Borough of Wellsboro – Charleston Township – Delmar Township

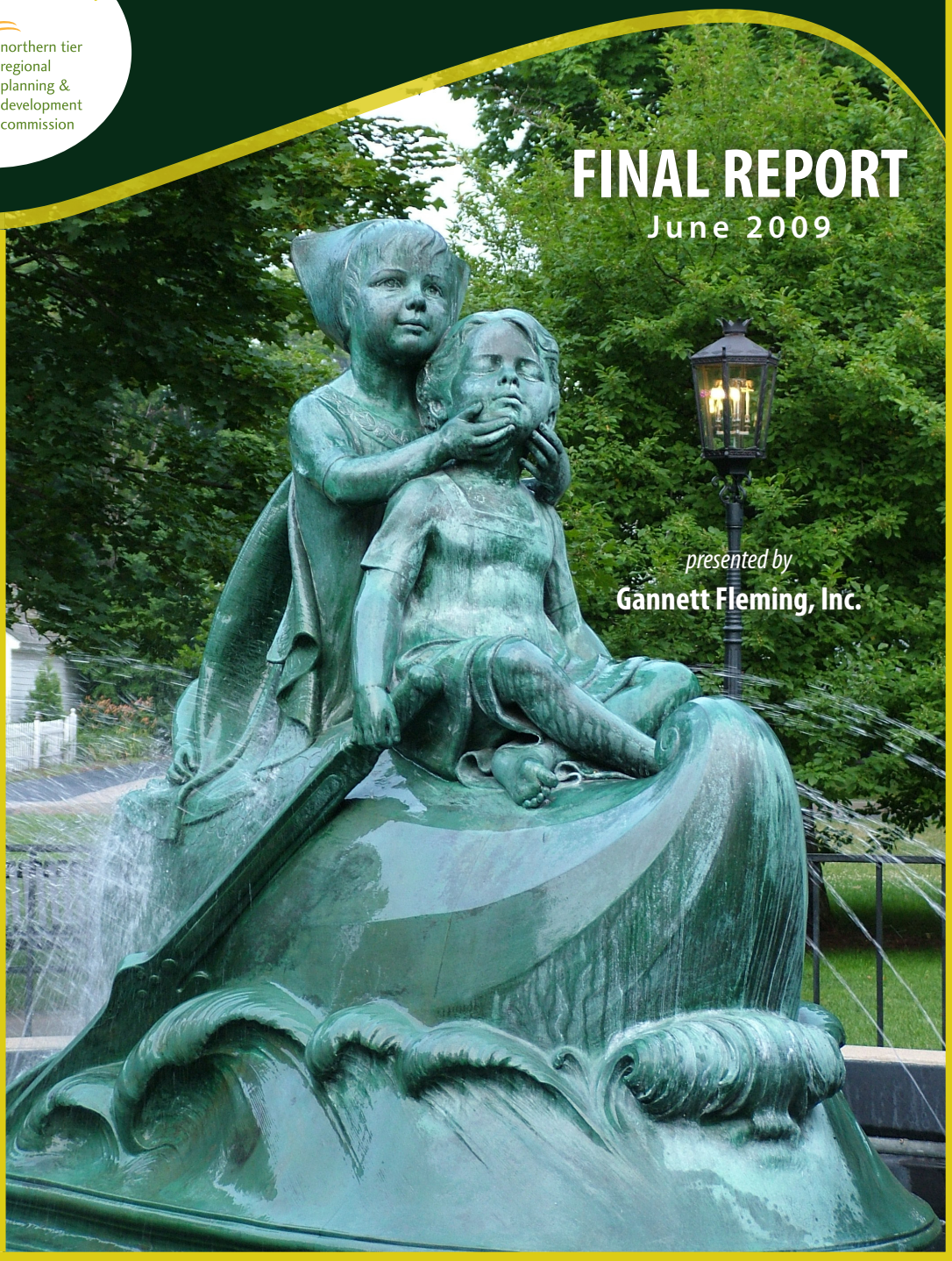
Wellsboro Enhancement Strategy and Mobility Plan

in cooperation with:

nt northern tier regional planning & development commission

FINAL REPORT

June 2009



presented by

Gannett Fleming, Inc.

Wellsboro
Enhancement Strategy and Mobility Plan

"The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation."

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Executive Summary

Why did we conduct this study?

Wellsboro is a significant place in Pennsylvania's Northern Tier region. Our position as a seat of government, business center, major community along scenic Route 6, and soon-to-be terminus of the Pine Creek rail-trail naturally makes us a significant destination for workers and visitors. Our downtown's character, featuring the trademark gaslights, locally-owned businesses and tree-lined streets give Wellsboro a sense of place that few communities possess.

Transportation is an important supporting element of any successful community. This includes everything from how easy it is for a child or senior citizen to cross a busy street, to how well our transportation system connects our residents, businesses, and industries to the outside world. We sought to administer a study that would identify the borough's most pressing transportation concerns and then establish a plan for addressing them. We have learned a lot about Wellsboro through the study process, from what's important to the community and what it believes to be the most vital areas of our transportation system that are in need of attention.

Through the study, we have identified ways in which transportation modes can better interact with one another, ways in which technology can be used to provide improved traveler information and system performance, and ways in which non-motorized modes such as bicycling and walking can be made more convenient and safe. This report represents only the beginning of a continuous process as we work together with interested borough businesses and residents, and other partners such as our county commissioners, the Northern Tier Regional Planning and Development Commission, PennDOT, and other state agencies.

Study Methodology

- Project Advisory Committee
- Data Collection
- Stakeholder Input
- Community Survey
- Public Open Houses
- Development of Draft Recommendations and Outreach
- Final Report/Executive Summary

What was studied, and how?

The Project Advisory Committee members provided the overall direction for the study. The study team collected and analyzed data for the study area related to: People (population composition and trends), Transportation (system performance and safety), and Traffic (volumes and turning movement counts). The team also collected anecdotal data with subjective input offered by the Project Advisory Committee, community survey, public open houses, interactive Web survey, and stakeholder groups such as senior citizens and middle school students.

Facts and opinions about the study process are highlighted on the following pages, and presented in the full report.

Facts: Highlights of Study Area Data

Stable Growth: In the 15-year period ending 2005, the borough's population has declined by three percent, while vehicle miles of travel (VMT) have been increasing an average of one-half of one percent annually. Since 1990, Wellsboro has experienced a net decline of 105 persons, while neighboring Delmar Township has declined by 103. Charleston Township, however, has expanded by 319. The growth in Charleston Township is not substantial, but is noteworthy in a county that grew by only 256 persons over the same period. Bottom line, the Greater Wellsboro area is maintaining its population base as other areas of the county are declining.

Aging Population: Nearly 25 percent of borough residents are age 65 or above. This is nearly nine percentage points higher than the state rate of 15.6 percent. Average age of borough residents is 44.2—also higher than the state average of 38. With the community's demographics skewed toward an older population, transportation elements such as signing, sight distance, and appropriate signal timing for pedestrian walk phases must be considered.

Safety Concerns: Universal concern over the intersection of Main, Charleston, and Tioga Streets was expressed through community surveys, focus group meetings, public open houses, and input from the Project Advisory Committee. A signal warrant analysis of the intersection demonstrated that the intersection satisfies three warrants[1] for signalization, based on traffic volume. As a connector between downtown Wellsboro and the extension of the Pine Creek rail-trail, Charleston Street will need to be improved with shoulders and sidewalks. The area's second-highest ranking transportation issue, as identified by the public, was pedestrian safety.

There is universal community concern over the intersection of Main, Charleston, and Tioga Streets.

Outdated Traffic Signal Equipment: There are currently four signalized intersections in Wellsboro. Signal permits indicate that the signal at East Avenue and Main Street has not been updated in more than a decade, while the signal on East Avenue and Grant Street has not been updated since 1988. Also, several of the intersections do not have pedestrian signal heads and associated push buttons. Actuation and detection are sorely needed to improve traffic operations. Upgrading to LED indications would also improve safety and efficiency over time.

1 A warrant is a condition that an intersection must meet to justify a signal installation.

Substandard Roadway Conditions: The Borough has worked to improve several roadways in recent months, including Bacon Street and McInroy Street. Other local roadways in need of improvement include Bodine, Lincoln, Stickley, and Upper Jackson. The Borough receives approximately $84,000 annually in liquid fuels funding but does not have a formal Capital Improvement Program (CIP) in place to maintain a prioritized inventory of roadways for improvement. State roadways such as PA 660 will be milled and resurfaced in summer 2009.

Sidewalk Maintenance: The Borough recently used funding from an Elm Street grant to construct sidewalks along East Avenue to the Wellsboro Plaza. Other areas in the borough have discontinuous sidewalks or sidewalks in poor condition. In some places, such as the areas surrounding Charlotte Lappla Elementary School, there are no sidewalks at all. With input from Borough police and community surveys, several areas have been identified as being in need of sidewalk improvement, including: Grant, Hastings, Meade, Nichols, Queen, and Sherman Streets, among others.

Opinions: What's important to residents

The study team mailed a survey to every property owner in the borough in September 2008 to identify study issues. The team received 276 surveys for a return rate of nearly 26 percent, which is very good for this type of survey. Respondents were asked to rate various study issues as "Very Important," "Medium," and "Less Important." The following table highlights the issues most important to borough residents and was used as one basis for developing report recommendations.

Table 1 – Highest Rated Issues…by Percent Reporting "Very Important"

Issue	Percent Saying "Very Important"
1. Improving the intersection of Main/Tioga/ Charleston	81.7
2. Ensuring pedestrian safety	76.5
3. Ensuring safe walking routes to area schools	62.4
4. Improving roadway conditions	62.3
5. Maintaining sidewalks	61.2
6. Maintaining the borough's historic character	59.8
7. Increasing the availability of sidewalks and crosswalks	56.8
8. Better enforcing traffic laws (speeding, etc.)	55.0

Source: Gannett Fleming, Inc.

What were the results of the study?

The study team identified and included 15 study recommendations in the study implementation plan. The recommendations are based on broad-based public participation, including two public open houses, a community survey, stakeholder outreach to senior citizens and middle school students, and an interactive Web survey. As a result of the study process, the Borough has identified a prioritized listing of improvement needs with an associated action plan for implementation. Recommendations cover the following broad subject areas:

- Roadway Conditions
- Operations (signals and signal systems)
- Sight distance
- Ordinance-related issues
- Non-motorized modes

Recommendations are listed below and described in more detail within the report:

A. Address poor roadway surface conditions

B. Upgrade the Borough's signal equipment and hardware

C. Signalize the intersection of Main/Tioga/Charleston

D. Develop the Marsh Creek Greenway as a link from the Pine Creek Rail-Trail to Wellsboro

E. Improve Charleston Street as a connector from the Marsh Creek Greenway to downtown Wellsboro

F. Investigate the need for a signal at Wellsboro Plaza

G. Evaluate sight distance limitations at various intersections

H. Develop and adopt an access management ordinance

I. Improve non-motorized access to recreational areas

J. Monitor the intersection of Bacon, Morris, and Waln

K. Improve public transportation services

L. Initiate a program to upgrade pedestrian routes to ADA standards

M. Address signing and roadway markings

N. Plan for vacant properties on East Avenue

O. Maximize on-street parking capacity

Who led this study?

The Wellsboro Borough Council hired Gannett Fleming, a planning consulting firm based in Camp Hill, and developed a Project Advisory Committee to guide the study process. Members included:

Rick Biery	NTRPDC
Robert Blair	Tioga County Development Corporation
Bob Chesko	Sherwood Motel
Jim Daugherty	Wellsboro Mayor
John Dugan	Wellsboro Borough Council
Joan Hart	Wellsboro Borough Council
Dave Howey	Charleston Township Supervisor
Fred Kennedy	Delmar Township Supervisor
Chris King	PennDOT District 3-0
Gary Mosher	Laurel Health System; WACC Enhancement Committee
Rudy Scharf	Wellsboro Borough Council
Curt Schramm	Country Ski and Sports
Sue Stephens	Wellsboro Borough Secretary
Julie VanNess	Wellsboro Area Chamber of Commerce
Phil Waber	Wellsboro School District Superintendent
Jim Weaver	Tioga County Planning
Bob Williams	Thornapple Design Group
Mary Worthington	Growth Resources of Wellsboro
Tom Young	Wellsboro Police Department

What happens next?

As part of this study report, members of the study Project Advisory Committee have finalized an implementation plan that outlines the framework for continued leadership and organizational cooperation, progress tracking and reporting, advocacy, funding, and communication/public information.

Who paid for it?

The study was funded by the Pennsylvania Department of Transportation and Wellsboro Borough.

Objectives and Methodology

Objectives

During its May 29, 2008, kick-off meeting, the Project Advisory Committee members identified the following as study objectives and expectations:

- A prioritized map of needs that includes potential sources of funding
- Provide safe walking routes
- Improve vehicle traffic flow
- Resolve issues at the intersection of Main/Tioga/Charleston
- Provide a document for future decision making
- Use the "Wellsboro mobility map" as a reference for the plan
- Consider the visual impact of any recommendations that are made
- Reduce the yellow paint currently on the streets and curbs
- Identify all bicycle and pedestrian issues in the borough
- Examine existing borough ordinances and stress enforcement of those ordinances
- Address current and future parking needs of community
- Promote economic development opportunities
- Consider aesthetic impacts of recommendations and context sensitive design issues
- Consider wayfinding signage both within the borough and for area attractions.
- Coordinate all modes of transportation.

Methodology

Project Advisory Committee

A 19-member Project Advisory Committee comprised of individuals from the following organizations reviewed draft study materials and guided the study process:

- Charleston Township
- Country Ski and Sports
- Delmar Township
- Growth Resources of Wellsboro
- Northern Tier Regional Planning and Development Commission
- Pennsylvania Department of Transportation
- Sherwood Motel

- Tioga County Development Corporation
- Tioga County Planning Commission
- Wellsboro Area Chamber of Commerce
- Wellsboro Borough

The Project Advisory Committee met five times over the course of the project.

Study Methodology

- Project Advisory Committee
- Data Collection
- Stakeholder Input
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- Public Open Houses
- Recommendations and Outreach
- Final Report/Executive Summary

Data Collection

In developing a baseline for the study, the study team collected data from a variety of sources, including the U.S. Census Bureau and PennDOT management systems. Field work included turning movement counts at the borough's four signalized intersections and at the intersection of Main/Tioga/Charleston Street. Traffic engineers also conducted a safety audit of the borough's main thoroughfares. A parking inventory was conducted in the borough in October 2008 to gauge the level of demand for on-street parking at several "activity centers," such as the Court House

Finally, the study team examined related studies and plans that would have an impact on the Wellsboro Enhancement Strategy and Mobility Plan. A few of these include the Tioga County Comprehensive Plan, PAWilds Design Guide, and borough subdivision and land development ordinances.

Stakeholder Input

The study team sought anecdotal stakeholder input through interviews with area officials and through focus group sessions with area senior citizens and middle school students. Personal interviews were also conducted with:

- Cindy Boyce – Wellsboro School District Transportation Coordinator
- Sam Delosa - Wellsboro Borough Police
- Karen Graber – Endless Mountains Transportation Authority
- Peter Herres – Wellsboro Department of Parks and Recreation
- Guy Mahosky - PennDOT's county maintenance office
- Tom Myles of the Myles Group - operator of the Wellsboro and Corning Railroad, and
- Jim Weaver – Tioga County Planning Commission.

Community Survey

The study team mailed a community survey to every property owner within the borough. The survey was also designed to inform borough property owners of a

public open house to be held on the evening of Thursday, September 25, 2008, at the Wellsboro High School auditorium.

Survey Design

The team designed the survey to be completed in a minimal amount of time. The survey instrument itself featured two demographic-related questions, along with a series of 25 additional questions to gauge community preferences on a range of issues. The issues surveyed were based on project data collection efforts to date. An open-ended question collected perspectives on issues not specifically addressed in the survey. A self-addressed envelope (without postage) was included as part of the survey mailing.

Survey Mailing

Using records from the tax assessment office, the team identified all property owners within the borough. After eliminating duplicates from the database, the team mailed 1,070 surveys on Tuesday, September 16, 2008.

Response Rate

In all, the team received 276 surveys for a response rate of nearly 26 percent, which is excellent for this type of mailing.[2] Nearly two-thirds of all surveys were completed and returned within the first week of mailing. Survey respondents had the option of mailing the survey to the planning team, dropping off a copy at the Borough office, or bringing a copy to the open house. The survey responses were useful in understanding community priorities and were used in formulating the final study recommendations.

Public Open Houses

The Borough hosted two public open houses at key project milestones. The Borough conducted the first open house on September 25, 2008, at the Wellsboro High School Auditorium. The purpose of the first open house was to introduce the study process to the public and to receive input on an initial list of transportation issues. The Borough conducted a second open house on May 4, 2009, in the Large Group Instruction room at Wellsboro High School. The purpose of the second event was to introduce a listing of draft study recommendations. (The study team vetted the recommendations with members of the Project Advisory Committee, Wellsboro Borough Council, and PennDOT District 3-0 prior to their public release.) The team used PowerPoint

[2] The response rate for the sample size gives the study team statistical confidence of 95 percent that the survey results accurately reflect community preferences to within 5 percentage points.

presentations and exit surveys at both public events, which also included a separate public officials briefing.

Recommendations and Outreach

The study team presented an initial list of study recommendations to the Project Advisory Committee during its November 12, 2008, meeting. The team held follow-up briefings and discussions with members of Wellsboro Borough Council on January 29, 2009, and with traffic engineers from PennDOT on February 20, 2009.

Final Report/Executive Summary

The report summarizes the study area's existing transportation conditions, trends and issues, as well as public comments and traffic analyses. Fifteen recommendations are included and found beginning on page 73. An Executive Summary geared toward a lay audience has also been prepared and is included at the beginning of this report.


WEST
WEST
660
6
SOUTH
NORTH
287
287
WEST
BicyclePA
Y
Route
SR 6
500
PENN WELLS
Dunham's department store
LEFT LANE
MUST
TURN LEFT

Background and Existing Conditions

The planning team prepared a background profile as part of the planning process to establish a baseline from which to plan for the future. This section of the report summarizes the study area's existing socio-demographic conditions, existing transportation system, and offers a review of other planning documents and studies that have a bearing on the outcomes of the study.

Existing Socio-Demographic Conditions

Stable Population Growth Trends

The three municipalities within the study area—Wellsboro Borough, Delmar Township, and Charleston Township—are among the most populous municipalities within Tioga County. Only Mansfield Borough, with a 2000 Census population of 3,411, is more populous than any of the three study area municipalities. The municipalities are also rather close to each other in size, with a difference of only 435 persons between Wellsboro and Delmar in 2000.

As Figure 1 shows, total population in Delmar and Charleston Townships has been on an upward trend since 1950. Delmar Township did experience a population decline during the 1990s, but has since gained according to the 2006 population estimates by the Census Bureau. Wellsboro Borough's total population peaked in 1960 and has declined in each succeeding decade. The decline has slowed considerably in recent years with the borough's population declining by only three persons between 2000 and 2006.

Table 2 below shows the study area's historical population while Table 3 shows the rate of population change over the past 30 years.

Table 2
Historical Population, 1980-2006

Municipality	1980	1990	2000	2006 Est.
Wellsboro Boro	3,805	3,430	3,328	3,325
Delmar Twp	2,732	3,048	2,893	2,945
Charleston Twp	2,712	2,957	3,233	3,276
Tioga County	40,973	41,126	41,373	41,382

Source: U.S. Census

Table 3
Population Change, 1980-2006

	1980s		1990s		2000-2006	
Municipality	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Wellsboro Boro	-375	-9.9%	-102	-3.0%	-3	-0.1%
Delmar Twp	316	11.6%	-155	-5.1%	52	1.8%
Charleston Twp	245	9.0%	276	9.3%	43	1.3%
Tioga County	153	0.4%	247	0.6%	9	0.0%

Source: U.S. Census

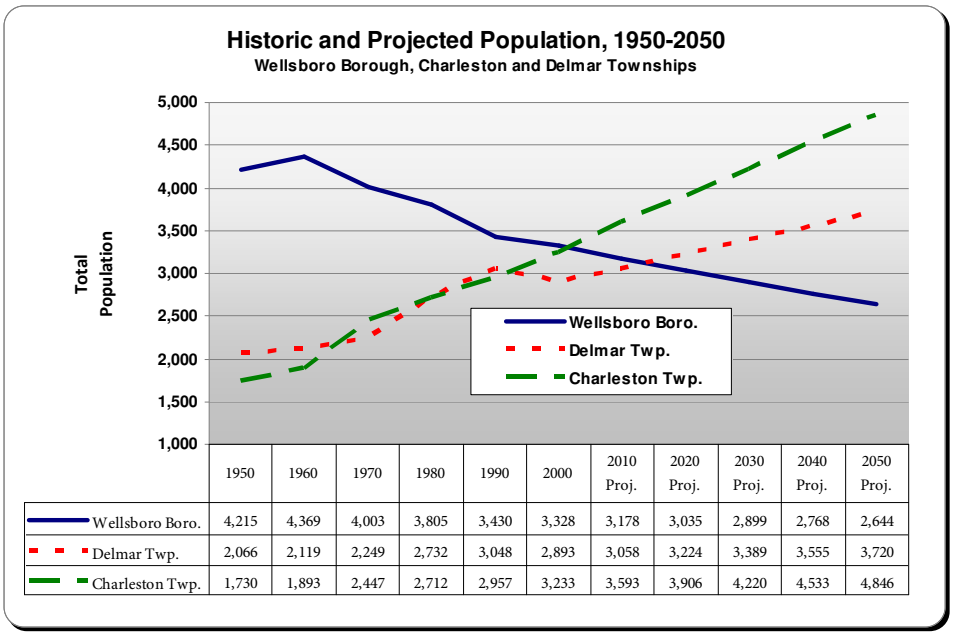
Population Projections

Projections of future populations are useful to provide an indication of what level of population may need to be served in the future. Fast-growing areas will require more municipal services than slower-growing or declining areas.

Population projections developed by the Northern Tier Regional Planning and Development Commission (NTRPDC) show the current trends of the past 60 years continuing into the future. As Figure 1 shows, Wellsboro is projected to lose 684 persons through 2050, while Delmar Township increases by 872 persons and Charleston Township gains 1,613 persons within the same period. It must be understood that population projections are only an educated guess at general future trends. The 2006 Census estimates appear to indicate that the growth of the two townships will be less than projected, while the borough's population loss will be less than expected.

Estimates from 2006 indicate that borough population declines are less than originally projected.

Figure 1
Historical and Projected Population



	1950	1960	1970	1980	1990	2000	2010 Proj.	2020 Proj.	2030 Proj.	2040 Proj.	2050 Proj.
Wellsboro Boro.	4,215	4,369	4,003	3,805	3,430	3,328	3,178	3,035	2,899	2,768	2,644
Delmar Twp.	2,066	2,119	2,249	2,732	3,048	2,893	3,058	3,224	3,389	3,555	3,720
Charleston Twp.	1,730	1,893	2,447	2,712	2,957	3,233	3,593	3,906	4,220	4,533	4,846

Source: U.S. Census, Northern Tier Regional Planning and Development Commission

An Aging Population

Average age in Wellsboro is six years higher than the state average.

Age is an important factor to consider when evaluating the community's transportation system. The oldest and youngest members of the population likely cannot or do not drive and their transportation needs must be accommodated in ways other than as a motorist. Additionally, as the population as a whole becomes older, the roadway system must be responsive to the needs of older drivers.

As Table 4 shows, in all three municipalities (as well as Tioga County and Pennsylvania as a whole) the median age of the study area population has increased. The median age increased the most in Delmar Township, where it rose 5.5 years. Meanwhile, in Wellsboro (which already had an older base), the median increased by only 2.1 years.

Table 4
Median Age, 2000

Municipality	Median Age	Change from 1990
Wellsboro Boro	44.2	+ 2.1
Delmar Twp	39.8	+ 5.5
Charleston Twp	41.2	+ 3.3
Tioga County	38.5	+ 4.3
Pennsylvania	38.0	+ 3.0

Source: U.S. Census

Table 5 shows figures for the dependent populations, or those who are age 17 and younger and age 65 and older. Despite the rising median age in all three municipalities, the percent of the population that is age 65 and older declined in both Wellsboro and Delmar. This percentage increased in Charleston, however the percentage of the population that is age 17 and younger also increased. These figures likely reflect the overall growth in population in Charleston Township in the 1990s and the corresponding population loss in the other two municipalities.

Table 5
Dependent Population, 2000

		Age 17 and Under		Age 65 and Over	
Municipality	**Total Population**	**Percent**	**Percentage Point Change from 1990**	**Percent**	**Percentage Point Change from 1990**
Wellsboro Boro	3,328	20.9%	-0.4%	24.1%	-1.9%
Delmar Twp	2,893	26.1%	-1.8%	12.9%	-0.2%
Charleston Twp	3,233	24.5%	+0.3%	18.4%	+0.9%
Tioga County	41,373	23.7%	-1.6%	16.0%	+1.0%
Pennsylvania	12,281,054	23.8%	+0.3%	15.6%	+0.2%

Source: U.S. Census

Wellsboro: More Jobs than Workers

Census data indicate there are nearly 5,000 jobs within Wellsboro, yet there are only 1,378 resident workers to fill them. A significant majority (73 percent) of Wellsboro's residents who are employed work within the borough, while 13 percent commute to other nearby Tioga County communities such as Mansfield, Blossburg, Liberty, and Tioga. Only 3.5 percent of the borough's workers are employed at destinations out of state. The high rate of workers employed within the borough underscores the importance of accommodating bicycle and pedestrian modes of travel.

Table 6 shows the top 10 destinations for the borough's workers in rank order.

Nearly 92 percent of all Wellsboro's workers reside in Tioga County.

Table 6
Destination of Resident Workers, 2000

Destination Municipality	Number of Workers
1. Wellsboro Boro	1,010
2. Mansfield Boro	61
3. Blossburg Boro	53
4. Liberty Boro	24
5. Liberty Twp	22
6. Tioga Boro	22
7. Elmira, NY	19
8. Middlebury Twp	18
9. Tioga Twp	17
10. Richmond Twp	16

Source: U.S. Census

Wellsboro is a net importer of workers, with a defined "laborshed" that reaches across most of Tioga County and into Galeton and Harrison Township in neighboring Potter County, as well as into Pine Township to the south in Lycoming County. Nearly 92 percent of all of Wellsboro's workers reside in Tioga County. Table 7 shows the most significant origins of workers employed within Wellsboro.

Table 7
Origin of Workers, 2000

Municipality of Origin	Workers Employed in Wellsboro
1. Wellsboro Boro	1,010
2. Charleston Twp	817
3. Delmar Twp	801
4. Richmond Twp	222
5. Middlebury Twp	220
6. Mansfield Boro	140
7. Shippen Twp	124
8. Covington Twp	106
9. Sullivan Twp	91
10. Chatham Twp	74

Source: U.S. Census

Existing Transportation System

Roadways

Wellsboro's transportation system is anchored by its nearly 23 linear miles of roadway. Nearly three-quarters of the borough's roadways are owned and maintained by the municipality (16.9 miles), while the rest (9.06 miles) are state-owned facilities. Several principal traffic routes converge in Wellsboro, highlighting its prominence as a regional destination. These major traffic routes are US 6, PA 287, PA 660, and Charleston Street (SR 4002), and are shown on Map 1.

Wellsboro has 23 linear miles of roadway.

The roadways of the borough vary in their characteristics and traffic carrying capacity and are assigned to one of five roadway classifications. These classifications are shown in Figure 2 and include:

- **Rural Principal Arterial** – These roadways link cities and larger towns and form an integrated network providing interstate and inter-county service. The only study area roadway in this classification is US 6, which is multiplexed with PA 287 north of the borough.
- **Rural Minor Arterial** – Roadways of this classification provide service to corridors with trip lengths and travel densities greater than those predominantly served by rural collector or local roads. They are generally designed to accommodate relatively high overall travel speeds with a focus on through movement. Within the study area, PA 287 is classified as a rural minor arterial.
- **Rural Major Collector** – These roads generally serve travel needs that are intra-county in nature with shorter trip lengths and slower speeds. Within Wellsboro, PA 660 west of the borough and Charleston Street east of the borough are classified into this category.
- **Rural Minor Collector** – These roads collect traffic from local roads and link locally important traffic generators with rural areas. Kelsey Street is a rural minor collector.
- **Local** – These roads are the lowest order of roadway with the slowest speeds and shortest travel distances. Many trips will begin and end on these roads that provide access to a wide range of areas. Local roads include Bradley Street/Pearl Street, Conway Street/Berwart Street, and all municipally owned streets.

Figure 2 graphically shows the functional classification of the borough's roadways.

Northern Tier Regional Planning and Development Commission

WELLSBORO ENHANCEMENT STRATEGY & MOBILITY ANALYSIS

BASE MAP
Map 1

Legend

- Railroad
- Major Through Traffic Routes
- Major State Roads
- Secondary Traffic Routes
- Stream / River
- Lake / Pond
- Municipal Boundary

LOCATION MAP

Scale (Feet)

0 700 1,400 2,800

JUNE 2008

Prepared By:

Gannett Fleming

207 Senate Avenue, Camp Hill, PA 17011

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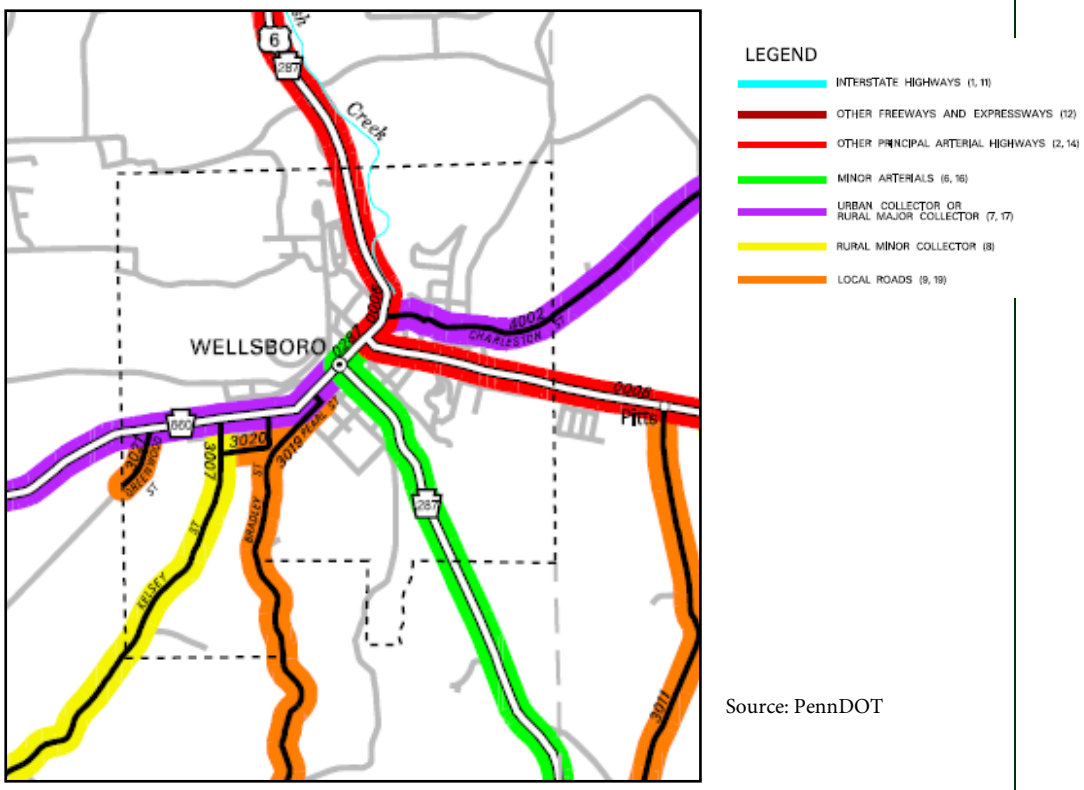
Figure 2
Roadway Functional Classification



Source: PennDOT

Roadway Improvements

The Northern Tier Regional Planning and Development Commission, in partnership with Tioga County and PennDOT, has programmed more than $10.56 million in roadway and bridge improvements within the Greater Wellsboro study area[3] as part of its 2009 Transportation Improvement Program (TIP). A majority of the projects are oriented towards roadway resurfacings, bridge replacements, and other system preservation projects.

Projects within Wellsboro include two resurfacing projects on US 6 and SR 3019 (Bradley Street), as well as a bridge replacement of King Street over Kelsey Creek. It should be noted that the study area municipalities also have access to line item reserves for CMAQ projects (those that mitigate congestion and improve air quality) totaling $1.67 million. These monies can be used for such things as traffic signals, public transportation equipment, park and rides, and similar projects. A second line item includes costs related to bridge preservation work in many

[3] Including Charleston and Delmar Townships

Tioga County municipalities, including the ones within the study area.

Table 8 shows area projects appearing on the region's 2009 TIP, which was approved by the State Transportation Commission (STC) on August 7, 2008.

Table 8
2009 TIP Projects Within the Study Area

Location	Description	Cost	Construction Year
Charleston Twp	SR 4035 over Catlin Hollow Creek	$233,972	n/a
Charleston Twp	SR 4002 over Catlin Hollow Creek	$487,500	2009
Charleston Twp	US 6 over Charleston Creek bridge replacement	$809,120	2010
Delmar Twp	SR 3007 over West Branch of Stony Fork Creek bridge replacement	$208,000	2009
Delmar Twp	SR 3007 over Stony Fork Creek bridge replacement	$624,000	2009
Delmar Twp	PA 287 resurfacing from SR 3019 to Wellsboro	$2,643,430	2011
Delmar Twp	PA 287 over Marsh Creek	$701,915	2012
Delmar Twp	SR 3007 over West Branch of Stony Fork Creek	$233,728	2013
Wellsboro Boro	King Street over Kelsey Creek bridge replacement	$2,218,340	2013
Wellsboro/Delmar	SR 3019 resurfacing from PA 287 to Pearl Street	$1,541,696	2010-11
Wellsboro/Delmar	US 6 resurfacing from Stokesdale to Wellsboro	$859,846	2012-13

Source: Northern Tier Regional Planning and Development Commission

In addition to the improvements programmed in the TIP, PennDOT's Maintenance District 3-7, located in Wellsboro, has maintenance projects programmed for state roads in the area. While these projects are programmed for upcoming years, PennDOT staff has indicated that the actual timeframe within which the projects will be constructed is unknown. The skyrocketing costs of oil-based asphalt materials and fuel has had a direct and immediate impact on the scheduling of maintenance projects. Costs of liquid asphalt for example more than doubled during 2008, from $295/ton in January to more than $600/ton in

August.

There are three projects to be completed in coming years, as funds permit:

- Main Street milling and resurfacing from Tioga County Court House to Charleston Street.
- US 6 resurfacing from Main Street to Weis Market.
- US 6 resurfacing from Weis Market to SR 4002/PA 660.

Maintenance and improvements to Wellsboro's locally-owned roadway system are largely accomplished using Liquid Fuels revenues that are disbursed by PennDOT's Bureau of Municipal Services. Wellsboro's share of this funding is determined on a formula basis, expressly the borough's share of total population, as well as municipal roadway mileage. For fiscal year 2008, this total amounted to $84,142.78. The only way this figure would increase appreciably would be if there were a legislative change in the funding formula or if there were a gas tax increase. The formula for this disbursement is steady and the amount typically increases from year to year, based on Daily Vehicle Miles of Travel (DVMT), which in turn generates the gas tax revenues that capitalize the liquid fuels amounts. Total municipal roadway mileage in Wellsboro is 16.9 miles, while the 2000 census put its population at 3,325. The population figure is used until the next census in 2010.

Wellsboro has currently taken out a loan to accomplish a large number of paving and infrastructure projects, with the loan to be repaid through future Liquid Fuels revenue. With this loan, the Borough is planning the following projects:

- Reconstruction (milling/base repair/paving) of the following roads:
    - Eberenz Street
    - Lower Jackson Street
    - McInroy Street
    - Norris Street
    - Queen Street
    - Water Street
    - Wetmore Street
- Replace traffic signal loop detector on McInroy Street
- Pipe and trench repair borough-wide

- Base repairs borough-wide
- Milling borough-wide

Other Borough projects not financed by the loan include:

- Extend the sewer main to the borough line on Kelsey Street
- Improvements to the Hamilton Lake recreation area
    - ADA-accessible boat launch improvements
    - Restrooms
- New playground equipment at Packer Park on Queen Street
- East Avenue sidewalk extension to Wellsboro Plaza

Slight Increases in Travel and Traffic Volumes

Traffic volumes were collected for the Wellsboro area from several sources. Some of the data was collected from PennDOT databases that contain current as well as historical information. Other data was collected in the field by the consultant by either direct observation or from traffic data recorders placed in the roadway. The travel data collected in the field is summarized in the Turning Movement Counts section of this report.

The overall amount of travel in Wellsboro Borough has increased only slightly in recent years. On state-owned roads in the borough, DVMT rose 4.9 percent in the 10-year period ending in 2007. This is an average growth rate of less than one half of one percent per year. Total DVMT increased from a 1997 total of 37,309 miles to a 2007 total of 39,144. The amount of travel on local roads is not recorded by PennDOT, so numbers are not available.

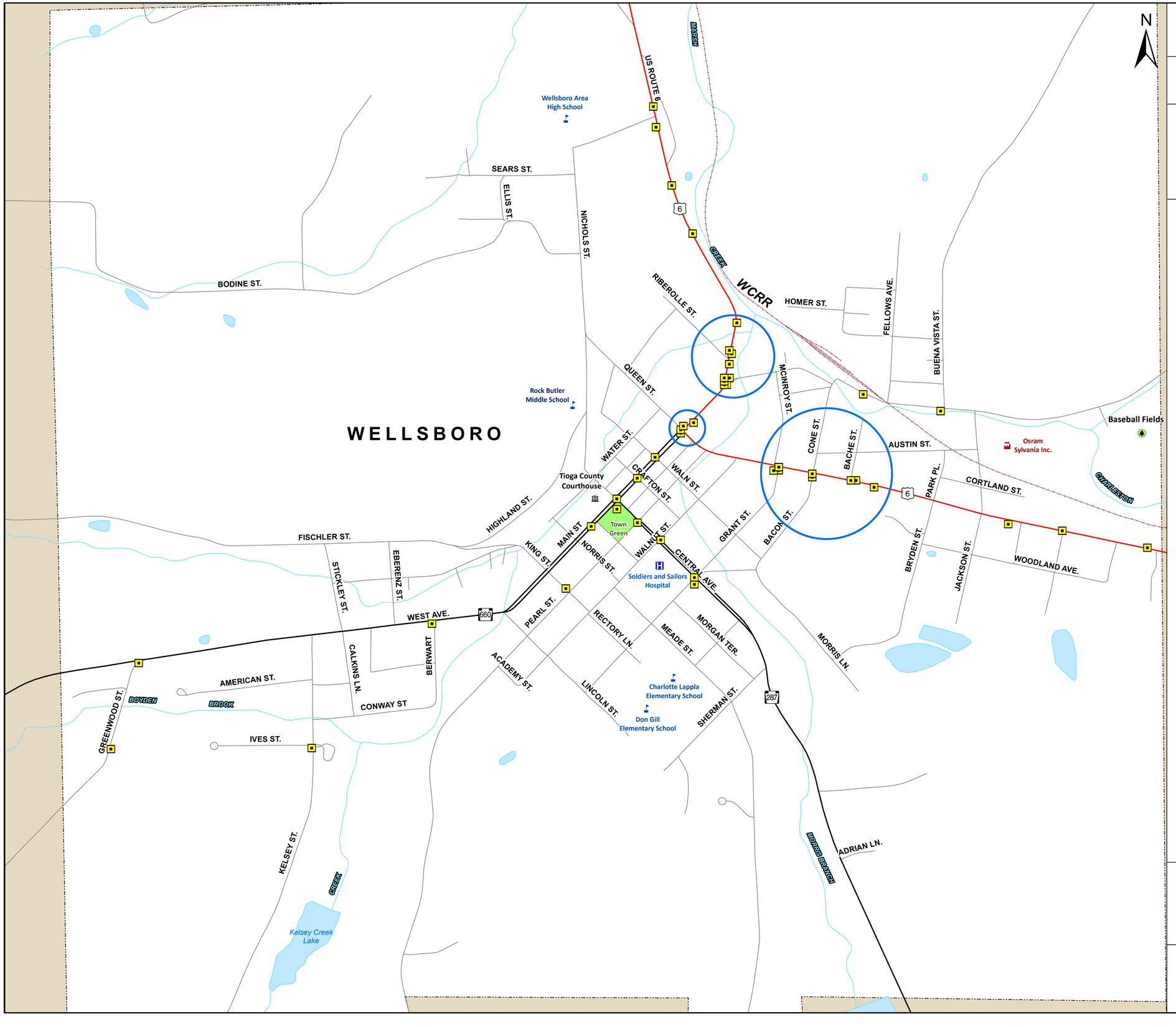
Traffic volumes for 2006 on state-owned roads in Wellsboro are shown in Figure 3. The roadways with the highest volumes are the entire length of US 6 through the borough and also Main Street (PA 287).

