BURGESS & NIPLE
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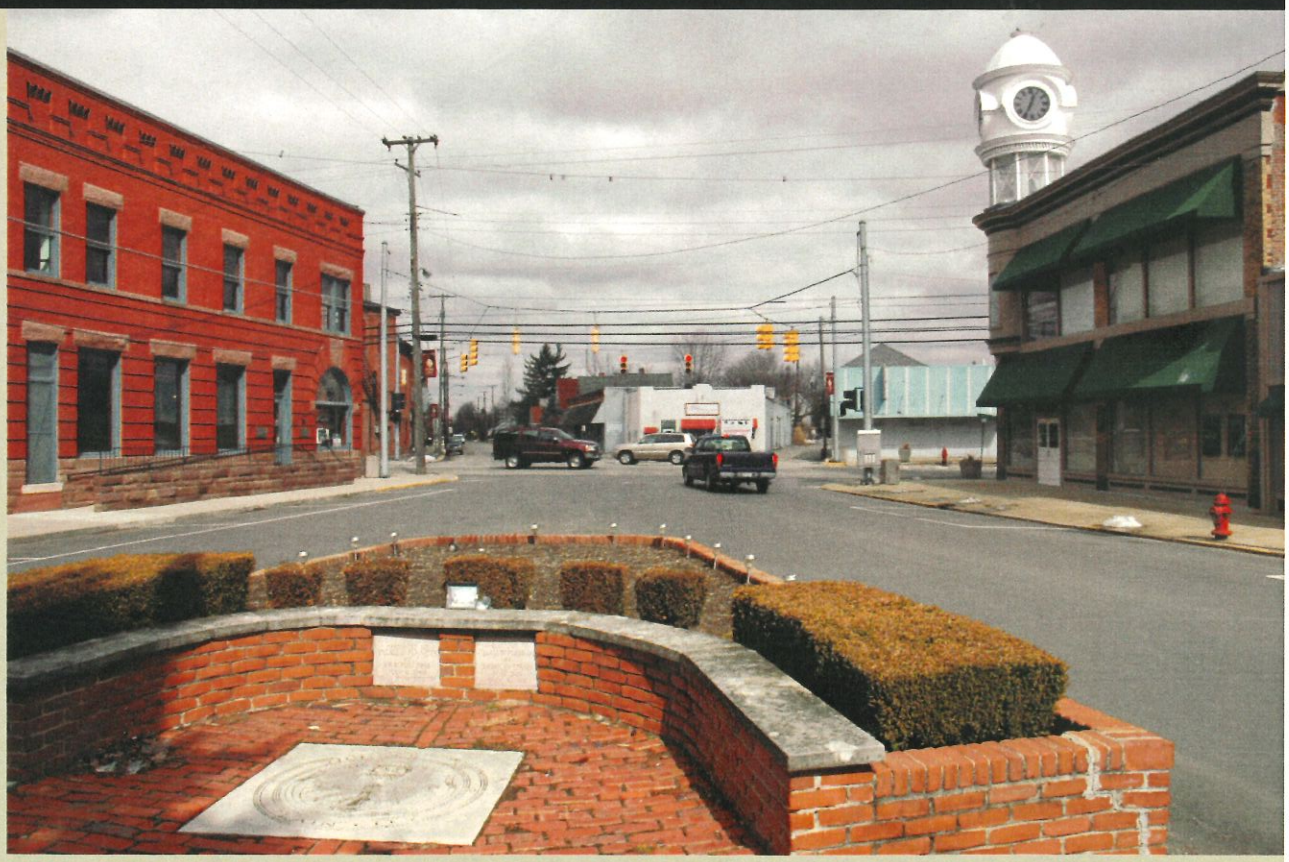
Plain City Thoroughfare Plan
The Village of Plain City, Ohio

July 2009



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EXECUTIVE SUMMARY

The Village of Plain City as shown in Figure 1 is located 8 miles west of the I-270 and U.S. 33 Interchange in Central Ohio. The Village is only 13 miles North of I-70 and within 4.5 miles south of U.S. 33. Proximity to an excellent transportation system and affordable property, great schools and village services provides Plain City with advantages for growth over other communities in the area. This convenient location has led to the development of several residential subdivisions in the Village. Many more developments are proposed in nearby jurisdictions which could have impacts on the Village's transportation network.

Based on its location, the Village expects to see development and traffic increases. This growth presents potential traffic congestion concerns that need to be addressed.

The goal of this thoroughfare plan was to analyze existing and future conditions, recommend improvements, and identify funding that provides the best possible transportation system for the Village. Year 2008 existing conditions were evaluated. The forecast year for analysis is 2030. The analysis reveals that the transportation system operates reasonably well today but will need some enhancements in the future. Recent changes in route paths through the village have added roadway capacity and changed high volume traffic locations. This is especially true along Main Street and led to operating improvements in the Main Street and Jefferson Street intersection and at the Main Street and Chillicothe Street intersection. The positive impact of this new U.S. 42 Bypass roadway section will be more important in the future.

The intersection of West Avenue and Jefferson Avenue is a problem today that will be worsened with future growth in traffic. The problem with this intersection is the left turn movement from westbound West Ave. to southbound S. Jefferson Ave. In the future P.M. peak hour, this movement does not operate acceptably. The primary problem is the minor street two-way stop intersection control. For the desired left turn in the P.M. peak hour, there are insufficient gaps in year 2030 traffic flow on U.S. 42. Some other form of traffic control is recommended such as a traffic signal or a modern roundabout.

