COST ESTIMATES, IMPLEMENTATION & FUNDING
COST ESTIMATES, IMPLEMENTATION & FUNDING

Cost Estimates

The costs associated with many of the immediate to near term recommended improvements are relatively low and inexpensive. A number can be implemented with little or no cost, (e.g. signal timing modifications, enhanced crosswalk striping, signage, landscaping, furnishings), while other recommendations require a more significant infrastructure investment. The cost for these as well as for the more substantial improvements such as the recommended State Street/Shenango Valley Freeway roundabout were estimated based upon recent bid prices for comparable elements.

It should be noted that there is significant variability in the degree to which improvements can be implemented and the costs associated with the improvements. For example, the gateway treatments can include special features, decorative pavement treatments and significant landscaping, or other less expensive treatments with only plantings and less expensive pavement treatments. Other improvements in the transportation system, such as the new roadway connection between Elm Avenue and Jefferson Avenue, may likely evolve over an extended time through a combination of private/public partnerships.

Table 8: Cost Estimates

<table>
<thead>
<tr>
<th>RECOMMENDATIONS</th>
<th>PLANNING LEVEL COST ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Coordination / Upgrades</td>
<td>no cost</td>
</tr>
<tr>
<td>Develop an organization to develop and lead the Revitalization Program for Downtown Sharon</td>
<td>$10,000</td>
</tr>
<tr>
<td>Develop a Façade Improvement Program for Downtown Sharon</td>
<td>$50,000</td>
</tr>
<tr>
<td>Develop a Wayfinding Sign program/system for Downtown Sharon</td>
<td>$25,000</td>
</tr>
<tr>
<td>Hospital Zone Mill, Overlay and Re-striping</td>
<td>$68,000</td>
</tr>
<tr>
<td>Hospital Zone Signage, Crosswalks, and Median</td>
<td>$153,600</td>
</tr>
<tr>
<td>School Zone Crosswalks</td>
<td>$67,000</td>
</tr>
<tr>
<td>School Zone Signage</td>
<td>$1,400</td>
</tr>
<tr>
<td>SRTS Case/Sharon Signage and Crosswalks</td>
<td>$1,700</td>
</tr>
<tr>
<td>SRTS West Hill Signage and Crosswalks</td>
<td>$5,300</td>
</tr>
<tr>
<td>Improved Safety Transition / Road Diet</td>
<td>$200,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intersections *</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Buhl Farm Drive</td>
<td></td>
</tr>
<tr>
<td>Phase 1 (Textured Crosswalks)</td>
<td>$70,100</td>
</tr>
<tr>
<td>Phase 2 (Geometric Design)</td>
<td>$717,000</td>
</tr>
<tr>
<td>Stambaugh and Euclid Avenues</td>
<td></td>
</tr>
<tr>
<td>Phase 1 (Textured Crosswalks, Landscaping)</td>
<td>$48,300</td>
</tr>
<tr>
<td>Phase 2 (Geometric Design)</td>
<td>$469,000</td>
</tr>
<tr>
<td>Kerrwood Drive</td>
<td>$857,000</td>
</tr>
<tr>
<td>Kerrwood Dr to Ellis Ave Sidewalk Connection</td>
<td>$53,000</td>
</tr>
<tr>
<td>Ellis Avenue</td>
<td>$978,000</td>
</tr>
<tr>
<td>Hermitage Road</td>
<td>$961,000</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Gateways</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Irvine Avenue Gateway</td>
<td>$934,000</td>
</tr>
<tr>
<td>Shenango Valley Roundabout</td>
<td>$1,573,000</td>
</tr>
</tbody>
</table>

Notes:
1. Includes signal modifications
2. Includes signal replacement
3. Costs include design, survey and construction inspection.
4. Costs are provided in 2012 dollars.
5. Costs do not include right-of-way.