The volumes indicate that the vast majority of traffic into and out of the borough travels on US 6. The East Avenue portion of this historic and scenic roadway carries an average of 12,000 vehicles per day, which is the highest volume of any study area roadway. The Tioga Street portion carries 7,900 vehicles, which is still much higher than either PA 660, at 3,100 vehicles, or PA 287 with 2,200 vehicles.

Northern Tier Regional Planning and Development Commission

WELLSBORO ENHANCEMENT STRATEGY & MOBILITY ANALYSIS

CRASH LOCATIONS 2003-2007



Legend

- Crash Location
- Athletic Fields
- Government
- Hospital
- Industry
- School
- Railroad
- Major Through Traffic Routes
- Major State Roads
- Secondary Traffic Routes
- Stream / River
- Lake / Pond
- Municipal Boundary
- Crash Cluster

LOCATION MAP

Scale (Feet)

0 500 1,000 2,000

SEPTEMBER 2008

Prepared By:

Gannett Fleming

207 Senate Avenue, Camp Hill, PA 17011

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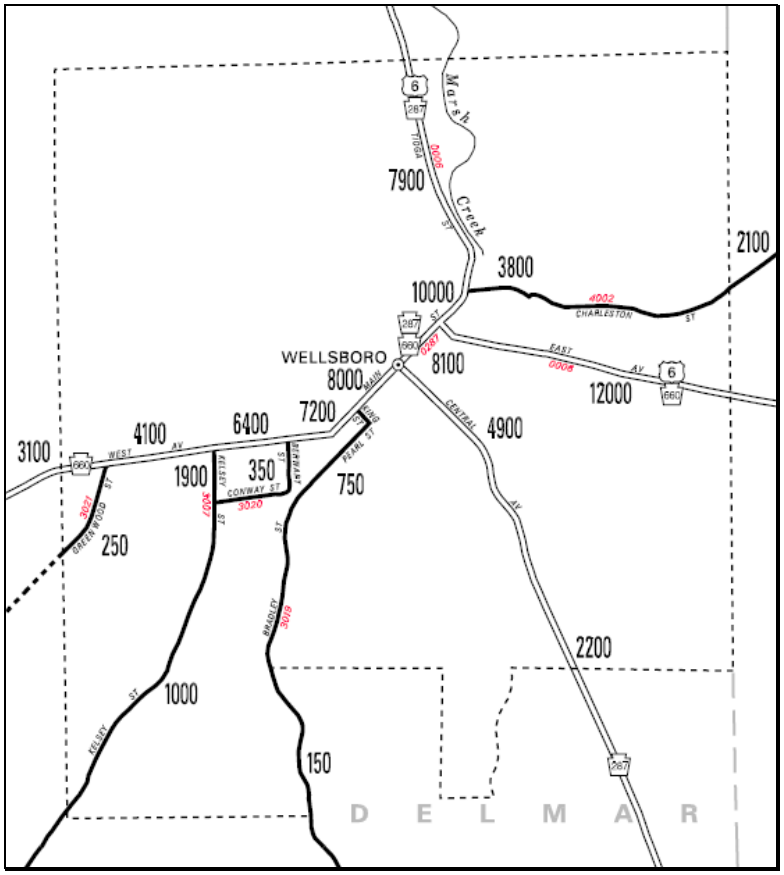
Figure 3
Traffic Volumes, 2006



Source: PennDOT Bureau of Planning and Research

Crash Trends

PennDOT maintains a database of all reportable crashes in the state. A reportable crash is a crash resulting in a death within 30 days of the crash; or injury in any degree, to any person involved; or crashes resulting in damage to any vehicle serious enough to require towing.

Aside from a slight uptick in 2005, the total number of crashes in Wellsboro has been trending in a favorable direction. Within the five-year period ending 2007 there were 95 reportable crashes within Wellsboro Borough. One of these crashes involved a fatality.

Table 9 shows crash trends in the borough versus county and state trends, while Map 2 shows the spatial distribution of reportable crashes within the borough for the five-year period ending 2007. From Map 2, it is easy to see a crash cluster at US 6's intersection with Charleston Street, and along East Avenue.

Table 9
Crash Trends, 2003-2007

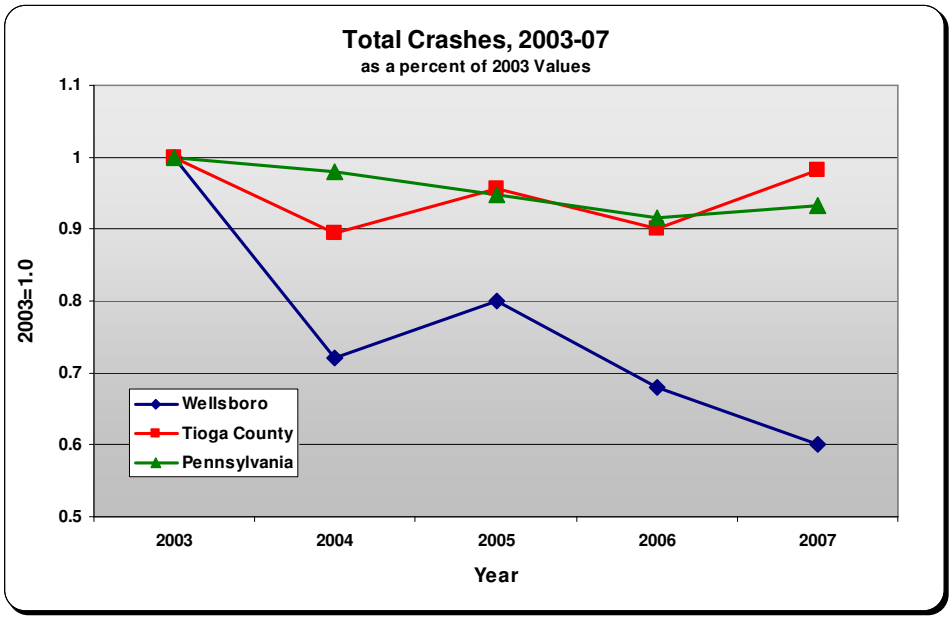
	2003	2004	2005	2006	2007
Wellsboro					
Crashes	25	18	20	17	15
Fatalities	0	0	0	0	1
Tioga County					
Crashes	471	421	450	424	463
Fatalities	10	6	11	11	9
Pennsylvania					
Crashes	140,207	137,410	132,829	128,342	130,675
Fatalities	1,577	1,490	1,616	1,525	1,491

Source: PennDOT Bureau of Highway Safety

The total number of reportable crashes in Wellsboro has been trending in a favorable direction.

Figure 4 below expresses the rate of change another way, using 2003 as a base year. Crashes have declined in Wellsboro at a greater rate than in Tioga County or Pennsylvania as a whole.

Figure 4
Total Crashes as a Percent of 2003 Values

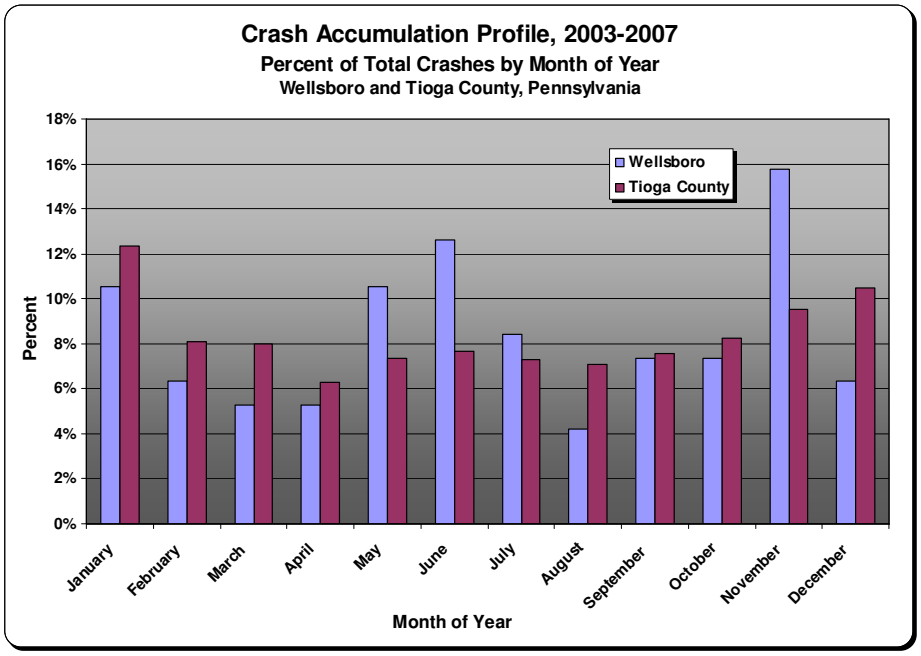


Source: PennDOT Bureau of Highway Safety

Crashes: By Month of Year

The study team also collected data on the number of crashes by month of year. Of the 95 crashes reported during the five-year period, a clear majority occurred during the month of November, which coincides with the typical first snow. The second-highest was during the month of June—the same month as the Laurel Festival, Wellsboro's most significant tourism attraction. Figure 5 below shows these trends compared against county crash trends.

Figure 5
Percent of Total Crashes by Month of Year

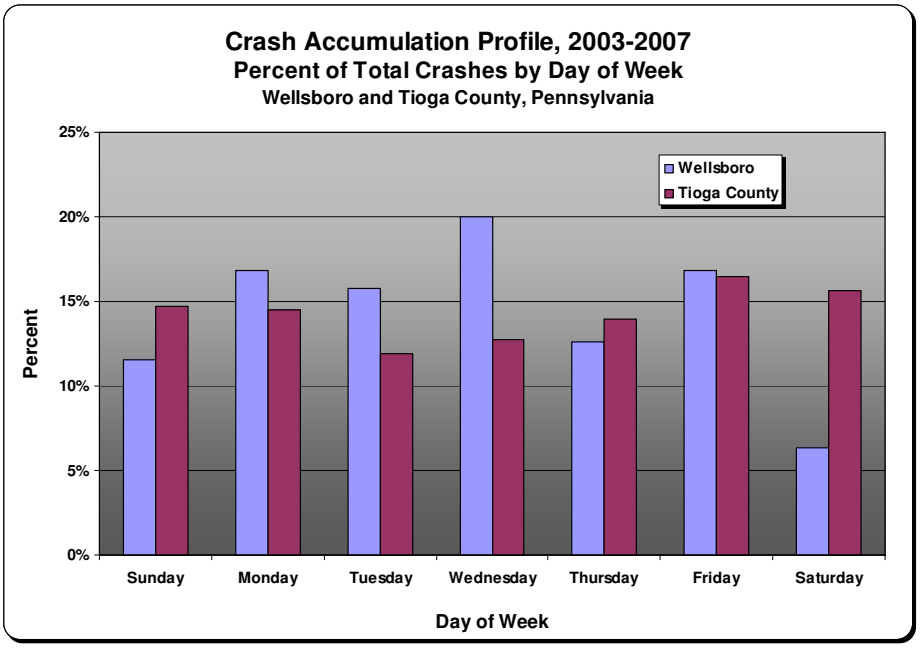


Source: PennDOT Bureau of Highway Safety

Crashes: By Day of Week

Crash rates also vary according to the day of the week. Within the borough, a majority of crashes occur on Wednesday (20 percent), as demonstrated below in Figure 6. Crashes within the borough occur on Saturdays at rates less than half of the countywide rate.

Figure 6
Percent of Total Crashes by Day of Week

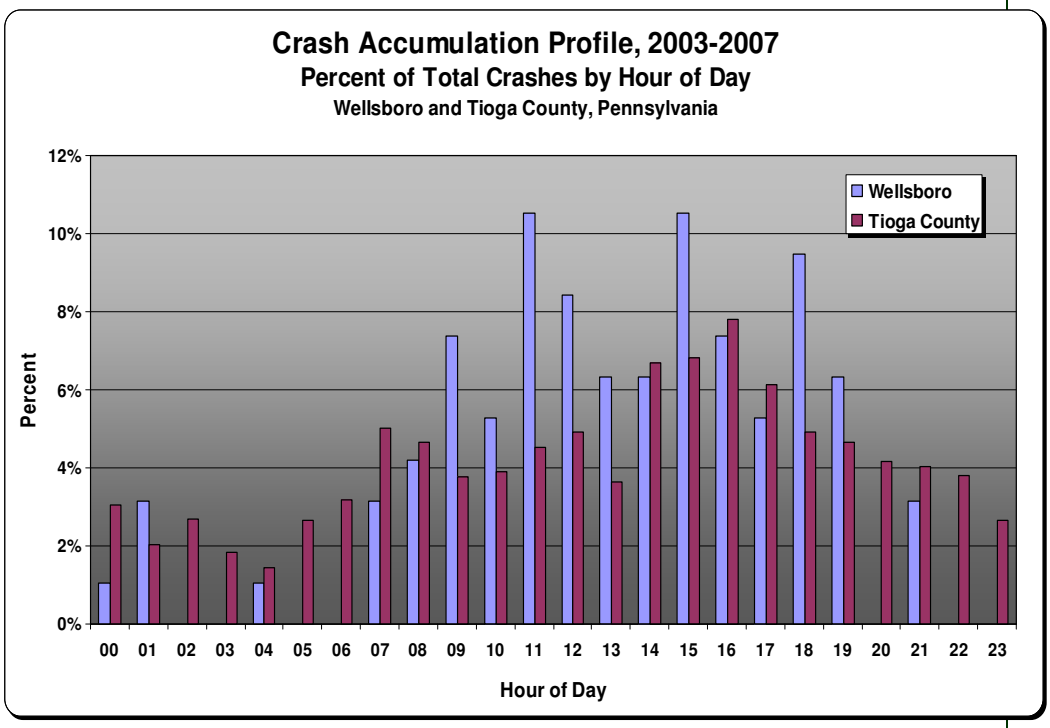


Source: PennDOT Bureau of Highway Safety

Crashes: By Hour of Day

Figure 7 below shows daily crash trends by hour of day for both Wellsboro and Tioga County as a whole. As should be expected, crash data trends for Tioga County as a whole are much "smoother" than for Wellsboro, because a greater number of crashes are averaged. Peak hours for crashes within the borough have been between 9 a.m. and 12 noon, and again between 3 p.m. and 7 p.m. There are substantially fewer crashes during the overnight hours in the borough compared to the county, as Figure 7 shows.

Figure 7
Percent of Total Crashes by Hour of Day



Source: PennDOT Bureau of Highway Safety

Crashes Involving Pedestrians; Heavy Trucks

There are a relatively low number of crashes involving pedestrians and heavy trucks. The actual numbers reported during the 2003-07 period were 6 crashes involving pedestrians (versus 27 countywide), and 3 involving heavy trucks (compared to 138 countywide).

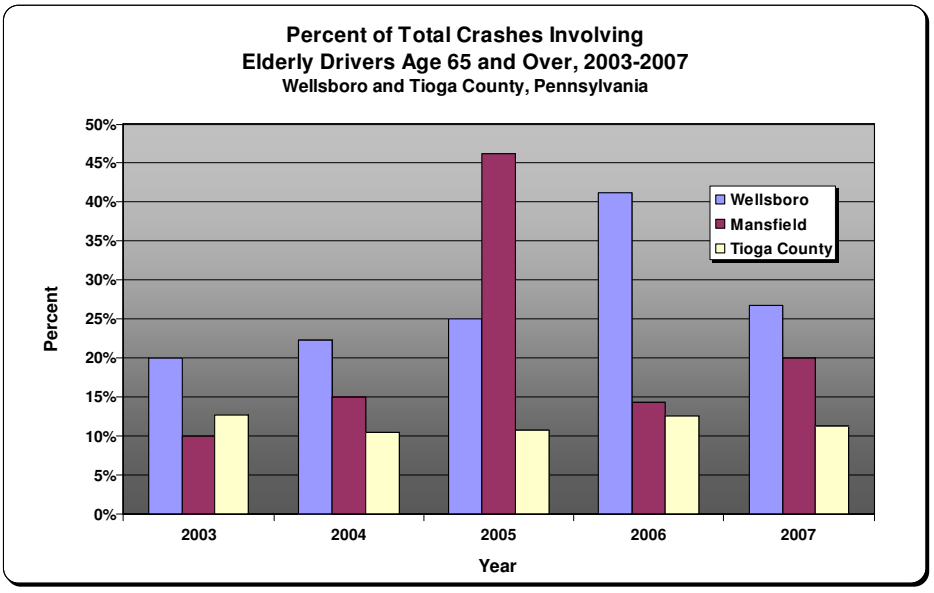
Crashes Involving Seniors

Perhaps the most revealing crash statistic involves the number of crashes involving seniors (age 65+) within the borough compared to the county as a whole. For the five-year period ending 2007, more than one in four crashes in Wellsboro involved a senior, or a driver over the age of 65 (Figure 8). In 2006 alone, the rate was more than 41 percent, compared to a county rate of only 12.5 percent. By comparison, rates in other Tioga County boroughs such as Blossburg and Tioga were generally uniform with county rates. In the Borough of Mansfield, rates were generally higher (20 percent for the five-year period), yet still lower than in Wellsboro or Tioga County in general. For the five-year period ending 2007, there were 25 crashes in Wellsboro involving seniors over age 65. Ten of these 25 crashes involved seniors between the ages of 65 and 75.

More than one in four crashes in Wellsboro involves a senior (age 65+).

In considering crash data from other, more rural municipalities, it should be noted that crash rates are derived from a smaller base. Of the 257 crashes involving seniors throughout Tioga County over the five-year period, 2 were in Tioga Borough, 5 were in Blossburg Borough, 16 in Mansfield, and 25 in Wellsboro.

Figure 8
Percent of Total Crashes Involving Drivers Age 65+, 2003-07



Source: PennDOT Bureau of Highway Safety

Wellsboro Borough police record the non-reportable crashes that they respond to. These crashes totaled 57 in 2006, 74 in 2007, and 62 in 2008. Borough police have reported on the frequency of rear-end crashes along the commercial area of Tioga Street by the bowling alley and by George's Restaurant. These areas are characterized by free access to adjoining commercial development (no well-defined driveways or entrances onto the roadway). The Borough currently does not have an access management ordinance regulating the creation of points of access to a roadway.

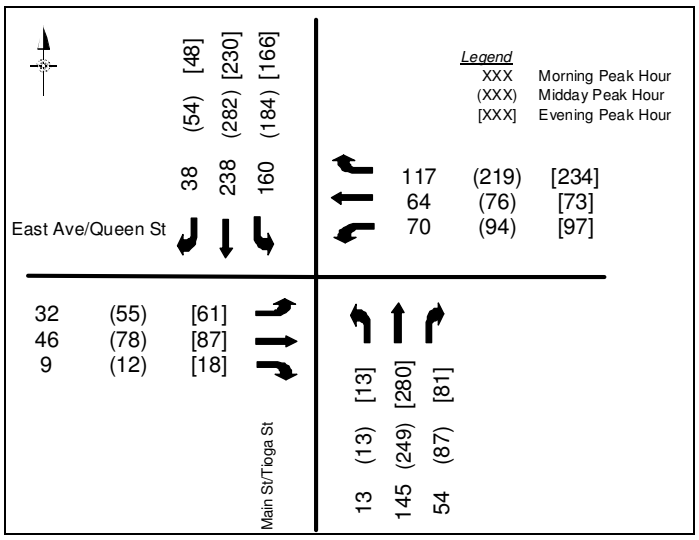
Turning Movement Counts

On July 9-11, 2008, the study team conducted manual turning movement counts at the following locations in the Borough of Wellsboro:

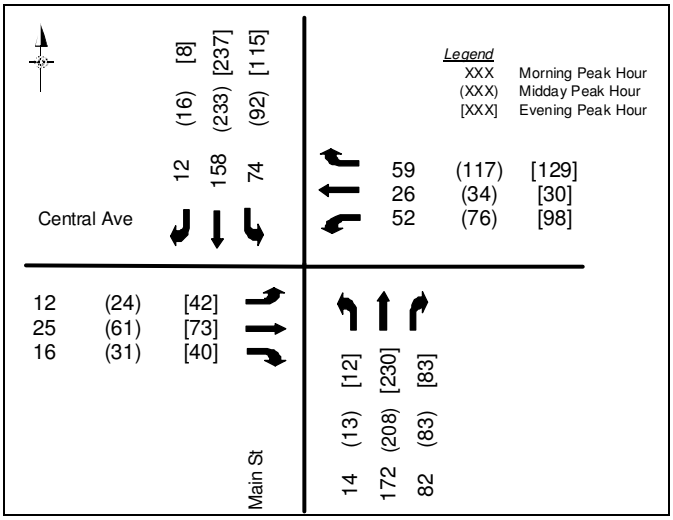
1. East Avenue/Queen Street and Main Street/Tioga Street

2. Main Street and Central Avenue
3. Grant Street/McInroy Street and East Avenue
4. Grant Street and Central Avenue
5. Tioga Street and Charleston Street

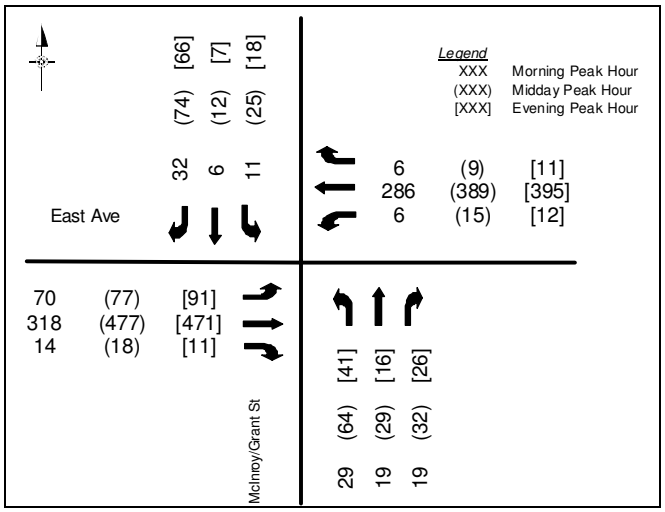
Intersections 1 through 4 above are signalized. Intersection 5 is unsignalized. The turning movement counts were conducted between the morning period of 7:00 to 9:00; the mid-day period of 11:00 to 1:00; and the evening period of 3:30 to 5:30. The peak hour count summaries are on the following pages.



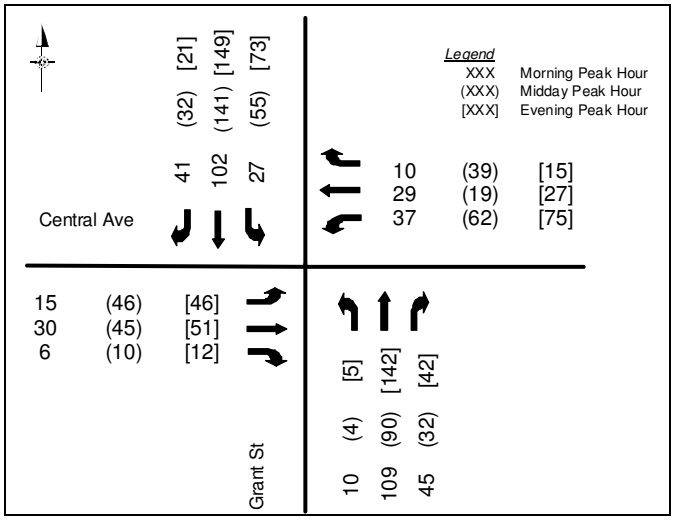
Intersection 1 Count Summary: East Avenue/Queen Street and Main Street/Tioga Street



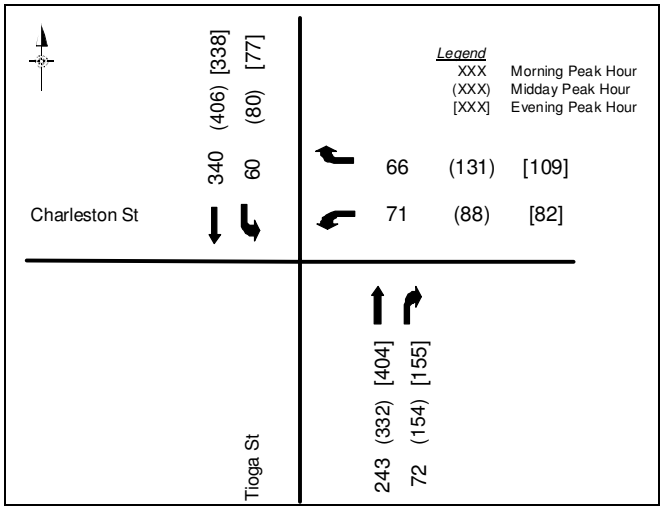
Intersection 2 Count Summary: Main Street and Central Avenue



Intersection 3 Count Summary Grant Street/McInroy Street and East Avenue



Intersection 4 Count Summary Grant Street and Central Avenue



Intersection 5 Count Summary: Tioga Street and Charleston Street

The traffic signal operation is summarized below:

- **Intersection 1:** Actuated four-phase operation with southbound protected/permitted left-turn phase; northbound/southbound through phase; eastbound/westbound through phase; exclusive pedestrian phase. Additionally, No Turn on Red restrictions are in place for all approaches.
- **Intersection 2:** Pre-timed two-phase operation with northbound/southbound through phase and eastbound/westbound through phase.
- **Intersection 3:** Actuated four-phase operation with northbound and southbound split phasing; eastbound/westbound through phase; exclusive pedestrian phase. Additionally, No Turn on Red restrictions are in place for the eastbound and westbound approaches.
- **Intersection 4:** Actuated two-phase operation with northbound/southbound through phase and eastbound/westbound through phase. Additionally, No Turn on Red restrictions are in place for the northbound and southbound approaches.
- **Intersection 5:** Presently not signalized**.**

Pedestrians navigating these intersections were also counted. Pedestrian crossing traffic is summarized in

Table 10, below. These volumes also include bicycle traffic if the bicyclist used the sidewalk and crosswalks. The most frequent example of this was children on bicycles.

Table 10
Pedestrian Volumes

Intersection	Morning Pedestrian Activity		Mid-Day Pedestrian Activity		Afternoon Pedestrian Activity	
	Peak Period (7:00-9:00)	Peak Hour (Variable Times)	Peak Period (11:00-1:00)	Peak Hour (Variable Times)	Peak Period (3:30-5:30)	Peak Hour (Variable Times)
1	64	41	220	139	201	126
2	51	39	187	107	175	100
3	37	21	15	6	32	11
4	25	15	7	3	14	3
5	1	1	0	0	32	13

The frequent actuation of the pedestrian phase at the East Avenue intersections with Main Street and Grant Street contributes to traffic queuing.

The pedestrian crossing volumes in the table above are the total for the entire intersection.

Intersections 1 and 2, the two signalized intersections along Main Street in the downtown district, had the most observed pedestrian activity during the count periods. By observation, many of the pedestrians at Main Street and East Avenue went to or came from the Wellsboro Diner, as well as several other local businesses. Many of the pedestrians at Main Street and Grant Street went to or came from the court house. There also appeared to be many people walking for exercise.

During the data collection period, significant queuing was noted in the northbound direction of Intersection 1, East Avenue and Main Street. At times, traffic queues extended to the intersection of Main Street and Central Avenue. Traffic queues were also observed in the eastbound direction at East Avenue and Grant Street.

It was also observed that most pedestrians crossing at the traffic signals used the pushbuttons to actuate the signals, but did not necessarily wait for the pedestrian phase at the traffic signal. At Main Street and East Avenue, pedestrians were commonly observed crossing during the vehicular traffic phase parallel to the crossing direction. The exclusive pedestrian phase would still occur, with traffic stopped for the entire length of the pedestrian phase. Motorists appeared to be impatient when they were stopped for no pedestrian traffic. This was evidenced by motorists revving their engines, and advancing forward of the stop line during the pedestrian phase. At the intersection of Central Avenue and Main Street, pedestrians frequently crossed during the conflicting vehicular phase. This could be due to the lack of pedestrian accommodations at the signal.

At East Avenue and Main Street, the northbound approach (Main Street turning right onto East Avenue/US 6) is comprised of one travel lane and one parking lane. Right-turning vehicles frequently pass vehicles waiting to turn left or go straight at the intersection. When this occurs and vehicles are parked in the parking lane, there is very little clearance between vehicles.

The frequent actuation of the pedestrian phase at the East Avenue intersections with Main Street and Grant Street contributes to the queuing observed.

Signal Upgrade Considerations

The elimination of the exclusive pedestrian phase at the intersections of Main Street and Grant Street on East Avenue would improve the operations at these intersections for motorists. As an alternative, a Lead Pedestrian Interval (LPI) can be considered. While both solutions are viable, the lead pedestrian interval can reduce vehicular delay versus an all pedestrian phase. A comparison of the two phasing alternatives is shown in Table 11, below.

Table 11
Signal Upgrade Comparison

Concept	Exclusive Pedestrian Phase	Lead Pedestrian Interval (LPI)
Description	▪ Pedestrians received a dedicated phase which is typically timed to allow them to cross at least one leg of the intersection, and in some cases diagonally.	▪ Traffic signals are programmed to allow the pedestrian to begin crossing before the vehicle traffic on the parallel street is given the green light. This is commonly referred to as a leading pedestrian interval (LPI) which lasts for 3-4 seconds. Pedestrians gain a head start before turning vehicles are released.
Pedestrian Impacts	▪ Pedestrian movements occur when vehicular traffic is halted. ▪ Pedestrian delays can actually increase vs. LPIs if the pedestrian arrives just after the exclusive pedestrian phase.	▪ Pedestrians enter traffic early before vehicular traffic to promote visibility; however, they move concurrently after the lead pedestrian interval expires.
Traffic Impacts	▪ Traffic is delayed while pedestrian movements take place. Along East Avenue, this is approximately 20 seconds.	▪ Traffic is delayed for 3-4 seconds per direction (E/W and N/S) for lead pedestrian intervals.
Other Considerations	▪ By field observation, pedestrians typically did not cross diagonally. This may be due in part to the absence of diagonal pedestrian signal heads.	▪ Research has shown that this treatment is associated with a decrease in pedestrian/motor vehicle conflicts and an increase in the percentage of motorists that yield right-of-way to pedestrians.

Concept	Exclusive Pedestrian Phase	Lead Pedestrian Interval (LPI)
		This study examined the influence of a three-second LPI on pedestrian behavior and conflicts with turning vehicles (Van Houten, Retting, Farmer, Van Houten, & Malenfant, 2000).

Source: Gannett Fleming

Many of Wellsboro's pedestrian signals are becoming harder to see due to lensburn. They are also outdated; new signal installations use the hand/man symbol. Additionally, at the time of the study team's site visit, the bulb appeared to be burned out in at least one pedestrian signal.

The signal at the intersection of Central Avenue and Main Street should be upgraded to provide pedestrian accommodations. This would likely reduce the occurrence of pedestrians crossing with a conflicting signal phase.

As an upgrade consideration, countdown pedestrian signals can be provided at all signalized intersections to provide a better active message to pedestrians crossing at the signalized intersections. Countdown pedestrian signals provide pedestrians with better information, indicating the exact amount of time remaining to complete the crossing.

Charleston Street Signal Warrant Analysis

Concerns were raised by study stakeholders about the intersection of Tioga Street and Charleston Street. There are concerns about sight distance due to the presence of a business's large concrete sign foundation. During the study team's site visit, traffic was observed queueing on Charleston Street. Considering traffic volumes collected for this study, the levels of service vary between C and D by peak hour for Charleston Street traffic turning onto Tioga Street.

The following eight warrants are presented in the Federal Highway Administration's (FHWA) publication Manual on Uniform Traffic Control Devices (MUTCD):

Warrant 1: Eight-Hour Vehicular Volume

Warrant 2: Four-Hour Vehicular Volume

Warrant 3: Peak Hour

Warrant 4: Pedestrian Volume

Warrant 5: School Crossing

Warrant 6: Coordinated Signal System

Warrant 7: Crash Experience

Warrant 8: Roadway Network.

A minimum of one warrant must be met for a traffic signal to be considered for installation. For this study, warrants 1, 2, and 3 were evaluated since they are traffic volume-based warrants. The three warrants that were evaluated are satisfied. Therefore, the intersection qualifies for a traffic signal.

A traffic signal is warranted at US 6's intersection with Charleston Street.

Curb Markings

A common practice within the borough is to apply yellow pavement markings to roadway curbs within certain areas. Typically, these markings are applied to curbs adjacent to segments where on-street parking is restricted, or along certain locations of the curbed median, particularly the nose of the median at intersections. Yellow paint also appears to be used to define corner radii through intersections. It was also noted that not all locations where on-street parking is restricted have the yellow markings.

Figure 9
Examples of Use of Yellow Markings

The *Manual on Uniform Traffic Control Devices* (MUTCD), published by the Federal Highway Administration (2003), states that the correct use of yellow longitudinal pavement markings are:

- The separation of traffic traveling in opposite directions
- The left edge of the roadways of divided and one-way highways and ramps.

In the case of parking restrictions and corner radii, since the yellow markings are on the right edge of the roadway, their use is not correct per the MUTCD. The correct method of restricting parking is through the use of signing, as shown in the accompanying image. Additionally, with the presence of lighting, nighttime visibility of intersection corner radii would still be sufficient without painted curbs.

Since the medians are on the left side of traffic, a yellow marking is appropriate. However, the more appropriate location for the marking would be on the road edge instead of the curb itself, similar to the condition shown to the right.

Traffic Safety Audit

A safety audit was performed for the following roadway segments within the Borough of Wellsboro:

- East Avenue (US 6/ PA 660) from Main Street to borough line
- Tioga Street (US 6/ PA 287) from East Avenue to beyond Steve's Beverage
- Main Street/West Avenue (PA 660) from East Avenue to borough line
- Central Avenue (PA 287) from Main Street to Adrian Lane
- Charleston Street from Tioga Street to beyond Jackson Street.

Particular attention was paid to pedestrian-related issues. It should be noted that this safety audit represents the study team's best effort at identifying common existing deficiencies. It is not necessarily an exhaustive listing of all existing deficiencies. The preliminary safety audit results are shown on the following pages.

Public Transportation

The Endless Mountain Transportation Authority (EMTA) is the area's primary provider of public transportation services and operates several different types of transit service. Wellsboro is served by three fixed routes that provide scheduled

service over a defined route. This service is called the Blue Bus. Three routes that serve the Wellsboro area include:

- **Route 70**, which connects Wellsboro to Mansfield and the Arnot Mall, with one run on even-dated Saturdays.
- **Route 45** makes one run daily on weekdays and connects Wellsboro to the northern Tioga County communities of Elkland and Westfield.
- **Route 30** provides the most frequent fixed-route service to Wellsboro, with Monday through Friday service with five daily trips to Mansfield and Blossburg.

EMTA also operates door-to-door transportation services for certain people within specialized programs, which are funded by the commonwealth. Those programs include:

- **Senior Shared Ride** – For residents age 65 or older
- **Persons With Disabilities** – For persons with a disability without access to other transportation
- **Medical Assistance** – For transportation to medical appointments
- **Access to Work** – For welfare to work participants
- **Human Service** – For transportation to human service providers

School Transportation

The study team interviewed officials from the Wellsboro Area School District regarding the transportation of students to area schools. It is noted that the school district has approximately 1,500 students and the vast majority (approximately 1,100 to 1,200) of them are bused to school. All children that live within 1½ miles of their school are not provided with busing, unless they live along a route that is hazardous for walking. Younger students that are not bused either walk to school or are dropped off by parents. Students in 11th and 12th grade serve as crossing guards for those walking.

At the high school, many students choose to drive themselves and others to school. This can cause some parking problems at the high school building. Traffic congestion has also been noted near the elementary schools as pedestrians, cars, and buses all interact. This congestion has been lessened in recent years with the installation of a bus loop that helps segregate bus traffic from other vehicles.

Parking Occupancy Assessment

The availability of parking is an essential component of a community's transportation system and economic vitality. A measure of parking occupancy can indicate the level of demand in particular areas of the community.

The pending development of the 66,000-square-foot Deane Center for the Performing Arts on Main Street is expected to have a significant impact on the demand for parking in downtown Wellsboro. The $12 million dollar land development will have a 450-seat performance hall in addition to a mix of commercial retail spaces. The proposed project will see the redevelopment of the former Davis Furniture building on the corner of Main and Central Avenue. The corner lot has been vacant since the adjoining Lamplighter Inn was destroyed by fire in 1980.

Consultants for the Deane Center have estimated a total of 465 on-street parking spaces and 400 off-street public/private parking spaces are available within three blocks of the proposed site.

On Wednesday, October 8, 2008, a parking occupancy assessment was conducted for the downtown area from 8:30 a.m. to 5:00 p.m. For analysis purposes, the downtown was organized into five "activity centers:" the Central Business District (CBD), Green Free Library, Court House, Hospital, and BiLo. Table 12 shows the total number of on-street parking spaces by activity center. The activity centers themselves are illustrated on Map 3.

