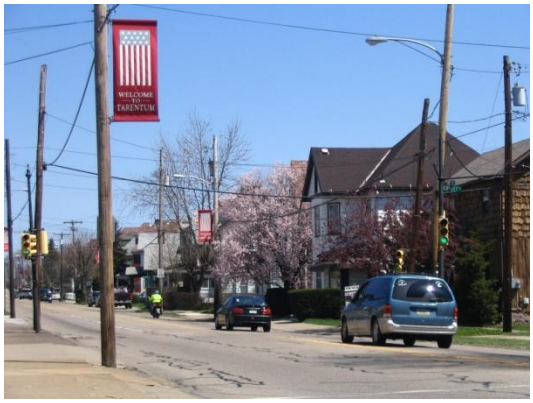
INTRODUCTION

The term "infrastructure" has become the new buzzword of this decade and is likely to remain so through a large part of the 21st century. While the need for infrastructure repair and replacement has been a longstanding topic of economic discussion, the issue moved to the forefront as the result of the collapse of the Interstate 35W Bridge over the Mississippi River in Minneapolis during the evening rush hour in August, 2007. Closer to home, the collapse of an overpass in Washington County in 2005 triggered increased vigilance from the Pennsylvania Department of Transportation. Although less obvious because of its background nature, the fragility of the nation's electrical grid system was made all too obvious by the great New York blackout and the more recent power outages experienced in a large part of the nation's northeast.

The construction and maintenance of public infrastructure is an issue as old as the idea of government itself. Starting with the provision of water, infrastructure evolved through roadways, river and rail to electrical distribution in the late 1800s. The creation of the internet and its rapid deployment not only expanded the definition of infrastructure; but also, the speed at which communities must adapt to their use of changing technology.

TRANSPORTATION AND PARKING

The Transportation and Parking Plan will serve as a guide for transportation and parking projects and priorities in the Borough of Tarentum. It allows the Borough to check its bearings by reassessing the transportation needs and prioritizing the projects and programs that will set the agenda for the Borough over the next 10 years. Upon completion of the priority or projects the Borough will be prepared to update the Comprehensive Plan. In addition, the projects that come out of the Transportation and Parking Plan will ensure residents that Borough and staff are "on-track" to complete these important projects.



Future funding decisions for important projects granted by the Commonwealth of Pennsylvania to its communities are being made by the respective project funding agencies based on a community's vision, which is embodied in a Comprehensive Plan.

Tarentum's Transportation and Parking Plan recommends investments in multi-modal forms of transportation that include transit, park and ride, parking structures, commuter train, pedestrian friendly access by filling in the gaps between portions of the community, maintenance of Borough streets, river transportation and automobile

and trail development as part of Allegheny County's Riverfront Trail Network; all with an emphasis on safety.

In addition, the Transportation and Parking Plan emphasizes travel for residents of the Borough to economic development opportunities in the City of Pittsburgh, and regional market opportunities for Tarentum businesses that can deliver their goods and services to other businesses by way of the Pennsylvania Turnpike, Route 28 and access to Route 80. The primary goal is to encourage transportation improvements that increase access to jobs, services and the movement of goods from the Borough of Tarentum to other regional and national markets.

Since Tarentum does not have the financial capacity to advance many of these important projects, the plan also encourages the Borough to work with other federal, state, local and regional agencies and private funding sources to support these important initiatives.

Finally, the Transportation and Parking Plan encourages the coordination of the Goals and Objectives of the Land Use component of the Comprehensive Plan. Planning transportation improvements without taking into consideration land use is counterproductive and will not assist the Borough with achieving their long-term goals.

INCORPORATION OF THE TRANSPORTATION AND PARKING GOALS AND OBJECTIVES

The plan began with a refinement of the transportation and parking goals and objectives. The transportation goals and objectives were based on the direct input of residents, property owners and the 2007 survey results of residents and business owners in the community. The goals and objectives were synthesized by Third Sector Development and refined by the Borough Manager for this document. In developing the transportation goals and objectives the Borough of Tarentum held three public meetings to enlist comments from residents and business owners to establish the Transportation and Parking Goals of the plan.

TARENTUM'S TRANSPORTATION AND PARKING GOALS

- *Coordinate transportation and land use planning.*
- *Investigate opportunities for a sub-regional transit system to provide connections to the Borough from*

Armstrong, Butler and Westmoreland County.

