td>
<td>3.29</td>
</tr>
<tr>
<td>N5</td>
<td>Prospect (Extension)</td>
<td>Construct new roadway</td>
<td>Northern Terminus to Parkview</td>
<td>Current</td>
<td>$70K - $90K</td>
<td>This small extension of Prospect to Parkview would allow local traffic access to commercial areas along the east side of N. Main (SR 25) without having to utilize the congested intersection of Main &amp; Poe, and the N. Main corridor. The project would most likely be funded through the City capital improvement funds, but consideration should be given to also private partnerships with commercial properties that would benefit from this connection.</td>
<td>2.86</td>
</tr>
<tr>
<td>N6</td>
<td>Mercer (Extension)</td>
<td>Construct new roadway</td>
<td>Poe to Newton (around Airport)</td>
<td>Long</td>
<td>$1.15 - $1.20 Million</td>
<td>Funding considerations should include various sources such as City capital improvement funds; BGSU participation given this is a component of the campus transportation plan; Airport participation as the roadway would benefit airport land development; TMACOG funds from the TIP; and possibly Ohio Department of Development (ODOD) funds for the project as it could possibly be promoted as infrastructure improvements to promote job creation.</td>
<td>3.29</td>
</tr>
<tr>
<td>N7</td>
<td>Mercer (Extension)</td>
<td>Construct new roadway</td>
<td>Napoleon to Gypsy</td>
<td>Long</td>
<td>$250K - $300K</td>
<td>This roadway extension is located primarily within the County, but the extension of the roadway would benefit both the City and County by providing public road access to underdeveloped land. Given this, a joint County &amp; City funding strategy should be explored. In addition, public-private partnerships should also be explored if large residential developments occur or if other private developments look to locate in this area.</td>
<td>2.43</td>
</tr>
<tr>
<td>N8</td>
<td>Brianwood (Extension)</td>
<td>Construct new roadway</td>
<td>Mercer to Campbell Hill</td>
<td>Medium</td>
<td>$120K - $170K</td>
<td>This extension would likely be funded through City capital improvement funds as it is primarily to provide east-west access for residential areas to Campbell Hill Road. In addition, public-private partnerships with developments that want to locate east of Mercer to Campbell Hill should be encouraged to construct parts of this project for access.</td>
<td>2.57</td>
</tr>
<tr>
<td>N9</td>
<td>Alumni (New Alignment)</td>
<td>Construct new roadway</td>
<td>Ridge/Mercer to Alumni</td>
<td>Long</td>
<td>$660K - $710K</td>
<td>This project is a component of the BGSU campus transportation plan and is located within the BGSU campus. Funding would primarily be through funding sources secured by the University. The City may elect to participate should the final roadway be a public roadway.</td>
<td>2.14</td>
</tr>
<tr>
<td>Map Key #</td>
<td>Project Facility</td>
<td>Project Description</td>
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<td>Timeframe Range</td>
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<tr>
<td>N10</td>
<td>Hull Prairie (Extension)</td>
<td>Construct new roadway</td>
<td>Bishop to Newton</td>
<td>Long</td>
<td>$250K - $300K</td>
<td>This roadway extension is located primarily within the County, but the extension of the roadway would benefit both the City and County by providing public road access to underdeveloped land. Given this, a joint County &amp; City funding strategy should be explored. In addition, public-private partnerships should also be explored if private developments look to locate in this area. The project might also consider funding through the Ohio Department of Development (ODOD) as the case could be made it is for opening land for economic development.</td>
<td>2.43</td>
</tr>
<tr>
<td>N11</td>
<td>Newton (Extension)</td>
<td>Construct new roadway</td>
<td>Mitchell to Liberty Hi</td>
<td>Long</td>
<td>$510K - $560K</td>
<td>The extension would be located within the County and would provide good east-west access from Liberty Hi Road east to SR 25 and points further east. The project would provide public road access to underdeveloped land. A joint County &amp; City funding strategy should be explored as well as funding through TMACOG's TIP given the project would be providing a final link to establish a new east-west corridor that would connect Grand Rapids to SR 25 (via Long Judson Road and Newton Road) once Newton Road is completed between SR 64 &amp; Liberty Hi Road.</td>
<td>2.29</td>
</tr>
<tr>
<td>N12</td>
<td>Fourth (Extension)</td>
<td>Construct new roadway</td>
<td>S. College to Bentwood</td>
<td>Medium</td>
<td>$200K - $250K</td>
<td>The project would likely be funded solely through the City's capital improvement funds or through large residential developments completing sections of this roadway for access as they develop. The roadway would provide east-west travel and access for residential areas to Mercer Road.</td>
<td>3.14</td>
</tr>
<tr>
<td>N13</td>
<td>Parkview (Extension) or Industrial Dr. (Extension)</td>
<td>Construct new roadway</td>
<td>Extend east across RR to N. College</td>
<td>Medium</td>
<td>$70K - $100K</td>
<td>Funding would likely be through use of the City's capital improvement funds. Either roadway extension option would involve securing a new at-grade railroad crossing agreement with the railroad, which typically involves the closure of one or two existing crossings elsewhere that are nearby so as to have a new crossing. Funding from the Ohio Department of Development (ODOD) might be explored for the extension of Industrial Dr. option as it could be used to justify supporting existing industries located on the roadway with better access to I-75 via N. College to Poe.</td>
<td>1.86</td>
</tr>
<tr>
<td>N14</td>
<td>Carter/Huffman (Connection)</td>
<td>Construct new roadway</td>
<td>SR 105 to Napoleon</td>
<td>Long</td>
<td>$480K - $530K</td>
<td>The completion of this project would provide an additional north-south corridor east of those areas currently developing along Dunbridge Road in eastern Bowling Green. Funding should be considered from various sources such as City funds; county funds; public-private partnerships if the area begins to develop; and funds available through the TMACOG TIP.</td>
<td>1.86</td>
</tr>
<tr>
<td>N15</td>
<td>Amos (Extension)</td>
<td>Construct new roadway</td>
<td>Kramer to US 6</td>
<td>Long</td>
<td>$350K - $410K</td>
<td>This project would extend the Dunbridge Road north-south corridor to areas south of US 6 to connect with Amos Road at Kramer Road (an east-west road south of Bowling Green). Funding should be considered from various sources such as City funds; county funds; public-private partnerships if the area begins to develop; and funds available through the TMACOG TIP.</td>
<td>1.29</td>
</tr>
</tbody>
</table>
Figure 3.1
Future Improvements