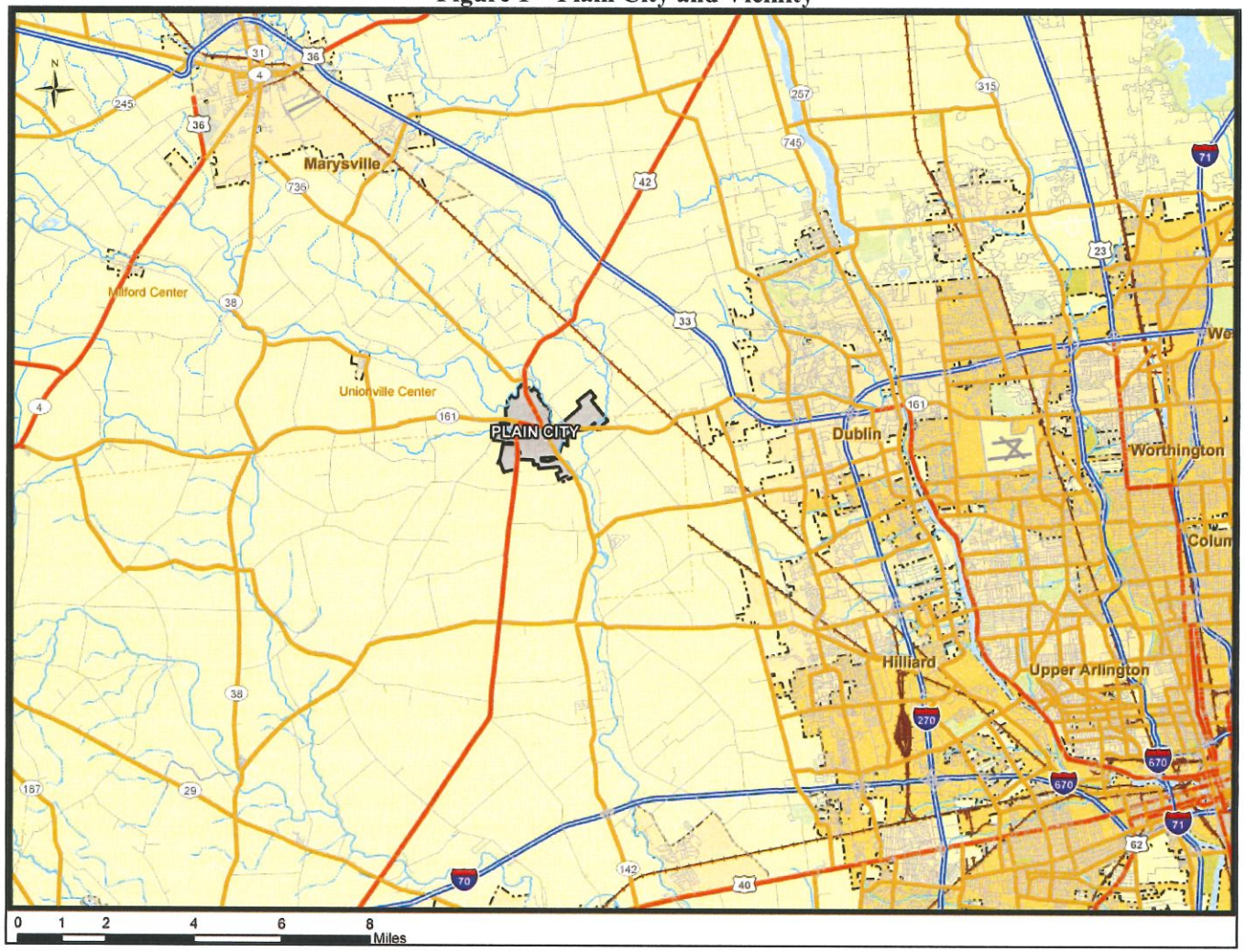
In addition to the problem at U.S. 42 and West Avenue, the analysis of year 2030 conditions revealed two other intersections would have failing turning movements. The intersections were:

- U.S. 42 (Jefferson Ave.) at Chillicothe St.
- South Chillicothe St. at West Ave.

The analysis showed that the three problem intersections used stop sign intersection control. Analyzing these three intersections with signals and with roundabouts showed improvements in the future traffic operations at these locations.

A cost and funding discussion is also included. Capital costs of $150,000 for signals and $1 Million for single lane modern roundabouts are used in the plan. Each intersection control type has benefit and cost ramifications for the Village to consider. Funding sources through the State of Ohio would be either Ohio Public Works Commission or Ohio Department of Transportation Safety Program funds. Madison and Union Counties and the Village are also sources of funding.

Figure 1 – Plain City and Vicinity



I. INTRODUCTION

Located at the crossroads of SR 161 and U.S. 42, with easy access to U.S. 33 and I-70, the Village expects to see development and traffic growth. In fact, the 2003 Plain City Community Plan identified several areas of anticipated build out in the Village.

The goal of this thoroughfare plan was to analyze existing and future conditions, recommend improvements, and identify funding that provides the best possible transportation system for the Village. Year 2008 existing conditions were evaluated in the Village. The forecast year for analysis is 2030.

The recent addition of a new segment of U.S. 42 between Main Street and Chillicothe Street brought additional capacity to the roadway system and changed the traffic patterns in the Village. This is especially true along Main Street and led to operating improvements in the Main Street and Jefferson Street Intersection and at the Main Street and Chillicothe Street intersection.

The analysis includes growth assumptions from a neighboring jurisdiction in the analysis. The primary analysis tool is the City of Dublin's travel demand model (TDM). The Village requested, and received, permission to use Dublin's model by letter in 2008 prior to work beginning. Because the model produces current year and future year (2030) traffic volumes for roadway sections and intersections it is the best tool to use in determining future congestion. From the model analysis, we can identify existing and future transportation problems and evaluate potential transportation improvements to the system.

In addition to evaluating the transportation system, the study recommends a thoroughfare plan including a roadway hierarchy of arterials (roads that primarily move traffic), collectors (roads that move traffic and provide access to adjacent land), and local roads so that the Village can consider how and where to provide access to developing land. Preserving the functional integrity of each of the classifications is critical to ensuring that the transportation system works well.

Section Two of this report provides an overview of the study's methodology. This includes an overview of the travel demand model and levels of service.

Section Three reviews the data that was collected including the traffic and crash data collected by the Village of Plain City Police Department.

Section Four describes the results of the transportation analysis including population and employment, traffic movements, and levels of service. It shows where the growth will occur and the resulting impacts on traffic operations.

Section Five discusses the recommended thoroughfare plan, improvements, costs, and prospective funding sources.

II. METHODOLOGY

B&N developed and is now providing technical assistance to the City of Dublin for its Travel Demand Model (TDM). This model forecasts transportation demand under development and transportation infrastructure scenarios. In developing Plain City's thoroughfare plan using the most current, available growth information, the Dublin TDM was selected because it captures the majority of the growth and transportation improvements that would impact Plain City. Developed by B&N for Dublin, the Dublin TDM includes the Village of Plain City and area south, north, and eastof the Village. . North of the Village, the model includes the U.S. 42 corridor, Jerome Township, and other areas expected to grow in the vicinity. Areas to the south west include Hilliard and areas likely to become developed by 2030. Plain City formally requested use of the model from the City of Dublin in 2008 and subsequently received it.

The TDM requires several types of data to be used as an analysis tool. Along with existing year traffic count data, information on population, employment, houses, number of travel lanes, and speed limits was needed to complete the thoroughfare plan.

For the purposes of this thoroughfare plan, the base year was selected as 2008. The data for the area outside of the village remained as 2004 because development data for year 2004 was most readily available.

During the development of the plan, the Village of Plain City provided household and employment information by location. The existing year and future year socioeconomic data were reviewed using input from the Village.

An evaluation was undertaken using the TDM to determine future impacts on Plain City. The selected year of analysis was 2030. Future roadway vehicle volumes were determined by following the recommended procedure documented in the National Cooperative Highway Research Program's (NCHRP) Report 265. This process takes the growth in the model that is a result of land use and roadway changes and applies it to the existing year count data. The existing and future land use, intersection volumes, and Levels of Service (LOS) are described in the Existing and Future Conditions section.

To assess the roadway operations, LOS were calculated at key intersections. Intersection LOS is a measure of the efficiency of an intersection's ability to accommodate traffic. LOS criteria and target parameters for signalized and two-way stop controlled intersections in Plain City are shown in Table 1.

Table 1 – LOS Descriptions

LOS	Signalized Intersection (Delay in seconds/vehicle)	Two-Way Stop Controlled Intersection (Delay in seconds/vehicle)
A	≤ 10	≤ 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	> 80	> 50

NOTE: LOS is provided for the entire intersection at all signalized locations. If the intersection has a two-way stop control then the LOS listed in the existing and future conditions section is for the leg of the intersection that has the worst performance. This distinction is due to how LOS is calculated at two-way stop controlled intersections. The calculation process does not allow for an overall intersection LOS at two-way stop controlled intersections. Please refer to the Highway Capacity Manual for further documentation.