Table 12 – On-Street Parking Spaces by Defined Activity Center

Activity Center	On-Street Parking Spaces
Library	38
Court House	52
Central Business District (CBD)	157
BiLo	24
Hospital	39
Total	310

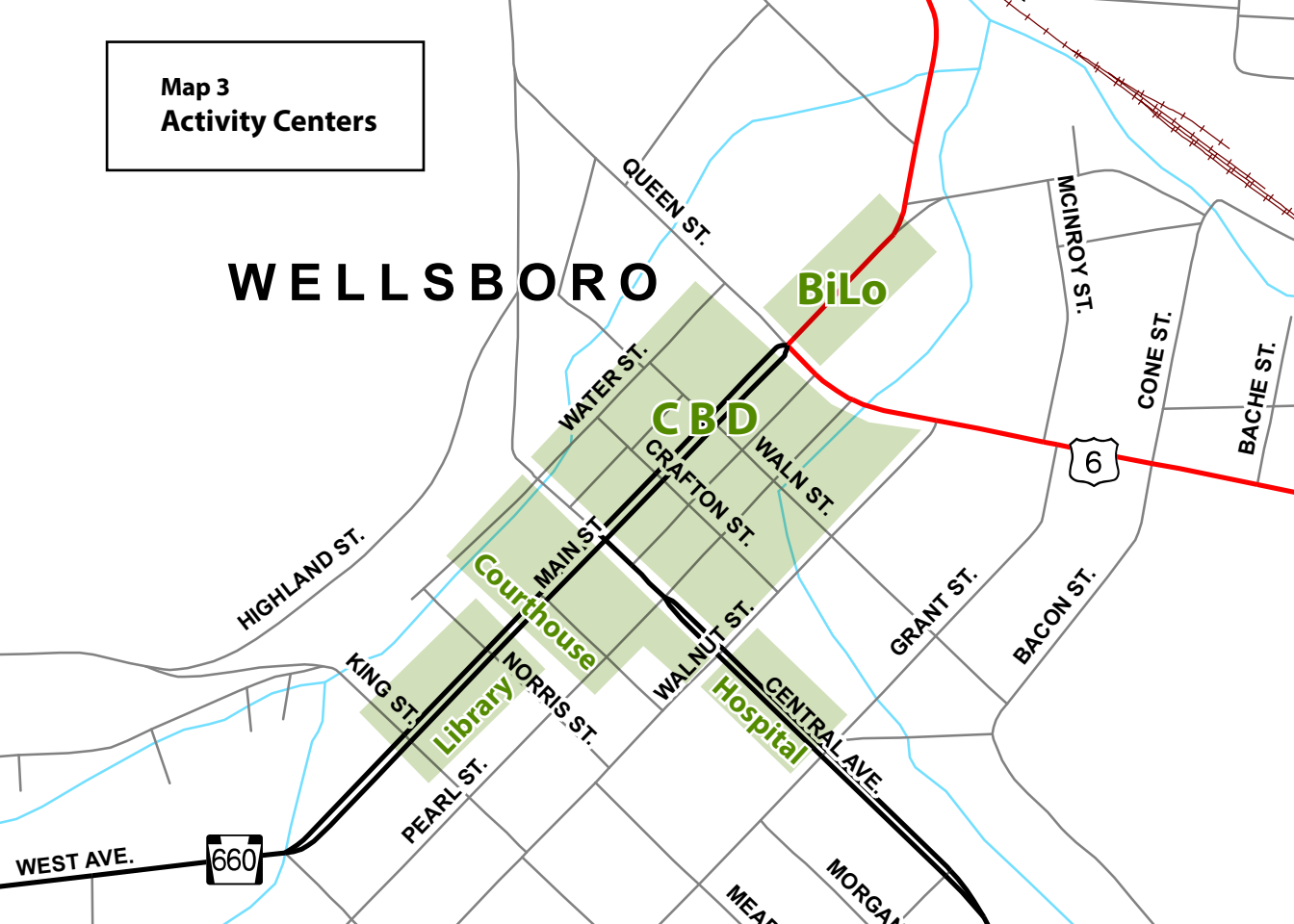

Map 3
Activity Centers
WELLSBORO
QUEEN ST.
BiLo
C B D
WATER ST.
CRAFTON ST.
WALN ST.
MAIN ST.
Courthouse
Library
Hospital
WALNUT ST.
HIGHLAND ST.
KING ST.
NORRIS ST.
PEARL ST.
CENTRAL AVE.
GRANT ST.
BACON ST.
MCINROY ST.
CONE ST.
BACHE ST.
6
WEST AVE.
660
MORGA

Figure 10: On-Street Parking Occupancy by Activity Center

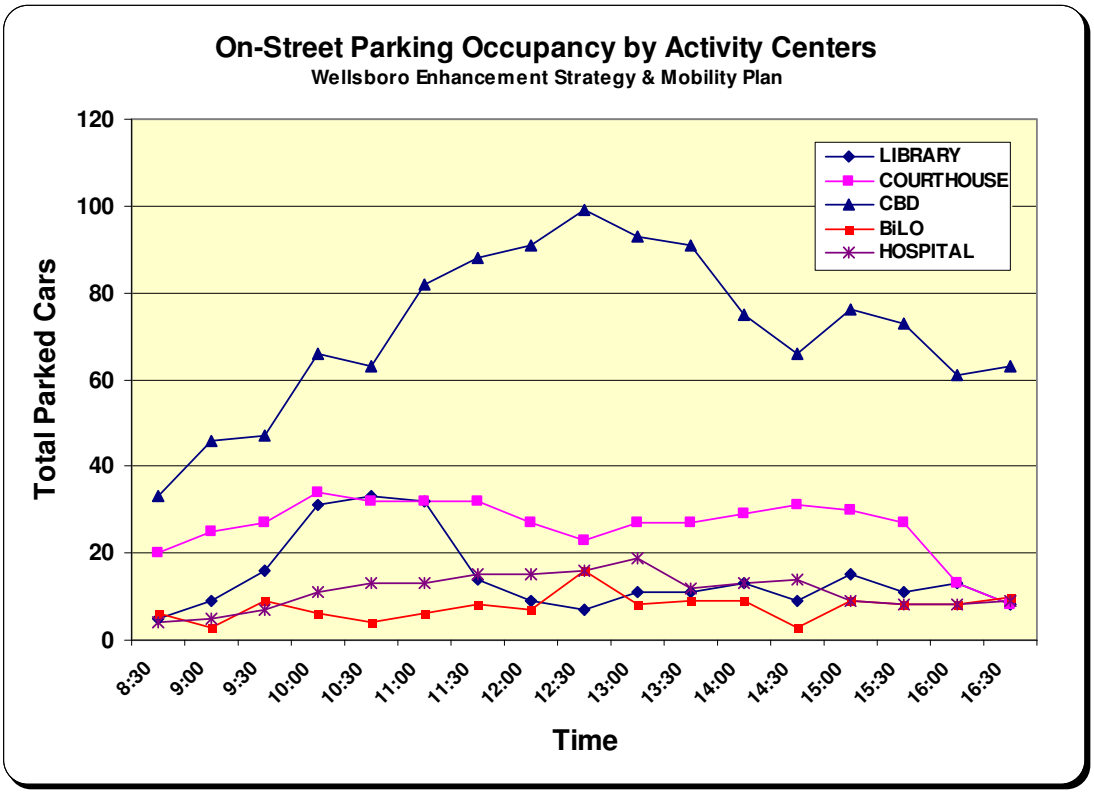
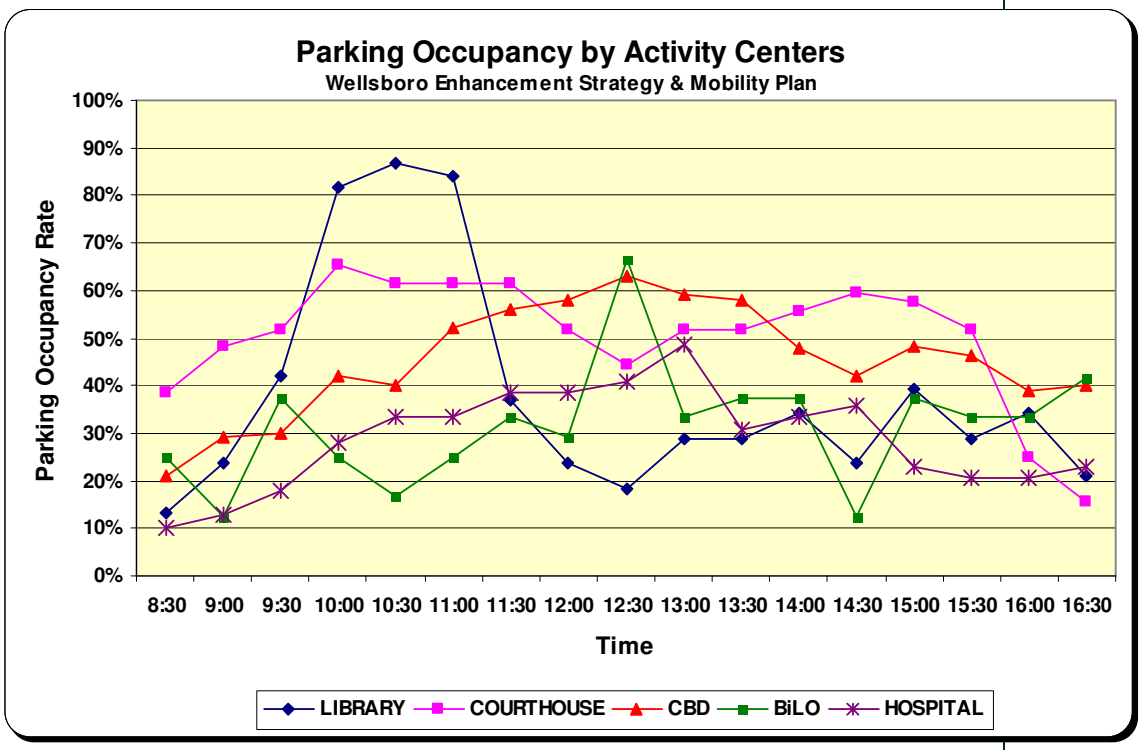


Figure 10 above shows the demand for parking throughout the day. The Central Business District (CBD) has the highest demand for on-street parking, with a peak period occurring during the noon hour. Occupancy at the borough's other activity centers exhibited stable trends throughout the day, with the library showing a spike during the 10:00 to 12:00 period.

Figure 11: Parking Occupancy Rate by Activity Center



Shown another way, Figure 11 shows the rate of parking occupancy at each of the five defined borough activity centers. The highest rate occurs by the library, where parking was at 90 percent of capacity during the morning hours. The area adjacent to the court house sustained the greatest level of on-street parking demand, varying from between 50 to 60 percent for most of the day. Parking demand at the Court House Activity Center dipped during the noon hour at the same time the CBD and area by BiLo experienced a spike. The CBD also experienced an increase in demand between 3:00 and 4:00 in the afternoon.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Review of Other Planning Documents

There have been a variety of other planning studies completed prior to this mobility analysis. The study team has reviewed these documents for their relevance to the current study and from the standpoint of how they can inform existing conditions, trends, and issues. The studies and corresponding documents were recommended for review by the Project Advisory Committee and include:

- The Tioga County Enterprise Zone Business Development Strategy
- Wellsboro Elm Street Plan for the East Avenue Neighborhood
- Tioga County Comprehensive Plan
- PAWilds Planning Study
- PAWilds Design Guide
- Borough zoning ordinance
- Borough subdivision and land development ordinance

Tioga County Enterprise Zone Business Development Strategy

In August 2007 a business development strategy was developed for Tioga County that was completed as part of the Enterprise Zone Program of Pennsylvania's Department of Community and Economic Development. To be eligible for an Enterprise Zone a municipality or group of municipalities must be economically disadvantaged in comparison to other parts of the state. Designation as an Enterprise Zone allows for the creation of plans and strategies for business support and development within that zone. Areas within the zones are also eligible for grants and loans from DCED.

The Tioga County Enterprise Zone and Business Development Strategy contains the following points relevant to this mobility analysis:

- Downtown vitality is an attraction to both knowledge workers and start-up companies.
- Young, educated knowledge workers are attracted to vibrant urban environments containing historic architecture, locally-owned shops, and an openness to new and diverse ideas. They are drawn to areas that couple these urban amenities with nearby active outdoor recreation, such as jogging paths, hiking and biking trails, and rock climbing destinations.
- Wellsboro is included in Enterprise Zones 11A and 11B. These zones are targeted for increased industrial uses.

- Central business districts of Tioga County's boroughs should focus on business support and professional services as well as shops and restaurants.
- Downtown Wellsboro is a prime location for second floor housing and small information technology companies.
- The percentage of county workers who walk to work and work at home is higher than the statewide average. Travel times to work are lower for the county than the state.

	Tioga County	Pennsylvania
Walk to work	5.7%	4.1%
Work at home	5.2%	3.0%
Mean travel time to work	23.1 minutes	25.2 minutes

Source: U.S. Census

Wellsboro Elm Street Plan for the East Avenue Neighborhood

Completed in June 2007, the Wellsboro Elm Street Plan for the East Avenue Neighborhood is a planning document funded through the Elm Street Program of the Pennsylvania Department of Community and Economic Development. The Elm Street Program is designed to complement the Main Street Program, also run by DCED. While the Main Street Program focuses on revitalizing downtown business districts, the Elm Street Program assists residential and mixed use areas that are adjacent to business districts. The goal of the Elm Street Program is to provide vibrant, attractive neighborhoods that complement and support a revitalized business district.

The Elm Street Plan for Wellsboro's East Avenue Neighborhood contains a number of items that can be helpful and inform this analysis. The plan identifies the following deficiencies:

- Streets with limited or no sidewalks and narrow rights-of-way
  - Charleston Street
  - Cortland Street
  - Jackson Street
  - Park Place
- Streets lacking trees
  - Jackson Street

  - Park Place
  - Austin Street – from Park Place to Jackson Street
  - Cortland Street
  - Charleston Street – east of Cone Street
  - Woodland Avenue
- Charleston Street is heavily travelled by vehicles and lacks adequate pedestrian facilities for the volume of traffic. Charleston Street is a major linkage between the East Avenue neighborhood and the Central Business District.

Two of the goals contained within the plan are also applicable to this study:

- Goal #2 – Improve pedestrian safety and the ease of pedestrian movements within the neighborhood and throughout the borough. Objectives include:
  - Pursue a traffic and pedestrian mobility analysis for the borough.
  - Devise a plan for the placement of traffic calming techniques and develop a funding scenario for developing the solutions.
  - Identify key pedestrian and traffic conflict points.
  - Determine the location of major pedestrian destinations and missing links in pedestrian facilities.
  - Establish a network of interconnecting pedestrian routes to reach those major destinations.
  - Integrate traffic calming techniques in conjunction with streetscape improvements.
  - Use the Wellsboro Chamber's Enhancement Committee as a community group to plan this activity.
  - Establish implementation priorities based on likely funding scenarios
  - Integrate pedestrian design issues into the land development process.
- Goal #3 – Address the public infrastructure needs of the East Avenue Neighborhood, including roadways, storm sewers, curbs, sidewalks, and street trees. Relevant Strategies include:
  - Utility Systems – Sanitary and storm sewer separation is required for:
    - Park Place
    - Jackson Street
    - Cortland Street
    - Purple Street

        - Woodland Avenue
        - McInroy Street
    - Road Network – Major road and sidewalk reconstruction is required for:
        - Jackson Street
        - Park Place
        - Cortland Street
        - Purple Street
        - McInroy Street from East Avenue to Purple Street
    - Sidewalks and Curbing – Sidewalks are totally lacking for:
        - Bache Street from East Avenue to Austin Street
        - Charleston Street from Park Place to Jackson Street
    - Sidewalks are also lacking for the following streets where right-of-way widths are inadequate to provide for them without obtaining additional right-of-way:
        - Park Place
        - Cortland Street
    - Street Trees – Street trees could be improved on the following streets, provided that adequate right-of-way and clearance from yard trees is available:
        - Jackson Street
        - Park Place
        - Austin Street from Park Place to Jackson Street
        - Cortland Street
        - Charleston Street east of Cone Street
        - Woodland Avenue

Tioga County Comprehensive Plan – Public Survey

As part of an updated comprehensive plan for Tioga County, residents were surveyed in Spring 2003. The survey dealt with a wide range of land use, transportation, economic development, and municipal service issues. The survey was broken out by individual municipalities, which enables the individual survey results from Wellsboro to be considered as part of this study.

While the actual number of survey questions that are relevant to this mobility analysis are limited, the following points can be gleaned from the survey.

- **Planning Priorities** - The survey asked respondents to rate how high of a priority they felt should be placed on a series of 36 issues in the next 5 to 10 years in order to preserve or enhance the quality of life in Tioga

County. When the surveys were tallied, the 36 issues were ranked high to low based on survey responses. Two of the issues are transportation related and follow:

- Road Improvements - ranked #9
- Regional Bus Service - ranked #28

- **Rating of Services** – Survey respondents were asked to rate the quality of existing services and then indicate if they would be willing to pay more in order to improve the quality of the service. Two service rankings are applicable here:

  - Quality of Road Maintenance
    - Excellent 1.9%
    - Good 26.5%
    - **Fair 44.2%**
    - Poor 21.9%
    - No Answer 5.4%

  - Would you pay more for improved road maintenance?
    - Yes 29.4%
    - No 34.2%
    - **No Answer 36.3%**

  - Access To and From Area
    - Excellent 8.5%
    - **Good 57.3%**
    - Fair 19.6%
    - Poor 6.7%

  - Would you pay more for improved access to the area?
    - Yes 10%
    - **No 48.7%**
    - No Answer 41.3%

Pennsylvania Wilds Planning Study – December 2007 Draft

The Pennsylvania Wilds Planning Study is the primary planning document associated with the Pennsylvania Wilds Initiative. This document is very broad in scope, covering all 12 counties within the Pennsylvania Wilds. As such, it concentrates on creating a clear vision of the future of the Pennsylvania Wilds region and the types of improvements that must be made to establish the area as a premier tourist destination.

The study specifically mentions Wellsboro as a community that will be directly impacted by increased tourism as a result of the initiative, and that the transportation system will need to be maintained and upgraded as required to accommodate that increase. Additionally, US Route 6 is noted as a major transportation corridor through the study area, and one of several roadways that are proposed for inclusion in the network of Pennsylvania State Byways.

Pennsylvania Wilds Design Guide

The Pennsylvania Wilds Design Guide was developed by T&B Planning as a part of the Pennsylvania Wilds Initiative. The goal of the design guide is to present a comprehensive and consistent set of design guidelines that can be applied to the Pennsylvania Wilds region to assist communities in reaping the benefits of change and growth while protecting their uniqueness and character. It shows, in graphical format, how to preserve and enhance the communities of the region while also promoting the aspects that are common to and knit together the larger Pennsylvania Wilds 12-county territory.

All sections of the design guide have some relevance to and can inform the ongoing improvement of Wellsboro by its residents and officials. Three sections of the design guide, however, are particularly relevant to this enhancement strategy and mobility plan. These sections include:

- Section 3.D – Residential Neighborhoods Best Practices
- Section 3.E – Town Centers Best Practices
- Section 3.G – Roadway Corridors Best Practices

Wellsboro Zoning Ordinance

The zoning ordinance controls the location of various land uses throughout the borough as well as the area and bulk of improvements that may be built. The current ordinance is dated June 2004. The zoning ordinance contains the following zoning districts:

- Rural Residential District

- Residential Town District
- Historic Residential District
- Central Business District
- Hospital District
- Highway Commercial District
- Commercial Manufacturing District

The ordinance regulations appear to be generally reflective of the existing lot sizes and buildings and allow flexibility in some regulations, such as setbacks, roof pitch and building orientation, to mimic the surrounding buildings. A more complete review of the ordinance would involve verifying whether the lots and buildings that exist today could be constructed using the regulations in the zoning ordinance. The zoning ordinance of a municipality that is largely built out, such as Wellsboro, should contain regulations that would allow future development to generally align with existing development.

Wellsboro Subdivision and Land Development Ordinance

A Subdivision and Land Development Ordinance (SALDO) is used to define the process by which land can be subdivided and developed, state what information must be shown on subdivision and land development plans, and provide design standards for such features as roadways, storm water management facilities, and water and sewer utilities. Wellsboro has a SALDO in place, which was adopted in June 2004.

Wellsboro's SALDO appears to be comprehensive and addresses all requirements of the Pennsylvania Municipalities Planning Code. The ordinance, and especially some of its design standards, however, contain requirements that are more suburban in nature and are out of character with the borough's existing "urban" form. A review of the SALDO revealed the following:

- **Section 504 –** The roadway design standards should be more nuanced and reflective of the borough's urban nature.
- **Section 504.A – Street classification** The classification definitions for collector and arterial streets do not match existing conditions in the borough. Wellsboro has both collectors and arterials running through downtown which have speeds below the 35 m.p.h. criteria stated in the existing ordinance. The definitions should recognize that Wellsboro is an urban area and not a developing suburban area.
- **Section 504.D – Street Alignment** The horizontal curve standards located here are more suburban in nature. These standards could make it

difficult or impossible to create a new development that respects the existing grid street pattern.

- **Section 504.F – Street Intersections** The required spacing of 800 feet between local street intersections along collector and arterial roads is too large and would not allow portions of Wellsboro to be built in its current form.
- **Section 504. H – Alleys and Driveways** This section prohibits alleys and is inappropriate for a historic borough such as Wellsboro where alleys would integrate well with the existing fabric of the community.
- **Section 505 – Curbs and Sidewalks** Curbs and sidewalks should be required almost everywhere within the borough. The current ordinance exempts areas with lot widths greater than 100 feet, which would likely include any newly developed commercial lot and some new residential lots.
- **Section 508 – Blocks and Lots** The maximum block length of 1,600 feet is excessive for this urban setting.
- **Section 510. H – Trees** Street trees are ideally located between the curb and sidewalk to provide maximum aesthetic benefit to the street. The ordinance currently requires trees to be between the sidewalk and the building setback line.

Public and Stakeholder Involvement

Background/Overview

Public and stakeholder involvement for the Wellsboro Enhancement Strategy and Mobility Plan was extensive and included:

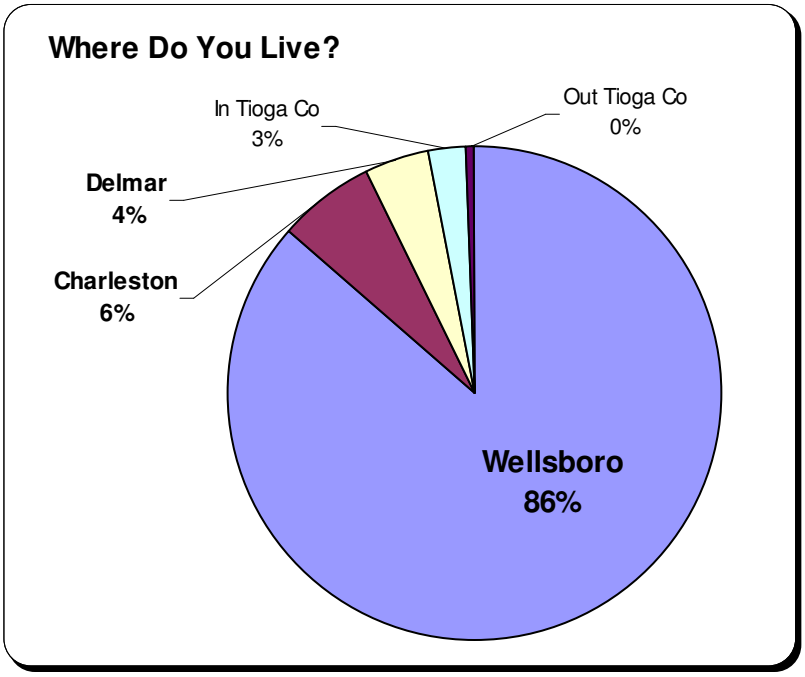
- A 19-member **Project Advisory Committee**, which convened five times over the course of the planning process to review draft study materials (a listing of all members appears in the front of this report, while meeting summaries are included in Appendix C).
- Two public **open houses** (one on September 25, 2008, to identify study issues; a second on May 4, 2009, to review draft recommendations).
- A **community survey** which was released on September 16, 2008, to every property owner within the borough (a total of 276 surveys were returned from an original mailing of 1,070[4]).
- An interactive **web survey** at www.wellsboromobility.com (results appear later in this section and in Appendix A)
- **Stakeholder sessions** with residents at Pinnacle Towers and Park Hill Manor on July 16, 2008.
- An interactive session with **eighth graders** at Rock L. Butler Middle School on March 31, 2009.
- Press releases and display ads in the Wellsboro Gazette.

Summary of the Mailed Community Survey Results

This section briefly summarizes highlights of the community survey results.

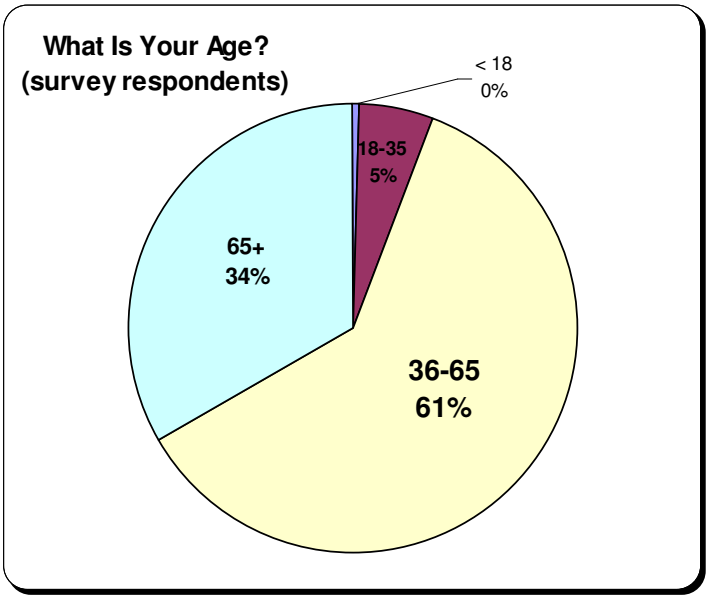
[4] The response rate for the sample size gives the study team 95 percent confidence that the survey results accurately reflect community preferences to within 5 percentage points.

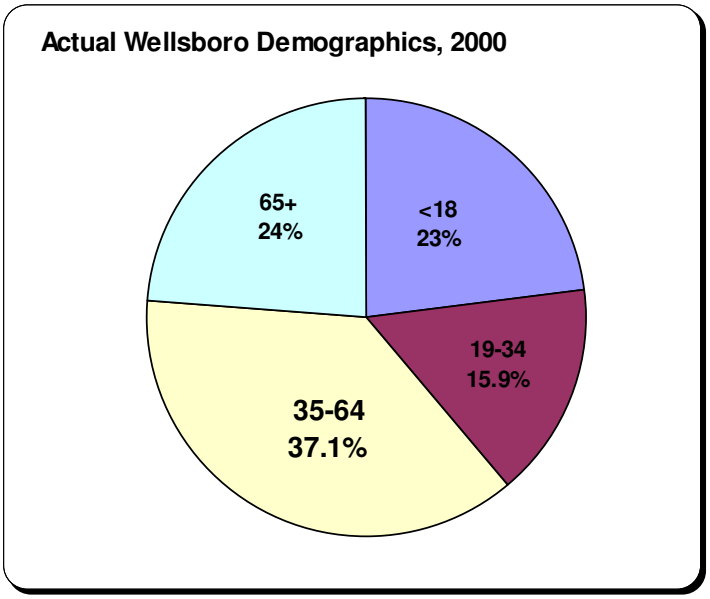
Figure 12 – Where Do You Live?



The team mailed surveys to all property owners within Wellsboro Borough. As might be expected, a majority of survey respondents (86 percent) reside within the borough. Another 11 percent were from neighboring Charleston and Delmar Townships, while the rest resided somewhere else within Tioga County.

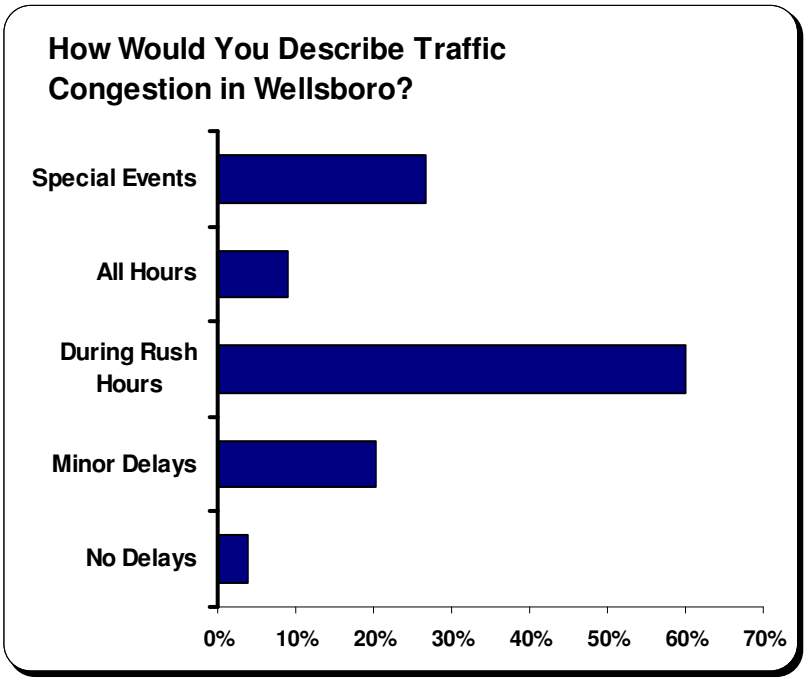
Figure 13 – What Is Your Age?





A majority of survey respondents (61 percent) were people between the ages of 36 and 65. While the Census Bureau records indicate that only 24 percent of the borough's population is over the age of 65, over one third of survey respondents indicated they were in that particular age group. This means that survey results are oriented more toward the perspectives of those over the age of 35.

Figure 14 - How Would You Describe Congestion in Wellsboro?



Survey respondents indicated experiencing congestion within the borough primarily during peak periods (60 percent), while 9 percent said they experience congestion at "all hours of the day." Roughly 1 in 5 described typical congestion as "minor delays" while 4 percent indicated experiencing "no delays."

There were 52 respondents who provided more than one answer to this survey question—mainly some combination of "Special Event Congestion" (27 percent) and other forms of recurring and non-recurring congestion.[5]

[5] Totals for this question will thus add to more than 100 percent.

Table 13 – Highest Rated Issues…by Percent Reporting "Very Important"

Issue	Percent Saying "Very Important"
Improving the intersection of Main, Tioga and Charleston	81.7
Ensuring pedestrian safety	76.5
Ensuring safe walking routes to area schools	62.4
Improving roadway conditions	62.3
Sidewalk maintenance	61.2
Maintaining the borough's historic character	59.8
Availability of sidewalks and crosswalks	56.8
Better enforcement of traffic laws (speeding, etc.)	55.0

Of the 25 issues on the survey, only the ones that appear in Table 13 above were ranked as "Very Important" By 50 percent or more of all respondents.

The intersection of Main, Tioga, and Charleston—a primary impetus for this enhancement strategy and mobility plan—easily ranks as the community's top transportation concern. Only 5 percent of survey respondents indicated it was "Less Important" as a transportation issue—the lowest such percentage rate for any of the transportation issues on the survey.

Pedestrian safety and accommodation also ranked highly in the community survey of transportation issues.

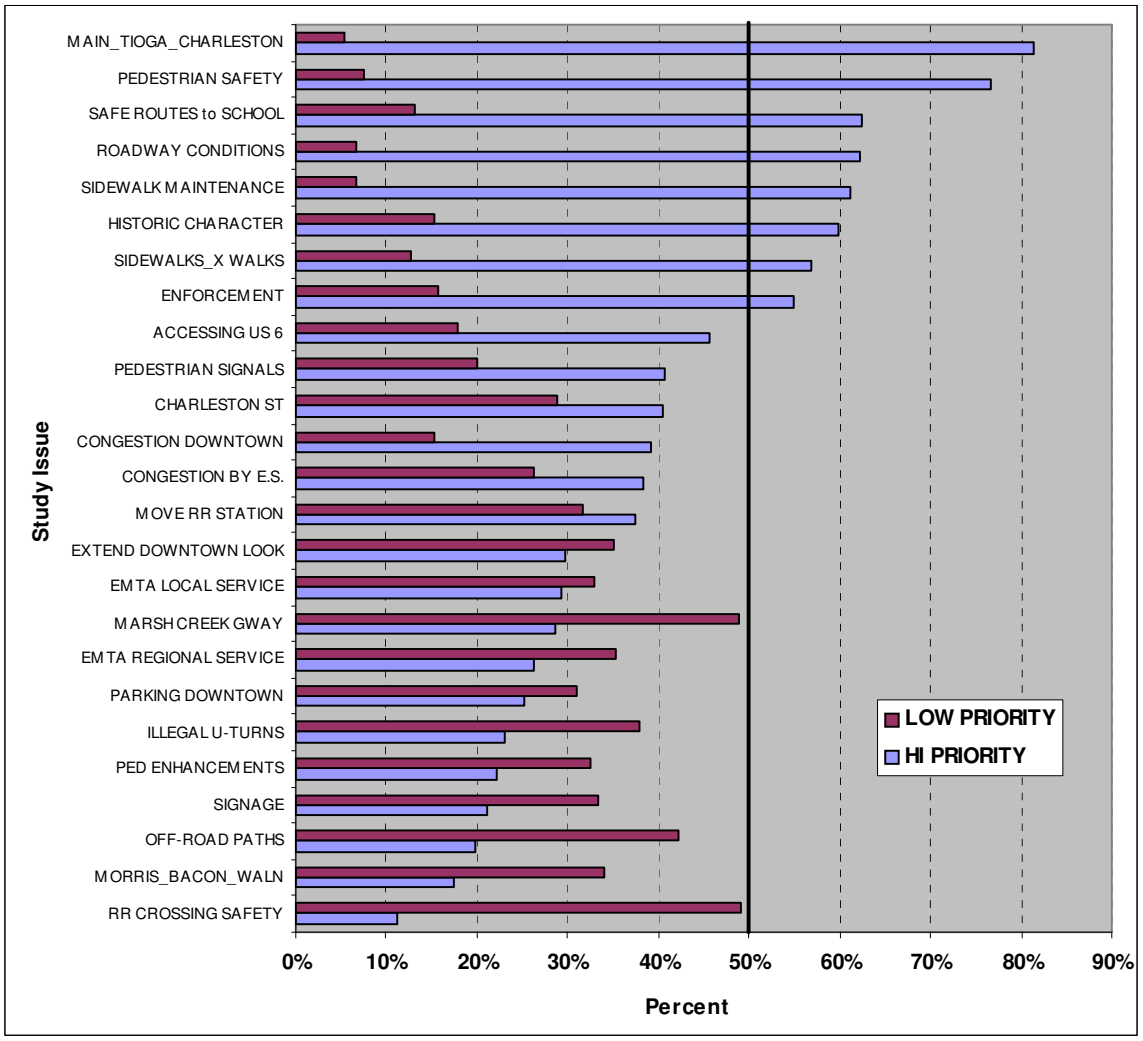
Table 14 – Lowest Rated Issues…by Percent Reporting "Less Important"

Issue	Percent Saying "Less Important"
At-grade railroad crossing safety	44.1
The Marsh Creek Greenway	42.8
Off-road paths to parks and other recreational areas	38.9
Illegal U-turns	35.8
Extending look of downtown to Lower Main Street	32.3
Signage	31.9
EMTA service to destinations outside Wellsboro	31.9
Intersection of Morris Lane, Bacon, and Waln	31.0

Only eight of the 25 transportation issues were deemed "Less Important" by a relatively high percentage of survey respondents. The results to some extent corroborate the views of the Project Advisory Committee, particularly on railroad crossing safety. Of the multiway intersection of Morris, Bacon, and Waln, one respondent noted that the area had "already been improved" with new sidewalks and directional signing.

Two recreation-oriented transportation issues, the Marsh Creek Greenway and off-road paths to parks and other recreational areas, were among the highest-scoring "Low Priority" ratings among the survey's transportation issues. In the case of the Marsh Creek Greenway, only 24 percent cited it as something "Very Important" to the borough's transportation future. More than 30 people left the Marsh Creek line item blank on their survey—the highest such number for any transportation issue. This may indicate indecision or unfamiliarity with the project.

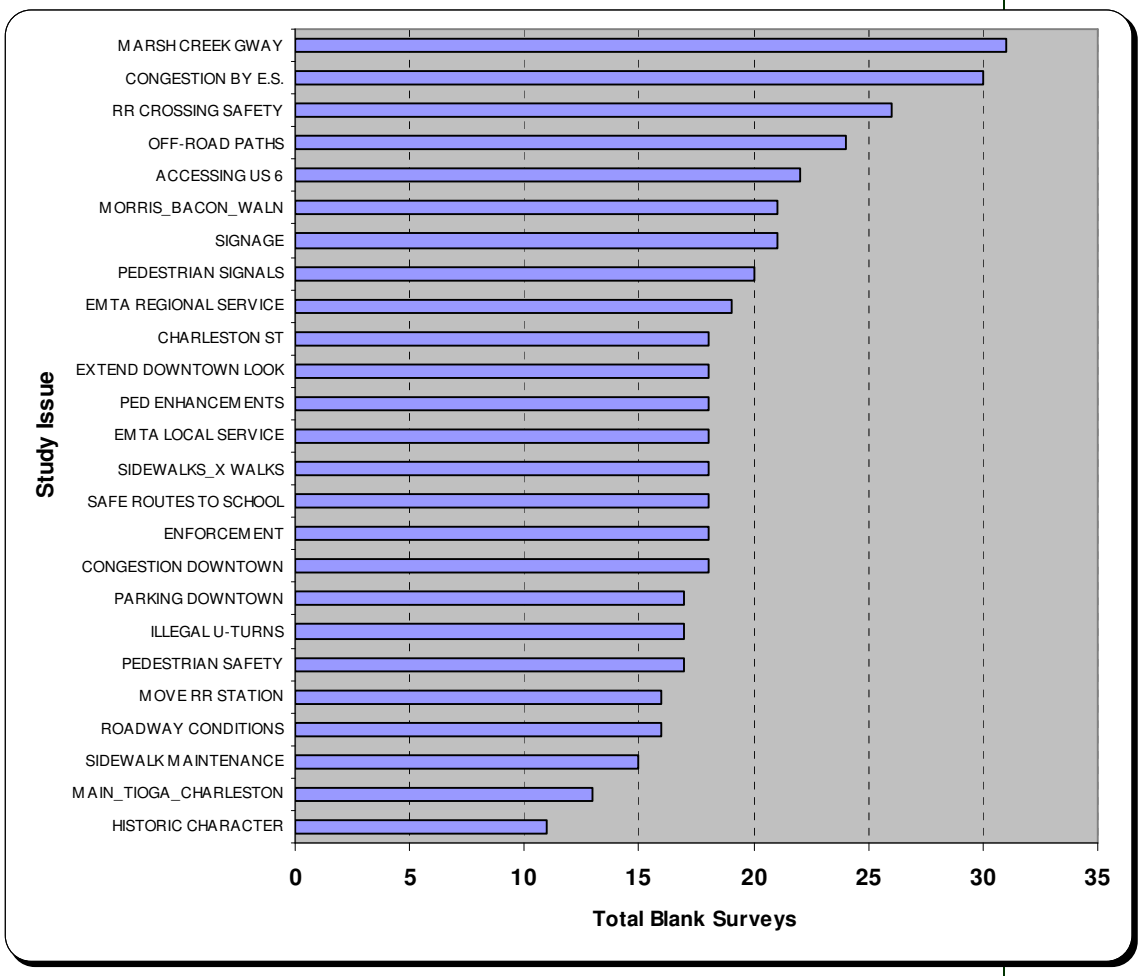
Figure 15: Issues Ranked from "High Priority" to "Low Priority"



Shown another way, Figure 15 above shows how the area's transportation issues are arrayed in terms of their importance to the community. Again, only eight items garnered more than 50 percent citing it as a "Very Important" or high priority study issue, led by the need for improvement at the intersection of Main, Tioga, and Charleston Streets.

No study issue attracted a similarly high level of disagreement as an issue to be addressed, although the Marsh Creek Greenway and Railroad Crossing Safety led the list.

Figure 16: Transportation Issues Registering No Response



A final planning indicator includes the number of survey issues that were submitted with no response. One of the top issues of "Low Importance"— the Marsh Creek Greenway—also had the greatest number of blank responses. This possibly indicates a greater need for community education and awareness of the project.

Other issues, such as "Congestion by the Elementary Schools," may reflect the higher share of seniors completing the survey and thus an aspect of community living they are either unaware of or not confronted with.

Of all study issues, "Preserving Wellsboro's Historic Character" had the fewest number of blank surveys, demonstrating the community's great awareness of the character of its built environment.

Senior Stakeholder Involvement

Senior citizens, because of their age and declining health, often have higher requirements of the transportation system than younger members of the community. When driving, their reaction times are not a fast as younger person's and their eyesight may be less keen. Therefore there is a need to accommodate them by building extra margins of safety into the roadway system and placing signs in the most visible locations possible. When walking, especially if using a cane or walker, seniors are more likely to be hindered by sidewalks that are uneven, cracked, or missing. Those in wheelchairs face similar problems. Similarly, seniors may be dependent on transit for trips to destinations to which they cannot walk.

Accordingly, the input from seniors in Wellsboro is critical to understanding the deficiencies of the current transportation system in the borough. A system that has been designed to meet the needs of these seniors with their greater demands would be beneficial to all users.

To get this vital input on the transportation system from seniors' point of view, the borough held two events at facilities operated by the Tioga County Housing and Redevelopment Authority: Pinnacle Towers and Park Hill Manor. Highlights of the sessions are summarized below and included in more detail in Appendix A.

Pedestrian Issues – Seniors noted difficulty in crossing borough streets, particularly at the intersection of East Avenue and Main Street, and at Main/Tioga/Charleston Street. Many sidewalks are in poor condition and difficult to use. In some cases, such as in front of Park Hill Manor, there are no sidewalks at all, making it necessary for seniors to walk in the street. Some signals do not provide enough time during the walk phase to cross safely.

Public Transportation Issues – The Endless Mountains Transportation Authority (EMTA) does not provide service during the afternoon, providing a limited time frame in which to make appointments. There are some benches available, but no bus shelters to accommodate users of EMTA service. Residents would enjoy having more local destinations available.

Motorist Issues – Speeding appears to be a problem, borough-wide, particularly on local streets such as Charleston and Grant. Participants also pointed out specific locations where sight distance was a concern.

Public Open House #2

As part of promoting the study's second public open house, a press release was prepared, announcing the event and the availability of a study survey on the project's Web site. The Web site included the 15 draft recommendations being proposed. Survey respondents were asked to identify what they believed to be the five most important study recommendations.

The second open house gave the public the opportunity to review and comment on the draft study recommendations. The study team delivered a PowerPoint presentation describing the recommendations and their benefits. Maps and posters were also on display highlighting the recommendations. Open house participants had the option to complete a paper version of the online survey.

In general, the survey results affirmed public preferences for the types of improvements being proposed. For example, of the 81 persons completing the survey, a total of 52 ranked "Signalizing the intersection of Main/Tioga/Charleston" as among the top five study recommendations. More than half of the individuals completing the survey were middle school students engaged during the Rock L. Butler Middle School outreach session. Figure 17 shows the composition of survey respondents while Table 15 shows the survey results.

Figure 17: Age of Survey Respondents

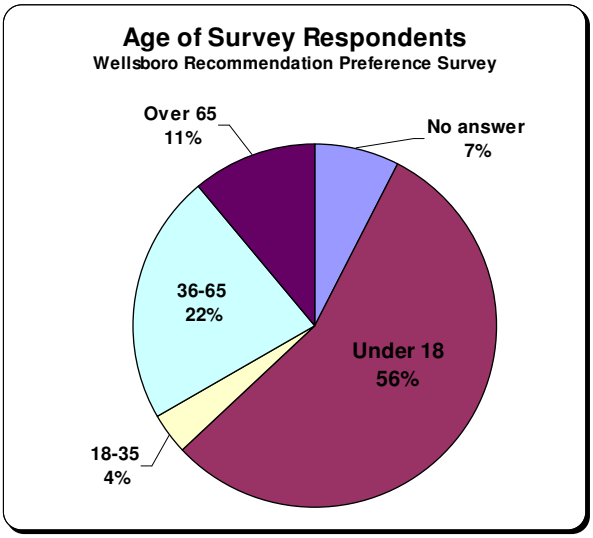


Table 15: Recommendations Sorted by Priority

What are the Top Five Study Recommendations?