Legend

Intersection Improvements
- Major Improvements
- Minor Improvements
- Potential Roundabout

Roadway Improvements
- New Construction
- Major Improvements
- Minor Improvements
- Pedestrian/Bicycle Corridor
- Programmed Project
- School
- Slippery Elm Bike Trail
- Rail Road
- Corp Limits

See Table 3.1 for Descriptions

Future Interchange Location Area
Re-Align Intersection
Provide Pedestrian Access to Existing Structure

Recommended Transportation Studies

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<thead>
<tr>
<th>Map Key #</th>
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<tr>
<td>S1</td>
<td>Citywide Signal System Study</td>
</tr>
<tr>
<td>S2</td>
<td>SR 25/19 Main St Corridor Safety Study</td>
</tr>
<tr>
<td>S3</td>
<td>New Northern Interchange with I-75 Study</td>
</tr>
<tr>
<td>S4</td>
<td>New Southwestern Interchange with US 6 Study</td>
</tr>
<tr>
<td>S5</td>
<td>SR 64 (Wooden/Heading) Corridor Safety Study</td>
</tr>
<tr>
<td>S6</td>
<td>SR 25/19 Main St Corridor Safety Study</td>
</tr>
<tr>
<td>S7</td>
<td>Citywide Overhead Guide Sign Study</td>
</tr>
<tr>
<td>S8</td>
<td>Poe Rd. Corridor Safety Study</td>
</tr>
</tbody>
</table>