* cost includes landscaping, milling and repaving the entire intersection
1. Includes signal modifications
2. Includes signal replacement
Implementation

Recommendations for implementation of the proposed improvements are outlined on the following pages. They are subdivided into three categories: Immediate to Near Term (0-5 years), Medium Term (5-10 years), and Long Term (10-20 years). Many of the Immediate to Near Term recommendations can be implemented as part of ongoing maintenance. Meanwhile, other items in this phase of implementation are either relatively low cost modifications or funding for these improvements may be more readily available. Medium Term recommendations require more planning and funding to implement and can likely be accomplished in the 5 to 10 year timeframe. The Long Term recommendations are generally more expensive and are likely to require significant planning to implement. It is noted that the longer timeframes may more closely align with typical PennDOT timeframes used for programming funding. Specific long term improvements may be made sooner if funding becomes available.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>RECOMMENDATIONS</th>
<th>FUNDING SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adopt the Business Route 62 Corridor Study</td>
<td>MAP-21, TIP, CDBG</td>
</tr>
<tr>
<td>2</td>
<td>Establish an organization to develop and lead the Revitalization Program for Downtown Sharon</td>
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</tr>
<tr>
<td>3</td>
<td>Update the City of Hermitage’s Comprehensive Plan</td>
<td>MAP</td>
</tr>
<tr>
<td>4</td>
<td>Incorporate the key recommendations from the Business Route 62 Corridor Study as part of the update of Hermitage’s Comprehensive Plan</td>
<td>MAP</td>
</tr>
<tr>
<td>5</td>
<td>Create and adapt access management provisions or an overlay district for both Cities</td>
<td>MAP</td>
</tr>
<tr>
<td>6</td>
<td>On-going implementation of access management recommendations for new and redevelopment properties</td>
<td>MAP</td>
</tr>
<tr>
<td>7</td>
<td>Develop and adopt non-residential design guidelines and standards for both Cities</td>
<td></td>
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<tr>
<td>8</td>
<td>Codify the Gateway Transitional Zoning District in Hermitage</td>
<td></td>
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<tr>
<td>9</td>
<td>Codify the Central Business District and Mixed Use District in Sharon</td>
<td></td>
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<tr>
<td>10</td>
<td>Codify the Landscape Standards for both cities</td>
<td></td>
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<tr>
<td>11</td>
<td>Institute a design review function and training in the development review process for both Cities</td>
<td></td>
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<tr>
<td>12</td>
<td>Implement TRP or Transportation Impact Fee funding mechanisms for both Cities</td>
<td>MAP</td>
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<tr>
<td>13</td>
<td>Modify the development review procedures to include a minor and major site plan review process for both Cities</td>
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<tr>
<td>14</td>
<td>Replace / install street furnishings in key locations in Sharon</td>
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<tr>
<td>15</td>
<td>Implement a site coordination plan between Buhl Boulevard and Oakland Avenue</td>
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<tr>
<th>ITEM</th>
<th>RECOMMENDATIONS</th>
<th>FUNDING SOURCES</th>
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</thead>
<tbody>
<tr>
<td>16</td>
<td>Improve pedestrian and bicycle facilities in key locations in Sharon</td>
<td>MAP-21, TIP, CDBG</td>
</tr>
<tr>
<td>17</td>
<td>Implement a signal coordination plan between Buhl Boulevard and Mill, overlay and re-stripe State Street within the Hospital Zone</td>
<td></td>
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<tr>
<td>18</td>
<td>Install Hospital Zone textured crosswalks and flush mount LED signs</td>
<td></td>
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<tr>
<td>19</td>
<td>Install Hospital Zone pedestrian signage</td>
<td></td>
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<tr>
<td>20</td>
<td>Install Hospital Zone safety medians</td>
<td></td>
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<tr>
<td>21</td>
<td>Complete map andaprile of Hospital Boulevard</td>
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<tr>
<td>22</td>
<td>Install Hospital Zone safety medians</td>
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<td>23</td>
<td>Install Hospital Zone safety medians</td>
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<td>Install Hospital Zone safety medians</td>
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<td>30</td>
<td>Install Hospital Zone safety medians</td>
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<tr>
<td>31</td>
<td>Install Hospital Zone safety medians</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Install Hospital Zone safety medians</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Recommendations, Implementation and Funding
COST ESTIMATES, IMPLEMENTATION & FUNDING

- MAP-21 expands the National High
- Provides assistance to profit-motivated businesses to carry
- Construction of public facilities and improvements, such as water
- Acquisition of real property;
- Public services, within certain limits;
- Strengthens America’s highways
- According to the FHWA, the purpose of MAP 21 is to set the course for
- transportation investment in highways by:
- Establishes a performance-based program - Under MAP-21, performance
- management will transform Federal highway programs and provide a
- means to more efficient investment of Federal transportation funds by
- focusing on national transportation goals, increasing the accountability
- and transparency of the Federal highway programs, and improving
- transportation investment decision making through performance-based
- planning and programming.