Recommendation	Count	Percentage
Signalize the intersection of Main/Tioga/Charleston	52	64.2%
Address poor roadway surface conditions	44	54.3%
Improve bicycle and pedestrian accommodation	36	44.4%
Upgrade the Borough's signal equipment and hardware	32	39.5%
Investigate the need for a traffic signal at Wellsboro Plaza	28	34.6%
Improve Charleston St. between Greenway and Route 6	27	33.3%
Maximize on-street parking capacity	24	29.6%
Evaluate sight distance limitations at various intersections	22	27.2%
Develop the Marsh Creek Greenway to Wellsboro	20	24.7%
Improve public transportation services	19	23.5%
Address signing and roadway markings	17	21.0%
Plan for vacant properties on East Avenue	15	18.5%
Improve non-motorized access to recreational areas	14	17.3%
Monitor the intersection of Bacon, Morris Lane, Waln	13	16.1%
Develop and adopt an Access Management Ordinance	4	4.9%

The survey results point to a relatively strong public preference for improvements at the intersection of Main/Tioga/ Charleston Street, as well as improved roadway surface conditions in general. Improved bicycle and pedestrian accommodation rounded out the list of top concerns.

A summary of open-ended comments received appears in Appendix A.

Recommendations and Implementation Plan

Background/Overview

The study recommendations and related Implementation Plan were derived through meetings with the Project Advisory Committee, interviews with area stakeholders, a community survey, and the results of public open houses held on September 25, 2008, and May 4, 2009.

The consulting team met with the Project Advisory Committee as well as the Borough Council and PennDOT officials to discuss, validate, and refine each of the recommendations and resultant Implementation Plan. It is anticipated that these recommendations will continually be refined until the study and final recommendations are eventually endorsed by the Project Advisory Committee and adopted for implementation by Borough Council.

The recommendations address the following broad categories:

- Roadway Conditions
- Operations (traffic signals and signal systems)
- Sight distance
- Ordinance-related issues
- Non-motorized modes

Recommendations are listed below with more detailed descriptions following:

A. Address poor roadway surface conditions

B. Upgrade the borough's signal equipment and hardware

C. Signalize the intersection of Main/Tioga/Charleston

D. Develop the Marsh Creek Greenway as a link from the Pine Creek Rail-Trail to Wellsboro

E. Improve Charleston Street as a connector from the Marsh Creek Greenway to downtown Wellsboro

F. Investigate the need for a traffic signal at Wellsboro Plaza

G. Evaluate sight distance limitations at various intersections

H. Develop and adopt an access management ordinance

I. Improve non-motorized access to recreational areas

J. Monitor the intersection of Bacon, Morris, and Waln

K. Improve public transportation services

L. Initiate a program to upgrade pedestrian access routes to ADA

standards

M. Address signing and roadway markings

N. Plan for vacant properties on East Avenue

O. Maximize on-street parking capacity

A. Address Poor Roadway Surface Conditions

Background: The surface condition of several roadways throughout the borough is in need of improvement. The Borough receives approximately $84,000 annually in Liquid Fuels money for use in maintaining roadways.

Action:

1. *Develop a Capital Improvement Program* (CIP) that addresses the surface condition of the following roadways and amortizes their costs over time:

Facility Name	Notes/Comments
Bacon Street	• Work was completed in 2008; still some remaining work to be done on a 150-foot segment between the intersections of Waln and Morris Lane.
Bodine Street	• Surface conditions are good within 500 feet of Nichols Street. Bodine St serves 17 households.
Buena Vista Street	• Will be milled and resurfaced Summer 2009.
Upper Jackson Street	• Roadway has poor shoulders and manholes. Serves 16 households south of Woodland Ave (530 feet).
King Street between Water Street and Fischler/Highland	• One way WB; no shoulders or guiderail; very poor surface condition (660 feet).
Lincoln Street	• Poor surface conditions 2,110 feet from PA 660 to its terminus; serves 23 homes; no leveling area at PA 660
Main Street between Waln and East (in front of Dunham's)	• Will be milled and resurfaced Summer 2009
McInroy Street	• Newly resurfaced with some new curbs and sidewalks.
Norris Street (under construction)	• Newly resurfaced with some new sidewalk, some poor sidewalk locations.
Stickley Street	• Poor surface conditions between PA 660 and Fischler Street (1,000 feet). An important alternate to King Street.

The above list is not exhaustive, but summarizes streets identified through field work and from stakeholder and public input.

Benefits: Improving the roadway surfaces of local streets accomplishes many things, from improving ride quality to lowering noise levels in residential areas to

enhancing safety. These streets serve important roles in providing accessibility to homes and (in some cases) businesses and in providing access to the state highway network. Coordination with PennDOT on improvements is also important. PennDOT typically contacts the municipality every two to three years with pending work.

Exhibit 1 – Buena Vista at Charleston Street

B. Upgrade the Borough's Traffic Signal Equipment and Hardware

Background: Signal controllers within the borough have not been adjusted in many years. Signal permits indicate that the signal at East Avenue and Main Street has not been updated in a decade, while the signal on East Avenue/US 6 and Grant has not been updated since 1988. Travel demands have changed in ensuing years, compromising the performance of the Borough's signal system. As a result, motorists have become frustrated with roadway capacity on state roadways, specifically East Avenue and its intersections with Main and Grant Streets. Local streets not designed to accommodate greater traffic volumes and changes in travel patterns have been challenged with motorists speeding and running stop signs to avoid the congestion on the higher-order, state roadways within the borough's highway network.

Actions:

1. *Update all four existing signals in the borough* with LED signals, improved timing and pedestrian signal heads. All four signals should be coordinated and in tandem with a proposed new signal at the corner of Main, Tioga, and Charleston Streets. A Lead Pedestrian Interval (LPI) should be considered at Queen and Main to lessen congestion while accommodating pedestrian movement. The responsibility for owning, installing, and operating traffic signals rests with the Borough. The Borough will need to design and submit plans to PennDOT for review and approval. Upon PennDOT approval, the Borough would then be responsible to submit permit drawings for approval.

   If the Borough wishes to replace the incandescent bulbs with LED indications, it must coordinate with the Signals Unit at PennDOT District 3-0. For such a minor change PennDOT has indicated it would be willing to upgrade the permit drawings and reissue them to reflect the alteration or change to LEDs at no cost to the Borough (however, the Borough *would* have to pay for the upgraded signals.) The Borough should coordinate with Don Free of District 3-0's Municipal Services Unit to determine if there is an existing contract under which it could purchase the LEDs at a reduced rate.

2. *Add actuation and detection where needed.* The intersection of Main Street and Central Avenue operates pre-timed. Actuation would improve operations by reducing wasted green time. In conjunction with this,

pedestrian accommodations would be needed, and possibly an updated signal controller.

3. *Consider a phased approach to improving pedestrian safety at the corner of Queen and Main*, including countdown pedestrian signal heads to provide improved information. Queen Street does not need as long of a signal phase, which highlights the benefit of LPI since the phase timings can be separated from one another. A desire for a "protected left" from Queen Street onto US 6 West was mentioned by the public, although peak hour volumes do not currently meet PennDOT's minimum thresholds.

4. *Consider installing audible pedestrian signal heads as part of the proposed upgrade.* Non-audibles cost approximately $385 per indication, while the audibles cost upwards of $985 each. Audible pedestrian signals provide audible tones to inform vision-impaired pedestrians of the pedestrian phase. One disadvantage of audible pedestrian signals is that the constant tones can be disruptive to occupants of nearby properties. Since the signals can emit the tone at any hour of the day, they could be too noisy for use in residential areas.

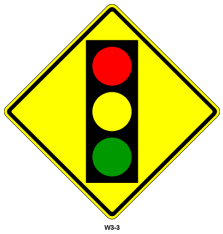
5. *Improve the accessibility of the pedestrian push button* at the corner of East Avenue and Grant Street. The current location is difficult for some pedestrians to use.

Benefits: These actions will improve the overall performance of all four existing signalized intersections. Vehicular traffic will be able to "pulse" through the borough, and pedestrians will have a greater measure of safety and information in crossing the intersections. Other options, such as removing "No Right Turn on Red" signs, would involve eliminating certain on-street parking spaces.

C. Signalize the Intersection of Main/Tioga/Charleston

Background: No other transportation deficiency in the borough draws more attention than this intersection of US 6 with Charleston Street. The intersection is characterized by wide approaches with little to no lane definition, compromising safety for motorists, pedestrians, bicyclists, and others, such as people in motorized wheelchairs. Motorists attempting to make left turns during peak periods can cause vehicle queuing and more erratic driver behavior. The intersection is expected to experience greater demand in the future as Charleston Street evolves to become an important link between downtown Wellsboro and the Pine Creek Rail-Trail. As a side street, volumes on Charleston Street are already greater than on the borough's other four existing signalized intersections. It is also a crash cluster location.

Actions:



1. *Signalize the intersection* in tandem with signal improvements being proposed at the borough's other four signalized intersections. The Borough should submit designs and permit drawings as a construction plan to PennDOT.

2. *Consider providing advance warning signs, particularly for the eastbound approach to the intersection along US 6*. This would alert motorists rounding the curve to the presence of the signal. An Advance Traffic Control symbol sign W3-3 (shown), perhaps in conjunction with an overhead "wig wag" sign, if necessary, could be used. The proposed signal would be located just 675 feet south of an area of US 6 where horizontal sight distance is limited.

Benefits: Signalizing the intersection would improve operations by reducing delay to side street traffic, as well as facilitating pedestrian crossings. Signalizing the intersection would minimize the need for any right-of-way "takings" from flattening the curve. A signal would be more appropriate than other treatments (such as a roundabout), given the unevenness in traffic volumes from the three approaches and the amount of truck traffic moving through the intersection. The signal would also create an important "break" in traffic, thus facilitating pedestrian crossings between the BiLo parking lot and the post office, for example.

D. Develop the Marsh Creek Greenway as a link from the Pine Creek Rail-Trail to Wellsboro

Background: The Marsh Creek Greenway will use the Wellsboro & Corning Railroad corridor as a rail-trail, pedestrian/bikeway facility, and will connect the Pine Creek Trail to Wellsboro. This has been a major recommendation of the PAWilds promotional program. The Marsh Creek Greenway is bounded by Wellsboro Junction (directly east of where the Pine Creek Trail will cross PA 287) and the railroad, to the north of the Tioga Central Railroad siding and along the rail line into Wellsboro. Its southern terminus will be in the vicinity of the railroad station along Charleston Street, and may be extended to the Little League recreation fields along Charleston Street. The trail's crossing of PA 287 is still to be determined. The present consensus is that an at-grade crossing is more practical due to the costs associated with a pedestrian bridge.

In addition to developing a connection from the Pine Creek Trail to downtown Wellsboro, it is the hope of citizens along the Stokesdale section of the trail that construction will permit the mitigation of flooding and the restoration of Marsh Creek to its original embankments. A feasibility study for the construction of the Greenway has been completed, funded by DCNR and with substantial citizen input from various Wellsboro and township organizations. The Bradford County Stream Team (affiliated with the County Conservation District office) is preparing hydraulic models of Marsh Creek and developing design recommendations for stream improvements and mitigation. Funding for the greenway remains the major stumbling block; however, both state and local interests are determined to see it become reality.

Actions:

1. *Continue coordination* with DCNR, GROW (Growth Resources of Wellsboro), Tioga County Commissioners, and property owners to assure that right-of-way issues can be addressed.

2. *Work with NTRPDC, PennDOT, DCNR, DCED and other agencies to pursue various funding sources to construct the Marsh Creek Greenway*, including the State Growing Greener Program, the Community Conservation Partnership Program, Keystone Recreation Funds, Transportation Enhancement Funds, and funding that may become available through DCNR due to the leasing of gas/mineral rights on State Forest and State Park properties.

3. *Complete property/right-of-way negotiations* with adjacent property owners.

Benefits: Completion of the Marsh Creek Greenway will provide a major hiking and biking link from the Pine Creek Rail-Trail, which accommodated an estimated 125,000 trail users in 2006. Such a link will bring trail users directly into downtown Wellsboro, which is already a noted tourist destination. The project will provide enhanced outdoor recreational facilities for tourists and residents alike, and provide a very scenic and varied venue.

E. Improve Charleston Street as a Connector from the Marsh Creek Greenway to Downtown Wellsboro

Background: The eventual addition of a rail with trail along the Wellsboro & Corning Railroad right-of-way will ultimately introduce more pedestrians and bicyclists into downtown Wellsboro. Charleston Street (SR 4002) would be the main connector route linking the trail terminus with the downtown area. Presently, Charleston Street has sidewalks on both sides of the street between Tioga Street and Cole Street. From there to Cone Street (approximately 500 feet), there is one narrow sidewalk in poor condition[6]. Pedestrians from the proposed trailhead must cross the street twice to gain access to this sidewalk. There are no defined shoulders. The roadway is signed as a bicycle route.

Actions:

1. *Construct/reconstruct sidewalks along Charleston Street* from the trail terminus to Charleston Street's intersection with Tioga and Main Streets. Add a crosswalk across Cone Street to connect an improved sidewalk on Charleston Street to the existing sidewalk on Cone Street.

2. *Widen Charleston Street* to allow for a minimum three-foot shoulder (the AASHTO *Guide to the Development of Bicycle Facilities* recommends four) and add Share the Road signing. Charleston Street is currently only 28 feet wide, with 11-foot lanes and 3-foot shoulders. The shoulder should not be formally signed as a designated bikeway.

3. *Replace the Charleston Creek bridge on Charleston Street* as conditions warrant. Charleston Street currently makes two 90-degree turns as it crosses Charleston Creek. The bridge carrying Charleston Street over the creek is not structurally deficient, nor does it carry a high volume of traffic (3,800 AADT). It has sidewalks on one side. It is not a crash cluster location.

4. *Consider the development of a property maintenance ordinance* to enforce a minimum standard for exterior property maintenance that addresses both safety issues and aesthetics.

Benefits: Planning now for the eventual creation of the Marsh Creek Greenway

[6] There is a new section of sidewalk on the south side of Charleston Street, however, east of McInroy Street.

will prevent introducing a greater volume of pedestrians and bicyclists to the potential safety hazards of Charleston Street. With the improvements outlined above, Charleston Street can become a more welcoming corridor between the trail and downtown Wellsboro.

Exhibit 2 – A lack of defined shoulders and sidewalks on Charleston Street, looking west

F. Investigate the Need for a Traffic Signal at Wellsboro Plaza

Background: The Wellsboro Plaza (the former Ames Plaza) is situated near Wellsboro's eastern boundary with Charleston Township. The plaza has been the subject of a multi-phase upgrade, including new canopies and lighting. More importantly, future phases include the construction of over 5,000 square feet of new office space, a drive-through bank, and a new medical arts building. Borough residents have voiced frustration with accessing East Avenue/US 6 from Wellsboro Plaza and various local streets that intersect US 6.[7]

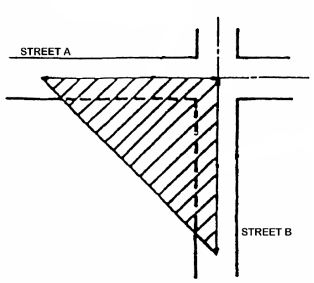
Action

1. *Require a Traffic Impact Study (TIS)* to evaluate whether the additional land development would trigger the need for a traffic signal.

Benefits: A new signal would reduce delays to traffic exiting the plaza. It would also create a "break" in traffic along US 6.

Exhibit 3 – The intersection of US 6 with Wellsboro Plaza

[7] On an unrelated note, Wellsboro received over $52,000 through DCED's Elm Street grant program to construct a sidewalk linking Wellsboro proper to Wellsboro Plaza and properties in between.



G. Evaluate Sight Distance Limitations at Various Intersections

Background: Survey respondents highlighted several intersections and roadway segments in the borough where sight distance and visibility was a problem. Within a "clear sight triangle" there should be no obstruction of vision between a height of 2 feet and 10 feet above the centerline grade of the street. Clear sight triangles should be graded as necessary and kept clear of any buildings, plantings, or other obstructions. Objects such as chain-link and split rail fences could be permitted, provided no screening vegetation or material renders the fence opaque, and the intersection is signalized, or equipped with stop signs requiring all traffic to stop. Intersection visibility is governed by Article 13.6 of the Borough's zoning ordinance.

Action:

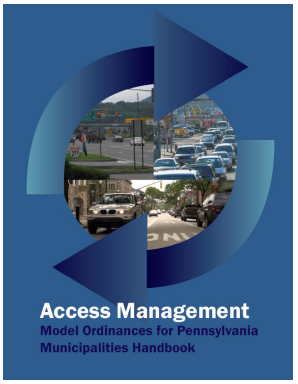
1. *Specific action will vary by intersection, traffic volume and posted speed limit*, but may involve the removal of certain on-street parking spaces (such as at the intersection of Central Avenue and Pearl Street) or shrubbery (such as by the Acorn convenience store on East Avenue). Another existing sight distance issue is at the corner of Charleston and Tioga Street. This would be mitigated to some extent by the proposed traffic signal. Sight distance should be evaluated, and improved if necessary, at the following locations:

    - BiLo supermarket onto Main Street (PennDOT)
    - Intersection of Main and King (Wellsboro)
    - Queen Street from between AAA and the Community Building (Wellsboro)
    - Low hanging tree branches along East Avenue and Main Street (tree limbs lower than 8 feet are prohibited within a clear sight triangle, according to Borough ordinance) PennDOT
    - Highland Street (Wellsboro)
    - Pearl Street and Central Avenue (Wellsboro).

Benefits: Improving sight distance can greatly improve safety by providing motorists with sufficient visibility of approaching traffic. Crashes can often be avoided if motorists can spot another motorist, bicyclist, or pedestrian in time.

H. Develop and Adopt an Access Management Ordinance

Background: There are many points of unrestricted access onto roadways in the borough, most notably along US 6. Poor access management can be characterized by having too many curb cuts (which creates problems for through traffic, particularly for businesses) and undefined access where motorists can pull out onto the roadway anywhere they choose. (A prominent example of this is by George's Restaurant and the dialysis center along US 6.) Managing access with curbs and shared driveways creates fewer decision points, which provides for more predictable travel patterns, reduces delay, and even allows for higher volumes.



Actions:

1. *Develop and adopt an Access Management Plan* and ordinance which would require shared driveways and parking areas, thus improving roadway capacity and safety. Over time, the Borough should attempt to obtain an average spacing of 250 feet between access drives. A copy of PennDOT's Model Ordinance can be found online at http://www.dot.state.pa.us and in Appendix D of this report.

2. *Use PennDOT's recent access management model ordinance handbook* as a guide in developing the ordinance.

3. *Work with individual property owners and businesses* in encouraging them to create driveway connections between their properties and potential opportunities for joint parking.

4. *Owners of new development should be encouraged to allow for joint use and access*, with a maintenance agreement that outlines maintenance responsibilities. Access points should be planned for adjacent parcels as site plans are submitted to encourage joint driveways.

Benefits: This ordinance would protect the future capacity of US 6 while resulting in a reduced number of access points along state roadways for existing properties and will reduce the overall number of traffic conflict points caused by closely spaced driveways. The reduction in the total number of decision points ultimately improves safety for all users, including motorists, bicyclists, and pedestrians.

I. Improve Non-motorized Access to Recreational Areas

Background: From the perspective of a pedestrian or bicyclist, one of Wellsboro's largest recreational facilities is almost entirely inaccessible. The issue of walking or bicycling to the Little League ball fields was greater in years past. More recently, almost all youth arrive by car. The recreational complex in the far eastern corner of Wellsboro contains five ball fields and serves a geographical area much larger than the borough itself. The Borough's department of parks and recreation converts the fields to soccer in the fall. The fields are leased and maintained by the Little League association, but the fields themselves are owned by the Borough. The posted speed limits on Charleston Street by the recreational area are 45 mph heading out of town and 50 mph heading toward town.[8] Charleston Street currently has 10-foot travel lanes and a 6-foot shoulder on the south side east of Jackson Street.

Actions:

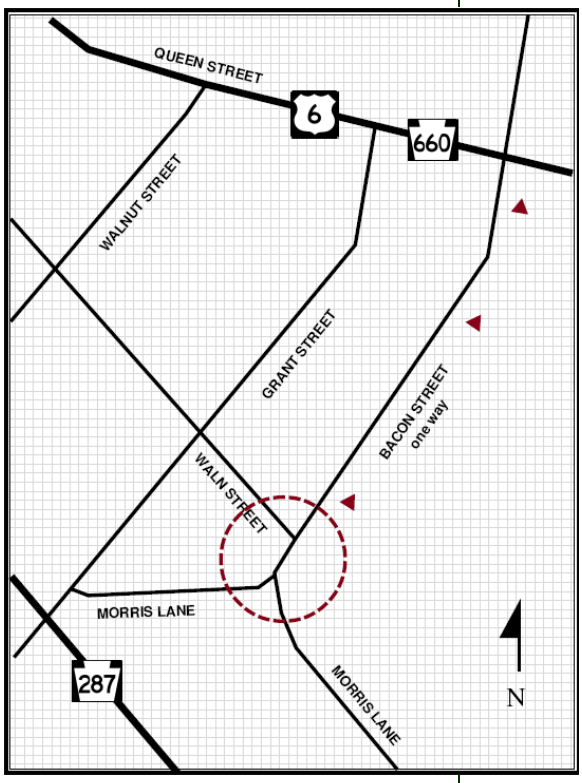
1. *Install "Share the Road" signs along Charleston Street to the recreational area.* The signs are meant to encourage safe behavior and interaction between motorists and bicyclists.

2. *Investigate the feasibility of extending the Marsh Creek Greenway* eastward along Charleston Creek to the recreational areas. This would provide a non-roadway based alternative to using Charleston Street for access to the recreational areas.

Benefits: Improvements to access to the recreational fields (both roadway and non-roadway based access) would provide greater safety to bicyclists and pedestrians while making borough residents less reliant on private automobiles.

[8] The posted speed limit drops to 35 mph west of Jackson Street.

J. Monitor the Intersection of Bacon, Morris Lane and Waln



Background: The Project Advisory Committee and public have cited the intersections of Morris Lane, Bacon Street, and Waln Street as a concern. The geometry of the intersections and their proximity to one another (less than 100 feet apart) can be somewhat confusing for motorists. In addition to local traffic, the intersections are also used by motorists seeking to bypass the downtown area with a less congested route between East Avenue and Central Avenue. Residents have also cited speeding as a concern through the intersections, with vehicles speeding down Morris Lane.

Pedestrian safety is also an issue there, even though sidewalks have been constructed recently on Waln Street. Representatives from the Shared Home are working to provide a better entrance drive to the home with a sidewalk from the top of the hill to the stop sign below, with no steps. The Borough will provide a crosswalk at that location, but seniors navigating the intersection will still be a concern.

Action:

1. *Monitor this intersection* as signals are updated and coordinated. Improvements to the signals on the state highways should alleviate some of the demands being placed on these local streets and intersections.

Benefits: The effectiveness of recent improvements to the intersection should continue to be monitored as improvements are eventually made to the borough's signal systems, which are expected to positively impact local roadways and intersections.

K. Improve Public Transportation Services

Background: The Endless Mountains Transportation Authority is the primary provider of public transportation services in Wellsboro. Their services are used primarily by the borough's seniors and persons with disabilities. Services are currently too infrequent for those who wish to use public transportation for shopping trips. In some instances, headways are as long as 2½ hours. Related infrastructure, such as shelters and benches, are also not available, making use of EMTA service somewhat inconvenient.

Actions:

1. *Explore the feasibility of providing circulator shuttle service* within the borough. This would help seniors who rely on public transportation for shopping, as well as for medical trips. (There's currently no way to go to a doctor on short notice, as a 24-hour advance notice is required.) Residents have expressed a desire for EMTA to provide more service to local destinations, such as the library and grocery stores. This type of service could also be used during special events.

2. *Work with EMTA and NTRPDC in securing CMAQ funding* for related enhancements such as shelters and benches.

3. *EMTA should provide large print bus schedules* to residents at Pinnacle Towers, Park Hill Manor, and the Laurels.

Benefits: The borough has a larger share of seniors than most communities (24 percent of total population). Attending to deficiencies in existing human service public transportation can greatly improve the quality of life for the hundreds of seniors who reside in Wellsboro and do not have access to an automobile or prefer not to drive.

L. Initiate a Program to Systematically Upgrade Pedestrian Access Routes to ADA Standards

Background: Nearly half of the borough's population is over the age of 65 or under the age of 18. This constitutes a significant share of the borough's population that is more reliant on non-motorized modes of transportation, particularly walking or bicycling. Adequate sidewalk and crosswalk conditions are very important from both a transportation and recreational aspect. Their construction and maintenance must be supported and backed by Borough enforcement.

Actions:

1. *Address sidewalk conditions, beginning with a prioritized listing*. The following areas have been identified through the community survey and the Borough police as areas in need of sidewalk improvement and are shown below in no priority order:

    - Grant Street – sidewalks are in a state of disrepair on the east side of the street between Central Avenue and Waln Street. There is no sidewalk on the west side north of the Laurels to Waln Street. Sidewalks on both sides of the street are in a state of disrepair from Park Hill Manor to East Avenue.
    - Hastings Street to Brewery Lane
    - McInroy – There are some new sections of sidewalk here, yet others that still need to be replaced.
    - Meade Street – some sections are in a state of disrepair; there is no sidewalk from Charlotte Lappla south to the west side of Sherman Street.
    - Nichols Street – sidewalks are in disrepair north of the Queen Street intersection on the west side of the street while no sidewalk exists on the eastern side north of its intersection with Bodine Street.
    - Queen Street – some sections are in a state of disrepair north of Hastings Street.
    - Queen/Riberolle/Waln – bridge elevations are not at-grade with sidewalks. Riberolle needs marked crosswalks.
    - Sherman Street – has no sidewalk between PA 287 and Charlotte Lappla.

2. *Step up enforcement of borough sidewalk conditions*. Many seniors have indicated that even in areas where sidewalks are available, they must walk or ride their motorized wheelchairs in the street due to lack of maintenance, particularly in the wintertime.

3. *Evaluate providing low interest loans* for home owners needing to construct/reconstruct sidewalks. The Borough currently has a volunteer program for sidewalk construction/replacement where the Borough demolishes and removes the old sidewalk at no cost to the property owner, who then hires a contractor to construct the new sidewalk.
4. *Provide ADA-compliant curb cuts with tactile surfaces*.
5. *Provide bicycle parking* in downtown areas to encourage their use.

Benefits: Attention to bicycle and pedestrian travel improves their mobility and safety as well as community health and wellness, while reducing traffic congestion.

Exhibit 4 – At the corner of Pearl and Charles Streets

M. Address Signing and Roadway Markings

Background: Traffic signs fulfill an important role in the borough's transportation system. There are several types of highway signing, including regulatory, advisory, wayfinding, and informational. Signs should command attention and convey clear, simple meanings while providing adequate time for traveler response. The Borough has a $5,000 line item in its annual budget for sign maintenance.

Actions:

1. *Replace faded and outdated signs throughout study area*. There are many examples throughout the borough where signs are difficult to read or have faded altogether. The Borough should develop an inventory of old and outdated signs and adopt a plan for their replacement.

2. *Add/replace No U-Turn signs in the downtown area* with the R3-4 sign (shown) prohibiting those movements. Pavement markings could be considered in consultation with the PennDOT district office. These markings are often discouraged due to the extra maintenance burden.

3. *Install supplemental plaques below stop signs* at multiway stop-controlled intersections to indicate a secondary legend, such as "3-way stop." The MUTCD requires that if the number of approach legs controlled by a stop sign at an intersection is three or more, the numeral on the supplemental plaque (R1-3) should correspond to the actual number of legs controlled by the stop signs. Intersections similar to the one at Pearl and Walnut would benefit. There are currently no stop signs at the intersections of Waln/Water and at Pearl/Crafton. Verify that these intersections are to have no form of traffic control or determine whether they are missing stop signs.

4. *Address the position of the Yield sign at Wellsboro Junction.* Sign R1-2 is currently located in the wrong place and should be moved 50 to 75 feet forward. Yield signs should be applied under the following conditions:
   - When the ability to see all potentially conflicting traffic is sufficient to allow a road user traveling at the posted speed, the 85th-percentile speed, or the statutory speed to pass through the intersection or to stop in a reasonably safe manner.
   - If controlling a merge-type movement on the entering roadway where acceleration geometry and/or sight distance is not adequate for merging traffic operation.

- An intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.

5. *Install signs to major destinations within the borough*, such as the Tioga Central Scenic Railroad and the recreational ballfields on the borough's east side. Improved traveler information can ease traffic congestion by getting visitors to their intended destination more quickly. Designs should consider the PAWilds design manual.

6. *Consider installing larger signing for greater visibility*. As traffic signs are replaced, consideration should be given to larger signing with Clearview font for the benefit of all users, particularly seniors.

Benefits: Improved signing is a relatively low-cost option for improving safety and traveler information. The appropriate use of signs can improve safety, lessen congestion, and improve the traveling experience.

Exhibit 5 - A faded sign along PA 287

N. Plan for Vacant Properties on East Avenue

Background: One of the most important gateways into the borough is US 6 from Mansfield and US 15 (future I-99). Some of the first images of Wellsboro the visitor forms is of abandoned and vacant properties on both sides of US 6 as one approaches Main Street. The borough's derelict appearance in this area runs counter to its attractive Main Street and its pitch as a tourist destination as part of the PAWilds program, Scenic Route 6, and the Pennsylvania Grand Canyon.

Action:

1. Ensure that any new development in this "gateway" area of East Avenue/US 6 in the borough *incorporates a zero lot line* as currently provided for in Article 5 of the Borough's zoning ordinance for properties within the Central Business District. New development or redevelopment of this area should see principal buildings oriented closer to the street (as opposed to the Rite Aid example on the corner of East Avenue and Grant Street). Associated off-street parking should be placed to the rear of any new building. The Pennsylvania Wilds Design Guide for Community Character Stewardship should also be considered as a reference for design issues.[9]

Benefits: The borough has an opportunity to expand its attractive streetscape on Main Street to other areas, such as this strategic gateway that welcomes visitors to Wellsboro from the east. Development oriented to the street is not only more aesthetically pleasing, but more efficient from a transportation perspective.

Exhibit 6 – Abandoned and undeveloped properties along East Avenue

[9] www.lumberheritage.org

O. Maximize On-Street Parking Capacity

Background: The study team performed an assessment of on-street parking occupancy in the borough on Wednesday, October 8, 2008. Parking capacity does not appear to be in jeopardy in any area of the borough, although some capacity for on-street parking is lost through the lack of defined parking spaces along certain streets. Also, the proposed land development plan for the Deane Center for the Performing Arts will remove some existing parking spaces while increasing demand for parking overall (both on- and off-street). Article 13.9 of the Borough's zoning ordinance governs off-street parking requirements.

Actions:

1. *Define on-street parking spaces* along the following streets:
   - Central Avenue between Pearl and Grant Streets
   - Main Street between Norris and King Streets
   - Charles Street

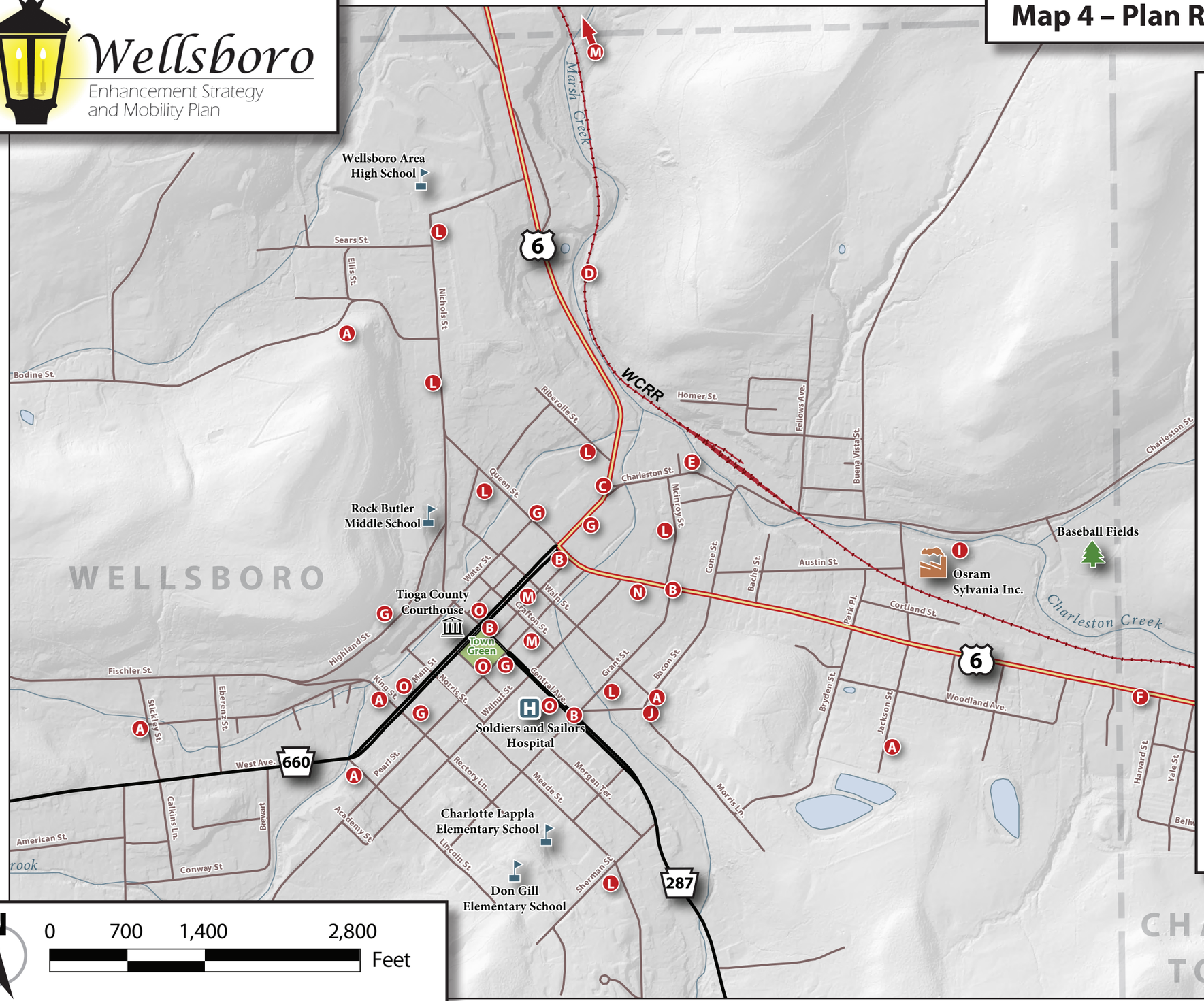
2. The Borough should *require a comprehensive assessment of the parking requirements* being introduced as part of the proposed Deane Center for the Performing Arts. This should be required in addition to a Traffic Impact Study. Article 13.9 of the Borough zoning ordinance presently does *not* require the provision of off-street parking for properties being converted to a new use within the Central Business District.

3. *Discourage workers from using on-street parking spaces*. This obviously frees up additional capacity and benefits both consumers and downtown merchants.

Benefits: In particular areas of the borough—such as areas adjacent to the court house—more defined parking would make more efficient use of available spaces.

Wellsboro
Enhancement Strategy and Mobility Plan

Map 4 – Plan Recommendations



Legend

- Athletic Fields
- Courthouse
- Hospital
- Industry
- School
- Railroad
- Major Through Traffic Routes
- Major State Roads
- Secondary Traffic Routes
- Stream / River
- Lake / Pond
- Municipal Boundary
- A — Address poor roadway conditions
- B — Upgrade borough's signal equipment and hardware
- C — Signalize Main/Charleston
- D — Develop Marsh Creek Greenway
- E — Improve Charleston St.
- F — Investigate signal warrants at Wellsboro Plaza
- G — Evaluate sight distance limitations
- H — Develop AM ordinance
- I — Improve non-motorized access to recreational areas
- J — Monitor intersection of Bacon/Waln
- K — Improve EMTA services
- L — Improve bicycle pedestrian accommodation
- M — Address signing and roadway markings
- N — Plan for vacant properties on East Avenue
- O — On-street parking capacity

N

0 700 1,400 2,800 Feet

Implementation Plan

Background & Purpose

- The Wellsboro Enhancement Strategy and Mobility Plan (hereinafter "the Plan") was developed to address a wide range of transportation issues and opportunities for a community that is highly valued by its residents and many visitors.
- The plan included a series of major recommendations that are being "converted" to "Projects and Initiatives" for the purposes of this implementation document, recognizing that the Borough intends to move forward on all of the recommendations.
- The Project Advisory Committee is the assumed body for overseeing and coordinating the plan's implementation in partnership with the Northern Tier Regional Planning and Development Commission, PennDOT, and others.
- This document is dynamic. It has been developed as a chapter of the plan, but also as a stand-alone document and tool for managing and monitoring the plan's implementation.

How to Use and Update

- At minimum, the Project Advisory Committee or its successor oversight body should do a full review and update of the Implementation Plan on an annual basis. This should be done in coordination with NTRPDC (and PennDOT) as part of its own work program planning.
- A status column is provided for the Project Advisory Committee to simply record any updates for any of the projects or initiatives. This also points to another important use for the Implementation Plan—it is a communication tool from which to extract key updates to keep the public informed of progress.

Implementation Plan Structure

- A matrix if provided for each of the 15 projects or initiatives. The matrix lists supporting actions and indicates whether the action is either near-term, medium or long range, or a continuous activity. A rationale for each was discussed as part of finalizing the plan but not included in the implementation plan for the sake of brevity.
- A lead organization is shown for each project or initiative. This is not to imply that they are solely responsible, but it is important to have a point organization that recognizes and accepts its role to move the project or

initiative forward. As a dynamic document, the Borough is free to change the leadership for any project or initiative as necessary.

- Finally, the consultants have provided both implementation considerations shown in bulleted form and a variety of early steps or checklist items shown with checkmarks. Both are intended to foster early action and momentum.

IMPLEMENTATION PLAN

Project/Initiative	Actions	Priority	Timing[10]	Logical Lead	Moving to Implementation
A. Address Poor Roadway Surface Conditions	Develop a Capital Improvement Program (CIP) to systematically maintain and improve the borough's 17 miles of roadway.	High	Ongoing	Streets & Highway Committee; (John Wheeler)	List of streets shown in the plan is illustrative, based on project field work and stakeholder involvement. The CIP should have a planning horizon of 5 years and follow a prioritized list of projects. This CIP will also incorporate a sidewalk element and other elements or sections.
B. Upgrade the Borough's Traffic Signal Equipment and Hardware	Update all four existing signals Add actuation and detection	High	Near-term	Streets & Highway Committee	The Borough will receive funding support from the state through its Pennsylvania Communities Transportation Initiative (CPTI) for "Smart Transportation" projects such as these. The Borough should develop a maintenance schedule or program for its signals. CMAQ funds are available through NTRPDC for ongoing maintenance work. Placement of (new) poles should be context sensitive.
C. Signalize Main/Tioga/ Charleston	Signalize the intersection	High	Near-term	Streets & Highway Committee	
D. Develop Marsh Creek Greenway	Complete property right-of-way negotiations Work with various funding partners to identify funding sources for Phase 2 Construct trail extension from Wellsboro Junction to Charleston Street	Low	Ongoing	Tioga County Planning	In collaboration with DCNR and the county commissioners. The extension of the trail should be designed as a recreational asset as well as a potential commuter facility between Wellsboro and Stokesdale.

[10] Near-term = 0-1 year; Medium-term = 1-2 years; Long-term = > 2 years

Project/Initiative	Actions	Priority	Timing[10]	Logical Lead	Moving to Implementation
E. Improve Charleston Street as a Connector from Marsh Creek Greenway to Downtown Wellsboro	Construct sidewalks Widen Charleston Street	Medium	Near-term	Borough Council; Mike Wood & Joan Hart	Advocate for placement on the region's 2011 TIP through NTRPDC. Address stormwater management issues associated with the area.
F. Investigate the Need for a Traffic Signal at Wellsboro Plaza	Complete a Traffic Impact Study (TIS) as new development occurs	High	Near-term	Borough Council	Costs could be shared with Charleston Twp. Possible public/private partnership (P3) could be evaluated with guidance from NTRPDC and PennDOT Office of Planning.
G. Evaluate Sight Distance Limitations	At various intersections as deemed necessary	Medium	Medium	Borough and PennDOT	Carry out in cooperation with Tioga County Maintenance Manager.
H. Develop and Adopt an Access Management Ordinance	Develop an Access Management Plan	Medium	Medium	Borough Planning Commission	Borough council might task the planning commission to develop ordinance. PennDOT handbook is available as a an appendix to this plan and is also available electronically: ftp://ftp.dot.state.pa.us/public/bureaus/CPDM/WEB/Access%20Management%20Model%20Ordinances%20for%20PA%20Municipalities.pdf
I. Improve Non-Motorized Access to Recreational Areas	Install "Share the Road" signs along Charleston Street Investigate feasibility of extending Marsh Creek Greenway eastward	High High	Near-term Long-term	Recreation Committee	"Yield to Pedestrian Channelizing Devices" are portable signs available at no cost to municipalities that have either an intersection(s) with a documented car/pedestrian crash history or a location where pedestrians have difficulty crossing the highway because motorists fail to yield to them lawfully. It is also recognized that there are differing views about the aesthetics of these signs. If the signs are not used, greater enforcement will be necessary. Contact PennDOT's Chris King chriking@state.pa.us

Project/Initiative	Actions	Priority	Timing[10]	Logical Lead	Moving to Implementation
J. Monitor Intersection of Bacon, Morris and Waln	Monitor as signals at other intersections are updated and coordinated	Low	Ongoing	Borough Police	
K. Improve Public Transportation Services	Explore feasibility of circulator shuttle service	Low	Long-term	NTRPDC; Borough Council	The Borough should draft a letter of request to NTRPDC to broker action planning for this initiative with EMTA. More stops are needed in the borough with shelters and benches. CMAQ funds are available through NTRPDC. At minimum, the goal should be to develop a reasonably basic and phased approach with EMTA for improving service.
L. Initiate a Program to Upgrade Pedestrian Access Routes to ADA Standards	Address conditions with a prioritized listing of improvements Step up enforcement of sidewalk conditions Evaluate low interest loans to construct/reconstruct sidewalks Provide ADA-compliant curb cuts Provide bicycle parking downtown	High	Near-term, then Ongoing	Streets & Highway Committee	A Capital Improvement Program (CIP), separate from the one to be developed for roadways, should be developed exclusively for sidewalks/crosswalks. Alternatively, the sidewalks/crosswalks focus can be a module within an overall CIP that also includes the highways.