- *Take advantage of the proximity of the major highway network including the Pennsylvania Turnpike and Route 28. The Borough should work with neighboring municipalities, Allegheny Valley Council of Government, and Armstrong County to form a Route 28 Corridor Coalition.*

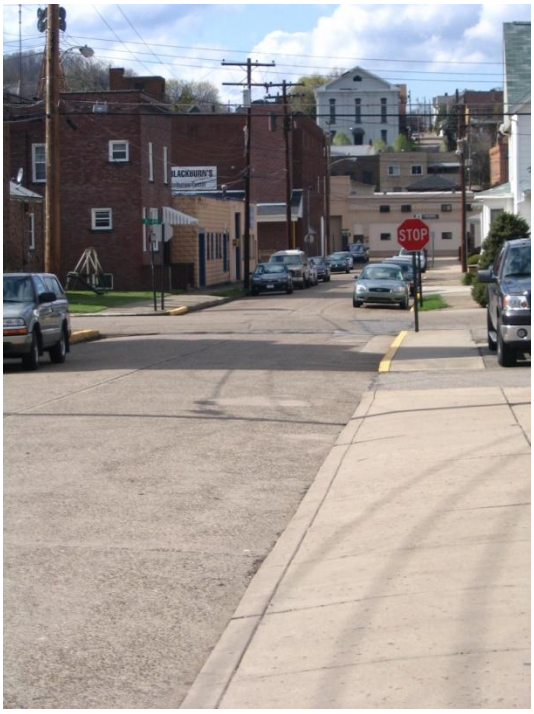
- *Work with Pennsylvania Department of Transportation, Allegheny County and Southwestern Pennsylvania Commission to advance the development of an industrial access road for the development of the Borough's Keystone Opportunity Zone.*

- *Work with Port Authority of Allegheny County in seeking out Park N Ride opportunities that promote Transit Oriented Development and mixed use development.*

- *Collaborate with the Westmoreland County Transit Authority on advancing the commuter rail service from the City of Greensburg to the City of Pittsburgh.*

- *The Borough should advocate the alignment of the commuter rail service that will go through the Borough of Tarentum.*

- *Develop a pedestrian pathway between First and Third Wards with connections to promote linkages between the business district and residential area.*

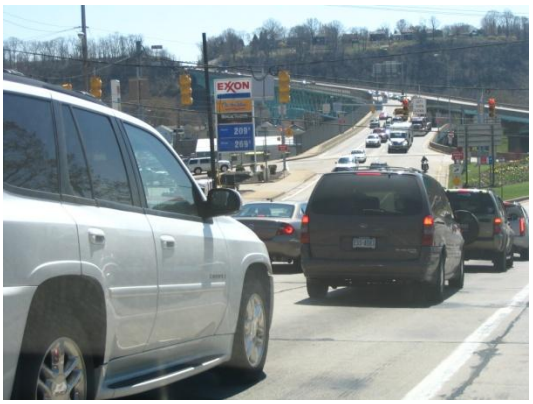


- *Initiate a residential parking permit program to limit parking on residential streets and to construct parking spaces that decreases curb wear and maintenance.*

- *Develop a parking facility for commercial businesses and to balance the development of the facility with green space to promote the aesthetics of the community.*

- *Promote the Borough's two major entrance corridors: New Kensington Bridge and Route 366. These access points provide an important gateway to the community. The Borough should*

increase the use of signage along these major access points to promote the riverfront and marina, and at the same time the business and commercial districts.



- *Promote the secondary entrance corridor of West Seventh Avenue. Improvements along this important corridor should serve to promote the Borough as a desirable place to do businesses, promote pedestrian linkages for commercial businesses, and include landscaping enhancements to promote the "small town look" of the Borough.*

- *Collaborate with the Port of Pittsburgh Commission on promoting the Allegheny River water way transportation and to seek economic development opportunities for the industrial properties along the Allegheny Valley.*

- *Maintain the Borough's roadway network to promote bicycle opportunities for residents of the Borough as a feasible commuting alternative and an everyday source of recreation.*

One model that should be utilized in implementing this plan is the concept of **Complete Streets**, which is based on the premise of safe access for all users. These users include pedestrians, bicyclists, motorists and transit riders. Complete Streets tend to support adjacent populations that are not only more diverse, but also more equitable. Current transportation statistics estimate that 1/3 of the population does not drive. Not having access to a vehicle not only limits long distance travel, but can also affect those who live in close proximity to necessary destinations. Poor planning decisions that have separated neighborhoods from jobs centers or commercial districts in the name of increased automobile access are unfortunately common.