Creates jobs and supports economic growth - MAP-21 authorizes $82 billion
- in Federal funding for FY’s 2013 and 2014 for road, bridge, bicycling,
- and walking improvements. In addition, MAP-21 enhances innovative
- financing and encourages private sector investment through a substantial
- increase in funding for the TIFIA program. It also includes a number of
- provisions designed to improve freight movement in support of national
- goals.

Supports the Department of Transportation’s (DOT) aggressive safety
- agenda - MAP-21 continues the successful Highway Safety Improvement
- Program, doubling funding for infrastructure safety, strengthening the
- linkage among modal safety programs, and creating a positive agenda to
- make significant progress in reducing highway fatalities. It also continues
- to build on other aggressive safety efforts, including the Department’s
- fight against distracted driving and its push to improve transit and motor
- carrier safety.

Streamlines Federal highway transportation programs - The complex
- array of existing programs is simplified, substantially consolidating the pro-
- gram structure into a smaller number of broader core programs. Many
- smaller programs are eliminated, including most discretionary programs,
- with the eligibilities generally continuing under core programs.

Accelerates project delivery and promotes innovation - MAP-21 incorpo-
- rates a host of changes aimed at ensuring the timely delivery of trans-
- portation projects. Changes will improve innovation and efficiency in
- the development of projects, through the planning and environmental
- review process, to project delivery.

The details of MAP-21 will be forthcoming over the next several weeks
- and months. The exact amount of funding that will be available to help
- implement the recommendations of the Business Route 62 Corridor
- Study is unknown at this time. However, the importance of MAP-21,
- its impact on the Transportation Improvement Program and its role as a
- potential funding source cannot be overstated. For more information on
- MAP-21 visit www.fhwa.dot.gov/map21/summaryinfo.cfm.

Transportation Improvement Program (TIP) - The TIP is a staged,
- multi-year program of projects that identifies the timing and funding of
- all highway, bridge, transit, intelligent transportation system, bicycle,
- and pedestrian transportation projects scheduled for implementation in
- the region during the next five years using federal transportation funds.
- Many of the surface transportation improvements identified in the Busi-
- ness Route 62 Corridor Study are eligible for specific federal funding
- programs through the TIP.

This region’s TIP is developed cooperatively by the MCRPC and the Pennsylvania Depart-
- ment of Transportation District 1-0. Shenango Valley Area
- Transportation Study (SVATS) MPO/MCRPC and PennDOT conduct a complete update of the TIP every two years. Every project proposed in the
- TIP is also listed in the Statewide Transportation Improvement Program
- (STIP) for Federal Highway Administration (FHWA) and Federal
- Transit Administration (FTA) approval. The current TIP can be viewed at

Community Development Block Grant (CDBG) - The City of Shor-
- non is a designated Entitlement Community under the CDBG Program.
- The United States Department of Housing and Urban Development, "awards grants to entitlement communities to carry out a wide range of
- community development activities directed toward revitalizing neigh-
- borhoods, economic development, and providing improved community
- facilities and services."

CDBG funds may be used for activities which include, but are not limited to:
- Acquisition of real property;
- Relocation and demolition;
- Rehabilitation of residential and non-residential structures;
- Construction of public facilities and improvements, such as water and
- sewer facilities, streets, neighborhood centers, and the con-
- version of school buildings for eligible purposes;
- Public services, within certain limits;
- Activities relating to energy conservation and renewable energy
- resources and;
- Provision of assistance to profit-motivated businesses to carry
- out economic development and job creation/retention activities.

Funding Opportunities

In order to successfully implement the recommendations of the Business
- Route 62 Corridor Study the Cities should pursue outside funding assis-
- tance from various Federal and State sources. If Sharon and Hermitage
- are successful in obtaining grant funds for the Irvine Avenue and State
- Street corridor, it can greatly reduce the number of local dollars neces-
- sary to construct the proposed improvements. A review of the available
- funding sources indicates that the most applicable to this project include
- the following:

Moving Ahead for Progress in the 21st Century (MAP-21) - On July 6, 2012, President Obama signed the Moving Ahead for Progress in the 21st Century Act. This act provides over $105 billion in funding for surface transportation programs for fiscal years 2013 and 2014. MAP-21 is the first long-term highway authorization enacted since 2005. The specific programs affecting local governments under the previous funding authorization bill (SAFETEA-LU) are now largely gone, including the Safe Routes to Schools Program, the Recreational Trails and Scenic Byways Programs, and the Transportation Enhancements Program. MAP-21 transforms those into eligible activities within the existing Highway Safety Improvement Program and a new Transportation Alternatives category. While MAP-21 requires states to spend at least 2 percent of their federal highway funds on Transportation Alternatives, the total is about $300 million less per year than the total for those programs under SAFETEA-LU.