The SYNCHRO traffic operations software program was used to calculate LOS at signalized and two-way stop controlled intersections and the SIDRA software program was used for the modern roundabout analysis.

Once intersections with unacceptable LOS were identified, potential improvements were evaluated. The resulting LOS at the improved intersections was detailed in the Recommended Thoroughfare Plan section.

III. DATA COLLECTION

Quality data is the key element needed to analyze existing and future conditions of any transportation system . In the case of the Plain City thoroughfare plan, needed data inputs included traffic count data, roadway speed limits, functional classifications, and intersection control types (i.e. signals, stop signs, pavement markings, etc.).

Traffic Counts
Traffic count data for several primary roadways were provided by the Village as well as garnered from other sources such as county and ODOT. In Figure 2, the count locations and volumes are shown. Since the counts are provided from various agency sources, the last two digits of each count represent the year that the count was gathered. Therefore, all count volumes are to the nearest 100 vehicles. The Village Police Department used Stealth Stat which uses K band radar to retrieve 24 hour traffic counts at useful locations for use in this study.

Speed and Lanes
The roadway network was driven to confirm speed limits and type of intersection stop control. Posted speed is shown in Figure 3. The number of travel lanes were confirmed.

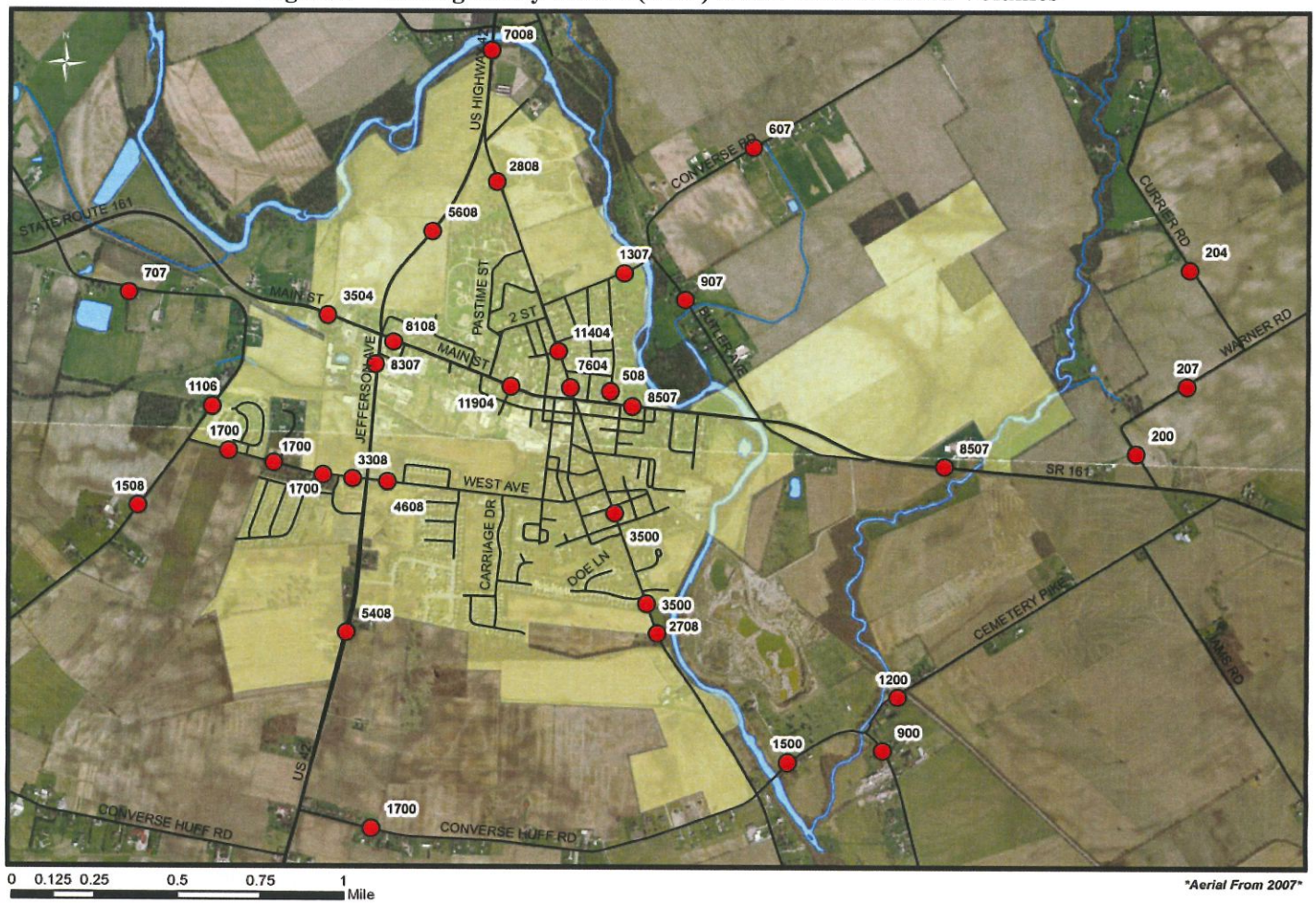
Crash Data
The Village of Plain City provided crash data for 2006 – 2008. Based on this information, the intersections with the highest number of crashes are shown in Table 2.

Table 2 – Highest Intersection Crash Locations

Intersection	2006	2007	2008	Total
W. Main St. at Jefferson Ave.	6	2	5	13
Main St. at Chillicothe St.	5	3	1	9
S. Jefferson Ave. at West Ave. /Perry Pike	4	5	1	10
S. Chillicothe St. at Bigelow St.	4	1	1	6
W. Main St. at Maple St.	3	2	0	5
S. Jefferson Ave. at Carlisle Ave.	0	1	4	5