Future Interchange Location Area

Provide Pedestrian Access to Existing Structure

Re-Align Intersection

Notes:
The photograph dated April 2006, is provided by Michael Sibbersen, Wood County Auditor as part of the Wood County GIS.
Project # BOWC3A - October 2007
Bowc3aImprovements.mxd
APPENDIX A

Public Involvement Documentation
<table>
<thead>
<tr>
<th>Name</th>
<th>Representing</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrick Etchie</td>
<td>Mannik &amp; Smith Group, Inc.</td>
<td>419-891-2222</td>
<td><a href="mailto:petchie@manniksmithgroup.com">petchie@manniksmithgroup.com</a></td>
</tr>
<tr>
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<td>BGPD</td>
<td>419-409-6353</td>
<td><a href="mailto:mgrigore@bgohio.org">mgrigore@bgohio.org</a></td>
</tr>
<tr>
<td>Gail Spencer</td>
<td>BGPD</td>
<td>419-602-0304</td>
<td><a href="mailto:gspencer@bgohio.org">gspencer@bgohio.org</a></td>
</tr>
<tr>
<td>Gale Ash</td>
<td>BG Planning Comm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rick Kettenbarger</td>
<td>City of BG</td>
<td>419-354-6218</td>
<td><a href="mailto:bgplans@bgohio.org">bgplans@bgohio.org</a></td>
</tr>
<tr>
<td>Brett Pogan</td>
<td>BSU</td>
<td>419-372-3853</td>
<td><a href="mailto:bppogan@bsu.edu">bppogan@bsu.edu</a></td>
</tr>
<tr>
<td>Brian O'Connell</td>
<td>BG Engineering</td>
<td>419-354-6235</td>
<td><a href="mailto:boconnell@bsu.edu">boconnell@bsu.edu</a></td>
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<tr>
<td>Dan Davis</td>
<td>BG City Schools</td>
<td>419-354-8509</td>
<td><a href="mailto:oldavis@bgcs.k12.oh.us">oldavis@bgcs.k12.oh.us</a></td>
</tr>
<tr>
<td>Larry Sorrells</td>
<td>BG City Council</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Representing</td>
<td>Phone</td>
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<tr>
<td>-------------------</td>
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<tr>
<td>Patrick Etchie</td>
<td>Mannik &amp; Smith Group, Inc.</td>
<td>419-891-2222</td>
<td><a href="mailto:petchie@manniksmithgroup.com">petchie@manniksmithgroup.com</a></td>
</tr>
<tr>
<td>Gary Spencer</td>
<td>BGPD</td>
<td>362-8775</td>
<td><a href="mailto:gspencer@byohio.org">gspencer@byohio.org</a></td>
</tr>
<tr>
<td>Brian O'Connell</td>
<td>BG Engineer</td>
<td>354-6227</td>
<td><a href="mailto:bocornell@byohio.org">bocornell@byohio.org</a></td>
</tr>
<tr>
<td>Brian Craft</td>
<td>BG Public Works Bureau</td>
<td>354-6227</td>
<td><a href="mailto:bcraft@byohio.org">bcraft@byohio.org</a></td>
</tr>
<tr>
<td>Galen Ash</td>
<td>Planning - Comm.</td>
<td>352-0362</td>
<td></td>
</tr>
<tr>
<td>Rick Ketzenbauger</td>
<td>Planning</td>
<td>416218</td>
<td><a href="mailto:bgplans@byohio.org">bgplans@byohio.org</a></td>
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<tr>
<td>Brett Pogan</td>
<td>BGSU</td>
<td>372-3853</td>
<td><a href="mailto:bpgan@hgsu.edu">bpgan@hgsu.edu</a></td>
</tr>
<tr>
<td>Larry Sonncells</td>
<td>BG City Council</td>
<td>353-6682</td>
<td><a href="mailto:larrysonncells@yahoo.com">larrysonncells@yahoo.com</a></td>
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</table>
### PUBLIC MEETING
**PUBLIC INVOLVEMENT MEETING OPEN HOUSE**  
**DRAFT BOWLING GREEN TRANSPORTATION MASTER PLAN UPDATE (2007)**