According to the FHWA, the purpose of MAP 21 is to set the course for
- transportation investment in highways by:

- Strengthens America’s highways - MAP-21 expands the National High-
- way System (NHS) to incorporate principal arterials not previously in-
- cluded. Investment targets the enhanced NHS, with more than half of
- highway funding going to the new program devoted to preserving and
- improving the most important highways - the National Highway Perfor-
- mance Program.

- Creates jobs and supports economic growth - MAP-21 authorizes $82 billion in Federal funding for FY’s 2013 and 2014 for road, bridge, bicycling, and walking improvements. In addition, MAP-21 enhances innovative financing and encourages private sector investment through a substantial increase in funding for the TIFIA program. It also includes a number of provisions designed to improve freight movement in support of national goals.

- Supports the Department of Transportation’s (DOT) aggressive safety agenda - MAP-21 continues the successful Highway Safety Improvement Program, doubling funding for infrastructure safety, strengthening the linkage among modal safety programs, and creating a positive agenda to make significant progress in reducing highway fatalities. It also continues to build on other aggressive safety efforts, including the Department’s fight against distracted driving and its push to improve transit and motor carrier safety.

- Streamlines Federal highway transportation programs - The complex array of existing programs is simplified, substantially consolidating the program structure into a smaller number of broader core programs. Many smaller programs are eliminated, including most discretionary programs, with the eligibilities generally continuing under core programs.

- Accelerates project delivery and promotes innovation - MAP-21 incorporates a host of changes aimed at ensuring the timely delivery of transportation projects. Changes will improve innovation and efficiency in the development of projects, through the planning and environmental review process, to project delivery.

- The details of MAP-21 will be forthcoming over the next several weeks and months. The exact amount of funding that will be available to help implement the recommendations of the Business Route 62 Corridor Study is unknown at this time. However, the importance of MAP-21, its impact on the Transportation Improvement Program and its role as a potential funding source cannot be overstated. For more information on MAP-21 visit www.fhwa.dot.gov/map21/summaryinfo.cfm.
The City of Sharon received a total of $532,470 in CDBG funds in the previous fiscal year. As the City adjusts its funding priorities each year, it should consider including some of the eligible projects outlined in this study into its Consolidated Plan. This will enable Sharon to utilize CDBG funding to implement a number of the recommendations contain in the Business Route 62 corridor study.

For more information on this funding source, please review the program guidelines at:

**Keystone Communities (KC) Program** - According to the KC Program Guidelines, “The KC Program is designed to encourage the creation of partnerships between the governmental (public) and private (non-governmental) sectors in the communities that jointly support local initiatives such as the growth and stability of neighborhoods and communities; social and economic diversity; and a strong and secure quality of life. The Department of Community and Economic Development (DCED) strongly encourages community-based organizations, public agencies, business leaders, private developers, financial institutions, and private citizens to work in partnership with local government to develop a comprehensive approach to address community development and housing needs.

These partnerships can and will create more attractive places to live, and will encourage business and job expansion and retention in Pennsylvania. The KC Program incorporates three discontinued appropriations: Housing and Redevelopment Assistance, the Pennsylvania Accessible Housing Program and the New Communities Appropriation, which was comprised of three programs - Main Street, Elm Street and Enterprise Zone - under one appropriation, the Keystone Communities Appropriation.” Eligible activities include:

- Keystone Main Streets: Funding and technical assistance for a community’s downtown revitalization.
- Keystone Elm Streets: Funding and technical assistance for residential and mixed use areas in proximity to central business districts.
- Keystone Enterprise Zones: Funding and technical assistance for disadvantaged industrial/manufacturing and business sites.
- Keystone Communities: Designation and potential access to funding and Neighborhood Assistance tax credits.
- Keystone Communities Development Projects: Grants and grants-to-loans for physical improvements for both designated and other communities.
- Accessible Housing: Housing improvements for persons with physical disabilities.