Project/Initiative	Actions	Priority	Timing[10]	Logical Lead	Moving to Implementation
M. Address Signing and Roadway Markings	Replace faded and outdated signs	High	Ongoing	Borough and PennDOT	Implement in cooperation with PennDOT and Delmar Township Supervisors.
	Add/replace No U-Turn signs				
	Install supplemental plaques below stop signs				
	Address position of YIELD sign at Tioga Junction (with Delmar Twp)				
	Install directional signing				
	Install larger signing for greater visibility				
N. Plan for Vacant Properties on East Avenue	Ensure zero lot lines in zoning ordinance	High	Ongoing	Borough HARB; Planning Commission	Orienting buildings to the street improves aesthetics as well as transportation efficiency. This initiative may entail some basic public education and information for all involved. The American Planning Association and other sources such as DCNR have good resources related to setbacks and related planning and zoning benefits and techniques. Wellsboro can easily adapt such best practices and concepts.
O. Maximize On-Street Parking Capacity	Define on-street parking spaces	Medium	Ongoing	Streets & Highway Committee	
	Review existing assessment of Deane Center parking requirements				
	Discourage workers from using on-street spaces				

Appendix A - Public and Stakeholder Involvement

Gannett Fleming is continuing a considerable effort to raise awareness of sustainability in our day-to-day activities and our projects. Our goal is to work sustainability into our projects in a more consistent and meaningful way than we have in the past.

As such, we are providing some appendices in electronic format in order to reduce paper waste while at the same time being able to provide additional resources and references.

Comments from Community Survey

The survey conducted during the first public open house provided opportunity for open-ended comments. A description of these is summarized below. A total of 184 survey respondents provided comments over and above what was shown on the survey instrument. Comments are shown on the following pages in no priority order and organized by topic area. They offer a community's commentary on its transportation issues.

Intersection of US 6/Queen & Main Street

- Light at Queen and Main is no way long enough for older people or any age to cross. Special attention should be given to that major intersection.
- Intersection of Queen and Main – need to remove parking meters and make a left turn lane.
- Re-do signage at Main and East Ave. Trucks miss Route 6 West turn. A lot of your questions are not about transportation!
- People press button then cross the street not waiting for signal.
- The intersection of Queen and Main needs a directional light for left turns.
- We need a left turn lane from Queen onto Main Street (eliminate parking by the Methodist Church).
- Congestion from the left turn from Queen Street onto Main Street.
- At Queen and Main, we need a (L) turn lane onto Queen. The parking spaces along the Methodist church could be converted into a lane for drivers going straight or turning (R). Should have a (L) turn signal as there is for those turning left from Main onto East Ave.
- Coming into the main traffic light on Queen Street and need to turn left onto Main, there are times when you are held up for 3 light changes because there is no left turning lane or light on that side.

Intersection of US 6/Main, Tioga & Charleston Street

- Get Mobil sign out of the clear sight triangle.
- Get parked vehicles (John Mosso's truck) out of the right of way.
- The "Y" at Sherwood Motel/Terry's Hoagies – Main, Tioga and Charleston Street. People take risks to get out, traffic often congested and no way for pedestrians to cross in a safe manner. Let's get back to giving pedestrians the right of way.

- I've seen many near accidents and long lines waiting to turn off of Charleston.
- The Y-intersection at Rt. 6 and then east end of Main Street high risk for accident and hazard to pedestrians. Needs a light or a roundabout.
- Crossing John's service station to Sherwood Motel intersection. This is a very dangerous intersection for pedestrians…a light is needed.
- Charleston Street intersection with Route 6 – especially with train and greenway improvements.
- Same old problem for many, many years…Tioga, Main and Charleston Street. Some things never change.
- The intersection by McDonald's is pretty busy, and, at times, confusing.

Street Conditions

- Buena Vista Street needs some serious work!
- Buck Road is in terrible condition, and a lot of kids walk and bike to the softball fields. It should be paved to the softball fields, and chipped the rest of the way to Dean Hill.
- We are really concerned about the Charleston Road. We travel this road a lot, and last winter we slid out coming down the last hill, coming into Wellsboro. Praise God we went to the left and went into someone's lawn and not hurt. If we had went to the right, we would have went into a steep ditch with large rocks lining it. I think you need a guard rail along that side of the road.

- McInroy Street is in terrible condition.
- King Street between Water Street and Fischler/Highland needs repairs! It gets a lot of use by local traffic.

- Nichols Street storm drain grates need raised.
- Traffic on Bacon Street – especially school buses! Narrow one-way street – large holes!
- Buena Vista Street is very bad. Could be an accident. Hope no one gets hurt or killed. [This] has been bad all summer [and] reported several times.
- Main Street in front of Dunham's [is] very bumpy.
- Bodine Street is in bad condition.
- Also, there is a very deep ditch coming out of the Catlin Hollow Road, turning toward Wellsboro, on to the Charleston Road. We have almost went into this deep hole, and seen others who have.

- There is a drainage grate on Grant Street near Park Hill Manor that needs to be fixed or replaced.
- Three bridges on Water Street, Queen Street, and Riberolle Street over the Kelsey Creek are several inches above the adjacent sidewalk.

Signing

- The sign at Nichols & Water has been down since spring.
- [Signs for] Morris Lane and Bacon Street and Waln…are not visible or clear – do not enter – yield – stop – one way.
- No need for stop sign on Morris Lane at Wilson's Lane.
- Should be able to turn "right on red" at intersection of Central and Walnut.
- Better signs (or lights) to find Cornell, Princeton, Yale, and Harvard Street.
- The corner of Charleston and Cone Street needs to be changed to all stop signs. Cars whiz through there, it is hard to see them coming and people unfamiliar with it do not know the stop sign does not apply to right turns.
- The intersection at Bacon/Waln/Morris Lane: the recent signage for not turning onto Morris Lane from Waln is ridiculous! What difference does it make for a few residence at the home? They can get hit from anyone coming down or up Morris Lane. Isn't that why sidewalks were put in? The new sign is no more than a ticket trap and why?
- The corner of Pearl Street and Crafton: no stop sign east and west.
- Signage needed to direct motorists to the recreational parks.

- There is too much state signage throughout the borough. It is trashy looking!
- There are too many signs.

Sidewalks/Crosswalks

- Sidewalks are needed on both sides on East Avenue – I think they should go to Weis. A lot of people walk to Weis and to Dollar General. There are a number of other places without sidewalks – along Pearl Street – for one.
- Define and post crossings.
- Sidewalks are needed at least as far [east] as Wellsboro Plaza.
- Meade Street from Sherman to Grant Street – sidewalks on right side in some places are unsafe.
- Many sidewalks in town or near town aren't there (!) or are in terrible shape. Codes must be enforced. We avoid certain routes that would be easier to walk due to poor or lacking sidewalks. They make strollers very difficult to use.
- If bicyclists can't use sidewalks they must drive in the road. The roads are too narrow, and that's dangerous. So what to do?
- Tactile strips at intersections where there are cutback sidewalks – guide dogs are trained to curbs!
- Some sidewalks on Nichols need repair and they should be on both sides [of the street] for school children.
- Crossing Central Avenue at Grant Street or Main Street light(s) is okay – any other street is problematic when parking along Central Avenue is heavy.
- Time limit for pedestrian crossing at East Avenue and Main (at the Diner) is insufficient, especially for the older population which is increasing here.
- Any marked crosswalks! I actually had a driver stop to let me cross Central at Walnut. The driver behind him pulled around the stopped vehicle and through the crosswalk nearly running over me! Post signs and enforce the law!
- Sidewalks all the way out to the borough lines; people love to walk and gaze, but they cannot go far. I would walk to Ames shopping center if there were sidewalks.
- Crossing the street from the BiLo parking lot to the post office.
- Add a safety island for pedestrians to help with crossing of intersection.

- The corner of Central Avenue and Main Street is dangerous for pedestrians.
- Pedestrian safety on West Avenue is a concern. There are no crosswalks and the speed limit is 35 mph. sooner or later, someone will be seriously injured.
- The Morris Street and Grant Street bridges over the Morris Creek are several inches above the adjacent sidewalk, making it difficult for those with walkers or wheelchairs.
- There are no sidewalks on the northwest side of Grant near Waln Street.
- There are not many marked crosswalks – state law to yield to pedestrians in crosswalk not enforced. Mansfield and Lawrenceville have signs in the middle of some major streets/roads reminding drivers of state law to yield!

Sight Distance

- Cannot see in pulling out of BiLo parking lot with cars parked along Main Street
- Main and King is a lethal intersection when illegal parking impedes vision.
- Queen Street is always a treat. We're lucky no one has been injured by the park area. There is zero visibility coming out of the parking lot between AAA and the Community Building. The entire area from Queen/Main to Nichol's always has traffic.
- Low trees along East and Main…you can't see through them…they all need to be trimmed.
- Highland Street is at risk due to lack of sidewalk and bends in the road where visibility is affected. It is frequently used by walkers including kids to and from school.
- Corner of Pearl Street and Central Avenue – many parked vehicles there block the view – suggest four-way versus two-way stop signs if you don't want to disallow parking on Central Avenue.

Parking

- There is insufficient parking at the post office and difficult parking on street in front, or, worse yet, crossing the street to get there from the BiLo parking lot.
- The borough needs a parking garage.

- Parking problems such as side streets like Crafton. Parking on both sides makes the street too narrow. Two pickup trucks have difficulty passing in opposite directions.
- On-street parking taken by store owners and employees.

Trinity Lutheran School

- West Avenue has a Lutheran school and a speed limit of 35 mph and lower during school arrival and dismissal hours and everyone ignores this, especially 18-wheeler and construction trucks which just go barreling up and down this residential street. We live in an older home and our house shakes with those trucks that barrel up and down through here. Speeding and very loud backfiring cars and motorcycles are a daily problem in what should be a fairly quiet residential street.
- Install blinker yellow light, on timer, in school zone on West Avenue for Lutheran school area.
- School children crossing to Trinity Lutheran School from 7:45 to 8:30 AM and 2:45 to 3:15 PM.
- Pedestrian safety is definitely an issue during pre-school hours and immediately after school at Trinity Lutheran School on West Avenue. Cars speed and do not obey 15 mph during posted times.

Traffic Congestion

- Congestion backups at Main Street and East Ave.
- Perhaps it is time to request a feasibility study for a Wellsboro bypass.
- An occasional three-minute wait at a traffic light is NOT congestion. Traffic flow in our area is fantastic compared to almost anywhere else. Don't mess with it!
- I CAN'T GO ANYPLACE IN THIS TOWN WITHOUT BECOMING ANGRY OR FRUSTRATED BECAUSE OF TRAFFIC.
- Meade Street: at the start and the end of the school day.

Access onto US 6 and Main Street

- It is hard to [turn left] …out of the BiLo parking lot onto Main Street due to traffic and poor visibility…with cars parked on that side of the road.
- Try to make a left-hand turn at either red light on Main Street between 3:00 and 5:30 on a weekday…good luck!

- Turning left off Bacon Street onto East Ave.
- Tioga Street is so busy with traffic and when I visit the shops on that street getting back into the street is almost impossible. Crossing by foot is dangerous. The speed limit is 25 mph but not heeded!
- Difficult to cross and back out into heavy, speedy traffic on West Avenue.
- Making left turns from Central Avenue onto Main Street is difficult when school buses come down from the middle school.
- The residential area east of the Wellsboro Plaza needs at least one light to get onto Route 6.
- Try getting onto East Ave from Bryden Street.
- Try getting on Main Street from any of the side streets. One has to get way beyond [the] stop sign to see (look for) oncoming traffic.
- I find it difficult to get on business blocks on Main Street from a side street (e.g., Waln) where a pickup truck or SUV is parked in the last space. I have to creep out into the street to see what is coming from the left. But how to patrol "no parking" or put up signs saying "no large vehicles."
- Wellsboro Plaza entry onto US 6 westbound.
- Coming out of Bacon Street.

Traffic & Codes Enforcement

- Uniform borough enforcement of its own codes, esp. in regard to sidewalks [maintenance] and sidewalks across driveways.
- Enforcement of traffic stopping for pedestrians at crosswalks. It's a state law, but only tourists do it (and truckers).
- Illegal U-turns downtown are not enforced.
- Terrible noise of about 2% of cars and motorcycles [is] sometimes unbearable.
- We need to enforce the "jake brake" ordinance.
- Please enforce crosswalk law for pedestrians. Put up crosswalk markers, as is often done elsewhere, notably recently in Mansfield, for cars to yield to pedestrians.
- Pedestrians jay walking all streets.
- Drivers not stopping at side-street stop signs.
- Figure out a way to make people use their turn signals.

- Speeding on Pearl Street.
- People constantly go through the four-way stop at the corner of Waln and Walnut.
- Speeding up and down Morris Lane in conjunction with no sidewalks – especially cars shortcutting from East Avenue.
- All high-speed traffic along Main Street – West Ave. Speed limit signs?
- I live on Sherwood Street and cars drive too fast. Cars drive down my street so drivers can park in front of the post office. I've clocked some of these cars at 40mph! There are small children on my street. Speed enforcement would be good.
- High speed drivers on Grant Street in from of Park Hill Manor.
- [Motorists] go way too fast around the corner from Queen Street onto Nichols Street. I have seen cars in the wrong lane, because they were traveling too fast to make the curve.
- Pedestrian crosswalk laws should be enforced – signs would be a good idea.
- I've concluded I will meet my death as a pedestrian on Pearl Street…anywhere from the town border to Central Avenue. Drivers speed on that stretch – in town! If the police parked at Tussey's parking lot and caught all the speeders, the Department could generate all of their own budget funds.
- Drivers rarely yield at marked crosswalk!

Aesthetics

- We have noticed an increase in advertising to promote Route 6 as a scenic travel area. However, when you enter Wellsboro on Route 6 from Mansfield, the town presents a very "run down" look, especially with the empty Hornets Nest building. Maybe the town should consider improving the appearance of East Avenue before spending any more money on Main Street.

- East Ave (US 6) – old "Coastal" station, empty bank lot Do-It Center parking lot all give Wellsboro a derelict appearance when approaching from the east.
- Do something to enhance the look of Route 6 coming in to Wellsboro from the east – the old Coastal station has been empty for years and looks terrible!
- Cut high grass along railroad station and property on Fellows Avenue.

Intersections & Intersection Capacity

- Corner of Central Avenue and Main: I've long asked for a pedestrian signal. I've had turning cars come so close to me I've been able to touch the car. Pedestrians never have the right of way.
- Intersection of East Ave. and McInroy/Grant Street meet: If traveling towards town and needing to turn (L) onto Grant, you can wait through several cycles before being able to turn if there are cars also turning ahead of you. A (L) turn signal is needed.
- Anyone turning left from Queen Street onto Main often is forced to wait a long time due to a long line of traffic coming off of West Avenue.
- Pedestrian signals are needed at the intersection of Main and Central Ave.
- Intersection of US 6 with Shumway Hill Road.
- There are a lot of left turns at red lights in town.
- There's lots of confusion about the right of way at the intersection of Waln, Morris Lane and Bacon Street.
- Eliminate the red light at Grant Street. Fridays and most late afternoons traffic is backed up to Pudgies.
- Pedestrian [phases] at intersections is too long.
- East Avenue, Grant and McInroy Street need left turn signals for the left turn lanes that are already there.
- The corner of Cone and East Avenue.
- Weis Market needs a light.
- There are too many "No Turn on Red" signs.
- Main and King: Letters have been written and calls made by several households, including those with small children, [with] no response. The borough could ticket liberally, impose massive fines and be richer as well as safer.

Miscellaneous

- We need better lighting along Main Street.
- …it would be nice to have bike racks in the downtown area since many more people are riding bikes due to the cost of gas.
- Traffic from 3 pm to 5:30 pm is horrible!
- At this time of national economic stress and uncertainty, no new projects should be undertaken by any governmental entity except for infrastructure maintenance.
- Ability to get to/from the airport to town and back.
- HARB [Historic and Architectural Review Board] has had a negative impact on our economy by exceeding its role.
- The new high school at school dismissal. Cars back up.
- Pedestrian safety is always a problem.
- The moving of the railroad [station] to Charleston Street would open up a lot of possibilities also for commerce. Trend at such high gas prices is to use more public transportation. Link to Corning.
- Bicycle lanes on local roads would be great (such as US 6, PA 287 West Avenue).
- There should be limits on parents dropping kids off – ride the bus or walk.
- Route 6 East (Main Street to Round Top Hill Road) needs to be 3-lane.
- Summer weekend traffic is getting worse each year.
- Traffic is increasing on Water Street.
- Add some simple benches at Nesmuk Trail. It would be appreciated.
- We need a bypass to move traffic out of the downtown area with a cloverleaf (on/off) near the Weis Market area to eliminate the congestion of factories.
- We don't need outside consultants telling us what we need!! We have compitent [sic] local people right here!
- The current historic district is enough – we don't need any more!
- Wellsboro area needs an industrial park!
- Any future hospital or medical clinic expansion should go "up" – not "out" – taking up less residential space.

- The day is coming when more street lighting will be required than gaslights can provide! Walk Main Street from court house to West Avenue after dark to see what I mean!
- There are no problems at all.
- Thank you for proactively addressing these issues.

Comments from Second Public Open House and Interactive Web Survey

Roadway Conditions

- well, i have trouble driving up bodine street in the winter can you please stop winter from coming next year? …
- i think that there should be some kind of definite line or curbing in the middle of the intersection by pizza hut, to direct a better flow of traffic. Kind of like what there is in the middle of main street.
- check Bodine ST.
- The road to the High school needs inmproved.
- road below the high school need pedestrain signs down by jokers
- don t put a curve at alls chainsaw
- fix the roads!!!!!!!!!!!!!!!
- fix main street its way to bumpy. Also put sidewalks and fix existing side walkand a half between middleschool and high school. Some one is going to get hurt there. On BOTH sides of the road needs a sidewalk

Intersections and Intersection Capacity

- I think the most important issue is to signalize the intersection of Main/Tioga/Charlesron
- the intersection of main/tioga/charleston is a mess and really needs fixed.
- I believe that at the intersection between the rode that i dont know the name of but i will try my best to describe it needs to have a red light of some sort. The intersection between the rode by packer park and the triple AAA building and the other one passing the vaccuum place and the dry cleaners and on the other side is the back of the Methodist church. i believe that there should be some type of stop light because a stop sign isnt cutting it.
- Traffic flow into the borough on East Ave is uncontrolled making access onto or crossing East Ave extremmly unsafe at peak hours...A red control signal proposed for the Wellsboro Plaza would not only help that intersection, but improve the access to East Ave from any street/access on the south side of the avenue, in other words improve any left turn onto East Ave toward downtown between Grant Street and the

Wellsboro Plaza. Right turn on red at Grant and Central Ave.....LONG OVERDUE!

- Investigate need for \'left turn lane and/or traffic signal at East Ave & Shumway Hill Road.

Bicycle/Pedestrian Accommodation

- Put in more crosswalks alot of people walk around to different places and walk their dogs. Fix roads and sidewalks so people can walk.
- Side walks on Bacon Add some side ways on Bodine
- I WANT MORE BIKE AND RUNNING TRAILS
- i would like to see more stop signs at not well marked intersections as well as more cross walks for pedestrians.
- Put more sidewalks and improve the ones that are already there. Make it easier to cross the street in some places.
- you should add sidewalks to the road past the don gill hill for tourists just before nesmuk lake
- NEED to fix main street all the way through town its way too bumpy. Also the sidewalks on bought sides of the road between Rock L and High school. its all uneven hard for people to walk also its got many puddles in the side walk. And the other side the sidewalk is like a 4rth the way up the street
- I think the various projects involving getting a \"Rail-Trail\" access in Wellsboro would be a tremendous addition both for \"locals\" and for tourists. Having the train depart from town would also be a great value economically for the whole town. I have never seen more than 2 or 3 people on any EMTA bus - I think establishing circuit routes would be a waste of money. I do not support a traffic light at Wellsboro Plaza - maybe in the future if more businesses are located there.
- Where is the list of sidewalks that need improving by police and the boro ?

Traffic and Codes Enforcement

- is there an ordinace against Jake Brakes? if so let us start enforcing it. if not look into such an ordinace. the trucker\'s now days don\'t know how to use anything other than jake brakes and you can\'t hear anything downtown when they are around. i think it is ridiculous to look into more things when we can\'t keep up w/or enforce what we already have.

Aesthetics

- Enforce time limits for placing trash at curbs; especially East Ave on weekends. Numerous tourists have commented on this unsightly condition.

Miscellaneous

- get a new volleyball court and inside swimming pool
- old people should leave
- I think that we should make a skate park so we all the kids can skate around and it will reduce the drug abuse among teen. I feel if we can improve the envirement our kids are in then maybe we can improve them. This is my only requested.
- DETOUR ALL HEAVY THRU TRUCK TRAFFIC AROUND DOWNTOWN AREA ON ROUTES WITH NO 90 degree TURNS.
- Will there be more tractor trailer traffic thru town if the Tioga Central at Charleston St. becomes a loading/ unloading terminal?
- would like to look into electrifying the gas lights. since it seems impossible to keep them kept clean and all mantles working lets put economical lights in them. do our part to be GREEN, electric is cheaper and greener than gas.

- Current roadway surfacing planning and action has been adequate. Traffic patterns are heavier with school and work opening and closing, it is part of commuting, changing and adding the traffic signals and signage could potentially take away from the quaint/small town ambiance that attracts so many people to Wellsboro. How many people are currently using the Rt. 287 through Ansonia Access to the Pine Creek Rail Trail? It seems most people begin at Darling Run and travel south through the actually 'canyon' portion. How many hikers and bicyclers are going to be using the Wellsboro and south to Darling Run section of the trail? How many people currently bicycle in town? Parking…courthouse workers park all along main street, eliminating week day parking. If the Dean center expands as expected, even with use of the Hospital parking lot (which few people are going to park that far away), parking along main street will be eliminated by Dean center visitors. The Dean center should be responsible for building their own parking facility for use of their patrons. A circulatory shuttle service within the borough should not be considered. Many people enjoy walking and there are adequate sidewalks in the downtown area. The shuttle would bring more of a 'big city' feel to Wellsboro, contrary to what attracts people to our area. Wellsboro can develop to be a beautiful small town/trail town accommodating

everyone, without becoming just another industrially designed/'cookie cutter'city. Design standards for sustainability and 'green' development should be addressed to maintain the unique character of the town.

- Some of these projects call for little money expenditure and possibly should be addressed first regardless of popularity among residents. Often little things can make a big difference. Thank you for making this available to the public and providing our input.

Appendix B - Newspaper Articles

NTRPDC is funding Wellsboro Mobility Analysis

By Diane Eaton

The Northern Tier Regional Planning and Development Commission, also called NTRPDC, is funding the development of the Wellsboro Area Enhancement Strategy and Mobility Analysis Plan. Rick Biery, regional planning manager with NTRPDC, said, "We are basically taking a look at Wellsboro and its two surrounding townships, Charleston and Delmar, to identify pedestrian, bicycle and motor vehicle traffic issues. We then have to identify which problems can be addressed quickly, which may take a little longer to remedy, and which will take a really long time because they require funding."

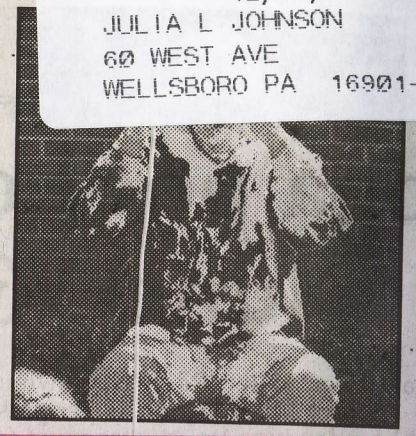
Biery said, "NTRPDC is managing federal highway dollars for special transportation initiatives. We do regional transportation planning for the five counties we serve.

"I had been invited to attend a Wellsboro Area Chamber of Commerce Enhancement Committee meeting concerning the committee's proposed Tioga Street Gateway to Wellsboro Project. That's when I asked, 'What about other parts of the borough and other transportation issues? How can we take a look at this in a comprehensive manner?'"

Biery concluded, "We are hoping to complete work on the Wellsboro area project in January or February of 2009. It might go a little longer depending on the amount of public input we get.

The Wellsboro GAZETTE

ear, No. 34 Wellsboro, PA • Wednesday, June 4, 2008 The Marketplace, 16 pages, one section, The Gazette, 24 pages, two sections $1.25 Newsstand (USPS 674-120)



Rally 'round!

stration for competitors and service crews will contin-
day and Friday, June 5 and 6, at the Tioga County Fair-
n Whitneyville before the rally begins.
nteer registration will be Thursday, June 5, from 9 a.m.
at the fairgrounds.
y, June 6, at 2:01 p.m., at the Tioga County Fairgrounds
yville, STPR® 2008 and the Sherwood Forest Regional
start

Wellsboro launches mobility analysis

A planning study recently launched by Wellsboro Borough aims to identify projects and policies to make it easier to walk, bicycle, drive, park, and use public transportation in the area—even as the borough's residents, visitors, and businesses continue to increase.

"The very things that make Wellsboro an attractive place and destination could combine to overwhelm its transportation system," said Rick Biery, regional planning manager at Northern Tier Regional Planning and Development Commission. "This study is being conducted to address how new developments such as the Deane Center for the Performing Arts and the extension of the Marsh Creek Greenway could impact aspects such as downtown parking and the introduction of more pedestrians into the downtown area. We need to plan ahead and be ready for those changes before they occur."

The study process will involve collecting and analyzing various

See Mobility on page 8-A

Employees get 50 cents a mile for u
their own vehicles

County ups milea reimbursement

by Gayle Morrow

County employees who use their own vehicles for wo
travel will see a two-cent per-mile increase in their reimbu
"It is only logical that we try to compensate," said Com
Erick Coolidge after the board voted to approve the ne
per-mile rate.

The commissioners have said in the past that it saves mo
employees are willing to use their own vehicles as the coun
have to pay the costs associated with vehicle ownership.

In other business at the May 29 commissioners' meeti
was held in Liberty Borough, the commissioners, meeting w
ty Treasurer Sandy Higgins as the Salary Board, approve
ation of a risk management position in the Department o
Resources.

Business park may

Mobility ...

continued from page 1

transportation and traffic data, as well as outreach to the community in the form of public open houses and interviews with students, seniors and community leaders.

The study will also examine issues related to transportation and land use (what type of development goes where), and will include an evaluation of the intersection of Charleston Street and Rt. 6. Traffic counts will be conducted at the borough's four signalized intersections to determine whether changes in signal timing or phasing need to be made.

The study will be guided by a 20-member planning advisory committee comprised of residents of Wellsboro and other leaders in the region. While the study will focus on borough transportation issues, representatives from Charleston and Delmar Townships will also be participating, as development issues along the borough boundary have implications for the borough.

"Transportation issues span municipal boundaries," said Mary Worthington, one of the advisory committee members. "It is important that representatives from these two townships be included as part of our steering committee."

The project is expected to be completed by the end of the year and is being funded primarily through PennDOT with a local match coming from the borough.

Readers who have questions about the study or are interested in getting involved may contact borough secretary and steering committee chairperson Susan Stephens at (570) 724-3186.

Support ...

continued from page 1

Harper said the Rendell administration opposed her efforts to have the state pay the fee.

"We recently learned the commonwealth has a revenue surplus of more than $435 million," Harper said. "How many families in Pennsylvania - especially single-parent families - have a surplus? In a state budget of more than $28 billion, we can surely find the $2 million needed to pay this fee and allow these struggling families to keep their $25."

The language of S.B. 1278 pay the $25 fee for those cases in which the annual collection is between $500 and $1,999.99. The $25 fee shall be collected from the custodial parent in cases where annual collections equal $2,000 or more."

"When this law takes effect, parents collecting as little as $167 in child support per month will have to give $25 back to the government each year for the privilege of collecting the money owed to them from the other parent," Harper said. "Taxing chil-

County...

continued from page 1

HR Director Brian Morral said the proposal to create the position "comes as part of a recommendation from the insurance carrier." The individual who fills the position will work with the maintenance department on safety issues for employees and for the public using county facilities and in county buildings. Claims reporting will also be part of the job description.

Coolidge noted that the County Commissioners Association of Pennsylvania has stressed the importance of timeliness in reporting insurance claims as one way to help avoid lawsuits.

The salary for the position has not been determined.

The commissioners also:

☛ Approved the hires of Cindy Dalton as temporary part-time juvenile victim witness advocate at a rate of $10 per hour, no benefits; Maleea Leskoven, Chesapeake Bay Technician with the Conservation District, $10.75 per hour with benefits; Lauren Taylor, government services intern with the Department of Human Services, $7.15 per hour, no benefits.

☛ Accepted resignations from Rita Reisinger, clerk in the Sheriff's Office; Derrick Watters, Domestic Relations officer; Dinate Stiner, nurse, DHS; Deborah Woodruff, DHS.

☛ Approved a request to advertise for paving bids for the road around the courthouse.

☛ Approved school-based

STSD ...

continued from page 1

of .22 mills, an average of $17.20 more per year on an average assessment of $77,259.

Rakoski noted that $1.2 million would be transferred from the district's capital reserve budget into the general fund to cover expenses for the replacement of the Mansfield High School roof.

"We will begin the 2008-2009 school year with a cash balance of $1.5 million and end the year with $86,000 in our capital reserve account. In addition to the Mansfield High School roof, among the other capital budget items are the replacement of the drainage system at the Blossburg Elementary School playground, and the purchase of a Combi—Oven for North Penn High School in Blossburg for the food services program, and other projects."

In another budget related matter, Rakoski told board members a Homestead/Farmstead Exclusion resolution would be presented at the June 9 meeting. The resolution will specify the amount of money the district will receive in gaming revenues and how that money will be applied to each homestead or farmstead eligible property owner's tax bill. Property owners will not receive money, but rather a deduction from their property tax bill.

Rakoski said, "Some eligible homestead and farmstead property owners will actually not have to pay any taxes in 2008-2009 because of the gaming revenues. They will receive a 'zero owed' tax bill.

"In some cases, the taxes being charged to the eligible prop-

tions have been made for district's eligible property ers, whatever gaming reve remain will be allocated eq to all district taxpayers wh they were eligible for a redu or not."

Rakoski said 107 parce property in the district w receive zero tax bills, while remaining eligible parcels see a $200 tax bill reduction other parcels will receive a $ household tax reduction. Th to homeowners comes from reallocation from property ers whose assessments are than the assessment gener from the gaming revenue.

Rakoski said there is a $1 difference between what the says the district has to distri in gaming revenues and wha district's calculations show.

Senio Farmers M Progra

The Area Agency on Agin the Counties of Bradford, S van, Susquehanna and Tiog working with the Pennsylv Dept of Agriculture to adm ter the Senior Citizens Far Market Nutrition Program.

The Farmers Market Nutri Program offers senior citi age 60 and older and mee financial criteria the oppo nity to receive free Pennsylv grown fresh fruits and vegeta

Traffic study is part of Wellsboro Area Enhancement, Mobility Analysis project

By Diane Eaton

Brian Funkhouser, Gannett Fleming project manager for the Wellsboro Area Enhancement Strategy and Mobility Plan, said, "During the week of July 7-11, we had Traffic Engineer Steve Palmer and Transportation Planner Jonathan Heilman in Wellsboro doing a safety audit. They also did traffic counts at the borough's four signalized intersections – at Main Street and Central Avenue, Central Avenue and Grant Street, Grant Street, East Avenue and McInroy Street, and at East Avenue and Main Street. They also did a traffic count at a fifth intersection - Tioga, Charleston and Main Street intersection – which is not governed by a traffic signal light.

Funkhouser said, "At the four intersections with traffic signals, they looked at pedestrian volumes and overall vehicular volumes. There are cross walks at all

as giving pedestrians more time to cross the street.

"The Wellsboro Planning Advisory Committee members believe that in the future more demands will be placed on the Tioga, Charleston and Main Street intersection by pedestrians and bicycle riders due to the Marsh Creek Greenway Project. They want to find ways to make that area safer for pedestrians and motorists.

"In addition to the traffic count, we did a safety audit. Digital photos were taken and deficiencies were noted. Deficiencies included bike and pedestrian as well as vehicle, roadway and signage issues.

"We looked at the various routes through the borough. Palmer and Heilman used a bicycle/pedestrian checklist to do the evaluation. For the bicycle/pedestrian audit, they went out on foot to indicate which sidewalks are in

provide the borough with an inventory of the problem areas."

Funkhouser continued, "What we tried to do is get a picture of existing conditions in Wellsboro as it relates to traffic volumes, congestion and pedestrian safety. We looked at total volumes going through these intersections, including the level of demand for truck traffic. We looked at the volumes to see if there should be changes in signal light timing or phasing.

"As part of our data collection, on July 16, we held two meetings with senior citizens, the first at Park Hill Manor and the second at Pinnacle Towers. We wanted to find out what obstacles or barriers they face when trying to get from one place to another in the borough either on foot, in a wheelchair, by car or via public transportation.

"That same day, we also talked to Gary Mahosky, PennDOT's Tio-

Wellsboro Mobility Analysis public meeting is Sept. 25

By Diane Eaton

Since May 29, Gannett Fleming, a Camp Hill-based firm of transportation engineers and planners, have been hard at work gathering data about Wellsboro's transportation system.

As part of the Wellsboro Area Enhancement Strategy and Mobility Plan project, the Wellsboro Planning Advisory Committee was formed. During a recent meeting with committee members, the preliminary information collected to date was shared.

Now, that preliminary information will also be shared with residents of Wellsboro Borough and Delmar and Charleston townships at a special meeting. The meeting will be at 6 p.m. on Thursday, Sept. 25, at the Wellsboro Area Senior High School Auditorium on Nichols Street.

"We are hoping that many people will attend this meeting," said Wellsboro Enhancement Strategy and Mobility Plan Project Manager Brian Funkhouser of Gannett Fleming. "We will provide the draft profile of existing transportation conditions in the Wellsboro, Delmar and Charleston township areas at the Sept. 25 meeting. And, we are very interested in hearing from the public about other problem areas we may not yet have looked at."

The firm's goals are to make recommendations to improve the walkability of the borough,

Mobility...

continued from page 1

resolve issues at the Route 6 intersection w
Tioga streets, improve traffic flow, coordinate
portation and provide a document for future

The next step in that process is to hold the
additional input.

The preliminary data shows that the po
borough and the two townships has rema
same since the 2000 census, that the average
is older than those in other municipalities
has a significant number of workers comir
from other municipalities. Specifically, the
that the borough has about 5,000 jobs with
workers to fill them. A significant majority c
ident workers (73 percent) are employed at
the borough. Gannett Fleming data also sh
Borough maintains the majority of its 23 li
way, 16.9 miles compared to the state's 9.06

Other data included in the preliminary r
volume, vehicle miles of travel on state road
tal crashes in the borough, dedicated pedest
street lights and how they contribute to traffi
trian signals that are out of date or missing a
use of yellow markings, deficiencies reveale
conducted between June 17 and 19, and hov
bility of senior citizens has been compromise
speeding motorists, infrequent public transp
infrastructure issues.

Also considered are planned state and
ments over the next five years, through 201
ough, Delmar and Charleston townships anc
planned Wellsboro Borough road projects.

Among the project goals are building ext
safety into the roadway system for senior
signs in the most visible locations possible.

Mosher describes Wellsboro Chamber's Enhancement Committee's involvement in mobility analysis project

By Diane Eaton

Gary Mosher, Wellsboro Area Chamber of Commerce vice president and chairman of the chamber's Enhancement Committee, said, "About two years ago the committee came up with a "Gateway to Wellsboro" project idea involving Tioga Street from its intersection with Charleston Street to the Route 6 bridge near the Wellsboro Small Animal Hospital, which we consider lower Main Street. We wanted to beautify that area for tourists coming into Wellsboro by adding a sign, sidewalk and curbing improvements, as well as our famous gaslights."

"The committee has never acted alone on major projects involving street improvements, but has always served as a resource for the Wellsboro Borough Council, fielding or suggesting various projects to enhance the community."

"In the last two years, the Enhancement Committee has changed its membership composition, which now involves both representatives from the borough and the chamber.

"First we brought in Borough Secretary/Treasurer Sue Stephens as a committee member and then we invited council representative Joan Hart to join. These representatives know what the borough's priorities are and the types of things the council wants to accomplish. We ended up interacting with most of the other council members who would periodically attend our meetings to discuss our ideas and projects.

"We needed to find a way to prioritize the projects we were recommending and to decide where the greatest amount of attention should be placed. Our committee did a weighted average analysis and prioritized the projects that we thought were most important. Many of these dealt with streets and sidewalks, safety, communication and mobility in general, and we soon learned from our interactions with council members that they were coming up with many of the same concerns. A lot of the issues focused on not only the appearance of the town but also safety and other aspects, such as allowing pedestrians to easily travel from one place to another."

Mosher noted, "Our highest ranking project from the prioritizing process was to extend the look of the primary three-block retail area of Main Street north to include the section of lower Main Street and Tioga Street that leads to the bridge over Morris Creek. Our hope is to make these blocks a more apparent part of the 'downtown' retail area, and to enhance the appearance of the area around that bridge with fencing, gaslights, a bench, waste receptacle, and signage as a 'Gateway' to the community.

"The borough council is responsible for maintaining the streets and planning for future improvements. The suggestions our committee made generally seemed to dovetail with the council's own plans. We really needed to have some way of verifying our collective ideas as both desirable and safe improvements. That's when the borough told us about their intent to fund a mobility study. PennDOT provided a $50,000 grant toward a professional study and the borough provided $13,000 ·th the Northern Tier Regional Planning and De- ·ment Commission's involvement. Through a request for proposal process, the borough was able to engage Gannett Fleming, a professional firm that specializes in transportation issues and has done many mobility studies. The reason it is called a mobility study instead of a traffic study is because the word 'mobility' applies to not only motor vehicle traffic, but also all forms of pedestrian traffic like walking and bicycling. There is a whole different slant to the study of movement in the community with an emphasis being put on safe walking routes and, particularly, safe paths to school.

"We are now working hand-in-hand with the council and its police and other departments through the Mobility Study to get a handle on what the street safety and mobility efficiency issues are, where we need to add sidewalks and curbing, improve traffic control and then, as a byproduct, we will add the enhancements – benches, trash receptacles, electric lights (ones that look like our gaslights) and wrought iron railings. Our goal is to maintain and enhance Wellsboro as the beautiful Victorian town it has always been.

"All of our Enhancement Committee members are also on the mobility study Planning Advisory Committee so we are very involved in this.

"The "safe routes to school" PennDOT program prompted the advisory committee to involve Wellsboro Area School District Superintendent Phil Waber in the Mobility Study. Mary Worthington, who had served as executive director of the Wellsboro Chamber of Commerce for more than 35 years, and is now fulltime GROW secretary/treasurer, has been part of this effort from the beginning. She has been so involved in every major study affecting the development of our community for so many years that she now serves as a major resource to any such effort.

"It takes more than just money, but loads of volunteer time and dedication to the purpose, to gain a successful result. Borough council members are devoting this type of effort for much more than street and sidewalk studies on a continuing basis.

"As members of the Enhancement Committee, we are very anxious to find out what the Gannett Fleming professionals determine from their analysis because their recommendations are going to have an impact on how we design some of the projects we propose to the Borough Council.

"In March of 2009, PennDOT is going to let bids for the repaving of Main and Tioga streets. The work should be accomplished sometime next summer. We really want to have some of the streetscape elements that we are recommending in place before paving begins. Through the mobility study, we are looking at safety in that area and the lack of sidewalks and curbing. One thing we want to do is provide better sidewalks and concrete curbing on both sides of Tioga Street to safely accommodate pedestrian traffic.

"Many of the committee members have been able to recount near-miss traffic accidents and situations where traffic is jammed at the Tioga, Charleston and Main Street intersection, and yet we understand that PennDOT cannot respond by installing a traffic signal or making other design changes unless there is a real accident issue.