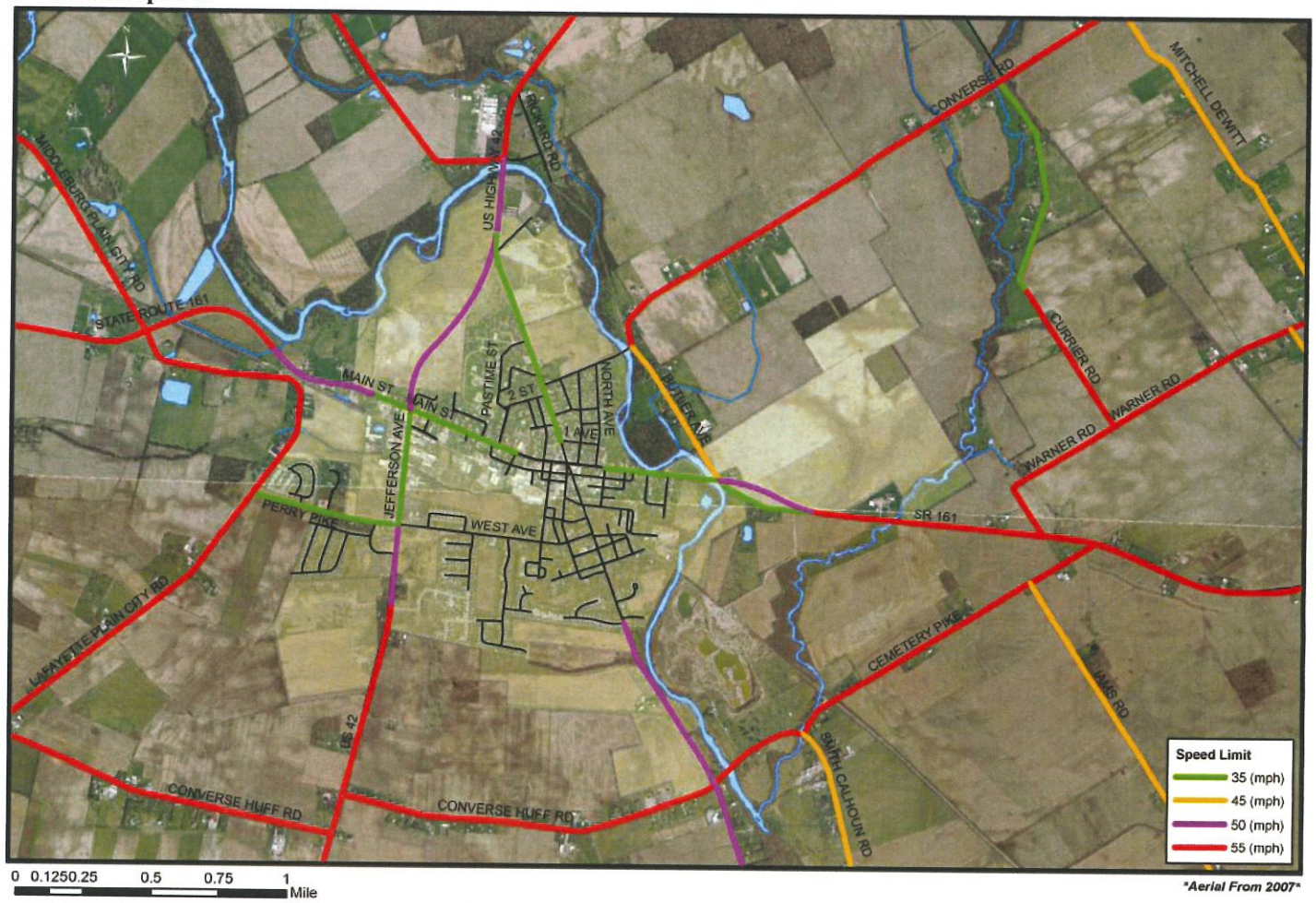
Note that the intersection operation at West Main Street at Jefferson was modified to accommodate the U.S. 42 Bypass. This intersection transitioned from a 3-way intersection to a 4 way intersection. The Bypass opened Spring 2008.

Figure 2 – Average Daily Traffic (ADT) Count Locations and Volumes



* Last two digits on the count represent the year the count was taken.

Figure 3 – Posted Speeds



* Posted speed on streets not in legend are less than 35 miles per hour.

IV. EXISTING AND FUTURE CONDITIONS

This step includes use of the collected data and TDM discussed in previous sections. Transportation problems are identified through analysis of the existing and future roadway conditions. Based on an anticipated increase in traffic the analysis identifies how traffic may shift in the future and where these shifts may create additional transportation problems.

In order to produce existing traffic conditions, all the model input data was reviewed for accuracy. This effort included correcting any speed, functional classification, lane capacity, or land use inconsistencies that were discovered in the TDM to match the data collected. In the TDM, land use and socioeconomic data are evaluated as an aggregate unit known as a Traffic Analysis Zone (TAZ) that is based primarily on census data. Roads, streams, and political boundaries usually make up the boundary of Census geography and TAZ. Figure 4 is a map of the TAZ layer for the study area.

Due to recent growth in and around the Village of Plain City, several additional subdivisions and businesses were added to the TDM base year. This growth changed the population, number of households, and employment in the TDM 2008 base year. The future year 2030 socioeconomic data had to be updated as well. Population, number of households, and employment socioeconomic data for 2008 and 2030 are shown in Table 3.

Table 3 and Figure 4 show that most of the commercial growth in Plain City is anticipated along U.S. 42 or the U.S. 42 Bypass. Traffic Analysis Zones along U.S. 42 and U.S. 42 Bypass (TAZ 48, 49, 353, 354, and 355) account for 78 percent of the forecast growth in employees. These areas account for 563 new employees. These TAZs and others are also targeted for residential growth areas as the Village could increase its population and housing stock by 75 percent by 2030.

When current year modeled count results were completed, the turning movement percentages at key locations were taken from the TDM. These percentages, along with engineering judgment, were then applied to the collected peak hour count data. This effort produced the 2008 peak hour turning movements shown in Figures 5 and 6.

The turning movement data, along with assumed optimized signal timings for the signalized intersections, were then input into the SYNCHRO intersection analysis software program. This program calculated LOS information for each of the analyzed intersections. The peak hour LOS information is shown in Figure 7.

A reasonable LOS target for Plain City would be for every intersection within Village limits to operate at LOS C. LOS C is the industry standard for locations of a similar size as Plain City. However, LOS D is the acceptable performance level for intersections in urbanized areas. While LOS D would be tolerated in the Village during limited periods of congestion during the typical week day, LOS C is the desired standard for the roadway system.