Complete Streets can allow contiguous land use patterns that are more diverse, sustainable, and equitable. They can also be used to create a sense of place that results in desirability as a choice of residence, increased economic value and community involvement. Implementation strategies that result from this planning document are strongly encouraged.

UTILITIES

In some cases, municipal governments, either through active role or the default of private utility providers, have taken a proactive role that has not only provided lifeline services to their constituents; but also provided an alternative source of revenue to their coffers.

The Tennessee Valley Authority is perhaps the most prominent example of governmental involvement in infrastructure development in the absence of private participants. Starting as a flood control and electric power generator, it now provides economic development assistance to the communities in its operational area. Locally, Tarentum provides both water and electric service to its residents and the systems also provide a financial return to the Borough beyond its normal tax base.

WATER

Owner/Operator - Tarentum Borough

Tarentum currently owns and operates its own water utility. There are 1,715 residential, 194 commercial and 14 government metered users of the municipal water system. A number of items are included in the Capital Improvement Budget as recommendations in regard to this utility. Unfortunately, water conservation is an issue of major concern only when drought conditions require the imposition of restrictions on its use. At the same, the loss of revenue due to conservation does not help the bottom line of water providers. Encouraging low cost conservation measures such as restriction flow devices on showers and low flow toilets may be encouraged by reduced plumbing fees on these devices. Consideration should also be given to "life line" rates for senior citizens.

SEWERAGE

Operator - Upper Allegheny Joint Sanitary Authority (primary)
Operator - Fawn Township Sewage Authority

The Upper Allegheny Joint Sanitary Authority provides wastewater treatment for the majority of Tarentum Borough. The Fawn Township Sewage Authority provides services for six residential properties located on the north side of Route 28. The Upper Allegheny Joint Sanitary Authority and the municipalities that it serves are currently under orders from a U.S. Environmental Protection Agency consent decree to address problems with storm and sanitary sewer systems to prevent the sewage treatment plant from being overwhelmed during heavy storms and discharging raw sewage into the river.

The EPA consent order requires the municipalities in the Authority's service area to map all sewer lines and designate whether they are a combined sewer or a single sewer line. Once they are mapped the Borough will then use a remote control camera to determine if the sewers need repairs.

Compliance with the consent decree will require the municipalities that utilize the services of the Upper Allegheny Joint Sanitary Authority to comply with the EPA's Nine Minimum Controls as follows:

- *Proper operation and regular maintenance programs for the sewer system and the Combined Sewer Overflows (CSOs)*
- *Maximum use of the collection system for storage*
- *Review and modification of pretreatment requirements to assure CSO impacts are minimized*
- *Maximization of flow to the publicly owned treatment works for treatment*
- *Prohibition of CSOs during dry weather*
- *Control of solid and floatable materials in CSOs*
- *Pollution prevention*
- *Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts*
- *Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls*

Tarentum should seek to incorporate alternative practices to reduce its CSOs and thus reduce its share of the costs for compliance with the EPA consent decree. These alternatives include, but are not limited to:

- *Use of pervious concrete for infrastructure, especially permeable alleys to reduce runoff* (Third Ward Redevelopment)
- *Use of green roofs on major structures to reduce runoff* (new municipal building)

ELECTRICAL SERVICE

Operator - Redcat Power/Tarentum Borough

The Borough currently serves as the Electrical Distributor Service (EDS) for all electricity consumers within its municipal boundaries under the name of Redcat Power. In return for agreeing to limit its distribution to within the Borough, Tarentum does not need to open its system to competition from other electrical service providers. Statewide in Pennsylvania, 35 municipalities, including Tarentum, own their own electrical companies. The ownership opens some interesting possibilities for the Borough. By increasing efficiency and/or generating its own power, the Borough can control the cost of electricity to its residents. Not only can the residents/customers benefit from competitive rates; but also, the utility can provide the Borough with an additional source of revenue that can reduce local taxes and thus create secondary savings. The Borough purchases its electricity from PPL Energy Plus. The utility has 1978 operational residential meters and 313 commercial meters. Currently, electric power is brought into the Borough at six separate metering points making monitoring difficult. In order to improve system efficiency, the Borough should make every effort to minimize the number of interconnection metering points with its supplier from six to two as part of an overall