Stephens talks about status of Mobility Analysis

By Diane Eaton

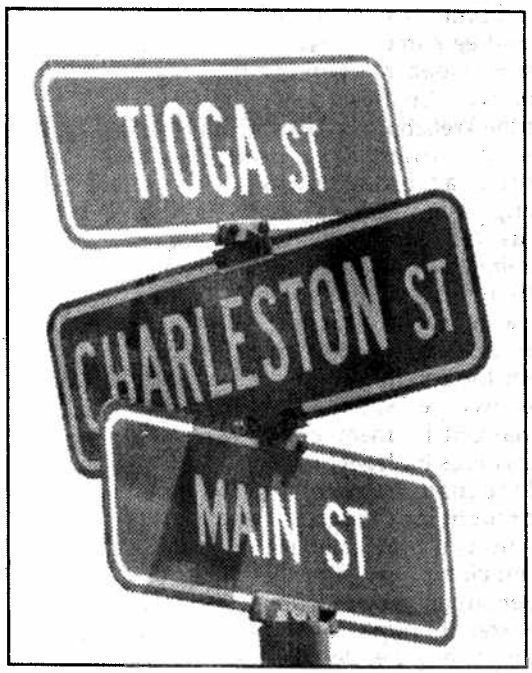
Sue Stephens, Wellsboro Borough secretary/treasurer, discussed the status of the Wellsboro Area Enhancement Strategy and Mobility Plan. On May 29, a tour and kick-off meeting was held. During the Wellsboro area tour, Planning Advisory Committee members pointed out what they believed were the most significant transportation issues in the study area, which includes Wellsboro and portions of Delmar and Charleston townships.

Stephens said, "The members of the committee covered the project area in a passenger van. They got out at several locations to observe and point out what they believed to be problem areas. Immediately following the project area drive, the committee members had a sit down meeting and made a map of 15 study priorities."

Those serving on the Wellsboro Area Enhancement Strategy and Mobility Plan Wellsboro Planning Advisory Committee include: Rick Biery of the Northern Tier Regional Planning and Development Commission, Bob Blair of the Tioga County Development Corporation, Bob Borzok of Partners In Progress, Bob Chesko of the Sherwood Motel, Wellsboro Mayor Jim Daugherty, Wellsboro Borough Councilpersons John Dugan, Joan Hart, Rudy Scharf and John Wheeler, Borough Secretary Sue Stephens, Wellsboro Police Chief Tom Young, Kurt Hetrick of Larson Design Group, Delmar Township Supervisor Fred Kennedy, Dave Howey, a member of the Charleston Township Municipal Authority Chris King of PennDOT District 3-0, Gary Mosher, chairman of the Wellsboro Area Chamber of Commerce Enhancement Committee, Julie VanNess, executive director of the Wellsboro Area Chamber of Commerce, Phil Waber, superintendent of the Wellsboro Area School District, Tioga County Planner Jim Weaver, Bob Williams of Thornapple Design Group, Mary Worthington, executive secretary/treasurer of Growth Resources of Wellsboro Foundation, Inc., Bob McCarthy of the Wellsboro Electric Company, Mike Charles of Citizens & Northern Bank, and Curt Schramm of Country Ski & Sports.

Stephens said, "There are lot of people on this committee because there is a lot of information they have to help pull together.

Gannett Fleming has looked at existing conditions in the study area and has put together a draft profile for review by Planning Advisory Committee members as well as a project map.



Monday through Friday, July 7-11, two Gannett Fleming staff members - Transportation Planner Jonathan Heilman and Traffic Engineer Steve Palmer - began the project area safety audit. They did traffic volume studies at the four Wellsboro intersections governed by traffic signals – at Main Street/Central Avenue, Central Avenue/Grant Street, East Avenue/Grant Street/McInroy Street and East Avenue/Main Street. They also did a traffic count at the Charleston/Tioga/Main Street intersection, which is not governed by a traffic light. The counts were done in the morning, at noon and in the afternoon. Stephens noted, "They spent two hours per count or six hours at each intersection. School wasn't in session but the tourists were here and they were able to get that count."

"In the past, the borough has asked PennDOT to put a traffic light at the Main, Charleston and Tioga Street intersection but there aren't enough reportable and non-reportable accidents at the intersection for them to justify installing a traffic light there. We are hoping Gannett Fleming can come up with a plan to address that intersection."

"Gannett Fleming has also looked at the Charleston, Cone and Purple Street intersection in the borough, which will be near the end of the expanded Pine Creek Rail Trail, also known as the Marsh Creek Greenway, as well as Charleston Street, which has no sidewalks, narrow shoulders and an increased speed limit in the three blocks prior to Little League Ball Fields."

Stephens said, "They have also stu borough crosswalks, signage, on-street p ing, and traffic control issues during walkable audit. "They checked the pedest crossing push button indicators at the di ent stoplights to see if they were accessib the public and how much time they pro for pedestrians to cross roadways.

"They have gathered crash data from Wellsboro Borough Police and informa about projects being planned by PennI and the borough's public works departm They are going to interview school dis representatives and school crossing gu to see what transportation issues, inc ing non-reportable incidents, are of con them.

Brian Funkhouser and Jonathan Heil met with residents at Park Hill Manor Pinnacle Towers. Stephens said, "These dents represent the walking, driving and ing public. They can help us by identif the problems they encounter."

They also met with PennDOT Mainten Engineer Gary Mahosky to gather infor tion about roadwork plans in the borc and townships and then with Wellsboro ough Police Officer Sam Delosa about rep able and non-reportable accidents in the ough and where they are occurring.

"Gannett Fleming is planning to hol interactive schools assembly event for sc children in grades 5, 6, and 7 to learn r about their bicycle and pedestrian trans tation needs.

"Those who aren't targeted individu are invited to attend the Sept. 25 public m ing to share their views on Wellsboro Delmar and Charleston township transp tion issues. Gannett Fleming will also b ing a direct mailing to all borough prop owners to let them know when and w the meeting is being held and that we w appreciate their input and participatio that we can come up with a good priorit of the work to be done.

"Then, they are going to pull togethe information they have collected and m with the Planning Advisory Committee m bers to let us know what they have found provide us with a draft of recommendat and alternatives.

"The mobility plan will conclude wi second public open house where all of findings will be presented and the priorit list of recommendations," she concluded

25 attend Pinnacle Towers meeting on Mobility Analysis project

By Diane Eaton

About 25 people, most of them senior citizens and residents of Pinnacle Towers, attended the 1 p.m. Wednesday, July 16, Wellsboro Area Mobility Analysis meeting at Pinnacle Towers on Cole Street in Wellsboro. At 10 a.m. that day, a similar meeting was held at Park Hill Manor.

Brian Funkhouser, Gannett Fleming project manager for the Wellsboro Area Enhancement Strategy and Mobility Plan, assisted by Transportation Planner Jonathan Heilman, led the meeting.

Funkhouser provided a one-page project fact sheet to those attending. "This gives you an overview of the effort the borough is undertaking to improve its transportation system." He also provided a map of the borough to each attendee and asked he or she to mark on it where they found a transportation deficiency when trying to get around the borough. "We will be collecting those at the end of this session," he said.

"I am working with Wellsboro on identifying not only problem areas but hot spots throughout the borough to be addressed in the future by the borough, PennDOT or the county to make improvements to the borough's transportation system."

He asked that they not just focus on highways and bridges but also on improvements that could be made for pedestrians, bicyclists or people with disabilities or other mobility problems to make getting around Wellsboro easier.

When Funkhouser asked how many people had lived in Wellsboro their whole lives, several raised their hands. When he asked how many had lived here over 20 years, the majority of those attending raised their hands.

Funkhouser said, "You guys are on the front lines. You are familiar with the problems of getting from one place to another in the borough."

Borough Secretary/Treasurer Sue Stephens, who attended the meeting to answer questions will be down on the ground.

One woman said there is a four- or five-inch difference in height in the sidewalk in front of Carleton's Nursing Home. "Even in a wheelchair it is disastrous. My son pushes me down the road to avoid the sidewalks."

Sidewalks and roadways on Bacon, McInroy and Riberolle Street were also dubbed "disasters."

Funkhouser asked those attending what their other common destinations were. The answers included the hospital, post office, library, pharmacy, medical and dental offices, churches and grocery store.

Another asked, "Why doesn't the borough have a sidewalk out to Ames Plaza (now Wellsboro Plaza)?"

Stephens responded, "McInroy Street sidewalks and the street itself are part of a paving project that is being done this summer. As part of this project, the street will be repaved and new storm sewers installed so that will take care of the water sitting in the street.

An attendee said, "The sidewalk just ends on West Avenue so I can't get to Dr. Anselmi's office. I have had to start using the EMTA bus."

Also discussed were bridges on Queen Street in front of Packer Park, on Riberolle Street, and Water Street. There is a drop off between the bridge decks and the connecting sidewalks that measure from several inches to five inches.

"Over on East Avenue between Rite Aid and the Canyon Motel, time and time again I have seen people tripping over that sidewalk. It's not so bad on the edge toward town but the edge closer to Rite Aid is bad. I have to slow down almost to a stop."

It was noted that because of the way "the curb comes down" those in wheelchairs have a hard time reaching the pedestrian button on the traffic signal light on the corner of McInroy Street across from Akiko's Floral Arts.

Many attending nodded their heads in agreement when one

Speeding by others makes traveling difficult it was noted by many. Cited were attempts to get into McDonald's Restaurant on Charleston Street, out onto Main Street or Tioga Street from Charleston Street, and even out onto Charleston Street from Cole Street – where Pinnacle Towers is located. "It's a speed way for them."

One attendee noted that part of the problem might be that the speed limit sign is blocked on Charleston Street by a tree at Fellows Apartments. She suggested a speed bump be put in to slow the traffic down.

"With pedestrians walking at both entranceways to the BiLo parking lot should have stronger lighting or something. That is a dangerous area up there. We have had people hit there," another said.

A woman quipped, "We have voiced our opinions. What in the heck are you going to do? I went to a meeting four years ago about this very same thing – about handicapped accessibility to different stores in town. You would be surprised at how many stores on Main Street are not handicapped accessible.

Are you guys just giving us lip service or are you really going to do something?"

Funkhouser replied, "We did a similar type of study like this in Mansfield and in Athens Township where the street is a growing commercial corridor that is unfriendly to bicyclists and pedestrians. We worked with the community infrastructure to make changes, including new sidewalks, having store owners provide parking for bicycles and policies that a township or borough can implement to improve the walkability of that community. We have worked with municipalities all across the northern tier."

Another asked, "Isn't PennDOT the ones that will do it?

Funkhouser responded, "It depends on what the improvement

"I am working with Wellsboro on identifying not only problem areas but hot spots throughout the borough to be addressed in the future by the borough, PennDOT or the county to make improvements to the borough's transportation system."

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When Funkhouser asked how many people had lived in Wellsboro their whole lives, several raised their hands. When he asked how many had lived here over 20 years, the majority of those attending raised their hands.

Funkhouser said, "You guys are on the front lines. You are familiar with the problems of getting from one place to another in the borough."

Borough Secretary/Treasurer Sue Stephens, who attended the meeting to answer questions raised about borough operations, said, "We are hoping to get a good response from the people who use our facilities on how to improve streets, sidewalks and crossings."

Funkhouser continued, "We are going to be meeting with emergency responders, the PennDOT maintenance manager, borough police, and the school district concerning the issues they have with the safety and mobility of school children. Earlier today we met with senior citizens at Park Hill Manor and now we are meeting with you. If we plan for the transportation needs for our seniors, frankly everyone will benefit."

One woman said, "Could they improve the sidewalks? They are terrible." Another commented, "I have to watch every step I take or I the water sitting in the street.

An attendee said, "The sidewalk just ends on West Avenue so I can't get to Dr. Anselmi's office. I have had to start using the EMTA bus."

Also discussed were bridges on Queen Street in front of Packer Park, on Riberolle Street, and Water Street. There is a drop off between the bridge decks and the connecting sidewalks that measure from several inches to five inches.

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It was noted that because of the way "the curb comes down" those in wheelchairs have a hard time reaching the pedestrian button on the traffic signal light on the corner of McInroy Street across from Akiko's Floral Arts.

Many attending nodded their heads in agreement when one talked about signal light on the corner where the Wellsboro Diner is. "They put that in for the handicapped. You really have to run to get to the other side of the street before it changes. You have 25 seconds from the time it turns yellow until the red light starts blinking. I can't get across it much less someone with a walker or a cane."

A woman commented, "Down in Williamsport, years ago, they had their lights set up as red, caution, green and then walk. That walk automatically came on so you didn't have to push a button or anything."

Funkhouser noted, "Yes, we may need to add a pedestrian phase to the signal lights so the pedestrian has the right of way in any direction."

this very same thing – about handicapped accessibility to different stores in town. You would be surprised at how many stores on Main Street are not handicapped accessible.

Are you guys just giving us lip service or are you really going to do something?"

Funkhouser replied, "We did a similar type of study like this in Mansfield and in Athens Township where the street is a growing commercial corridor that is unfriendly to bicyclists and pedestrians. We worked with the community infrastructure to make changes, including new sidewalks, having store owners provide parking for bicycles and policies that a township or borough can implement to improve the walkability of that community. We have worked with municipalities all across the northern tier."

Another asked, "Isn't PennDOT the ones that will do it?

Funkhouser responded, "It depends on what the improvement need is whether it is a Wellsboro issue or a state issue. If it were a traffic signal, it would involve both. PennDOT would install it and the borough would maintain it."

He then asked how many attending the meeting used EMTA services. The majority raised their hands.

"EMTA is a blessing if you do not drive, but it's an inconvenience, too. I have sat in Williamsport from 8 a.m. to 2 or 3 p.m. in the afternoon waiting for the EMTA bus. That is a long day."

"I don't like to leave at 5:30 a.m.," a woman commented. "For medical appoints, you have to give EMTA at least 24 hours notice," said another.

An attendee made her point, "A lot of people make appointments to be picked up and when the bus gets there they don't show up and haven't cancelled the ride either. So, the driver waits for a while. That ties the EMTA driver up."

Another woman said, "We need a local service so if you want to get to the hospital, or go to the library or go grocery shopping, you could. It would be nice to have local transportation similar to what they have in Mansfield with the Mounties bus. It is constantly connecting Mansfield to Wal-Mart and places in between."

Another attendee noted that making turns onto Central Avenue from Pearl Street were made difficult by cars that are parked near the First Baptist Church and the lawyers' offices. "That is a dangerous place there."

Stephens said, "Thank you again for coming. If you think of anything after this meeting or just want to give an opinion on another location, call me at the borough office."

Open house on Wellsboro transportation is Thursday

By Diane Eaton

This Thursday, Sept. 25, at 6 p.m., residents and business owners of Wellsboro Borough and Delmar and Charleston townships and other interested parties are invited to attend a public open house at the auditorium at the former Wellsboro High School on Nichols Street in Wellsboro.

Preliminary information about the Greater Wellsboro Area's transportation system, gathered by Gannett Fleming, a Camp Hill-based firm of transportation engineers and planners for the Wellsboro Area Enhancement Strategy and Mobility Plan project, will be shared.

Those attending will view a short slide show providing background information on the study and the area being analyzed. Stations adjacent to the auditorium will provide information on and a chance to discuss various aspects of the study. Major study elements include safety, bicycle and pedestrian accommodation, safe routes to schools and public transportation service.

Participants will be given the opportunity to weigh in on questions such as how transportation can better serve the area.

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Improving safety for *all* modes of travel is goal of mobility study

by Natalie Kennedy

Safer streets, safer sidewalks, safer residents. Improved safety and quality of life are the main goals of the Wellsboro Enhancement Strategy and Mobility Plan.

The plan is still in development, said organizers during an Open House on Thursday, Sept. 25. The Open House was a final opportunity to receive public input on issues affecting the borough's streets, sidewalks and other methods of transportation.

Brian Funkhouser, project manager with Gannett Fleming, Inc., discussed the process and information gathered to date with the 30 people attending, not including borough officials, chamber representatives and those from Northern Tier Regional Planning and Development Commission.

The two target groups are children and senior citizens, said Funkhouser, as they are the ones with the most needs. They are also the ones more likely to walk or ride bicycles as a method of transportation.

Those in attendance seemed to be in favor of the project.

"I would like to re-emphasize that, with the price of gas, you ought to be doing everything you can to promote bike use and bike lanes. I would like to see bike lanes on all highways," said one resident.

To begin the process, Gannett Fleming began by gathering data, holding interviews with the Pennsylvania Department of Transportation (PennDOT) and other groups, documenting traffic volumes, comparing the current population with the past to note trends, reviewing borough ordinances and distributing a community survey. The firm mailed 1,100 surveys to borough residents on Tuesday and, as of Thursday, 175 had been returned.

Wellsboro Borough's population peaked in the 1960s around 5,300. Since then it has been declining to the present day figure of 2,600. In reverse, Delmar and

been steadily increasing over the last decade, Funkhouser added. In Wellsboro, it has been increasing by 0.5 percent per year.

Gannett Fleming also looked at crash data, with good news to report. In the last five years, accidents have been trending down in Wellsboro and at a higher rate than both county and state rates.

Funkhouser further investigated the crash data and learned that peak crash months are May, June and November. Wednesdays show a spike in the number of accidents, which then drop off until Saturday when they increase again.

The most interesting crash data involved seniors, he added. County-wide, 12 percent of accidents involve senior citizens. In the borough, that figure is at 25 percent.

"We need to make sure that the transporation sysem is easy to use and predictable for the senior population," he added.

From a child's view, Funkhouser looked at where children would be going – parks, sports playing fields and schools. He noted that it is not easy or particularly safe for a child on foot or on a bike to get to the playing fields on Charleston Street.

Many sidewalks are irregular, there are no crosswalks painted on the streets and traffic signals suffer from "lens burn" making the messages (walk or don't walk) or symbols difficult or impossible to read.

Another area of concern was access management. In some areas of the borough, particularly along the length of Tioga Street, drivers have unencumbered access on and off the highway to local businesses. That creates a very dangerous situation for motorists, pedestrians and cyclists, said Funkhouser.

The borough also has a lot of yellow paint, he noted, especially on curbing. That's **not** in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), which indicates yellow paint is primarily to be used to keep traffic right of center. An-

Mobility ...

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the historic character of Wellsboro, public transportation and the proposed Marsh Creek Greenway to connect the Pine Creek Rail-Trail to Wellsboro.

Upon completing the presentation, Funkhouser asked those in attendance for help in identifying additional mobility issues and possible solutions.

Several concerns were mentioned. The first was the section of Tioga Street from its intersection with Charleston and Main streets to the borough line. Franklin Helt noted that children on sports teams cross the road from the Frog Hut to the Minit Mart and back; in that section, there were two accidents at Harsch's Produce Stand in the last year, and traffic continually moves in and out of the dialysis center, Al's Chain Saw and Laurel Lanes.

The second area of concern is the Wellsboro Plaza. People wondered if the plaza had been included in the study. It had, said Funkhouser.

Another concern was the amount of traffic in and out of schools. A resident suggested creating a staging area where parents could drop off students and a bus would then transport the students to school.

Funkhouser noted that the Wellsboro Area School District had received a Safe Routes to School grant and his staff will be working on that in conjunction with the borough and school district.

There are more steps to complete in this process, added Funkhouser. He and his staff will work on developing recommendations in October/November and will begin meeting with municipal officials this fall. A second Open House to present the recommendations to the community is tentatively scheduled for January of 2009. The final report is scheduled for completion in February of 2009.

Borough seeks input on mobility plan

by Natalie Kennedy
nkennedy@tiogapublishing.com

There are 15 recommendations for enhancing mobility within Wellsboro. The next step is to prioritize those recommendations.

About 20 people, most of them borough officials, gathered to hear a report on Wellsboro's Enhancement Strategy and Mobility Plan during an open house on Monday, May 4.

Brian Funkhouser with Gannett Fleming presented the recommendations to those in attendance. In return, he asked for their input on a survey to help determine which items are most important for residents. On-line surveys are available at www.wellsboromobility.com. Click on "Your Ideas" to read the recommendations and take the survey.

This was the second open house during the process. The first was held in September 2008. Input from that meeting, combined with data collection last summer, resulted in the recommendations.

Topping the list of resident concerns was signalizing the intersection of Main, Tioga and Charleston streets.

"This was the number one issue," said Funkhouser. "People said something has to be done."

One possibility considered was a roundabout, a type of road junction at which traffic enters a one-way stream around a central island. A roundabout works best at intersections where volumes are even on all sides. That is not true for this intersection, he said.

Improving pedestrian safety and access was a big issue as identified by surveys of senior citizens and eighth grade students at Rock L. Butler Middle School, he added. The entire class recently took an on-line survey and identified their three largest concerns as: signalizing Charleston Street, improving roadway surface conditions and improving bicycle/pedestrian conditions.

Mobility ...

continued from page 1

Several of the recommendations were connected and of interest to those attending.

Bob Bower spoke about road surface conditions, particularly on Stickley Street and Fischler Street Extension. Wellsboro Council President Mike Wood explained that the borough paves 10-12 streets every four years by borrowing $250,000.

Another concern was sidewalk conditions, as commented on by Bob Bearhardy. "It annoys me to no end that sidewalks don't get fixed," he said.

Tom Morley suggested that the final plan focus on popular pedestrian routes, such as to the school or hospital or parks, rather than identifying disjointed sections of sidewalks that need repair.

The Marsh Creek Greenway and the possibility of extending that to other areas of the borough, such as the Little League Complex, were top of mind for Skip Cavanaugh. He suggested that a hiking/biking trail be established along the stream bed alongside Charleston Street.

"We need to do everything we can to enhance the beauty of the community," Cavanaugh said. "There are little things that people are unaware of. If you walk for a quarter mile [out of Wellsboro], you're in one of the most beautiful parts of Pennsylvania, a natural glen. No one knows about it because you can't get there from here!"

The full list of recommendations includes:

- Addressing roadway surface conditions.
- Upgrading traffic signals.
- Signalizing Charleston Street.
- Developing the Marsh Creek Greenway.
- Improving Charleston Street as a connector.
- Investigating signalizing the Wellsboro Plaza.
- Improving sight distances at intersections.
- Access management, particularly along Tioga Street, by installing curbing to define access points for vehicles.
- Improving non-motorized access to recreation areas.
- Monitoring the intersection of Morris Lane with Bacon and Waln streets. If traffic signals improve the flow of traffic, this may become less of an issue, said Funkhouser.
- Investigate the feasibility of public transportation, such as a circulator shuttle service within the borough and installing shelters and benches for users.
- Improving bike/pedestrian accommodations.
- Improving signage and roadway markings. Many signs are faded and out-of-date.
- Improving the appearance of East Avenue to extend the Main Street streetscape onto the route. This would not only be aesthetically pleasing, but also safer.
- Define and expand on-street parking and discourage workers from using on-street parking spaces.

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Region

Charleston Street, sidewalks main topics at Wellsboro open house

By BRYAN G. ROBINSON Sun-Gazette Correspondent

POSTED: May 5, 2009

WELLSBORO - About 20 area residents turned out for an open house at the Wellsboro High School large group instruction room to hear draft recommendations for the Wellsboro Enhancement Strategy and Mobility Plan, a collaborative effort to identify the immediate area's most pressing transportation issues, and develop a strategy to address them.

During a half-hour presentation, Brian Funkhouser, project manager for the study with Gannett-Fleming Inc. of Camp Hill, presented the 15 recommendations based on data collected last summer and this past fall through studies, surveys and meetings with local officials and residents. An open house was held for area residents in the fall, with another open house with the eighth grade class at Rock L. Butler Middle School held in recent weeks.

"Far and away, the No. 1 issue was Charleston Street," said Funkhouser. He said the intersection of Charleston, Tioga and Main streets does satisfy three requirements for a signal: an 8-hour traffic count, a 4-hour traffic count and a peak traffic count.

"We also looked at the treatment of a roundabout as in Williamsport, but we didn't feel that would be appropriate," he said.

Other recommendations included:

Development of the Marsh Creek Greenway to connect the Pine Creek Rail to the railroad terminal on Charleston Street

A traffic study for the Wellsboro Plaza for a signal there

A plan for vacant properties on East Avenue as motorists approach the borough on both sides of Route 6.

Before the meeting, Bob Bernhardy said he thought the plan was a good idea. "I live on Meade Street and the sidewalks are terrible," said Bernhardy, a volunteer at Soldiers and Sailors Memorial Hospital. "I'd like to be able to walk down the street to get there."

During a time for public comment after the presentation, borough resident Bob Bower asked about the condition of Fischler Street. "Presently we're looking at some widening there like was done to Bodine Street," said Wellsboro Borough Council President Mike Wood. He also said the borough was taking millings and putting them over the streets.

Wood also said the borough has been working on putting in retention ponds near Fischler Street to help with stormwater and drainage issues. "We're working with engineers in order to prioritize which one to do first," he said. "We don't have the amount of money to do everything at once."

Another resident, Skip Cavanaugh, said he believed pedestrian access from the train station to the Little

League fields off Charleston Street was extremely important. For example, he said many people didn't realize that the second oldest elm tree in the state was near the Osram property in the borough.

"We need to do everything we can to preserve and enhance the beauty of our area," he said. "There are so many little things that people are seemingly unaware of."

The plan is being developed by borough and township officials with funding by the Northern Tier Regional Planning Development Commission, the state Department of Transportation, the Federal Highway Commission and Tioga County.

A final report should be available in June, Funkhouser said. Once the study is completed, the hope is to be able to receive grants for engineering and then implementation of the plan, he said.

Appendix C - Meeting Summaries

Wellsboro
Enhancement Strategy
and Mobility Plan

Wellsboro Area
Enhancement Strategy & Mobility Plan

Tour and Kick-off Meeting Summary

TCDC Conference Room | 114 Main Street
May 29, 2008 | 8:30 AM

Background

A tour of the Wellsboro area and subsequent kick-off meeting was held on Thursday, May 29, 2008. The purpose of the tour was to introduce the consultant team to the most significant transportation issues in the study area. The kick-off meeting successfully launched the planning study through a discussion of study success factors and advisory committee members' expectations. Binders were distributed to Planning Advisory Committee members containing a map of the borough, an agenda, a scope of work and draft outline of the final report, a project schedule, and a worksheet to indicate known sources of project data.

Summarized below are the major issues identified on the tour, the principal points of discussion during the meeting, additional points of direction from the Planning Advisory Committee, and an associated action plan.

Tour of the Wellsboro Area

Ten members of the Planning Advisory Committee toured the study area in a passenger van. The tour resulted in the following list of important study considerations:

Operations

- The borough has four signalized intersections. All will eventually be replaced by LED signals.
- Illegal U-turns occur downtown.

- Main Street will be resurfaced with a planned let date of March 2009.
- Wayfinding signing is an issue. For example, there are no signs directing visitors and tourists to the scenic railroad, etc.

Parking

- The proposed 66,000 square-foot Deane Center for the Performing Arts will create parking issues in the downtown by removing some existing parking and generating more parking demand during popular performances. Land development plans have not yet been submitted for this project although the developer has performed a macro-analysis of the parking situation.
- The downtown has other existing parking problems.
    - The county courthouse is currently short on parking spaces.
    - Downtown shop owners park on the street in front of their shops and feed the meter.
    - The siting of a proposed parking garage will be challenging.
    - The borough has a municipal parking authority.

Pedestrian Issues/Sidewalks and Crosswalks

- The borough police department provided a listing of sidewalk needs - especially as they relate to children's walking routes to schools.
- Central Avenue is a heavily used pedestrian area with nursing homes, churches, and the hospital.
- New sidewalks are needed on Charleston Street between McInroy and Cone Street.
- Sidewalks around the elementary school are in poor condition. There is vehicle congestion around the elementary school during pick up and drop off times.
- Sidewalks are desired along Tioga Street to the bowling alley.
- There are many crosswalks that do not have painted line markings.
- The borough has an upcoming project to install sidewalks along East Avenue out to Wellsboro Plaza. The borough has received a $52,186 Elm Street grant from DCED for the sidewalk extension project.
- The borough has a volunteer program for sidewalk construction/replacement where property owners put in their own forms and contract out the work after the borough has removed the old sidewalk.

- The borough is guided by a HARB, which provides guidance on new development, sidewalk and curbing issues.

Safety

- Despite their number, there are no at-grade rail crossing issues, according to tour participants.
- Access management issues were observed along US 6 at George's Restaurant and other areas.
- The left turn out of the rear exit of Rite Aid is difficult and dangerous.
- The intersection of Main, Charleston, and Tioga Streets is challenging for motorists, bicyclists and pedestrians to navigate and is the site of many crashes and near misses. West bound motorists on Charleston were observed making their own right turn lane. Site distance is also an issue, with the placement of the Mystic service station sign.

- The baseball fields on the northeastern side of the borough are accessed via Charleston Street, which has no sidewalks, narrow shoulders, and an increased speed limit in the 3 blocks or so prior to the fields.
- The intersection of Charleston Street, Cone Street and Purple Street has several issues to be addressed:
    - This intersection will be near the terminus of the expanded Pine Creek Rail Trail (Marsh Creek Greenway) and should provide a welcoming gateway to the borough for trail users.
    - Charleston Street makes two 90-degree turns as it crosses Charleston Creek. The bridge, not being structurally deficient or carrying a high volume of traffic, does not currently warrant replacement.
    - The bridge has sidewalks on only one side.
    - The train station in this area is privately owned and being used as a warehouse.
    - There are currently no plans to move the terminus of the Tioga Central Railroad to the site.
- The intersections of Morris Lane, Bacon Street and Waln Avenue were cited as a concern. There are issues there with speeding from Woodland Park and general confusion, given the geometry of the two intersections. This intersection should bear consideration because it is used as a cut off from East Avenue to Central Avenue which bypasses the downtown. Pedestrian safety is also an issue there. Representatives from the Shared Home are working to provide a better entrance drive to the home with a sidewalk from the top of the hill to the stop sign below with no steps. The borough will

provide a crosswalk at that point, but seniors navigating across the intersection will still be a concern.

Public Transportation

- Transit usage in the area is primarily for seniors and persons with disabilities.
- There are no transit benches or shelters in the borough.

Meeting Points of Discussion

- **Project Scope** - The scope of the project was discussed. Some minor modifications were made and are highlighted in the "Meeting Decisions" section, below.
- **Municipal Coordination** - It was noted that there was no representation from the adjacent townships of Charleston and Delmar, yet they will be involved in the study. Coordination of land use issues and concerns with the two townships will be important.
- **Project Schedule** - The current project schedule shows an April to December deadline. GF will attempt to complete the bulk of the work by December, but a no-cost time extension will likely be required to get the project to the final product.
- **Safe Routes to School Grant** - Brian noted that GF applied for a Safe Routes to School Academy grant through the Pennsylvania Advocates for Nutrition and Activity (PANA) on May 19. Funds from this can be used for additional outreach and education.
- **Study Expectations** - The Planning Advisory Committee listed their expectations of the study process, which included the following:
    - A prioritized map of needs that includes potential sources of funding
    - Provide safe walking routes
    - Better vehicle traffic flow
    - Resolve issues at the intersection of Main/Tioga/Charleston
    - Provide a document for future decision making
    - Provide walking access to a future farmers market
    - Use the Wellsboro mobility map as a reference for the plan
    - Consider the visual impact of any recommendations that are made
    - Reduce the yellow paint currently on the streets and curbs
    - Identify all bicycle and pedestrian issues in the borough
    - Examine existing borough ordinances and stress enforcement of those ordinances
    - Realistically address current and future parking needs of community (especially the new Deane Center)
    - Promote economic development opportunities

- Address the overabundance of signs and the confusion they create
- Consider aesthetic impacts of recommendations and context sensitive design issues
- Coordinate all modes of transportation
- Consider wayfinding signage both within the borough and for area attractions.

Meeting Decisions

- Susan Stephens will be the primary contact for GF.
- GF agreed to perform intersection counts at the following intersections not originally noted in the Scope of Work:
  - East Ave./McInroy St./Grant St.
  - Central Ave./Grant St.
- Other actions GF agreed to included:
  - Interviews with softball/baseball team children and parents.
  - An interview with Karen Graber at EMTA to discuss mobility issues within the borough and EMTA plans for future service as it relates to the area.
  - Interview with area EMT providers.
  - Interviews with persons with disabilities.
  - Facilitation of an event for seniors at Pinnacle Towers.
  - GF will consult the PA Wilds report for additional information (a copy has been ordered).
  - GF will consult the school district strategic plan for additional information.
- The public open house will tentatively be held at the high school instead of the Fireman's Annex.
- Municipal officials will be briefed on the plan one hour prior to the first public open house event through a public official briefing.

Action Items

Other items that Gannett Fleming added to the work scope or agreed to be included are as follows:

<u>Wellsboro Borough</u>

- Provide copies of all plans and ordinances to GF
- Provide information on planned developments in the borough to GF

- Provide Elm Street planning document to GF
- Provide the results of the community survey conducted for the county comprehensive plan to GF
- Provide a mailing list of borough property owners to GF
- Provide a contact person for the baseball association to GF.

Gannett Fleming

- GF will begin developing an action plan for creating an existing conditions memorandum. This will include the steps highlighted in Tasks 3 and 4 of the scope of work and the meeting decisions highlighted in the preceding section of this meeting summary.

Attendees/Contact Information

A listing of meeting attendees and their contact information is shown in the following table.

Contact	Representing	E-mail
Rick Biery	NTRPDC	biery@northerntier.org
Robert Blair	TCDC	Tcdc1@ptd.net
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Gary Mosher	Chamber of Commerce	gmosher@laurel.org
Susan Stephens	Borough of Wellsboro	borowell@epix.net
Julie VanNess	Chamber of Commerce	juliev@wellsboropa.com
Robert Williams	Chamber of Commerce	ibexbob@ptd.net
Mary Worthington	GROW	mwwacc@epix.net

Wellsboro
Enhancement Strategy and Mobility Plan

Wellsboro Area
Enhancement Strategy & Mobility Plan

Senior Involvement Events

Park Hill Manor | 10:00 am
Pinnacle Towers | 1:00 pm
July 16, 2008

Background

Senior citizens, because of their age and declining health, often have higher requirements of the transportation system than younger memebers of the community. When driving, their reaction times are not a fast as younger persons and their eyesight may be less keen. Therefore there is a need to accommodate them by building extra margins of safety into the roadway system and placing signs in the most visible locations possible. When walking, especially if using a cane or walker, seniors are more likely to be hindered by sidewalks that are uneven, cracked, or missing. Those in wheelchairs face similar problems. Similarly, seniors may be dependent on transit for trips to destinations to which they cannon walk.

Accordingly, the input from seniors in Wellsboro is critical to understanding the deficiencies of the current transportation system in the borough. A system that has been designed to meet these seniors with their greater demands will be beneficial to all users.

To get this vial input on the transportation system from seniors' point of view, two events were held at facilities operated by the Tioga County Housing and Redevelopment Authority.

Park Hill Manor

Common Destinations

- Post Office
- Bi Lo Grocery
- Hospital
- Medical and dental offices
- Churches

Pedestrian Issues

- Crossing the street at Rite Aid (Grant Street/McInroy Street/East Avenue) can be difficult. Drivers don't yield to pedestrians.
- The intersection of Tioga Street, Charleston Street, and Main Street is very difficult to cross. Many people avoid crossing the street at this intersection.
- Sidewalks throughout the borough are bumpy and difficult to traverse
- No winter maintenance performed on sidewalks. Residents often walk in the streets in winter because they have been cleared of snow and ice.
- Sidewalks do not extend all the way to WellsboroPlaza. Sue Stephens noted that this problem will be corrected later this summer with the installation of the missing sidewalk sections.
- Cars roll through the intersection of Grant Street and Waln Street in front of Park Hill Manor making it difficult to cross for pedestrians.
    - Grant Street is used as a shortcut to avoid downtown traffic, so there is more traffic on this road than might otherwise be expected.
    - Cars also drive faster than is safe on Grant Street.
- Sidewalks on Bacon Street are sloped and cracked making them very difficult to walk on.
- Pedestrian signals throughout town present challenges. Some take too long to change to the walk signal, and others don't provide enough time during the walk phase. Pedestrian countdown timers would be helpful for this problem.
- Vehicles don't always use their turn signals and pedestrians have a hard time judging if a car is turning or not.
    - This problem is present at the Grant Street East Avenue intersection. At this location, no turn on red signs might be helpful.
- There's no left turn arrow for vehicles turning from East Avenue onto Grant Street. Drivers will make quick left turns in an attempt to beat oncoming cars, making it dangerous for pedestrians crossing Grant Street.
- The Morris Street and Grant Street bridges over the Morris Creek are several inches above the adjacent sidewalk, making it difficult for those with walkers or wheelchairs.
- Speeding cars are a general issue throughout the borough.
- Cars don't give respect bicyclists
- Kids ride bicycles on sidewalks in a dangerous manner. Residents have concerns about being hit by these bicyclists.
- Tourists add to the problems as they don't know where they are going, making their movements unpredictable. They also don't know where stop signs are and may not stop.

Public Transportation Issues

- EMTA doesn't have afternoon service, therefore there is a limited timeframe in which to make medical appointments.
- The EMTA Blue bus doesn't stop long enough at Park Hill Manor. Residents want to wait inside the building, especially in winter, but when the bus driver doesn't see anyone out waiting for the bus, he leaves.

- There are some bus benches in the borough, but no shelters. People don't want to wait outside in the winter.

- There is not enough service to grocery stores available. There is scheduled service that accesses Weis, but the bus does not make a return trip for 2 ½ hours.
- Bus drivers don't allow shopping carts on the busses, limiting the amount of groceries that residents can buy on a trip.
- Young kids won't get up and give their seats to seniors. The buses have signs that say they should do so, but this rule is not enforced.
- There is no way to go to doctor on short notice – 24 hour advance notice is required by EMTA.

Driver Issues

- There are potholes in many streets
- It is difficult to leave Wellsboro Plaza in a car turning left. There is a large amount of traffic on US 6 with few breaks in the flow.
    - This same difficulty is present at other locations on US 6 between Grant Street and Wellsboro Plaza.
- Bacon Street is one way and many cars go the wrong way on the street.
- There are too few handicapped parking spaces near the front door of Park Hill Manor.

Pinnacle Towers

General Destinations:
Pharmacy
Grocery Store
Hospital
Bacon Street
Ames Plaza

Pedestrian Issues

- McInroy Street is extremely rough and difficult to negotiate, especially with electric carts. Sue Stephens noted that this street is to be repaved later this summer.
- West Avenue sidewalk ends right before Laurel Health
- There bridges on Water Street, Queen Street, and Riberolle Street over the Kelsey Creek are several inches above the adjacent sidewalk.
- The sidewalk along East Ave near Rite Aid has a large drop off.
- The pedestrian push button near Rite Aid is difficult to get to.
- The pedestrian phase at Wellsboro Diner is too short
- The intersection of Tioga Street, Main Street, and Charleston Street is dangerous for both cars and pedestrians.

- In the past, the pedestrian walk lights came on automatically at intersections, and now you have to push the button to get the walk light.
- There are no sidewalk on the northwest side of Grant near Waln Street.
- The sidewalk in front of McDonalds it very cracked and torn up.
- Cars speed into and out of McDonalds, making it a dangerous area for pedestrians.
- The uncontrolled access at the movie store across from McDonalds is dangerous. Cars back out without looking for pedestrians. Other uncontrolled access points in the borough are equally dangerous.
- The lighting at the entrance to Bi-Lo is inadequate.
- Many stores on Main Street are not handicapped accessible.

Public Transportation

- Residents that don't drive are happy to have EMTA, but the bus is an inconvenience because of long wait times to return to home.
- Residents have had experiences of EMTA not coming to pick them up from Pinnacle Towers when they say they will and also of leaving them at the destination for extended periods of time.
- Residents would like EMTA to provide more service to local destinations, such as the library, grocery store, etc.
- More EMTA schedules are needed at Pinnacle.
- Schedules should be printed larger for seniors with poor eyesight.

Driving

- Speeding is an issue borough-wide.
- Vehicles often don't stop for stop signs, but merely roll through.
- There is a drainage grate on Grant Street near Park Hill Manor that needs to be fixed or replaced.
- Turning onto Central Avenue from Pearl Street is difficult. The sight distance is poor due to cars parked along Central Avenue.
- Turning out of the Pinnacle Towers driveway can be dangerous. Cars come down Charleston Street very fast.
- Three is a tree on Charleston Street that blocks a speed limit sign.

Wellsboro
Enhancement Strategy and Mobility Plan

Wellsboro Area
Enhancement Strategy & Mobility Plan

Meeting Summary

TCDC Conference Room | 114 Main Street
August 20, 2008 | 10:00 AM

Background/Overview

The primary objectives for this second study steering committee meeting were to review a draft profile of existing transportation conditions and to plan for the study's first public event. Comments received on the draft report will be addressed, as the report will ultimately become a chapter of the final plan. Over the near term, the document will also be used in preparing for the study's first public event through the development of a PowerPoint presentation, display boards, and other meeting materials.