Figure 4 – TAZ Locations

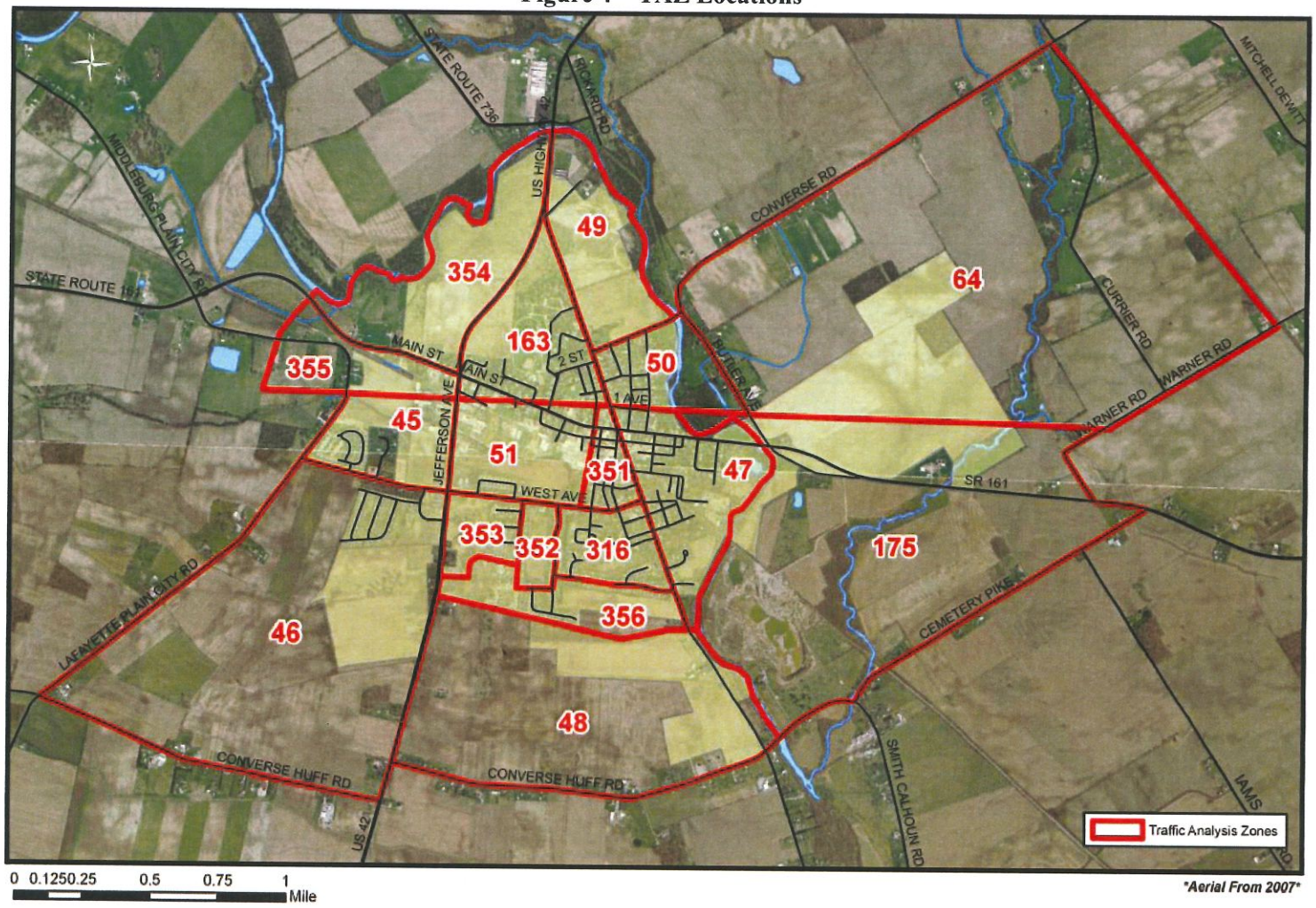


Table 3 – Plain City Socioeconomic Data

	Year 2008			Projected Year 2030			Percent Growth		
Plain City TAZ*	HH's	Population	Employment	HH's	Population	Employment	HH's	Population	Employment
45	96	110	50	108	129	50	113%	117%	100%
46	110	300	100	194	508	100	176%	169%	100%
47	237	591	157	237	591	157	100%	100%	100%
48	25	70	0	280	784	86	1120%	1120%	NA
49	0	0	31	21	52	145	NA	NA	468%
50	159	461	4	159	461	4	100%	100%	100%
51	74	165	250	109	236	250	147%	143%	100%
351	174	383	63	174	383	63	100%	100%	100%
64	59	159	19	76	254	168	129%	160%	884%
163	70	182	150	108	263	150	154%	145%	100%
354	5	13	10	401	980	136	8020%	7538%	1360%
355	10	26	25	15	39	89	150%	150%	356%
175	9	27	60	75	198	60	833%	733%	100%
316	110	275	10	120	300	20	109%	109%	200%
352	50	125	0	50	125	0	100%	100%	NA
353	65	163	0	90	222	73	138%	136%	NA
356	113	283	0	164	400	100	145%	141%	NA
Total - Plain City	1,366	3,333	929	2,381	5,925	1,651	174%	178%	178%
Dublin		40,874	50,500		71,450	143,890		175%	285%
NW Metro Columbus		149,869	96,660		259,139	275,336		173%	285%

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*TAZ - Traffic Analysis Zones for the Plain City Area