**SIGN-IN SHEET**  
Monday July 30, 2007 at the BG Community Center  
1245 W. Newton Road, Bowling Green, OH 43402  
4:00 p.m. to 7:00 p.m.

#### PLEASE PRINT

<table>
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<tr>
<th>NAME</th>
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<th>APT. #</th>
<th>CITY, STATE &amp; ZIP CODE</th>
<th>PHONE (Opt.)</th>
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<tbody>
<tr>
<td>Harold Brown</td>
<td>909 Park Ave</td>
<td></td>
<td>BG 43402</td>
<td></td>
</tr>
<tr>
<td>John Quinn</td>
<td>420 Kensington</td>
<td></td>
<td>BG</td>
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<tr>
<td>Pat Etchien</td>
<td>525 Maple</td>
<td></td>
<td>BG</td>
<td></td>
</tr>
<tr>
<td>Jean Hartline</td>
<td>420 Mollendorf</td>
<td></td>
<td>BG</td>
<td></td>
</tr>
<tr>
<td>Rick Ketzenbarger</td>
<td>420 Mollendorf</td>
<td></td>
<td>BG</td>
<td></td>
</tr>
<tr>
<td>Brian O'Conner</td>
<td>1320 W. Wooster St</td>
<td></td>
<td>BG</td>
<td></td>
</tr>
<tr>
<td>Bob McDaniel</td>
<td>923 Pearl</td>
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<tr>
<td>Jeff Newby</td>
<td>1320 W. Wooster St</td>
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<tr>
<td>Dave Briel</td>
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PUBLIC MEETING
INFORMATION PACKAGE

DRAFT TRANSPORTATION MASTER PLAN
CITY OF BOWLING GREEN, OHIO 43402

Project Sponsor:
City of Bowling Green
304 N. Church Street
Bowling Green, Ohio 43402

Project Consultant:
The Mannik & Smith Group, Inc.
1800 Indian Wood Circle
Maumee, Ohio 43537

Held At:
BG Community Center
1245 W. Newton Road
Bowling Green, Ohio 43402
4:00 p.m. to 7:00 p.m.
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<td>V. FUTURE IMPROVEMENTS (<em>FIGURE 3.1</em>)</td>
<td>3</td>
</tr>
</tbody>
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PUBLIC MEETING COMMENT SHEET
Exhibits Station Guide
Draft Transportation Master Plan
Open House Public Involvement Meeting
Bowling Green, Ohio 43402

Following is a list of the stations setup at the meeting and the items contained at each one:

**Station 1 - Welcome & Sign-In**
- The opportunity for meeting attendees to sign-in
- Public Meeting Informational Handouts

**Station 2 – Study Purpose & Study Limits**
- Study Purpose and Purpose of Public Involvement Meeting
- Exhibit of the Roadways & Intersections Reviewed and the Study Area

**Station 3 – Existing & Future Conditions**
- Exhibit of High Crash Intersections & Corridors (2003-2005)
- Exhibit of Future Land Use Growth Areas
- Exhibit of Existing 2007 Traffic
- Exhibit of Future 2027 Traffic
- Exhibit of Existing 2007 AM & PM Levels of Service
- Exhibit of Future 2027 AM & PM Levels of Service
- **Synchro** Traffic Model Traffic Simulation

**Station 4 – Recommended Improvements**
- Exhibit of Pedestrian/Bicycle Facilities & Destinations
- Exhibit of Future Improvements on Aerial (2 copies of exhibit)
- Exhibit of Future Improvements Table (provides details of improvements shown on Aerial)