One of the most applicable programs under the KC Program are the Public Improvement Grants. These grants can provide up to $500,000 in funding and require a dollar for dollar match for a total project cost of up to $1,000,000. There are very few restrictions on the types of projects that are eligible for this program. The primary factors in determining eligibility are: 1) it is a good project with a compelling public benefit and 2) there are a number of partners that are supporting and participating in the success of the project.

For more information on this funding source, please review the program guidelines at:

**Appalachian Regional Commission (ARC)** - On March 9, 1965, President Lyndon B. Johnson signed the Appalachian Regional Development Act into law. The goal of this act was to improve the quality of life for individuals and families located in the region known as Appalachia. The ARC is responsible for providing grant funding for infrastructure related projects. Grants generally range from $100,000 to $300,000 and cannot exceed fifty percent of the project costs. Development of new access roads is eligible for funding up to 80 percent of the project cost. In northwest Pennsylvania, this program is administered by the Northwest Commission (www.nwcommission.org).

**Municipal Assistance Program (MAP)** - According to the MAP Guidelines, “The Municipal Assistance Program (MAP) is created to help local governments efficiently and effectively plan and implement a variety of services, improvements, and soundly managed development. The program provides funding for three groups of activities – 1) shared services; 2) community planning; and 3) floodplain management.” The completion of the Business Route 62 Corridor Study positions both Cities to apply for an implementation grant under the Community Planning program. There are a number of activities that could be funded through the MAP that would advance the recommendations of this study. These include the development of:

- A single zoning amendment to both zoning ordinances that includes design guidelines and standards and access management requirements for East State Street and
- A transportation impact fee ordinance for both Cities.

It should be noted that any effort to apply for funding under the MAP would be better positioned if Hermitage adopts some or all of the 2007 Joint Comprehensive Plan.

The MAP can provide up to 50% of eligible project costs. There is no pre-determined limit on the amount of funding that can be requested for a project. However, the maximum grant award for 2011 was $50,000. For more information on this funding source, please review the program guidelines at:

A complete listing of funding sources can be found on the MCRPC’s website, http://www.mcrpc.com/grants.htm.
Safe Routes to School - Based on the level of action taken to institute a successful SRTS program, the costs for solutions can vary for every project. They could be as little as purchasing reflective safety vests for adults participating in Walk to School events or as much as undertaking an infrastructure related traffic calming program.

Recent Congressional voting has passed a bill called “MAP-21” (Moving Ahead for Progress for the 21st Century) that combines SRTS with Recreational Trails and Transportation Enhancement funding. This has removed a dedicated source of Federal funding for SRTS. Projects must now compete with other programs under the Transportation Alternatives. States like Pennsylvania, however, are encouraged to utilize the remaining money earmarked for SRTS projects.

These events, however, will require school districts and municipalities to develop creative strategies aimed to fund identified recommendations. Several places that funding can be sought from are:

- Existing state SRTS programs;
- Surface Transportation Program (STP);
- Highway Safety Improvement Program (HSIP);
- Congestion Mitigation and Air Quality (CMAQ);
- Community Development Block Grants;
- Health and physical activity funds;
- Pennsylvania Infrastructure Bank (PIB) Loans;
- Public-Private partnerships;
- Municipal Liquid Fuels Program;
- Department of Community and Economic Development - Community and Municipal Facilities Assistance Program and the Community Revitalization Program;
- Automated Red Light Enforcement (ARLE) Funding;
- Transportation grants;
- United States Department of Agriculture (USDA) Community Facilities Loans & Grants;
- Economic Development Administration (EDA) Public Works & Economic Development;
- County and city funding; and
- Philanthropic organizations

For further information on Pennsylvania specific funding for SRTS programs, visit www.saferoutespa.org.
References

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- Publication 212: Official Traffic Control Devices, Pennsylvania Department of Transportation, 2006
- Publication 236M: Handbook of Approved Signs, Pennsylvania Department of Transportation, 2006
- Synchro 7. Trafficware, Albany, California
- TRB Paper No. 01-0511, Modeling The Roadside Walking Environment: A Pedestrian Level Of Service
- MCRPC - Congestion Management Process, Fall/Winter 2009
- Smart Transportation Guidebook, Planning and Designing Highways and Streets that Support Sustainable and Livable Communities, Pennsylvania Department of Transportation, New Jersey Department of Transportation, March 2008