** Dublin and NW Metro Columbus data included for comparision of growth rates.

Figure 5 – 2008 A.M. Peak Hour Turning Movement Volumes

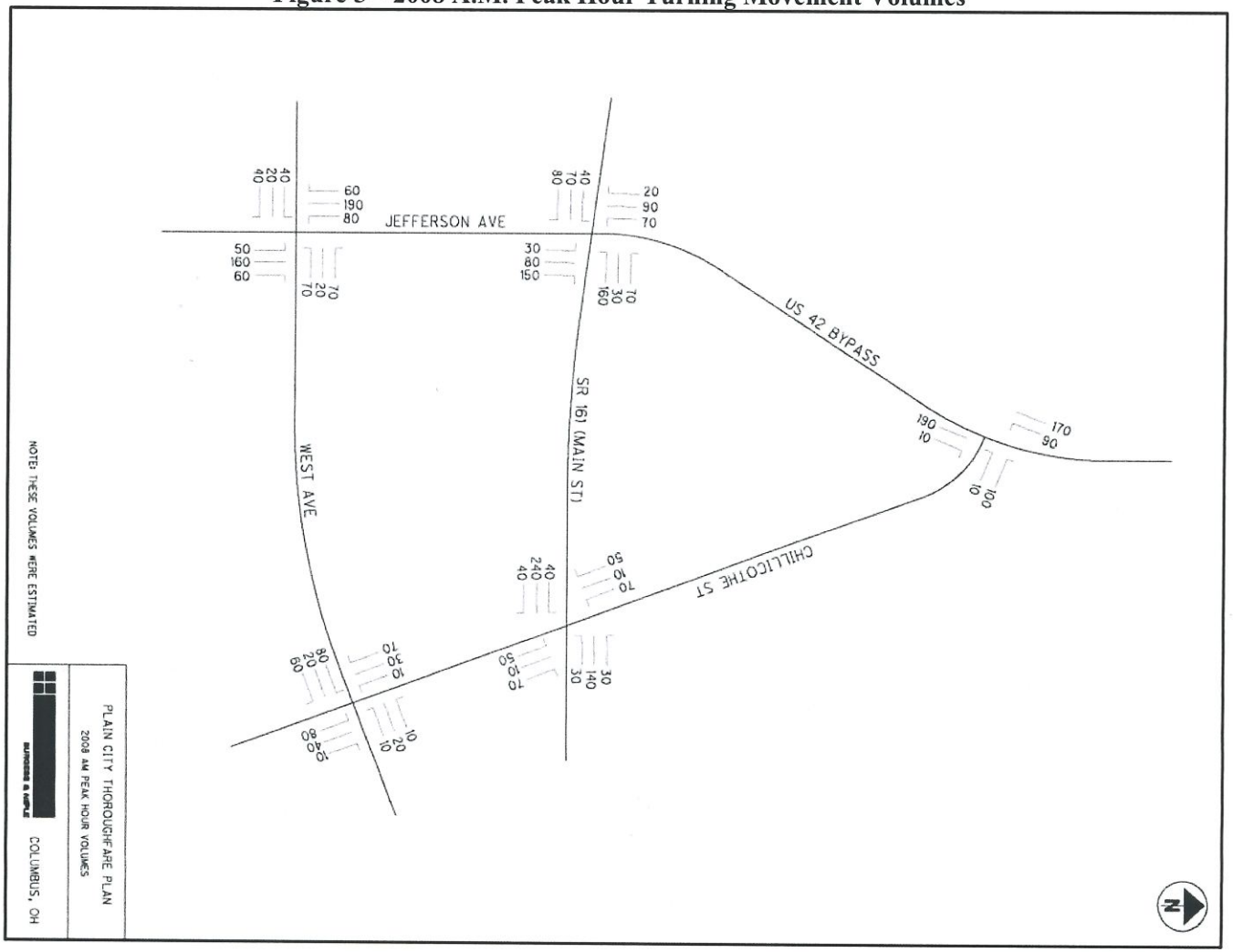


Figure 6 – 2008 P.M. Peak Hour Turning Movement Volumes

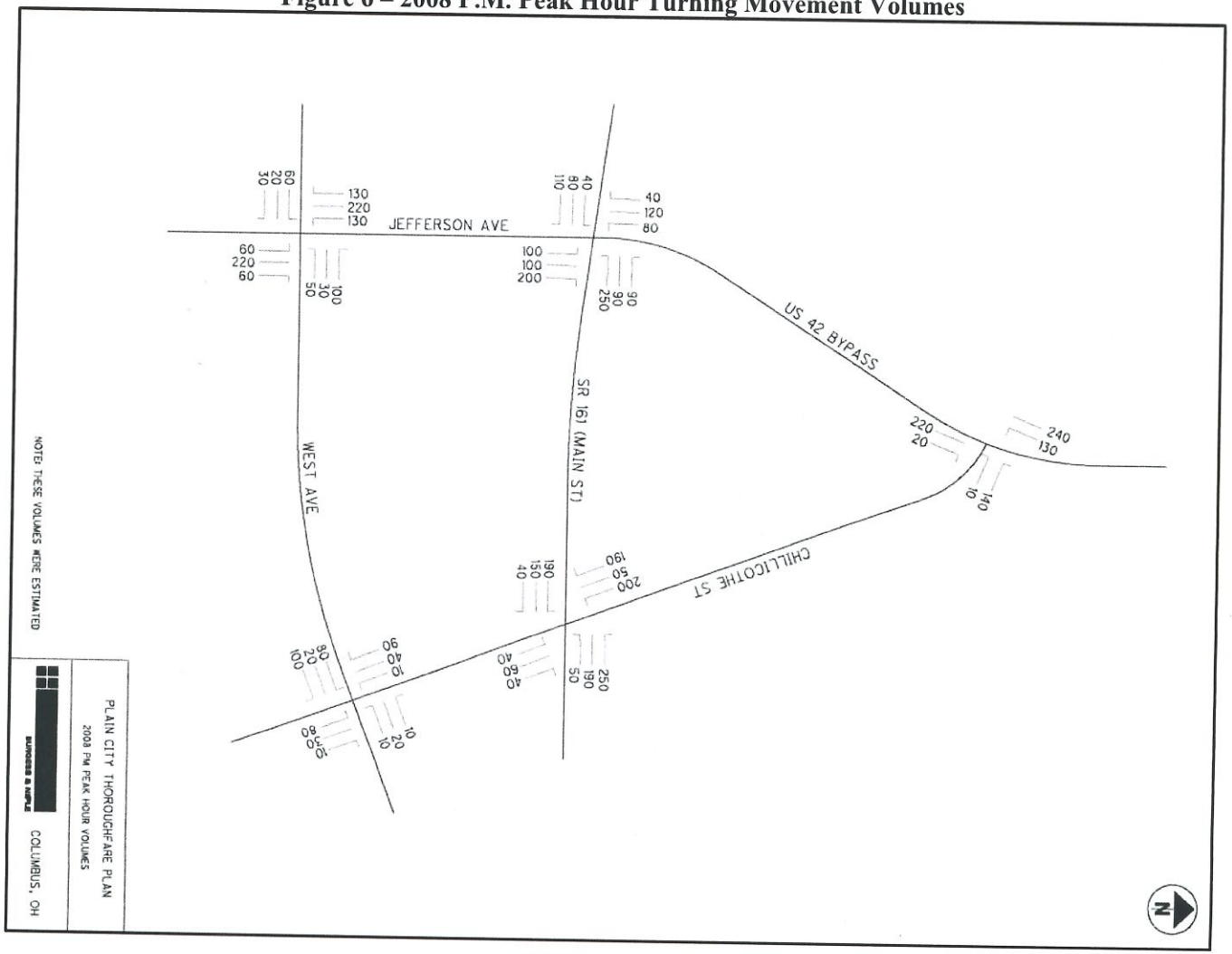
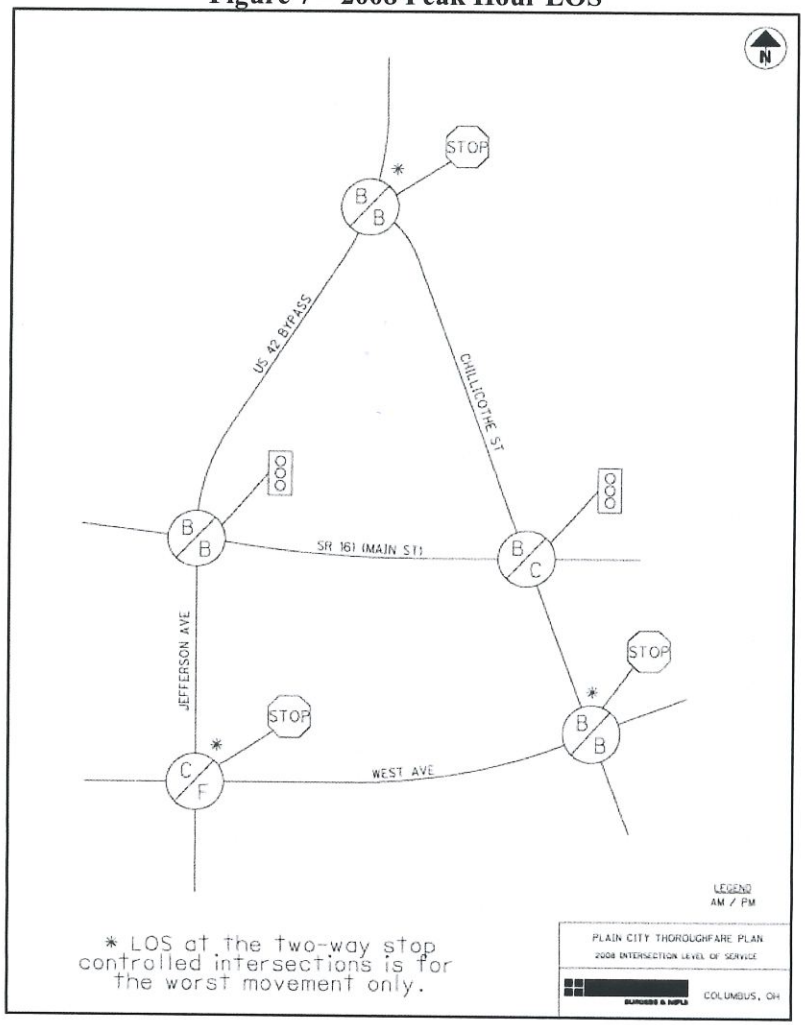


Figure 7 – 2008 Peak Hour LOS



An analysis of the 2008 data, shown in Figure 7, indicates that the key intersections function at an acceptable LOS except for the intersection of U.S. 42 (Jefferson Ave.), Perry Pike, and West Ave. during the P.M. peak hour. At this intersection, the left turn from West Ave. to southbound U.S. 42 and the left turn from Perry Pike to northbound U.S. 42 both fail. This intersection is currently a two-way stop controlled intersection. During the analyzed peak hour, the length of time that it takes to make left turns from the stop sign controlled directions is the cause for LOS F at this intersection.