**Station 5 – Comments**
- A comment sheet is provided within this handout package
- Please fill out the comment sheet here at the meeting and deposit it in the comment box, or fill it out later and mail it in by **August 13, 2007**.
Public Involvement Meeting for
Draft Transportation Master Plan
Monday July 30, 2007

I. MEETING PURPOSE

The purpose of this Public Involvement Meeting is to present the preliminary findings of Bowling Green's Transportation Master Plan Update, and to solicit comments from the public on the list of recommended improvements that have been developed to service the transportation needs of the City over the next 20 years. The information package you are now reading was prepared to guide you through the stations that have been setup at this “Open House” style meeting and to give you the latest information that has been developed for the project. The City of Bowling Green's Planning and Engineering Departments are the lead agencies on this update of the Transportation Master Plan and have contracted The Mannik & Smith Group, Inc., a consulting firm that specializes in Transportation Planning and Traffic Engineering.

There is no formal presentation at this “Open House” meeting that runs from 4:00 to 7:00 PM and you are welcome to review exhibits at your own pace. There is city & consultant staff here at the meeting that will answer any questions you may have.

Comment sheets are available here at the meeting and one is included at the end of this information package to provide you with an opportunity to express any comments that you may have about the preliminary list of recommendations developed to provide quality transportation for the City through the next 20 years. Comments can either be submitted at this meeting in the drop box, or they can be mailed to meet the comment submission deadline date of August 13, 2007.

For further information on the project, please contact:

Mr. Rick Ketzenbarger
Planning Department – City of Bowling Green
304 N. Church St.
Bowling Green, Ohio 43402
(419) 352-0443
bgplans@wcnet.org

Your input into this planning process is important to us and will be documented in the Transportation Master Plan.
II. PROJECT HISTORY

The Bowling Green Transportation Master Plan Update began in mid-2006 when numerous traffic counts were conducted in the City to obtain current traffic data to provide details of traffic patterns and to also be used for constructing a traffic model for the City to be used for analyses. The last update of the Plan was conducted in 1996, and significant changes in roadways (E. Wooster widening, Newton Rd. extension, etc.) have occurred since then that required an update of the Plan.

III. PROJECT METHODOLOGY

The initial steps of the project involved collection of existing data and studies as well as numerous traffic counts that were conducted. Once all traffic data and existing data was collected, it was reviewed and analyzed to determine where current deficiencies exist and where future problem areas could be expected based on future land use and current trends. Once these deficiencies were determined, a list of recommended improvements was developed to address the issues. This draft list of improvements was reviewed by the City Planning and Engineering departments as well as an Oversight Committee that was established to review findings of the study, provide local input, and assist in prioritizing the improvements. Upon comments being received at the public meeting, the Transportation Master Plan will be finalized and officially adopted by the City to guide planning for the next 20 years.

IV. COMMENT INFORMATION

A public meeting comment sheet is provided at the end of this information package, and additional sheets are available at the comment station here at the meeting. You may complete your comment sheets and submit them here at the meeting in the Comment Box provided, or you can also submit sheets by mailing them out (requires stamp) to meet the comment deadline of August 13, 2007.

Thank you for attending this Public Involvement Meeting and taking an active role in the planning process for the transportation needs for the City of Bowling Green for the next 20 years.
ANYONE WISHING TO SUBMIT COMMENTS/SUGGESTIONS CONCERNING THE RECOMMENDED IMPROVEMENTS OF THE TRANSPORTATION MASTER PLAN MAY DO SO BY PRESENTING THIS FORM HERE AT THE MEETING, OR BY MAILING IT TO THE CITY OF BOWLING GREEN PLANNING DEPARTMENT AS PRINTED ON THE REVERSE SIDE OF THIS COMMENT SHEET.