Meeting Directions/Decisions

In addition to several editorial comments, other considerations regarding the draft profile of existing conditions included:

- **Readability**: Lines on line charts should be distinct for ease of review when printed in black and white. The phasing diagrams in the signal upgrade comparison table also need to be enlarged for clarity.
- **Comparative Crash Data**: Crash data involving seniors will include a comparison of Wellsboro with other Tioga County communities, such as Blossburg, Mansfield and Tioga. Crashes in Wellsboro involve a disproportionately high number of seniors (more than one in four) compared to county rates. Crash data for the borough currently shows combined data for reportable and non-reportable crashes. The borough has been averaging 20 reportable crashes annually.
- **Map Scale**: The scale of project mapping is too small to differentiate various crash locations. There may not be as much clustering of crash locations as the draft map may seem to indicate.
- **No U-Turns**: The report does not mention the congestion-related issue of illegal U-turns occurring in the downtown area.
- **Editorial Comment**: The editorial comment stating the community's "comfort" with the existing signal phasing from a pedestrian standpoint should be removed.

- **Safety Audit Maps**: Several of the images are not tied to the correct locations on the map. These will be corrected.
- **Public Transportation**: Additional issues not addressed in this section of the draft report include the need for improved information, and the possible need for a shuttle, or circulator service, through the borough.
- **Aviation/Passenger Rail**: These modes are not mentioned in the draft report, although they should be a point of interest from a travel and tourism point of view.
- **Public Meeting**: A tentative date of **Thursday, September 25** has been established. The study team will be developing meeting materials (PowerPoint, display boards, etc.) as well as promotional material for this. Advisory committee members are encouraged to use "Mark Your Calendars" and other meeting promotional pieces prepared by the study team to encourage greater turn-out. The study team will be using information from the county tax office to send a direct mailing to all property owners within the borough; this includes a total of 1,638 records.

Advisory committee members are encouraged to submit any additional comments (editorial or substantive) on the draft report to Gannett Fleming Project Manager Brian Funkhouser at their convenience.

Attendees/Contact Information

A listing of meeting attendees and their contact information is shown in the following table:

Contact	Representing	E-mail
Rick Biery	NTRPDC	biery@northerntier.org
Robert Blair	TCDC	Tcdc1@ptd.net
Bob Chesko	Chamber of Commerce	bchesko@ptd.net
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Mary Worthington	GROW	mwwacc@epix.net
Tom Young	Borough of Wellsboro	wpdchief@epix.net

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Wellsboro
Enhancement Strategy
and Mobility Plan

Wellsboro Area
Enhancement Strategy & Mobility Plan

Meeting Summary

TCDC Conference Room | 114 Main Street
November 12, 2008

Background/Overview

The primary objectives of this steering committee meeting were to:

- review the results of the community survey
- discuss the results of the parking occupancy assessment, and
- review the draft study recommendations.

The project is now shifting from background studies and data collection to developing preliminary recommendations. The study committee should have a good understanding of the existing conditions and driving forces that shape the initial recommendations.

Since the last steering committee meeting, the team completed a parking occupancy assessment and facilitated an Open House at the Wellsboro High School auditorium in September.

Meeting Highlights and Directions/Decisions

Below are meeting highlights and decisions/action items:

Community Survey – Over 1,000 surveys were mailed out with 276 completed surveys returned. This is a 27+% response rate, which is excellent given that no postage was provided for the return envelopes. The response rate indicates that the Wellsboro Mobility Plan is very important to those who live in this region. The results of the survey were discussed and there were no major concerns regarding the mainstream results.

Parking Occupancy Assessment – The committee reviewed the results without many comments. The survey was conducted on Wednesday, October 8. It was noted that some committee members believed the results would be different if conducted on a weekend.

Focus Group Sessions -- The study team met with senior citizens at Pinnacle Towers and Park Hill Manor to get an understanding of their perspectives. The study team will also be coordinating with Chris Morral to conduct a focus group event with middle school students in the near future. Later in the process, the team will be meeting with PennDOT, Borough Council

members, and representatives from GROW, the Chamber, and Delmar and Charleston Townships.

Review and Comment on Draft Recommendations -- The draft recommendations were very preliminary and serve as a starting point for discussion. They were organized into the following categories:

- Roadway Conditions
- Operations (Signals & Signal Systems)
- Sight Distance Issues
- Ordinance-related Issues
- Non-motorized modes

Specific comments from the committee are noted for each draft recommendation.

A. Address Poor Roadway Surface Conditions

- It was noted that Bacon Street and Buena Visa Streets have been worked on this past season. Lincoln Street and the King Street Bridge should be added to the list.
- The Borough prioritizes street projects within their budgeting process, yet the Borough does not have a formal capital improvements program. The borough should consider developing a capital improvements program.

B. Upgrade the Borough's Signal Equipment and Hardware

- This is one of the most important projects that the Borough can undertake. Committee members pointed out that the LED signals are more efficient, which will help with safety and maintenance costs. It was suggested that upgraded signals should better accommodate the hearing and sight impaired.

C. **Signalize the Intersection of Main/Tioga/Charleston**

- There was strong consensus that this is an important recommendation. The committee discussed short-term solutions, traffic queues, access management issues, pedestrian issues, and sight distance issues. If and when the Marsh Creek Greenway becomes a reality, this intersection will become an even greater issue for the Borough. Some committee members raised the possibility of a round-about and suggested looking at how this might affect pedestrian access.

D. Develop Marsh Creek Greenway

- Community awareness of this three-mile-long project does not appear to be very high, according to results from the community survey. Some thought a name change would provide more clarity.

- The railroad has been flooded many times, and there are maintenance issues on certain sections of track. There are four bridges on the line between the former freight station (near Patterson's Home Center) and Wellsboro Junction. Funding is the project's most significant issue.
- The Myles Group (current rail line operators) should be contacted to assess their position on this.

E. Improve Charleston Street as a Connector

- This recommendation focused on an incentive for property owners to upgrade and improve their properties. A possible alignment of the proposed trail was discussed, which suggested that the trail should lead into the former freight station area and then break into a Y—with one leg leading to the Little League Ball fields and the other leg leading to downtown Wellsboro.
- It was noted that it is still too early to support or reject a recommendation to develop a greenway connector linking the Marsh Creek Greenway with the west end of Charleston Street.
- It was also noted that additional marked crosswalks are needed at Riberolle Street.

F. Signal at Wellsboro Plaza

- It was noted that a sidewalk along East Avenue has been installed, providing a much needed improvement for pedestrians.
- The following intersections should be considered for improvements: Shumway Hill Road, the entrance to Weis Markets, Truck Lite, and the Butters Plaza. A left turning lane would help some of the access issues in this area.
- Any implementation of this recommendation should be coordinated with Charleston Township.

G. Potential for Moving the Terminus of Tioga Central Scenic Railroad

- This unfortunately would present major issues for buses and parking in the Charleston Street area. Discussion occurred regarding whether or not there is enough infrastructure to support a terminus at Charleston Street. The Railroad has plans for a station and maintenance facility within the Triangle at Wellsboro Junction.

H. Evaluate Sight Distance Limitations

- Add Central Avenue and Pearl Street.

I. Access Management Ordinance

- No Comments.

J. Improve Non-motorized Access to Recreation Areas

- No Comments.

K. Monitor the Intersection of Bacon, Morris Lane and Walnut

- No Comments.

L. Improve Public Transportation Services

- Most believed that EMTA provides a very valuable service to Wellsboro and the surrounding areas. The committee was very supportive of the action to provide a circulator/shuttle service within the Borough.

M. Improve Bicycle and Pedestrian Accommodation

- Addressing missing mid-block crosswalks is a choice the Borough will need to make. They would need to be permitted and engineered. Some on-street parking would be eliminated for sight distance.
- Determine where to eliminate mid-block sidewalks across the boulevard in some areas. PennDOT requires mid-block crosswalks be permitted. Resolve the conflict.

N. Address Signing and Roadway Markings

- Consider developing an inventory of old and outdated signs and adopting a replacement plan.
- Consider conducting a program to remove vegetation blocking signage.
- Consider conducting a signing study to determine what parameters and design standards are required by the subdivision and land development and zoning ordinances.
- Consider developing way-finding signage and making it compliant with the PAWilds design manual.

O. Plan for Vacant Properties on East Avenue

- Developing a gateway to Wellsboro along East Avenue should be considered as a recommendation within the plan.
- Consider developing an Official Map for the Borough that defines set-back lines and other design standards in a graphic way. This would need to be coordinated with zoning requirements and HARB guidelines.

Next Steps

The next steering committee meeting will be conducted in early 2009.

Attendees/Contact Information

A listing of meeting attendees and their contact information is shown in the following table:

Contact	Representing	E-mail
Rick Biery	NTRPDC	biery@northerntier.org
Robert Blair	TCDC	Tcdc1@ptd.net
Bob Chesko	Chamber of Commerce	bchesko@ptd.net
Brian Funkhouser	Gannett Fleming	bfunkhouser@gfnet.com
Joan Hart	Borough Council	Jhart29@epix.net
Fred Kennedy	Delmar Township	delmartwonship@chilitech.net
Chris King	PennDOT 3-0	chriking@state.pa.us
Fred LaVancher	Gannett Fleming	flavancher@stny.rr.com
Gary Mosher	Chamber of Commerce	gmosher@laurel.org
Julie VanNess	Chamber of Commerce	juliev@wellsboropa.com
Jim Weaver	County Planning	jweaver@tiogacountypa.us
Bob Williams	Thornapple Design Group	ibexbob@ptd.net
Chief Tom Young	Borough Police	wpdchief@epix.net

Please Note:
The above meeting synopsis represents the major discussion points and agreements. Should anyone have any additions, modifications, or corrections, please submit via email to Brian Funkhouser at bfunkhouser@gfnet.com five working days of the date of issuance of this meeting summary. Should no additions be received within ten working days, this summary will stand as official and duly incorporated into the project files.

S:\DIV-4_441\Wellsboro\Meetings\summary 081112.doc

Wellsboro
Enhancement Strategy
and Mobility Plan

Wellsboro Area
Enhancement Strategy & Mobility Plan

Meeting Summary

TCDC Conference Room | 114 Main Street
May 28, 2009

Background/Overview

The primary objectives of this steering committee meeting were to:

- Receive comments on the draft report, and
- Discuss the composition of the plan's Implementation Matrix.

Since the project's second open house on May 4, the planning team has developed a draft report and associated draft implementation plan matrix.

Meeting Highlights and Directions/Decisions

Below are meeting highlights and decisions/action items:

Brian reviewed the recent progress of the study. He reported that individual sessions had been held with the Wellsboro Borough Council, the PennDOT District 3-0 office, students at the Rock L. Butler Middle School, and senior citizen groups at Pinnacle Towers and Park Hill Manor. Suggestions and recommendations from these groups have been incorporated into the study report, as appropriate.

The team conducted a second study public open house at Wellsboro High School on May 4th with approximately 20 people in attendance. A public officials briefing was held immediately prior to the event. A summary of public reaction to the draft study recommendations is included in the draft report under "Public and Stakeholder Involvement."

Brian requested that advisory committee members get any review comments on the overall draft report to him by June 15th. The project team will have the report completed and printed before the contract end date of June 30.

Brian reviewed the broad categories of the recommendations, and then each one in detail. Specific comments from the committee are noted for each draft recommendation.

A. Address Poor Roadway Surface Conditions

- It was recommended that Borough Council should establish a long-term (12-20 year) Capital Improvements Program (CIP) for roadway improvements. The LTAP program can also provide assistance and training for borough council members and their employees. This ultimately becomes a prioritized borough plan outlining funding strategies, parties responsible for implementation and should be updated annually.

B. Upgrade the Borough's Signal Equipment and Hardware

- This can be funded through state grants or programs. Once upgrades have been made, a maintenance schedule needs to be developed. Advisory committee members noted that the placement of signal poles and supports need to be carefully located – context sensitive design should be employed.

C. Signalize the Intersection of Main/Tioga/Charleston

- Once completed, the Borough will own and maintain the signal equipment.

D. Develop Marsh Creek Greenway

- Related to this action, it was reported that there are plans for a station at the junction that will service both rail trail users and the excursion train, and that a trans-load facility is also being developed. Phase I of the trail development will be the at-grade crossing at PA 287 at Wellsboro Junction which will be completed by DCNR. It was noted that the establishment of a sponsoring organization has already been accomplished.

E. Improve Charleston Street as a Connector to downtown Wellsboro

- This must be done as a phased approach.

F. Signal at Wellsboro Plaza

- Any signal work at the Wellsboro Plaza will be the developer's responsibility, including the completion of a traffic impact study (TIS).

G. Potential for Moving the Terminus of Tioga Central Scenic Railroad

- This unfortunately would present major issues for buses and parking in the Charleston Street area. Discussion occurred regarding whether or not there is even enough infrastructure to support a terminus at Charleston Street. The railroad operator has plans for a station and maintenance facility within the Triangle at Wellsboro Junction.

H. Evaluate Sight Distance Limitations

- The Borough should establish an annual inspection and checklist. Future tree planting should be consistent with design criteria, and coordination with the shade-tree commission should be encouraged. Chris King of PennDOT emphasized that legal issues need to be considered. Several intersections in the borough need to be given attention.

I. Access Management Ordinance

- The borough council should direct the planning commission to prepare and recommend such an ordinance to council. Rick Biery recommended that PennDOT's Access Management Guidebook be included as an appendix to this study report.

J. Improve Non-motorized Access to Recreation Areas

- No comments.

K. Monitor the Intersection of Bacon, Morris Lane and Walnut

- This would be an on-going, long-range action item for the borough.

L. Improve Public Transportation Services

- Rick Biery agreed to broker action planning on this item between EMTA and Wellsboro. Advisory committee members noted there is a need for EMTA to provide and publicize schedules and designated stops.

M. Improve Bicycle and Pedestrian Accommodation

- There is a need for a related CIP for sidewalks that is updated annually. Enforcement of maintenance has been an issue, particularly in the wintertime. Bicycle parking also needs to be provided in the downtown area.

N. Address Signing and Roadway Markings

- The Borough has established a line-item in its budget for sign replacement. The PAWilds Design Guide should be considered in the overall plans for signage within the borough.

O. Plan for Vacant Properties on East Avenue

- The Borough needs to be vigilant in enforcing its existing zoning ordinances related to this.

Keith Chase facilitated a portion of the meeting devoted to recommendation-area priorities. The final results were as follows:

1. Signalize the Intersection of Main/Tioga/Charleston
2. Address poor roadway surface conditions
3. Upgrade the Borough Signal Equipment and Hardware
4. Improve Non-motorized Access to Recreational Areas
5. Improve Charleston Street as a connector from the Marsh Creek Greenway to downtown Wellsboro.

Next Steps

The planning team will address all comments as part of the final report. Final copies will be printed and provided to Advisory Committee members by mid-July.

Attendees/Contact Information

A listing of meeting attendees and their contact information is shown in the following table:

Contact	Representing	E-mail
Rick Biery	NTRPDC	biery@northerntier.org
Robert Blair	TCDC	Tcdc1@ptd.net
Keith Chase	Gannett Fleming	kchase@gfnet.com
Brian Funkhouser	Gannett Fleming	bfunkhouser@gfnet.com
Joan Hart	Borough Council	Jhart29@epix.net
Chris King	PennDOT 3-0	chriking@state.pa.us
Fred LaVancher	Gannett Fleming	flavancher@stny.rr.com
Gary Mosher	Chamber of Commerce	gmosher@laurel.org
Rudy Scharf	Borough Council	n/a
Julie VanNess	Chamber of Commerce	juliev@wellsboropa.com
Mary Worthington	GROW	mwwacc@epix.net
Bob Williams	Thornapple Design Group	ibexbob@ptd.net

Appendix D – Model Access Management Ordinance

Model Ordinances

The model ordinances are presented in three tiers to allow your municipality to customize and apply the techniques that are most appropriate for your situation. The model ordinances are written in a form that can be incorporated into your existing subdivision and land development ordinance and comprehensive plan. Commentary is included to provide context and a better understanding of each access management technique and its implementation.

The practices presented in the model ordinances are commonly used in developing an effective access management program. However, these practices should not be viewed as the only solutions. Many other access management practices exist that may be used to address unique situations or meet specific goals and objectives of the municipality. Additional resources, provided at the end of this handbook, contain many more access management practices that may be applicable to your community.

It is important to establish a cooperative relationship with your district PennDOT office as you adopt access management ordinances to ensure local and state-level consistency and awareness. The following model ordinances, as written, complement PennDOT's regulations.

Note that local access management practices are most effective when they include both strong planning and supporting regulations. Communities may consider developing a policy framework that supports access management in the local comprehensive plan, preparing corridor or access management plans for specific problem areas, and encouraging good site planning through regulatory requirements. Access management plans and regulatory requirements should support the future land use plan of the municipality reflected in the comprehensive plan.

Model Ordinance Tiers

The access management practices in this handbook have been categorized into three tiers of model ordinance language based on ease of implementation; timeline to achieve desired outcomes; and the level of coordination required between the municipality, property owners, affected stakeholders, and PennDOT.

Tier 1

Tier 1 practices relate to the number and location of driveways and basic design elements that should be evaluated for every access. These practices should be implemented during the land development approval process and require coordination between the municipality, property owner, and possibly PennDOT. Additional practices such as shared driveways and internal access to outparcels attempt to consolidate access points among adjacent property owners. The practices included in this tier are generally the easiest to implement because they cost the least, take the least time to implement, and require the least amount of coordination between the property owner, municipality, and PennDOT.

Tier 2

Tier 2 practices involve more complex design elements for individual driveways, such as left turn lanes and deceleration lanes. Other practices, such as driveway and signalized intersection spacing, involve multiple driveways or off-site intersections. The practices in this tier can be implemented during the land development approval process, but they could require a higher level of coordination among the municipality, multiple property owners, and PennDOT. Some of the practices could require implementation through multiple land development approvals or a comprehensive project involving several properties. The practices in this tier can be more costly and require a longer period of time to implement than the practices in Tier 1 due to the participation of multiple property owners.

Tier 3

Tier 3 includes roadway design and planning practices such as medians, two-way center left turn lanes, setbacks, frontage roads involving multiple driveways, intersections, and properties. These practices cover a much larger corridor or area and typically require the highest degree of coordination among property owners, the municipality, and PennDOT. In addition, this tier contains planning and regulatory tools such as the official map and zoning overlay districts to implement these types of practices. In most situations, these practices would require capital funding for implementation. These types of practices could require years to fully implement. These practices are more expensive, require much higher levels of coordination between stakeholders, and much more time to implement than Tier 1 and Tier 2 practices.

Access Management Practices

- Number of Driveways
- Corner Clearance
- Safe Sight Distance
- Driveway Channelization
- Joint and Cross Access
- Access to Outparcels
- Driveway Throat Length
- Driveway Throat Width
- Driveway Radius
- Driveway Profile

- Auxiliary Lanes
- Left Turn Lane
- Acceleration Lane
- Driveway Spacing
- Signalized Intersection Spacing
- Driveway Clearance from Interchange Ramps

- Overlay Districts
- Official Map
- Two-way Left Turn Lanes
- Frontage/Service Roads
- Non-traversable Medians
- Setbacks
- Bonuses and Incentives
- Pre-existing Access

Purpose

"The purpose of this ordinance is to provide vehicular access to land development in a manner that preserves the safety and efficiency of the transportation system. Access management encompasses the careful planning of the location, design and operation of driveways, median openings, interchanges, and street connections. If access systems are not properly designed, the primary transportation network, including arterials and highways, will be unable to accommodate the access needs of development and retain their primary transportation function.

This ordinance is intended to promote safe and efficient travel within (municipality, county) by limiting the number of conflict points, providing safe spacing standards between driveways, encouraging shared access between abutting properties, and ensuring safe access by emergency vehicles."

Applicability

"This ordinance shall apply to all arterials and selected collectors within (municipality/county), as identified in (either the comprehensive plan or other functional classification table), and to all properties which abut these roadways."

Conformance with Plans, Regulations, and Statutes

"This ordinance is generally consistent with (cite specific policies) of the comprehensive plan for (municipality). This ordinance also conforms with the requirements of the Pennsylvania Municipalities Planning Code and meets or exceeds the standards contained in Title 67, Chapter 441 of the Pennsylvania Code titled, Access To And Occupancy Of Highways By Driveways And Local Roads."

Definitions

85th Percentile Speed – The speed, in miles per hour, which is exceeded by only 15 percent of the drivers traveling on a section of highway.

95th Percentile Queue Length - The queue exceeded at some point during 5 percent of the signal cycles.

Access – A driveway, street, or other means of passage of vehicles between the highway and abutting property, including acceleration and deceleration lanes and such drainage structures as may be necessary for proper construction and maintenance thereof. [67 PA Code Chapter 441]

Auxiliary Lane – The portion of the roadway adjoining the through lane that is used for speed change, turning, storage for turning, deceleration, acceleration, weaving, and other purposes supplementary to through traffic movement.

Average Daily Traffic (ADT) – The total volume of traffic during a number of whole days (more than one day) and less than one year divided by the number of days in that period.

Design Speed – The maximum safe speed that can be maintained over a section of roadway when conditions are so favorable that the design features of the road govern.

Driveway – Every entrance or exit used by vehicular traffic to or from properties abutting a highway. The term includes proposed streets, lanes, alleys, courts, and ways. [67 PA Code Chapter 441]

Egress – The exit of vehicular traffic from abutting properties to a street.

Functional Area – The area beyond the physical intersection of two controlled access facilities that comprises decision and maneuver distance, and the required vehicle storage lengths.

High Volume Driveway – A driveway used or expected to be used by more than 1,500 vehicles per day. [67 PA Code Chapter 441]

Highways, Roads, or Streets – any highways, roads, or streets identified on the legally adopted municipal street or highway plan or the official map that carry vehicular traffic, together with all necessary appurtenances, including bridges, rights-of-way and traffic control improvements. The term shall not include the Interstate Highway System.

Ingress – The entrance of vehicular traffic to abutting properties from a street.

Interchange – A grade-separated system of access to and from highways that includes directional ramps for access to and from the crossroads.

Internal Trips – Site-generated trips that occur between two or more land uses on the subject site without exiting onto the intersecting street.

Level of Service (LOS) – A qualitative measure describing the operational conditions within a section of roadway or at an intersection that includes factors such as speed, travel time, ability to maneuver, traffic interruptions, delay, and driver comfort. Level of service is described as a letter grade system (similar to a school grading system) where delay (in seconds) is equivalent to a certain letter grade from A through F.

Local Road – Every public highway other than a state highway. The term includes existing streets, lanes, alleys, courts, and ways. [67 PA Code Chapter 441]

Low Volume Driveway – A driveway used or expected to be used by more than 25 but less than 750 vehicles per day. [67 PA Code Chapter 441]

Medium Volume Driveway – A driveway used or expected to be used by more than 750 but less than 1,500 vehicles per day. [67 PA Code Chapter 441]

Minimum Use Driveway – A residential or other driveway that is used or expected to be used by not more than 25 vehicles per day. [67 PA Code Chapter 441]

Offsite Improvements – Those public capital improvements that are not onsite improvements and that serve the needs of more than one development.

Onsite Improvements – All improvements constructed on the applicant's property, or the improvements constructed on the property abutting the applicant's property necessary for ingress and egress to the applicant's property, and required to be constructed by the applicant pursuant to any municipal ordinance, including, but not limited to, the municipal code, subdivision and land development ordinance, planned residential development regulations, and zoning ordinance.

Outparcel – A lot that is adjacent to the roadway that interrupts the frontage of another lot.

Pre-Existing Driveway – Permitted driveways in place at the time of the adoption of this ordinance that do not conform to the standards herein.

Right-of-Way – An area of land, measured from the centerline of the cartway that can be used by the public for travel and the location of utilities.

Right-of-Way Preservation – The acquisition of an area of land, through dedication or easement, needed to accommodate the future widening of the roadway.

Road Improvement – The construction, enlargement, expansion, or improvement of public highways, roads, or streets.

Setbacks – The minimum distance from the street right-of-way line to the lot line that establishes the area within which no structure can be erected.

Signal Progression – The timing of a series of traffic signals to provide a progressive movement of traffic at a planned rate of speed through the signalized intersections without stopping.

Stopping Sight Distance – The distance required by a driver traveling at a given speed to stop the vehicle after an object on the roadway becomes visible to the driver.

Street – Includes street, avenue, boulevard, road, highway, freeway, parkway, lane, alley, viaduct, and any other ways used or intended to be used by vehicular traffic or pedestrians, whether private or public.

Storage Length – Lane footage needed for a right or left turn lane to store the maximum number of vehicles likely to accumulate during a peak period of travel.

Taper – The widening of the roadway to allow the redirection or transition of vehicles into or around an auxiliary lane.

Trip – A one-directional vehicular trip to or from a site.

Trip Generation – The total number of vehicular trips going to and from a particular land use on a specific site during a specific time period.

Ultimate Right-of-Way – An area of land beyond the legal or dedicated right-of-way needed to accommodate future widening of the roadway, measured from the centerline.

I.A.1. Commentary

According to PennDOT's regulations, *67 PA Code CH. 441*, "the number of driveway locations to be permitted to serve a property will be based on preserving the flow of traffic and highway safety, considering the amount and type of traffic the driveway is expected to serve, the location, type, and density of the development, the type and character of the roadway which it accesses, interior traffic patterns, frontage and other criteria consistent with the AASHTO publication entitled *A Policy on Geometric Design of Highways and Streets*."

The applicant should be given the opportunity to provide capacity and circulation analyses to demonstrate whether an additional driveway will be needed to accommodate traffic generated by the development. PennDOT considers a level of service C to be acceptable in rural conditions, and a level of service D to be acceptable in urban conditions. Safety is always a concern when there are sight distance constraints. The municipality may require access to be served by an internal collector roadway separated from the main roadway when driveway spacing requirements cannot be achieved or when outparcels are part of a commercial development.

In many instances it may be desirable to restrict access for a parcel that abuts two or more intersecting roadways to the one of lower functional classification. However, there may be some instances when access to the higher classification road or both roads is desirable for capacity or safety reasons.

A. Driveways

1) Number of Driveways

a) Only one access shall be permitted for a property.

b) An additional access or accesses shall be permitted if the applicant demonstrates that an additional access or additional accesses are necessary to accommodate traffic to and from the site and it can be achieved in a safe and efficient manner.

c) The municipality shall restrict access to right turn only ingress and egress or to another state maintained road or local road if safe and efficient movements cannot be accommodated.

d) For a property that abuts two or more roadways, the municipality may restrict access to only that roadway that can more safely and efficiently accommodate traffic.

e) If the municipality anticipates that a property may be subdivided and that the subdivision may result in an unacceptable number or arrangement of driveways, or both, the municipality shall require the property owner to enter into an access covenant to restrict future access.

2) Corner Clearance

a) Corner clearance shall meet the following driveway spacing standards that are desirable for arterial and major collector roads:

i) Principal arterial: 600 feet

ii) Minor arterial: 400 feet

iii) Major collector: 200 feet

b) Access shall be provided to the roadway where corner clearance requirements can be achieved.

c) If the minimum driveway spacing standards cannot be achieved due to constraints, the following shall apply in all cases:

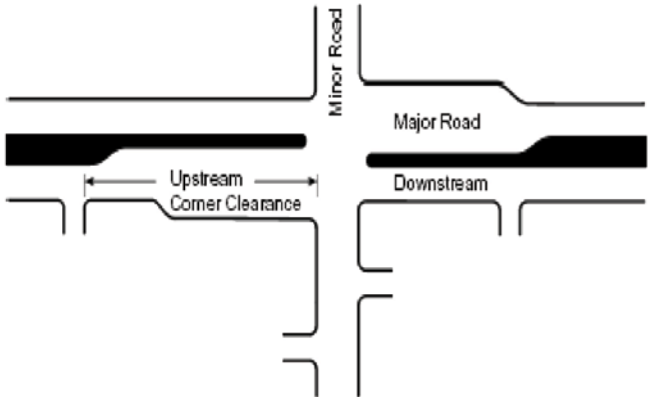
i) There shall be a minimum 10-foot tangent distance between the end of the intersecting roadway radius and the beginning radius of a permitted driveway.

ii) The distance from the nearest edge of cartway of an intersecting roadway to the beginning radius of a permitted driveway shall be a minimum of 30 feet.

d) If no other reasonable access to the property is available, and no reasonable alternative is identified, the driveway shall be located the farthest possible distance from the intersecting roadway. In such cases, directional connections (i.e., right in/right out only, right in only or right out only) may be required.

e) The municipality shall require restrictions at the driveway if the municipal engineer determines that the location of the driveway and particular ingress or egress movements will create safety or operational problems.

Upstream Corner Clearance



Source: TRB Access Management Manual, 2003.

I.A.2. Commentary

Corner clearance minimizes driveway-intersection conflicts and provides a greater distance for vehicles to merge into through traffic. Corner clearance, at a minimum, should be equal to or greater than driveway spacing standards. On high volume or high-speed roadways, a longer corner clearance may be needed to avoid conflicts. It is undesirable for driveways to be located within the functional area of an intersection. The functional area includes all areas where auxiliary lanes, such as right and left turn lanes, exist. Preferably, driveways for a corner property should be located on the roadway with the lower functional classification or as close to the property line farthest from the intersection as is possible.

New driveways should not be permitted within the functional area of an intersection unless no other reasonable access to the property is available and the municipal engineer determines that there is no reasonable alternative. In such cases the municipal engineer should determine the appropriate location of the driveway and whether restrictions should be placed on certain turning movements, usually left turn movements.

I.A.3. Commentary

PennDOT sight distance requirements are consistent with AASHTO design criteria. Adequate sight distance ensures that drivers can safely enter or exit a driveway or intersecting roadway. It is critical that safe sight distance requirements are met for the safe operation of vehicles at driveways or access road intersections.

The cost of constructing some driveways can be expensive when the parcel has limited frontage and topographic constraints. If improvements are needed on adjacent properties to achieve minimum sight distance standards, easements are typically needed from the adjacent property owners.

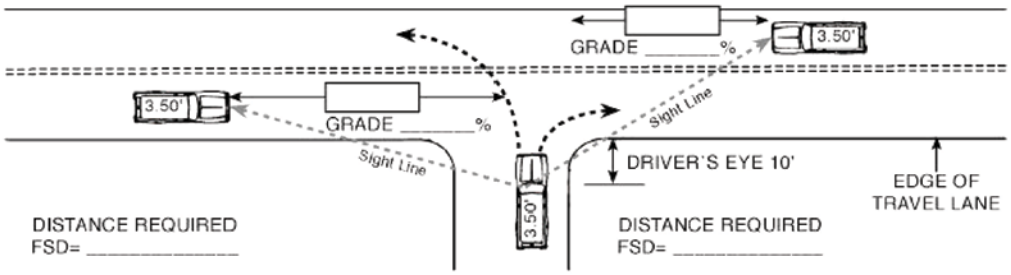
3) Safe Sight Distance

a) Safe sight distance shall be available for all permitted turning movements at all driveway intersections.

b) PennDOT's Pub. 441 and Pub. 282 for driveways or Pub. 70 for local roads shall be referenced to determine minimum driveway and roadway intersection safe sight distance requirements.

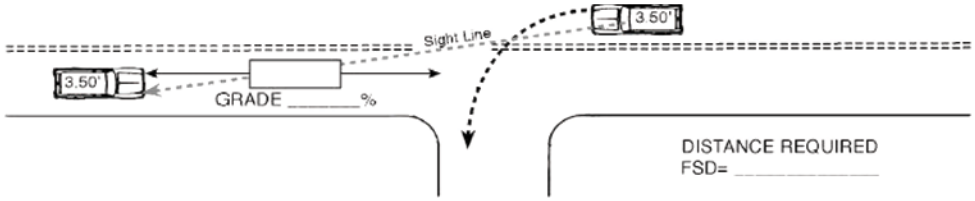
c) All driveways and intersecting roadways shall be designed and located so that the sight distance is optimized to the degree possible without jeopardizing other requirements such as intersection spacing, and at least minimum sight distance requirements are met.

Sight Distances to the Left & Right of the Driveway



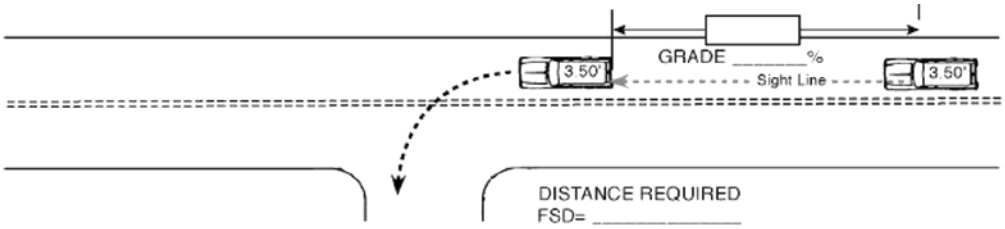
THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.

Sight Distance to an Approaching Vehicle from a Vehicle Turning Left into the Driveway



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.

Sight Distances Approaching the Rear of a Left Turning Vehicle



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.

Source: TRB Access Management Manual, 2003.

4) Driveway Channelization

a) For high and medium volume driveways, channelization islands and medians shall be used to separate conflicting traffic movements into specified lanes to facilitate orderly movements for vehicles and pedestrians.

b) Where it is found to be necessary to restrict particular turning movements at a driveway, due to the potential disruption to the orderly flow of traffic or a result of sight distance constraints, the municipality may require a raised channelization island.

c) Raised channelization islands shall be designed with criteria consistent with the latest AASHTO publication entitled *A Policy on Geometric Design of Highways and Streets*.

I.A.4. Commentary

The restriction of left turns into or out of a driveway reduces interruptions to through traffic on roadways. Turn restrictions are an effective measure for corner lots at intersections, because they eliminate left turning movements within the functional area of the intersection. Turn restrictions may also be implemented if the improvements that would be required at a driveway to achieve acceptable levels of service cannot be provided due to constraints or there is a history of high crash rates caused by left turning vehicles. Islands also provide a refuge area for pedestrians crossing high volume driveways.

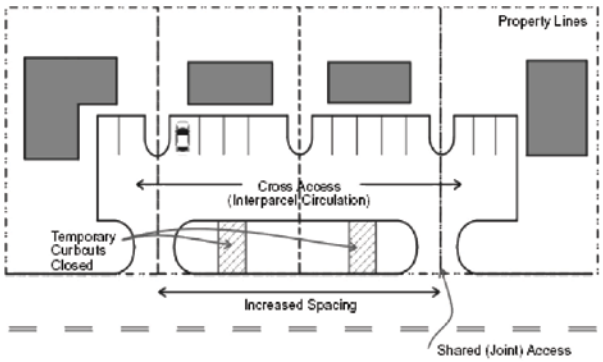
Channelizing islands can be controversial when recommended for commercial uses because they place a restriction on a direct access movement into the business. However, channelization islands are a less controversial access management practice to restrict turns at high volume driveways than the installation of medians on the intersecting roadway.

According to the Pennsylvania Code, Title 67, Transportation, Chapter 441, if sight distance requirements cannot be met, PennDOT may prohibit left turns by entering or exiting vehicles. A raised concrete island may be required to implement left turn restrictions at driveways where limited sight distance would otherwise pose a potential hazard.

I.A.5 Commentary

Joint and cross access driveways reduce the number of driveways accessing the roadway, thus reducing the number of conflict areas along the roadway. They are a safe and more efficient way to provide access to two or more adjacent land uses because motorists do not have to exit one driveway, merge into traffic on the intersecting roadway, and then enter another driveway. These types of driveways allow the municipality to maintain driveway spacing standards along corridors that have several parcels with limited roadway frontage. For undeveloped parcels, the easements for joint and cross access should be implemented during the land development approval process.

Joint Driveways and Cross Access



Source: TRB Access Management Manual, 2003.

5) Joint and Cross Access

a) The municipality may require a joint driveway in order to achieve the following driveway spacing standards that are desirable for arterial and major collector roads:

i) Principal arterial: 600 feet

ii) Minor arterial: 400 feet

iii) Major collector: 200 feet

b) Adjacent non-residential properties shall provide a joint or cross access driveway to allow circulation between sites wherever feasible along roadways classified as major collectors or arterials in accordance with the functional classification contained in the municipal comprehensive plan. The following shall apply to joint and cross access driveways:

i) The driveway shall have a design speed of 10 mph and have sufficient width to accommodate two-way traffic including the largest vehicle expected to frequently access the properties.

ii) A circulation plan that may include coordinated or shared parking shall be required.

iii) Features shall be included in the design to make it visually obvious that abutting properties shall be tied in to provide cross access.

c) The property owners along a joint or cross access driveway shall:

i) Record an easement with the deed allowing cross access to and from other properties served by the driveway.

ii) Record an agreement with the municipality so that future access rights along the driveway shall be granted at the discretion of the municipality and the design shall be approved by the municipal engineer.

iii) Record a joint agreement with the deed defining the maintenance responsibilities of each of the property owners located along the driveway.

6) Access to Outparcels

a) For commercial and office developments under the same ownership and consolidated for the purposes of development or phased developments comprised of more than one building site, the municipality shall require that the development be served by an internal road that is separated from the main roadway.

b) All access to outparcels shall be internalized using the internal roadway.

c) The driveways for outparcels shall be designed to allow safe and efficient ingress and egress movements from the internal road.

d) The internal circulation roads shall be designed to avoid excessive queuing across parking aisles.

e) The design of the internal road shall be in accordance with all other sections of this ordinance.

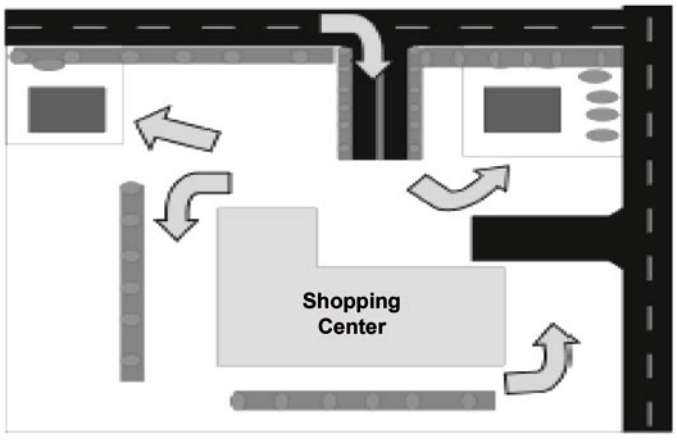
f) All necessary easements and agreements required under Section A.6.c shall be met.

g) A municipality may require an access covenant to restrict an outparcel to internal access only.

I.A.6 Commentary

Internal access reduces the number of direct access locations on major roadways in commercial districts and employment areas, thus reducing the number of conflict locations. The reduction in the number of driveways along the property frontage also creates more areas for landscaping to improve the aesthetics of a corridor. For collectors and arterials, the internalization of access to outparcels is critical in order to meet the spacing criteria found in Tier II.

Internal Access to Outparcels



Source: TRB Access Management Manual, 2003.

I.B.1 Commentary

Traffic volumes, type of vehicles, and vehicle queues are the primary considerations for determining driveway throat lengths. Adequate throat length for a driveway permits vehicles to enter the driveway without immediately encountering conflicts created by an internal intersection. Immediate conflicts can cause successive entering vehicles to queue onto the intersecting roadway. Adequate throat length also provides sufficient space for queuing of exiting vehicles, particularly at signalized driveways.

Although site conditions may not allow strict adherence to the guidelines in this ordinance, every effort should be made to design and construct the safest and most efficient access onto the municipal or state roadway. Exceptions to the design requirements in the ordinance should be reviewed by the municipal engineer on municipal roadways and PennDOT on state maintained roadways.

B. Driveway Design Elements

1) Driveway Throat Length

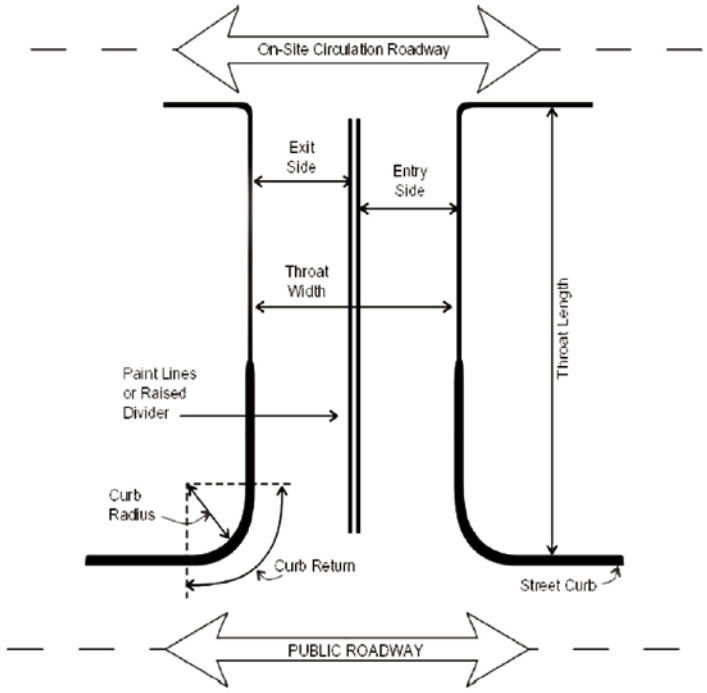
a) For minimum use driveways, the throat length shall be a minimum of 25 feet.

b) For low volume driveways, the throat length shall be a minimum of 50 feet or as determined by queuing analysis.

c) For medium volume driveways, the throat length shall be a minimum of 120 feet or as determined by a queuing analysis.

d) For high volume driveways, the throat length shall be a minimum of 150 feet or as determined by a queuing analysis.