Future year 2030 conditions were also produced using the methods described earlier. This process uses the growth in the model that is a result of land use and roadway changes and applies it to the "real world" traffic data counted by the Village.

To complete a 2030 year model run, the future land use was evaluated. The initial future population, number of households, and employment data were taken from the TDM. This information was then modified to better reflect the Plain City Community Plan and the addition of the U.S. 42 Bypass. For a typical model analysis, only through movement capacity improvements are input. This model is incapable if evaluating signal timing changes, additional turn lanes, or minor widenings that do not add capacity. As there are no capacity improvements currently funded for the Village, there were no additional roadway improvements assumed within Village limits. The larger model area incorporates the region's transportation and community plans. Most notably, growth in Union County, City of Dublin, City of Hilliard, and Franklin County produce the primary impact on the Village. Roadway improvements would include new interchanges and widening along U.S. 33 and I-270 and numerous improvements and extensions to surface streets in the area. Using the NCHRP Report 265

methodology and the 2030 TDM results, projected peak hour turning movements were calculated as shown in Figures 8 and 9. As with the 2008 analysis, year 2030 data was evaluated using the SYNCHRO software program. The calculated LOS can be found in Figure 10. A comparison of the roadway volumes in Tables 4 and 5 illustrates the roads with the most vehicle growth.

Using the projected 2030 data, several additional intersections will show an unacceptable LOS with the additional volumes. In each case, the stop controlled left turn movement is the cause of the failing or unacceptable LOS. This affects the U.S. 42 (Jefferson Ave.), Perry Pike, and West Ave. intersection, the N Chillicothe St. and U.S. 42 Bypass intersection, and the Chillicothe St. and West Ave. intersection during both peak hours.