NAME __________________________________________ TELEPHONE ___________________

STREET ADDRESS ____________________________________________

CITY, STATE, ZIP ____________________________________________

ORGANIZATION (if applicable) ____________________________________________

IN GENERAL, DO YOU AGREE WITH THE LIST OF RECOMMENDED IMPROVEMENTS PRESENTED AT THIS MEETING TO SERVICE THE CITY’S TRANSPORTATION NEEDS FOR THE NEXT 20 YEARS?

PLEASE CHECK ONE: ☐ YES ☐ NO ☐ UNDECIDED

ARE THERE ANY TRANSPORTATION PROBLEM AREAS YOU ARE FAMILIAR WITH THAT WERE NOT ADDRESSED IN THE LIST OF RECOMMENDED IMPROVEMENTS?

PLEASE CHECK ONE: ☐ YES ☐ NO ☐ UNDECIDED

IF YES, PLEASE LIST THE PROBLEM AREAS NOT ADDRESSED:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

PLEASE PROVIDE ANY OTHER COMMENTS YOU WISH TO HAVE DOCUMENTED?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

This sheet can be folded in thirds, taped, and mailed without an envelope.
Postage is required.
Mr. Rick Ketzenbarger  
Planning Department – City of Bowling Green  
304 N. Church St.  
Bowling Green, Ohio 43402
Public Comments Documentation

A public meeting was held on Monday July 30, 2007 from 4:00 – 7:00 PM at the Bowling Green Community Center to solicit public input on the recommendations developed from the update of the Transportation Master Plan. The meeting experienced little attendance as evident from the sign-in sheet located within this appendix. There were no comments submitted at the meeting. There was one set of comments submitted by a citizen as well as several comments from the Bicycle Safety Commission. The submitted comments are shown below, including the Oversight Committee response to the comments which are shown in red:

Private Citizen Comment:
The citizen cited three locations where typos were found and also provided a general discussion about the need to provide more minor arterials in the community to better move traffic within the city in a more efficient manner. Aside from these comments, the citizen also stated the following four recommendations:

1. Provide more collector streets to reduce the traffic loads on Main St. and Wooster St. These should join each other to provide continuous routes from one part of the city to another.
   **Response:** The future functional class figure (Figure 2.3), shows the planned arterials for the community. In the heavily developed areas there are few options to increase the number of through streets that would function as minor arterials given the heavily residential areas.
2. Extend Napoleon Rd. westward to connect with Wintergarden, with some connection to the local streets in the Westgate area.
   **Response:** This extension was considered in the Transportation Plan, however it was decided that constructing a roadway through the several park areas and the Slippery Elm bike trail would degrade the quality of the parks and create safety issues.
3. Change the designation of most Access Management Category 1 streets to Category 2. The standards calling for high speeds and very limited access seem impossible to attain and conflict with statutory speed limits.
   **Response:** The roadways classified as Category 1 are recommended for the category so as to promote roadway access standards on these key roadways. It is understood that the speed limit and access standards of this category will likely never be achieved throughout much of the roadway, however the standard is in place for when properties undergo re-development. In such instances the development must follow the guidelines. A recent example of this is on N. Main St. where the new Walgreen’s store had to reduce the number of drives from the several properties they purchased. In addition, the access categories have exceptions that can be made by the city if the standards are not possible.
4. Plan for a connection between Conneaut and the BGSU area, possibly via Fairview and Merry.
   **Response:** The Plan recommends re-opening Merry at the railroad crossing to accomplish this.

Bicycle Safety Commission Recommendations:
The commission submitted a set of recommendations for the proposed Multi-Use Path and Pedestrian/Bicycle Destinations in the Transportation Master Plan that included:

1. Complete designated route to the Bowling Green Community Center from local city schools and parks.
   **Response:** This improvement is recommendation #P1 as shown on Figure 3.1.
2. Reduce the amount of on-street parking (especially in those areas identified as bicycling routes and where the majority of residents have driveways.)
   **Response:** A statement to this effect will be added in the Transportation Master Plan.
3. Identify a designated “downtown bike circle.” (Oak, Church, Washington and Prospect Streets)
   **Response:** A recommendation for a designated circle bike route will be added to Figure 2.14.
4. Increase the amount of “bike route” signage.
   **Response:** A statement will be added in the Transportation Master Plan.
5. Create a designated east/west pedestrian/bicycle path on E. Wooster St. over the I-75 overpass, for traffic to Meijer, Municipal Court, and future BGSU buildings.
   Response: This improvement is indicated on both Table 3.1 and Figure 3.1.