"smart grid" strategy. The adoption of a smart grid system would also:

- *Ensure reliability of the electrical system*
- *Maintain affordability*
- *Accommodate renewable and traditional energy sources*
- *Reduce the Borough's carbon footprint*
- *Introduce advancements and efficiencies not currently available*

Another component of this strategy would be to complete the conversion of the electric/water meters throughout the Borough to allow remote monitoring. Where possible, the installation of "smart meters" will allow for more timely and accurate meter reading at a reduced cost and fraction of the time and expense under a manual reading system. The system can also be used to monitor power usage to allow users to monitor their own energy usage and permit ancillary data collection. Early adoption of smart grid system may allow the Borough to take advantage of State incentives for this activity.

As discussed in the Keystone Opportunity Zone section of this plan, the Borough is in a unique position to not only distribute, but also generate its own power. By developing a fuel cell generation facility in the KOZ, Tarentum will not only be able to comply with the Alternative Energy Portfolio Standards Act 213 of 2004; but also, be in a Position to profit from assisting other utilities to comply with the Act.

NATURAL GAS

Operator – Equitable

The natural gas distribution system in Tarentum Borough is owned by Equitable Gas Company. With the deregulation of laws related to energy utilities, natural gas customers can now benefit from "unbundling" and the ability to choose a separate supplier of gas from the company that transports it. The implementation of energy efficient building codes can reduce utility costs in the same fashion that they would for those who use electrical energy.

CABLE TV

Operator - Comcast

Comcast currently provides the Borough's residents with cable television service. The Borough should consider utilizing cable television to broadcast Council meetings to allow more residents to view the local political process in action.

TRASH COLLECTION AND RECYCLING

Operator – Waste Management Inc.

Municipal trash collection services are provided by Waste Management Inc. under contract to the municipality. The Borough also recently reinstituted its recycling program after the market for recyclables stabilized.

Wi-Fi SERVICE

Owner/Operator – None

The current rage in infrastructure is the installation of wireless Internet access, or Wi-Fi, as an incentive to visit or live in urban areas. New York, San Francisco, Chicago and Philadelphia are among approximately 300 cities seeking to go wireless. The deployment of Wi-Fi is not only an incentive to businesses, but can also provide an alternative to costly Internet access to less financially capable populations. Wireless service is cheaper, more reliable and allows even the most remote rural areas to log in less expensively than by laying down extensive networks of cables, not to mention the work and time involved.
When Philadelphia announced its plans to deploy a wireless broadband network in June of 2005 and charge subscribers to use it, private broadband providers reacted by lobbying for the passage of Pennsylvania House Bill 30, a legislative act that gave incumbent local carriers the right to keep local governments from setting up paid services like Philadelphia's after Jan. 1, 2006. While early versions of the bill banned local governments from offering broadband services for pay, the version finally signed into law allowed existing services to continue and gave local governments a one-year window to develop them. After that time, governments in Pennsylvania were banned from wireless deployment unless they offer a right of first refusal to local broadband providers and obtain written waivers to this effect.
While the City of Pittsburgh currently enjoys a wireless system in its central business district under the auspices of the Pittsburgh Downtown Partnership, the plethora of alternative access technologies, and the long-term economic feasibility of metropolitan networks appears uncertain.
In a recent study of a Wi-Fi network in California, it was determined that the network is comprised of three distinct user populations: modem, smart phone, and hotspot which display the following characteristics:

Modem

Modem users are static, normally always connected, and place the highest demand on the network. The deployment of Wi-Fi will have little if any impact on this segment.

Hotspot

These users are concentrated in commercial and public areas. Therefore, we recommend that any public Wi-Fi initially be established in the Borough's proposed Main Street District along East Sixth and East Seventh Avenues. Once redevelopment activity is complete in the Third Ward area and the new municipal center is completed, the service can be extended to the West Seventh Avenue area.

Smartphone

As this is most associated with transit riders, Tarentum should investigate any expanded needs of the Port Authority and other telecommunication service providers for use of the Borough's three communication towers along Route 28.