Diagram Displaying Driveway Throat Length, Width, and Radius



Source: TRB Access Management Manual, 2003.

2) Driveway Throat Width

a) For driveways without curb:

i) A minimum use driveway shall have a minimum width of 10 feet.

ii) Low and medium volume driveways shall have a minimum width of 10 feet for one-way operation and a minimum width of 20 feet for two-way operation.

iii) The design of high volume driveways shall be based on analyses to determine the number of required lanes.

b) For driveways with curb, two feet should be added to the widths contained in Section a.i and a.ii.

c) The municipality may require additional driveway width to provide turning lanes for adequate traffic flow and safety.

d) The municipality may require that the driveway design include a median to control turning movements. Where medians are required or permitted, the minimum width of the median shall be four feet to provide adequate clearance for signs.

I.B.2 Commentary

When the proper turning radii cannot be provided due to site constraints, wider driveways may be needed to facilitate turning movements. However, if driveways have excessive width, a driver may become confused on where to position the vehicle for ingress and egress movements. Also, pedestrians and bicyclists have a greater distance to cross the driveway, exposing them longer to potential vehicular conflicts.

The width requirements presented here are based on common design practices. The width of driveways must consider the volume and type of vehicles that are anticipated to use the driveway and the volume of bicycle and pedestrian traffic crossing the driveway. Trucks and buses require more width than passenger vehicles. Although site conditions may not allow strict adherence to the requirements in the ordinance, every effort should be made to design and construct the safest and most efficient access onto the municipal or state roadway. Exceptions to the design requirements contained in this ordinance must be reviewed by the municipal engineer.

I.B.3. Commentary

A small radius may make entering a driveway more difficult and cause entering vehicles to slow down or almost stop upon entering. Thus, improperly designed radii can affect the speed and capacity of through traffic on the intersecting roadway. Large trucks need adequate radii to complete their turning movements without encroaching into opposing lanes of traffic on the driveway or main road. Large turning radii allow for easier ingress and egress maneuvers. Very large turning radii can be used to increase entry speeds where deceleration lanes are not feasible, however consideration of bicycle and pedestrian volumes is necessary.

3) Driveway Radius

a) The following criteria shall apply to driveway radii:

i) For minimum use driveways, the radii shall be a minimum of 15 feet.

ii) For low volume driveways, the radii shall be a minimum of 15 feet uncurbed and 25 feet curbed.

iii) For medium volume driveways, the radii shall be a minimum of 15 feet uncurbed and 25 feet curbed.

iv) For high volume driveways, the design should be reviewed by the municipal engineer on municipal roadways and PennDOT on state maintained roadways.

b) For all driveways, the radii shall be designed to accommodate the largest vehicle expected to frequently use the driveway.

c) Except for joint driveways, no portion of a driveway radius may be located on or along the frontage of an adjacent property.

4) Driveway Profile

a) Driveway grade requirements where curb is not present on the intersecting street:

i) Shoulder slopes vary from four percent to six percent. When shoulders are present, the existing shoulder slope shall be maintained across the full shoulder width.

ii) The change in grade between the cross slope of the connecting roadway or shoulder and the driveway shall not exceed eight percent.

iii) The driveway grade shall not exceed eight percent within 10 feet of the edge of travel lane for minimum use driveways and within 40 feet for low, medium, and high volume driveways.

iv) A 40-foot minimum vertical curve should be used for a high volume driveway.

b) Driveway grade requirements where curbs and sidewalks are present:

i) The difference between the cross slope of the roadway and the grade of the driveway apron may not exceed eight percent.

ii) The driveway grade shall not exceed eight percent within 10 feet of the edge of travel lane for minimum use driveways and within 40 feet for low, medium, and high volume driveways.

iii) If a planted area exists between the sidewalk and curb, the following shall apply:

(1) The grade of the planted area shall not exceed eight percent.

(2) If the driveway grade would exceed eight percent in the area between the curb and the sidewalk, the outer edge (street side) of the sidewalk may be depressed to enable the driveway grade to stay within eight percent. A maximum sidewalk cross slope of eight percent must be maintained.

(3) If the sidewalk cross slope exceeds two percent, the entire sidewalk may be depressed. The longitudinal grade of the sidewalk may not exceed six percent.

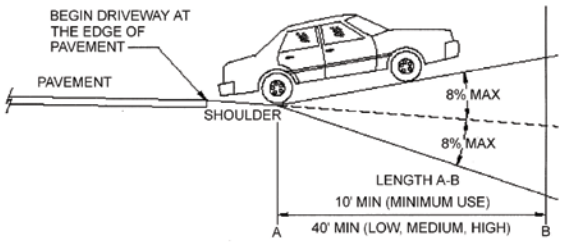
c) Although site conditions may not allow strict adherence to these guidelines in this ordinance, every effort should be made to design and construct the safest and most efficient access onto the municipal or state roadway.

I.B.4. Commentary

A properly designed driveway profile allows for more efficient and safe turning movements into and out of driveways and streets. It allows vehicles to complete a smooth 90-degree turning maneuver without a "bottoming out" of the vehicle against the pavement. The profile must be designed to accommodate the largest vehicle that will frequently use the driveway to allow for efficient movements. In areas where steep slopes are unavoidable, the driveway approach profile should be checked with an appropriate design vehicle template. The requirements of the model ordinance are consistent with PennDOT regulations. If a municipality already has more stringent design criteria, they should not be revised unless they are proven to be problematic.

Although site conditions may not allow strict adherence to these requirements, every effort should be made to design and construct the safest and most efficient access onto the municipal or state roadway. Exceptions to the design requirements in the ordinance should be reviewed by the municipal engineer on municipal roadways and PennDOT on state maintained roadways.

Driveway Profile



Source: TRB Access Management Manual, 2003.

II.A. Commentary

PennDOT's regulations, *67 PA Code Chapter 441*, establish the need for a turn lane as follows: "The permit may require the installation of a left turn lane, a two-way left turn lane, or a right turn lane to separate and protect turning vehicles from through traffic if failure to do so would result in unacceptable levels of service or undue hazard for the traveling public, as determined by a traffic study approved by the Department." The website address for the PennDOT traffic impact study guidelines can be found on the references/resources page of the Access Management Model Ordinances for Pennsylvania Municipalities handbook.

A. Auxiliary Lanes

Auxiliary lanes separate turning vehicles from through traffic, thus they increase capacity and improve operations at intersections. They reduce the potential for rear-end crashes and interference or disruption of the flow of through traffic.

1) Right Turn Lane/Deceleration Lane

a) Unsignalized intersections:

i) A right turn lane shall be considered on the major road (not stop controlled) at an unsignalized intersection when any one or a combination of the following conditions exists:

(1) Forty or more right turns in the peak hour.

(2) Three percent or more downgrade with 20 or more right turns in the peak hour.

(3) Speed in excess of 40 mph.

(4) High average daily traffic on the through road (5,000 vehicles per day or more).

ii) A right turn lane shall be required on the minor road or driveway (stop controlled) approach if a capacity analysis shows an unacceptable LOS for the approach, and the installation of a right turn lane will improve operations.

b) Signalized intersections:

i) A right turn lane shall be required when a capacity analysis shows unacceptable LOS, and the operation of the intersection can be improved by the installation of one or more right turn lanes. Levels of service E and F should be considered unacceptable in rural areas and a level of service F should be considered unacceptable in urban areas.

ii) Capacity analysis methodology shall follow criteria [either established elsewhere in the Subdivision and Land Development Ordinance or the applicable PennDOT criteria for conducting traffic impact studies.]

c) Design Criteria

i) The desirable width for a right turn lane is 14 feet with curb and 12 feet without curb. The minimum width of right turn lanes shall be 13 feet with curb and 11 feet without curb. If not curbed, shoulders shall be designed in accordance with PennDOT 3R criteria found in *PennDOT Publication 13M: Design Manual Part II*.

ii) The required lengths of right turn lanes shall consider the following components as may be applicable:

(1) Storage bay length:

(a) Shall accommodate the 95th percentile queue length for signalized intersections.

(b) The stop controlled approach of an unsignalized intersection shall accommodate the number of turning vehicles likely to arrive in an average two-minute period during the peak hour.

(2) Deceleration distance in accordance with AASHTO publication *A Policy on Geometric Design of Highways and Streets*.

(3) Taper length in accordance with AASHTO publication *A Policy on Geometric Design of Highways and Streets*.

(4) The right turn or deceleration lane shall be designed based on an analysis that projects traffic volumes for a ten-year period from the anticipated opening of the proposed development.

(5) The 85th percentile speed shall be used for the retrofit of existing deceleration or right turn lanes. The design speed of the roadway shall be used for the design of auxiliary lanes for new roads.

II.A.1 Commentary

Right turn and/or deceleration lanes separate vehicles slowing to make a right turn from through traffic. They allow the right turns to be completed without impeding the travel speed of through traffic. These lanes can also reduce rear end crashes and increase capacity at an intersection or driveway. Other factors such as sight distance limitations and crash history can also be used in determining the need for a right turn or deceleration lane.

Unacceptable levels of service can be defined differently by agencies and municipalities. The municipality should include criteria for unacceptable levels of service that meet their traffic operation objectives.

PennDOT is currently developing uniform statewide criteria for right turn and deceleration lane warrants and design criteria. The municipality should amend its ordinance when the warrants and criteria are adopted so that it is consistent with PennDOT regulations.

Right turn lanes are relatively easy to install because they do not require widening on the opposite side of an intersection to shadow or direct through traffic around turning vehicles as is needed for left turn lanes when there is an opposing approach to the intersection. The design of right turn and deceleration lanes generally consist of a taper, deceleration length, and storage length depending on the class of roadway and whether or not the approach to the intersection is uncontrolled, stop controlled, or controlled by a traffic signal. Generally, long tapers enhance the function of a deceleration or right turn lane.

Right turn lanes on stop controlled approaches of two-way stop intersections should carefully consider sight distance limitations that could be created. These lanes can be difficult to retrofit due to physical constraints and the potential need to acquire additional right-of-way. Continuous right turn lanes should be avoided because they can be confused for an additional through lane.

II.A.2 Commentary

Left turn lanes are usually provided for either a high left turn volume into a driveway or side street, or when a combination of left turn volumes and high through volumes causes long delays. They can also be used in locations with high rates of rear end crashes. A left turn lane allows turn movements to be removed from the through lanes, reducing disruption and delay for the through traffic.

Unacceptable levels of service can be defined differently by agencies and municipalities. The municipality should include criteria for unacceptable levels of service that meet their traffic operation objectives.

PennDOT is currently developing uniform statewide criteria for left turn lane warrants and design criteria. The municipality should amend its ordinance when the warrants and criteria are adopted so that it is consistent with PennDOT regulations.

AASHTO publication *A Policy on Geometric Design of Highways and Streets* provides criteria based on HRR 211 methodologies to determine the storage length of left turn lanes. For unsignalized intersections, HRR 211 takes the following variables into account in determining the need for a left turn lane:

VA = advancing volume (through, left-turning, and right-turning, vehicles per hour)

VL = left-turning volume (vehicles per hour)

L = VL/VA = proportion of left turns in the total advancing traffic stream

VO = opposing volume (opposing through and right-turning, vehicles per hour)

v = operating speed (mph)

HRR 211 provides nomographs based on these criteria to establish warrants for the installation of left turn lanes. ITE recommends that at high speed rural intersections, left turn lanes should be provided for safety reasons, whether or not warrants are satisfied.

The Highway Capacity Manual (HCM) states that for signalized intersections, the need for left turn lanes should be investigated when the volume of left turns approaches one hundred vehicles per hour. As the volume of left turns approaches three hundred vehicles during the peak hour, the need for dual left turn lanes should be investigated.

Left turn lanes are sometimes difficult to implement in a retrofit situation because they usually require widening on both sides of the road as well as on the opposing approach, and right-of-way acquisition can be difficult and expensive. Limits of work must include sufficient length to provide for lane transition tapers that are necessary to guide through traffic around the left turn lanes.

2) Left Turn Lane

a) Unsignalized Intersections:

i) For the major street, Highway Research Record 211 (HRR 211) provides warrants for requiring a left turn lane.

ii) A left turn lane shall be required when the appropriate HRR 211 nomograph indicates that the warrant for a 100-foot-long left turn lane is met for the anticipated completion date of the development.

iii) A left turn lane shall be required if the visibility to the rear of a vehicle stopped to turn left into the proposed access does not meet minimum sight distance requirements and no alternative is available.

b) Signalized Intersections:

i) A left turn lane shall be required when a capacity analysis indicates that the operation of an intersection, approach, or movement will operate at unacceptable levels of service and the operation of the intersection, approach, or movement can be improved with the installation of one or more left turn lanes. Levels of service E and F should be considered unacceptable in rural areas and a level of service F should be considered unacceptable in urban areas.

c) Design Criteria

i) The desirable width for left turn lanes is 12 feet. The minimum width shall be 10 feet, unless the percent of trucks will exceed five percent, then 11 feet shall be the minimum width.

ii) The length of a left turn lane shall consider the following components as applicable:

(1) Storage bay length.

(a) Shall accommodate the 95th percentile queue length for signalized intersections.

(b) Shall be determined from the appropriate nomograph in HRR 211 for the uncontrolled approach of an unsignalized intersection.

(2) Deceleration length in accordance with AASHTO publication *A Policy on Geometric Design of Highways and Streets*.

(3) Taper length in accordance with AASHTO publication *A Policy on Geometric Design of Highways and Streets*.

3) Acceleration Lane

a) May be required on arterial highways where operating speeds are in excess of 40 mph and where access points are located a sufficient distance apart to permit the installation of acceleration lanes.

b) The design length and width shall follow criteria found in the latest edition of *A Policy on Geometric Design of Highways and Streets* and shall conform to PennDOT requirements on state maintained highways.

II.A.3 Commentary

Acceleration lanes allow vehicles entering a highway from a driveway or side road to merge with through traffic at or near the same speed as the through traffic. For limited access highways and some principal arterials, acceleration lanes are critical to maintain smooth traffic flow, and to minimize disruption caused by entering traffic.

Acceleration lanes are generally not effective in facilitating egress from driveways or side roads that intersect the lower classification roads. Motorists tend to wait for a large enough gap in through traffic to enter directly into the flow of traffic.

B. Driveway Spacing Requirements

1) Driveway Spacing

a) Driveway spacing is measured from the end of one driveway radius to the beginning of the next driveway radius.

b) The following driveway spacing standards are desirable for arterial highways and major collector roads:

i) Principal arterial: 600 feet

ii) Minor arterial: 400 feet

iii) Major collector: 200 feet

c) Driveways shall be aligned with other driveways and roadways on the opposite side of the intersecting roadway on arterials and major collector roads in order to meet spacing requirements.

d) If these driveway spacing standards cannot be met, a system of joint or cross access driveways, frontage roads, or service roads may be required.

II.B.1 Commentary

Driveway spacing standards should be intended for arterial and major collector roads. Adequate driveway spacing allows greater speeds for through traffic, reduces the number of potential conflict points that must be monitored by motorists, and helps preserve the capacity of the roadway. Spacing standards may be developed based on the posted speed limit of the intersecting roadway and/or its functional classification. Driveway spacing requirements are difficult to implement in areas that are already developed, such as in commercial areas or corridors, and when there are no supporting land use regulations governing lot frontage or dimensions.

II.B.2 Commentary

Adequate separation distance between signalized intersections is necessary to prevent queues from one intersection extending into or otherwise influencing operations at the next upstream or downstream intersection. Furthermore, uniform spacing of traffic signals provides better traffic flow progression. Limiting the number of traffic signals in a corridor also reduces the number of locations where queuing of vehicles may obstruct turning movements from driveways or side streets.

Coordinated traffic signal systems with long and uniform signal spacing achieve efficient traffic progression at desired speeds. In a simultaneous coordinated traffic signal system, all signals along the corridor operate with the same cycle length and display the green indication at the same time. In an alternating coordinated system, each successive traffic signal or group of signals shows opposite (or alternating) green indications to that of the next signal or group.

Traffic signal spacing standards are a function of the cycle length of the traffic signal and the desired travel speed. Progression speeds increase as traffic signal spacing increases. Speeds also tend to increase as the cycle lengths increase for the signals along the corridor. Traffic signal spacing can be difficult to implement in established commercial areas. Midblock high volume driveways may require a signal for efficient ingress and egress movements. These driveways often break the uniform spacing.

2) Signalized Intersection Spacing

a) Uncoordinated traffic signals shall be located a minimum of 1,000 feet from adjacent signalized intersections.

b) Optimal signal spacing for coordinated systems may be determined by the following equations:

For simultaneous coordinated signal systems:

$S = VC / 0.681$

For alternating coordinated signal systems:

$S = VC / 1.362$

S = Signal spacing in feet

C = Cycle length in seconds

V = Progression speed in miles per hour

b) The progression speed shall be determined by the municipal engineer and PennDOT.

c) Warrants for the signalization of an intersection must be met and may be found in the Manual on Uniform Traffic Control Devices (MUTCD).

d) If a driveway or local road requires signalization and will be located within an existing coordinated traffic signal system, the traffic signal must be incorporated in the system.

3) Driveway Clearance From Interchange Ramps

a) A driveway shall not be permitted on or within an interchange ramp.

b) A driveway shall not be permitted within 100 feet in areas classified as urban by PennDOT or 300 feet in areas classified as rural by PennDOT from either the end of a ramp radius or the intersecting edge of the pavement of the ramp speed change lane to the beginning of the access radius.

II.B.3 Commentary

Proper interchange area management reduces the conflicts between merging traffic from interchange ramps and traffic entering or exiting from driveways. Minimum distance requirements provide adequate distance for traffic merging from ramps to avoid traffic queues from the nearest intersection and to enter left turn lanes. The minimum spacing standards can be maintained in some instances through the acquisition and preservation of limited access right-of-way.

PennDOT's proposed regulations, *67 PA Code Chapter 441*, do not permit driveways within 50 feet of an interchange ramp. NCHRP Report 420 recommends that an unsignalized access be located at least 750 feet from an interchange ramp, and that a signalized access be located one half mile or greater from the terminus of an interchange ramp.

Introduction

Tier III contains access management techniques that can be implemented through the various planning options available to municipalities, such as overlay districts and the official map. This tier contains techniques that are more comprehensive and are typically used to control access to arterials and major collector roads. Tier III techniques used in conjunction with those from Tiers I and II are the best techniques for maintaining efficient traffic flow and high safety levels in areas experiencing intense land development pressures.

Tier III techniques apply to existing arterial highways and some major collector roads that are experiencing or can be anticipated to experience pressure for new development. Since the great majority of arterial highways and many major collectors are under the jurisdiction of PennDOT, the implementation of these techniques may require PennDOT approval and permission (Highway Occupancy Permits). The cooperation and input of PennDOT should also be sought for those corridors identified by the municipality for the implementation of access management practices.

The techniques, such as non-traversable medians, two-way-left-turn lanes (TWLTL), and frontage roads, often require right-of-way acquisition, utility relocation, and roadway widening. They require significant funding, and therefore are often implemented through a capital project administered by PennDOT.

A. Access Management Overlay District

The municipality may establish an Access Management Overlay District. Access management overlay districts add special requirements to existing zoning districts. They may be established for a corridor, intersection, or interchange area. All or some of the access management requirements from Tiers 1 through Tier 3 can be applied. Overlay districts can be developed to fit the unique characteristics of a particular area or corridor to address concerns regarding safety, access, and traffic flow problems that could be experienced as a result of intense pressures from development. Overlay districts can also contain land use requirements regarding the permitted uses along arterials and major collector roads or near interchanges in order to regulate the location of large volume generators such as shopping centers or office/industrial parks.

The zoning regulations of the underlying district, such as permitted uses and conditional uses, are retained. However, the overlay district may have more restrictive regulations regarding uses, setbacks, location and number of driveways, joint or cross access, and internal circulation. Overlay districts may also contain regulations regarding signing and landscaping to preserve the community character and natural features of the area. The regulations of the overlay district will generally prevail over the underlying district.

A planning study should be completed before the enactment of an overlay district. The study may be conducted in conjunction with the municipal comprehensive plan or municipal transportation plan, or a separate corridor study may be conducted. Its purpose is to establish the need for additional regulations due to existing and/or projected traffic problems. The planning or corridor study should address the following issues:

- Purpose of the overlay district;
- Analysis of existing traffic conditions;
- Analysis of future traffic conditions based on projected land development patterns;
- Recommended access improvements and management practices; and,
- Establishment of the boundary for the overlay district.

The need for an overlay district may exist on a regional basis for arterial corridors and interchange areas located near municipal boundaries. In these instances, a multi-municipal transportation plan or corridor study should be completed prior to enactment. If overlay districts are not developed properly, they can lead to complex regulations and significant administrative costs.

After the completion of a transportation plan or study that establishes the need for an overlay district, ordinance revisions are required for its enactment. The municipal zoning ordinance should be revised to show the boundary of the overlay district and include regulations for proper development. The subdivision and land development ordinance must also be updated to include required design standards. The municipality should consider the adoption of an official map in order to preserve right-of-way to implement recommended access improvements from the study, such as corridor or intersection widening, interchange re-configuration, new collector roads, service roads, and frontage roads.

B. Official Map

The official map is an effective planning tool to reserve right-of-way for new road alignments and interchanges. In addition, it can be used to reserve right-of-way along existing roadways for turning lanes at intersections, additional through lanes along corridors, and Tier 3 access management techniques such as two-way left turn lanes and non-traversable medians.

The Pennsylvania Municipalities Planning Code (MPC) provides that a municipality may adopt an official map covering the entire municipality, or a portion thereof, to show elements of the comprehensive plan pertaining to public lands and facilities. An official map identifies areas of public interest and need for the purpose of reserving lands for public use. It can be used to implement the transportation network and other community facilities. Section 401(a) of the MPC permits the municipality to represent the following transportation facilities on the official map:

1. Existing and proposed public streets including widening, narrowing, extensions, diminutions, openings, or closings.
2. Pedestrian facilities and easements.
3. Railroad and transit rights-of-way and easements.

The adoption of any street or street lines as part of the official map does not constitute the opening or establishment of any street, the taking of any land, nor does it obligate the municipality to improve or maintain any such street. The adoption of the official map does not constitute the taking or acceptance of any land by the municipality.

The construction of any building is not permitted within the lines of any street that is shown on the official map. The municipality may fix the time for which streets on the official map shall be deemed reserved for future taking or acquisition for public use. However, the reservation of public lands lapses and becomes void one year after an owner of such lands has submitted a written notice to the municipality announcing their intentions to build, subdivide, or otherwise develop the land reserved for public use, or has made a formal application for an official permit to build a structure for private use.

The municipality may use property records, aerial photography, photogrammatic mapping, geographic information systems (GIS), or other methods for the identification, description, and publication of elements of the official map. An ordinance must accompany the official map that describes the lands identified for future public use. The ordinance may be placed directly on the map. The municipality does not need to survey designated lands prior to the adoption of the official map and ordinance. At the time of land acquisition or easements, boundary descriptions by metes and bounds must be provided by a licensed surveyor.

Prior to the adoption by the municipality, the official map and ordinance must be reviewed by the county planning commission. The county planning commission must provide its recommendations to the municipality within 45 days, or an extension to the time for review may be agreed to by the municipality. The proposed official map and ordinance may also be reviewed by adjacent municipalities, other local authorities, and similar public bodies during the same review period. If the review parties do not provide recommendations within 45 days or the agreed to extension period, the municipality may proceed without the county planning commission and other recommendations.

Prior to the enactment of the official map and ordinance, the governing body must hold a public hearing pursuant to public notice. Following the adoption of the official map and ordinance, a copy must be submitted to the county recorder of deeds within 60 days of the effective date.

For more information on the official map including procedures for adoption and implementation, please refer to Article IV Sections 401 – 408 of the Municipalities Planning Code.

III.C.1 Commentary

TWLTLs separate left turning vehicles from through traffic. They are generally safer than undivided highways because they reduce rear-end collisions. They also increase capacity and reduce travel time for through traffic.

The potential for conflicts between left turning vehicles from opposing travel streams is one potential problem with TWLTLs. Also, they do not provide a safe refuge area for pedestrians as raised medians do. TWLTLs can encourage commercial strip development along arterial corridors, particularly if there are no driveway spacing requirements.

The use of TWLTLs requires careful consideration of driveway locations. In some cases, TWLTLs can be rather easily retrofitted on corridors that consist of multiple travel lanes. For corridors consisting of only two travel lanes, TWLTLs can be much more difficult to retrofit due to right-of-way constraints and potential impacts to existing structures and properties.

C. Roadway Design Practices

1) Two-way Left Turn Lanes

a) The municipality may identify certain roadway corridors for the retrofit of a two-way left turn lane (TWLTL) where the following conditions exist:

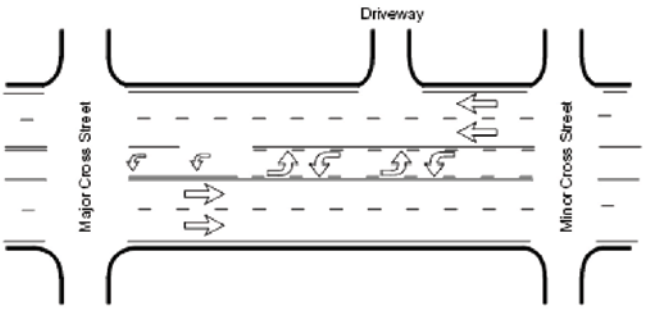
i) Speeds are less than 50 mph or as permitted by PennDOT.

ii) There are no locations of heavy concentrations of left turning vehicles that cannot be accommodated with exclusive left turn lanes.

b) At cross streets or locations with a heavy concentration of left turning vehicles, the municipality may require the modification of pavement markings for a center left turn lane to provide an exclusive left turn lane based on the requirements for unsignalized and signalized left turn lanes.

c) The pavement markings for a TWLTL shall be in accordance with the guidelines and criteria contained in the most recent edition of the Manual on Uniform Traffic Control Devices (MUTCD).

Two-way Left Turn Lane



Source: TRB Access Management Manual, 2003.

2) Frontage/Service Roads

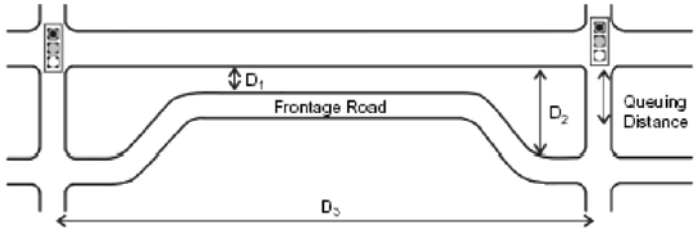
a) The municipality may require the construction of a frontage or service road to provide more favorable access for multiple commercial and residential developments to preserve the safety and capacity of the adjacent roadway.

b) The municipality may require the construction of a frontage or service road to maintain the driveway and traffic signal spacing requirements and corner clearance requirements contained in this ordinance.

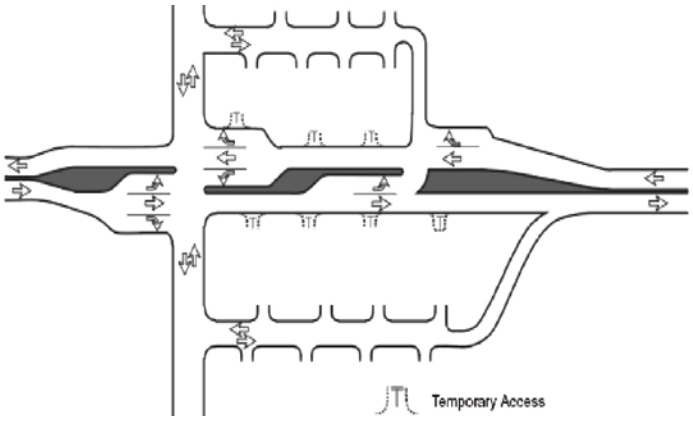
c) New developments that abut an existing service or frontage road must take access to the service or frontage road. Access to the arterial or collector road will be permitted only if driveway and intersection spacing requirements are met and a traffic study shows that it is necessary to maintain levels of service, and safety is not compromised. The traffic study shall be conducted in accord with PennDOT's applicable guidelines and requirements.

d) Frontage roads and service roads shall be designed in accordance with the most recent editions of *PennDOT Publication 13M, Design Manual Part II* and *A Policy on Geometric Design of Highways and Streets*, AASHTO.

Typical Frontage Road



Typical Service Road



Source: TRB Access Management Manual, 2003.

III.C.2 Commentary

Frontage roads provide direct access for individual parcels, thus minimizing the number of access points on an arterial. They separate local traffic from high speed through traffic. In commercial areas, businesses are still visible from the major roadway. Frontage roads are an effective access management tool in undeveloped areas experiencing development pressures.

Service roads allow the development of small parcels along a major roadway without providing access to each parcel from the major roadway. These roads can provide access to properties on either side. Service roads are often less costly than frontage roads and are easier to retrofit in developed areas. If a service road will be constructed in phases, temporary driveways may be needed to access the intersecting arterial or collector road. The temporary driveways should be removed after the completion of the service road.

Frontage roads can involve significant donation of right-of-way by multiple property owners. Short spacing between the intersections of the connector roads and the major roadway can cause problems with vehicle queues that extend through the intersections. These intersections have low capacity and the traffic volumes generated by a commercial development could result in congestion. Frontage roads tend to encourage commercial strip development rather than compact activity centers. They are very difficult to retrofit in fully developed areas.

III.C.3 Commentary

Medians can be used to reduce conflict areas by restricting turn movements into and out of driveways and minor side roads that are located on an undivided highway (generally four or more lanes). A detailed traffic study must be conducted in order to determine the degree of improvement to through traffic that can be realized by installing a non-traversable median. Also, appropriate locations for breaks in the median for side roads and major roadways must be determined along with the impact on existing properties. The ability and accommodation of traffic to reverse direction must also be investigated and provisions must be included in the design.

Approval for the alteration of an existing median for access to a property must be approved by PennDOT on state maintained roadways. The National Cooperative Highway Research Program (NCHRP) is currently developing guidelines and warrants for the installation of median barriers and establishing the type of barrier to be used in certain situations. The municipality should consider updating its access management ordinance once these warrants become available.

Medians are designed to physically prevent left turns into a driveway or onto a side street and left and through movements from driveways or side streets. They also reduce angle and rear-end crashes involving left turning vehicles from the inside through lanes.

Directional medians contain breaks at key locations to provide access to a particular land use or side street. A separate ingress lane is typically used at a break in the median for left turns into the driveway and for U-turns. An egress lane, sometimes referred to as a median acceleration lane, may be used in some circumstances for exiting movements from a driveway when significant delay would occur because of infrequent simultaneous gaps in both directions of travel on the intersecting roadway. Jughandles may be used at median breaks as an alternative to left turn ingress lanes, because they eliminate left turn movements from the major roadway (intersecting roadway with the higher traffic volumes). As a result, delay is decreased at the intersection and levels of service are improved.

Crash data for study purposes can be obtained from the PennDOT Bureau of Highway Safety and Traffic Engineering.

3) Non-Traversable Medians

a) The municipality, and in conjunction with PennDOT on state maintained roadways, may establish the need for the installation of a median barrier along an arterial or major collector roadway. General criteria involves a history of high crash rates caused by conflicting turning movements, a high average daily traffic volume, and unacceptable LOS along the corridor and at intersections.

b) The placement, type, and design of median barriers must be in accordance with the most recent additions of *PennDOT Publication 13M, Design Manual Part II* and the AASHTO publications *A Policy on Geometric Design of Highways and Streets* and *Roadside Design Guide*.

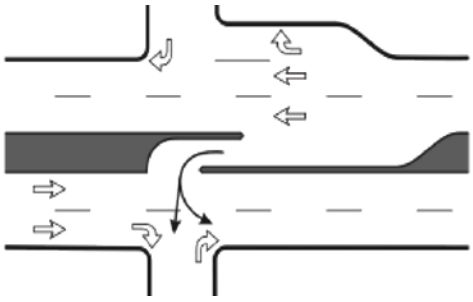
c) The municipality, in conjunction with PennDOT on state maintained roadways, shall consider the appropriateness of breaks in median barriers based on safety and capacity factors related to the proposed driveway. The removal or alteration of a portion of a median along a divided highway to provide access will not be permitted unless it is determined that the operating characteristics of the highway system will be improved by the action.

d) The spacing of median breaks shall be in accordance with the minimum driveway spacing, traffic signal spacing and corner clearance requirements contained in this ordinance.

e) A left turn ingress lane shall be required at a median break for a driveway. The length of the ingress lane shall be based on a capacity and queuing analysis conducted in accord with PennDOT's applicable guidelines and criteria.

f) A left turn egress lane (median acceleration lane) may be required at a median break for exiting left turn movements from a proposed driveway. Its design must be based on the appropriate AASHTO criteria.

Median Break with Left Turn Lane



Source: TRB Access Management Manual, 2003.

D. Planning Practices

1) Setbacks

a) The following setback distances shall be required between the legal right-of-way line and any proposed buildings or structures :

Minimum Setback Distance (Feet)

	Urban				Suburban/Rural			
	R	C	I	O	R	C	I	O
Arterial	15	15	10	15	150	150	125	150
Collector	15	15	10	15	100	100	50	100
Local	10	10	10	10	25	25	50	50

R - Residential
C - Commercial
I - Industrial
O - Office

III.D.1 Commentary

Setbacks are the minimum distance from the legal right-of-way line that establishes the area where no structures can be erected. Setbacks are not the dedication of right-of-way by the applicant, but preservation for future acquisition by the municipality. If the current municipal ordinance does not contain setbacks, the table included in the model ordinance language is from the *Chester County Circulation Handbook*, and can be used as a guide. In addition to the need for future roadway improvements, the municipality should consider other community design objectives when establishing or revising existing setback requirements.

The preservation of right-of-way well in advance of needed improvements can help reduce overall project costs and can help prevent development from precluding implementation of needed roadway improvements. The preservation of right-of-way can be done much more efficiently by the municipality than the state. The preservation of right-of-way for future roadway improvement projects must be completed on a property by property basis, which can take a considerable amount of time.

Applicants may be required to dedicate right-of-way to the municipality for the construction of on-site roadway improvements needed to provide ingress or egress to the property according to the driveway design requirements of the SLDO. The municipality cannot require off-site improvements according to the provisions of the MPC.

The official map may be used to preserve right-of-way for intersection improvements, corridor widening, or interchange reconstruction. The following table contains guidelines that may be used to preserve the ultimate right-of-way:

Minimum Right-of-Way Guidelines

	Urban	Suburban	Rural
Principal Arterial	100	150	150
Minor Arterial	80	100	100
Major Collector	80	80	80
Minor Collector	80	80	80
Local (>100 ADT)	50	50	50
Local (<100 ADT)	33	33	33

These widths are presented as a guide by the *Chester County Circulation Handbook* and *Landscapes Community Planning Handbook, Volume 2: A Toolbox for Managing Change in Chester County*. AASHTO has standards of 40-60 feet for collector roads and 50-66 feet for local roads in urban areas. Standards for other roadway classifications and area types should not be less than the area required for all of the elements of the design cross section, utility accommodation, and appropriate border areas.

III.D.2 Commentary

Bonuses and incentives provide the municipality with a negotiating tool to implement access management practices such as shared driveways, frontage roads, internal access to outparcels, and off-site roadway improvements. Careful consideration must be given to the decision to grant bonuses and incentives. Bonuses and incentives must be drafted in the ordinance in a way that does not relax other access management requirements.

2. Bonuses and Incentives

a) The municipality may grant adjustments to the requirements of the subdivision and land development ordinance when the applicant elects to implement one or more of the following access management techniques over and above the required minimums:

i) Off-site roadway and intersection improvements to improve or maintain acceptable operating levels of service on existing roadways in the vicinity of the proposed development,

ii) Reduction in the number of existing driveways onto a public roadway,

iii) Reduction in the number of driveways that would be normally permitted,

iv) Shared driveways,

v) Cross access,

vi) Frontage or service roads,

vii) Internal circulation systems, or

viii) Interconnected or shared parking areas.

b) The municipality shall determine, at its discretion, the adequacy and appropriateness of the access management techniques elected to be implemented and the corresponding adjustment to be granted to the applicant.

3) Pre-existing Access

a) Permitted driveways in place at the time of the adoption of this ordinance that do not conform to the standards herein shall be designated as pre-existing driveways. They shall be brought into compliance with the applicable standards contained herein under the following conditions:

i) New driveway permits are requested,

ii) Modifications to an existing driveway permit are requested,

iii) The property owner or applicant applies for a change in property use and will generate more vehicle trips than the existing use, or

iv) An expansion of the existing use will result in an increase in trip generation.

III.D.3 Commentary

Many pre-existing land uses will have driveways that are inconsistent with the design requirements contained in the model ordinance. It is unreasonable to assume that a municipality can impose immediate and in some cases very expensive retrofit designs. Designating these driveways as pre-existing access allows the municipality to work with the property owner or developer to implement access management requirements in a more reasonable fashion.

PennDOT's highway occupancy permit regulations provide that in granting a driveway permit, the Department does not waive its authority to require future change in operation, removal, relocation, or proper maintenance of any access to a state road.

Opportunities presented by the requirements for pre-existing access to bring driveways into compliance allow the cost to be amortized in business loans or mortgages, thereby reducing the financial hardship to the property owner or developer.

References

AASHTO, *A Policy on Geometric Design of Highways and Streets*

AASHTO, *Roadside Design Guide*

Chester County, *Chester County Circulation Handbook and Landscapes Community Planning Handbook, Volume 2: A Toolbox for Managing Change in Chester County*

FHWA, *Safety Effectiveness of Highway Design Features: Volume I, Access Control*, 1992.

National Highway Institute, S&K Transportation Consultants, Inc. *Access Management Location and Design*. Participant notebook for NHI Course133078. April 1998, revised April 2000.

PennDOT, *Publication 13M, Design Manual Part II*

PA Code, Chapter 441: *Access To and Occupancy of Highways by Driveways and Local Roads* www.pacode.com/secure/data/067/chapter441/chap441toc.html

Transportation Research Board, *Access Management Manual*, 2003.

Transportation Research Board, *NCHRP Report 420: Impacts of Access Management Techniques*, 1999.

Additional Resources

Federal Resources

Access Management TRB Committee ADA70
www.accessmanagement.gov

Federal Highway Administration
www.Ops.fhwa.dot.gov/access_mgmt

PennDOT Resources

Center for Program Development:
Linking Land Use and Transportation
www.dot.state.pa.us/Internet/Bureaus/CPDM.nsf/LandUseHomepage?OpenFrameset

PennDOT Publication 282:
ftp://ftp.dot.state.pa.us/public/Bureaus/BOMO/MC/Publication282.pdf

PennDOT HOP Project Scoping Meeting Checklist
ftp://ftp.dot.state.pa.us/public/Bureaus/BOMO/MC/282 B1 Scoping Mtg Checklist1.pdf

PennDOT Recommended HOP Application Process
ftp://ftp.dot.state.pa.us/public/Bureaus/BOMO/MC/282 B Recommended Process.pdf

PennDOT Traffic Impact Study Guidelines
ftp://ftp.dot.state.pa.us/public/Bureaus/BOMO/MC/GuidelinesTrafficImpactStudy.pdf

Other Resources

Pennsylvania Planning Association website
www.planningpa.org

Florida
www.dot.state.fl.us/planning/systems/sm/accman

Kentucky
www.transportation.ky.gov/Multimodal/Access.asp

New Jersey
www.state.nj.us/transportation/eng/documents/NJHAMC

Turner-Fairbank Highway Research Center
www.tfhrc.gov/safety/intersect.htm

Center for Urban Transportation Research (CUTR)
Planning & Corridor Management Program
www.cutr.usf.edu/research/access_m/intro.htm

Acknowledgements

A guiding influence is attributed to the Steering and Advisory Committees as they helped to direct and develop the model ordinances, as well as ensured that what is proposed can be implemented with relative ease. The committees were composed of individuals from around the state. Collectively, the PennDOT staff would like to extend a special thank you to:

Pennsylvania Department of Community and Economic Development
Phil Robbins

Lehigh Valley Planning Commission
Olev Taremae

Pennsylvania Builders Association
Lou Biacchi
Melanie G. Cook

Pennsylvania State Association of Township Supervisors
Elam Herr
Mike Jacobs

Pennsylvania Department of Transportation
Tom Haist, Esq.
Ron Jones
Walt Knerr
Tom Kotay
Bill Laubach
Glenn Rowe
Jim Smedley
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Visit PennDOT website
www.dot.state.pa.us and search "access management"

Visit LTAP website
https://www.dot7.state.pa.us/LTAP

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