6. Ensure that all schools are included in bike routes.
   Response: Bike routes have been added to get to the schools.

7. Make Poe Rd. a trail segment to facilitate travel to/from BGHS.
   Response: This recommendation will be added to Figure 2.14.

8. Make S. College St. a trail segment to connect BGSU to student housing areas on Napoleon Rd.
   Response: The Oversight Committee for the Transportation Master Plan reviewed this comment and it was determined that the recommended Manville as a designated bike route would serve the student housing areas and that S. College would be a duplicate route.

9. Extend the bike route in the 100 block of W. Wooster all the way to Wintergarden Rd.
   Response: The Oversight Committee agrees with the need to extend a route westward to Wintergarden, but instead of W. Wooster which is a busy street and not conducive to pedestrians & bicycles, it is recommended that Pearl be used as the designated bike route from Church St. to Wintergarden. This recommendation will be added to Figure 2.14.
Transportation plan suggests paths for BG pedestrians

By HAROLD BROWN
Sentinel City Editor

A bicycle/pedestrian path to the community center and dedicated pedestrian access over two Interstate 75 overpasses are among transportation improvements proposed for Bowling Green in the next 20 years.

The draft update of the city's Transportation Master Plan was available for citizen review for three hours Monday night at the community center. Only nine people signed the attendance sheet, with just two of those not being associated with the city, its consulting firm or the media.

The draft also proposes eight separate transportation studies, numerous roadway improvements, revamping of traffic signals, intersection improvements and a handful of new street construction projects.

The city hired The Mannik & Smith Group Inc. of Maumee as consultant on the project. The transportation master plan was last updated in 1996.

Documents remain available for public review in the Planning Commission Office, 130 South Main Street, through Aug. 13.

(See BG on 5)
<table>
<thead>
<tr>
<th>Name</th>
<th>Representing</th>
<th>Phone</th>
<th>Email</th>
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<tbody>
<tr>
<td>Patrick Etchie</td>
<td>Mannik &amp; Smith Group, Inc.</td>
<td>419-891-2222</td>
<td><a href="mailto:petchie@manniksmithgroup.com">petchie@manniksmithgroup.com</a></td>
</tr>
<tr>
<td>Rick Koteenberger</td>
<td>City of BG</td>
<td>354-6218</td>
<td><a href="mailto:bgplans@bgohio.org">bgplans@bgohio.org</a></td>
</tr>
<tr>
<td>Larry Sorensen</td>
<td>City of BG</td>
<td>354-8854</td>
<td><a href="mailto:council.medense11@yahoo.com">council.medense11@yahoo.com</a></td>
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<tr>
<td>Galen Ash</td>
<td>BGPD</td>
<td>352-8775</td>
<td><a href="mailto:gspencer@bgohio.org">gspencer@bgohio.org</a></td>
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<td>Gary Spencer</td>
<td>BGPD</td>
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<td>Brian O'Connor</td>
<td>City of BG</td>
<td>354-6227</td>
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<tr>
<td>BRETT POGAN</td>
<td>BGSU</td>
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</tr>
<tr>
<td>Harold Brown</td>
<td>SENTINEL - TRIBUNE</td>
<td></td>
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<tr>
<td>Brian Craft</td>
<td>City of BG - Public Works</td>
<td>419-354-6227</td>
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APPENDIX B

Traffic Count Locations
### Primary Intersections

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<th>PM Count Period</th>
<th>Comments</th>
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<td>7:00-8:30</td>
<td>4:30-6:00</td>
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<td>2</td>
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<td>7:00-8:30</td>
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<td>3</td>
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<td>7:00-8:30</td>
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<td>4</td>
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<td>4:00-5:30</td>
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<td>4:00-5:30</td>
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<td>8</td>
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<td>9</td>
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<td>11</td>
<td>Dunbridge &amp; Napoleon</td>
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<td>12</td>
<td>N College &amp; E Poe</td>
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### Secondary Intersections

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<th>Comments</th>
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<td>Napoleon &amp; Campbell Hill</td>
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<td>15</td>
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<td>7:30-9:00</td>
<td>4:00-5:30</td>
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<td>16</td>
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<td>17</td>
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### Beneficial Hose Count Locations

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<th>Comments</th>
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<td>Newton (Btwn SR64 &amp; Brim) (Pick Up Speed Data)</td>
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<td>H8</td>
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<td>H9</td>
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<td>H10</td>
<td>Napoleon (Btwn Campbell Hill &amp; Dunbridge)</td>
<td></td>
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</tr>
</tbody>
</table>

**Note:**
The "Primary Intersections" are those locations MSG has scoped in proposal. The "Secondary Intersections" would be beneficial for study but not critical. The "Beneficial Hose Count Locations" are not critical for the study, but would supply more recent count data than what currently exists from TMACOG (the hose counts are listed from most beneficial to least beneficial).

Counts with a comment “Anytime” are locations where BGSU being in session is not so much an issue and could be counted this summer, whereas those marked by “Before Apr 28 or After Aug 21” are influenced more by BGSU and should be counted when BGSU is in session.

Shaded counts above will be conducted by the City of Bowling Green.
APPENDIX C

References
The development of a Transportation Master Plan requires research and reference to many sources. The update of the Bowling Green Transportation Master Plan utilized various sources including the key sources listed below:

The following references were utilized in developing the *Bowling Green Transportation Master Plan (2007)*:

- The City of Bowling Green Downtown Plan
- The City of Bowling Green Land Use Plan Update
- The City of Bowling Green Utility Master Plan Update
- Bowling Green Parks and Recreation Department Parks and Recreation Master Plan
- Wood County Regional Airport Master Plan
- Bowling Green Police Division – 2006 Traffic Crash Analysis
- BGSU Campus Master Plan and Roadway Improvements
- TMACOG – On the Move 2007-2035 Transportation Plan
- TMACOG – Traffic Count Online Services
- Ohio Department of Public Safety – High Crash Listing Identification System
- Ohio Department of Transportation – Traffic Survey Reports
- The Ohio Department of Transportation’s *State Highway Access Management Manual*
  [HTTP://WWW.DOT.STATE.OH.US/ROADWAYENGINEERING/ACCESS_MANAGEMENT/INDEX.ASP](HTTP://WWW.DOT.STATE.OH.US/ROADWAYENGINEERING/ACCESS_MANAGEMENT/INDEX.ASP)

**ODOT DRIVEWAY STANDARDS (ALSO SEE APPENDIX B OF THIS DOCUMENT FOR DRIVE GEOMETRY):**
[HTTP://WWW.DOT.STATE.OH.US/ROADWAYENGINEERING/STANDARDS/PUBLICATIONS/LDM/800_JUL93.PDF](HTTP://WWW.DOT.STATE.OH.US/ROADWAYENGINEERING/STANDARDS/PUBLICATIONS/LDM/800_JUL93.PDF)

**ODOT INTERSECTION STANDARDS:**

**ODOT’S LOCATION AND DESIGN MANUAL – VOLUME 1:**
[HTTP://WWW.DOT.STATE.OH.US/ROADWAYENGINEERING/STANDARDS/LOC_MANUALS.ASP](HTTP://WWW.DOT.STATE.OH.US/ROADWAYENGINEERING/STANDARDS/LOC_MANUALS.ASP)