Figure 8 – Projected 2030 A.M. Peak Hour Turning Movement Volumes

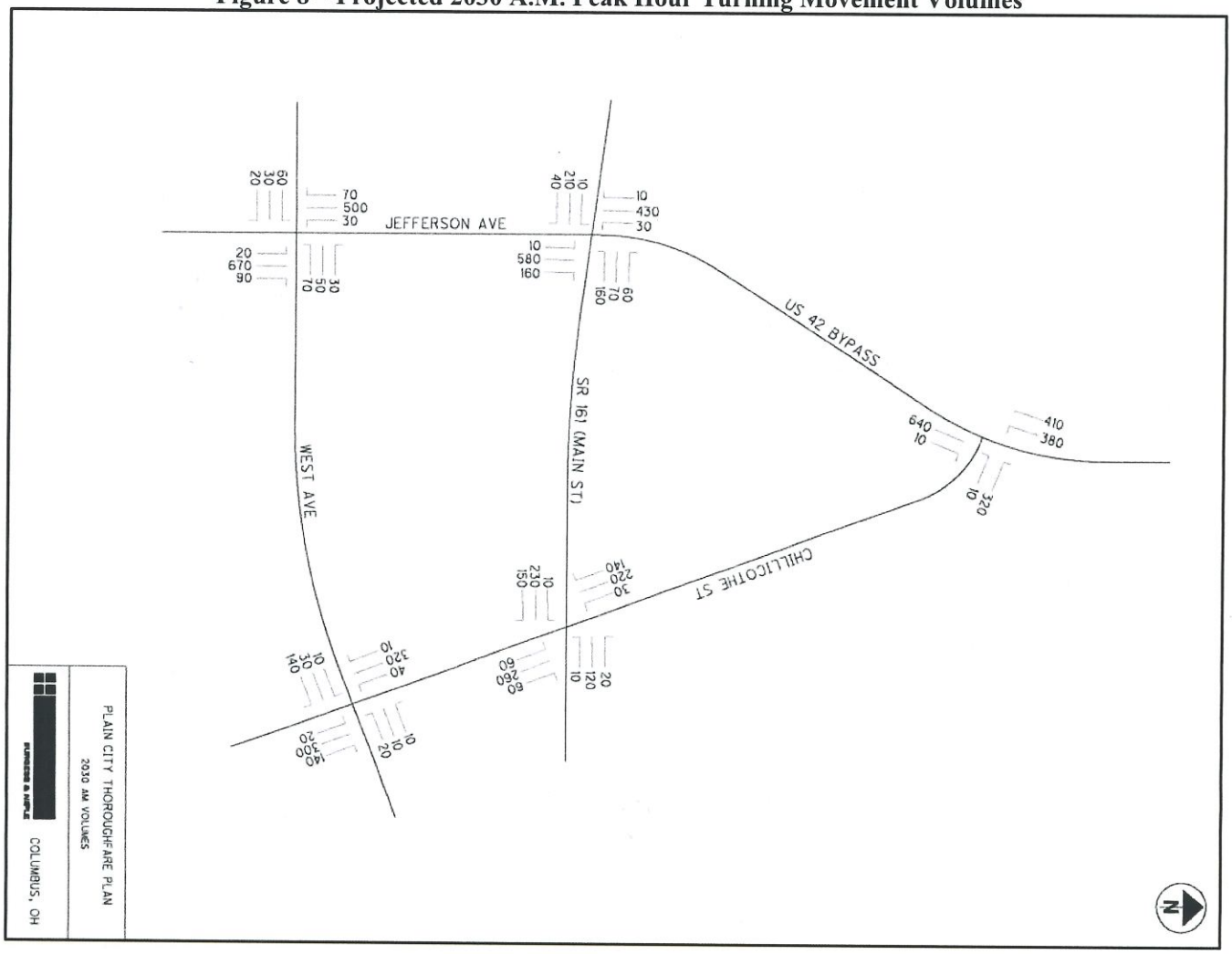


Figure 9 – Projected 2030 P.M. Peak Hour Turning Movement Volumes

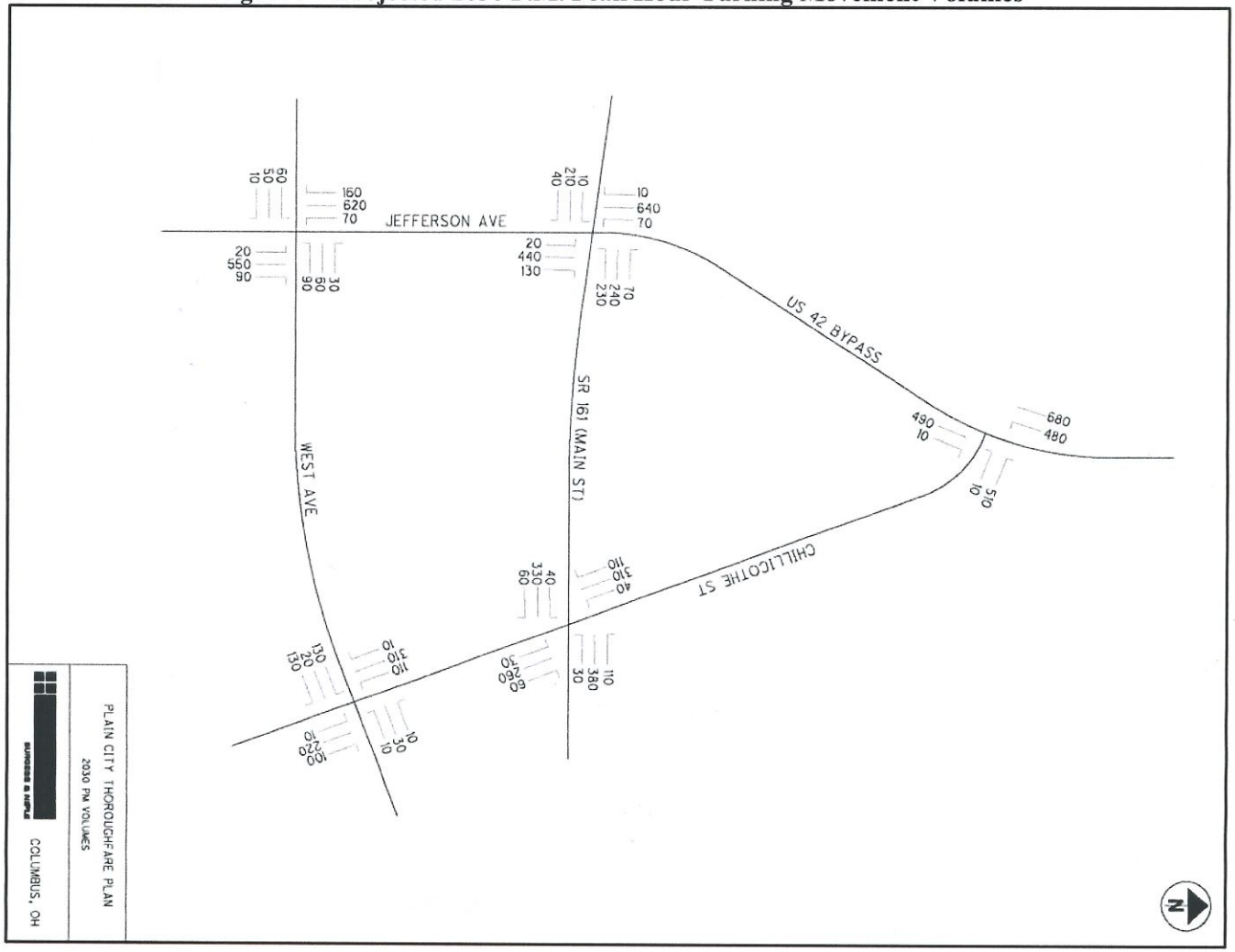


Figure 10 – Projected 2030 Peak Hour LOS

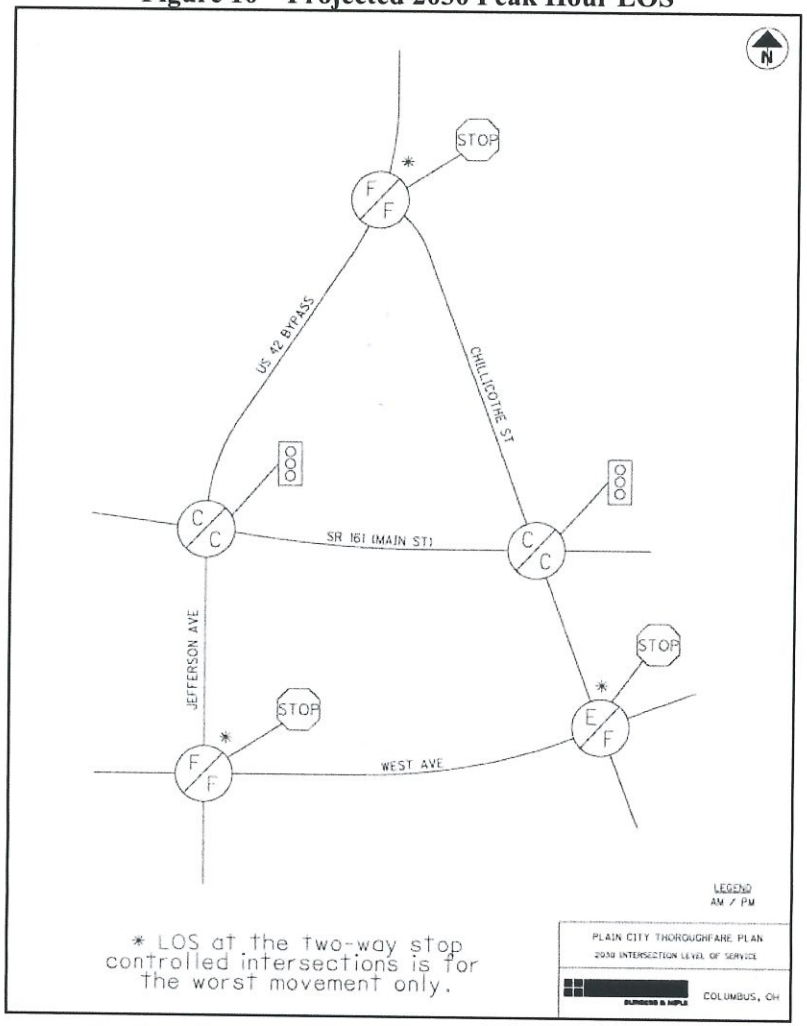


Table 4 – A.M. Peak Hour Roadway Volume Comparison

	Intersection Leg	2008 Two-Way Volume	Projected 2030 Two-Way Volume	Percent Growth
U.S. 42 Bypass at N. Chillicothe Street	North	550	1750	318%
	South	370	1120	303%
	East	210	820	390%
	West	N/A	N/A	N/A
U.S. 42 at SR 161	North	370	1120	303%
	South	600	1360	227%
	East	560	710	127%
	West	270	350	130%
U.S. 42 at West Ave./Perry Pike	North	600	1360	227%
	South	570	1370	240%
	East	330	220	67%
	West	230	250	109%
Chillicothe St. at SR 161	North	210	650	310%
	South	240	690	288%
	East	580	470	81%
	West	560	710	127%
Chillicothe St. at West Ave./Perry Pike	North	240	690	288%
	South	230	940	409%
	East	80	250	313%
	West	330	220	67%

*N/A – intersection leg does not exist.

Table 4 shows the three-fold increase in traffic on all approaches at the U.S. 42 Bypass and Chillicothe Street intersection. Large increases of 200 percent and higher are shown along the U.S. 42 Bypass at the SR 161 and West Avenue intersections as well. The Chillicothe Street north-south approaches at the SR 161/Main Street and West Avenue intersections also showed pronounced increases of 200 percent and even 409 percent at West Avenue on the south leg shows more use of the North-South routes in 2030. There is a modest reduction in traffic along SR 161/Main Street and along West Avenue in the future A.M. peak hour compared with today.

The same North-South trend is also shown in the P.M. current and future comparison in Table 5. The 2030 two-way volume on the north and south legs of the U.S. 42 at Chillicothe Street intersection is nearly 3 times as high as it is today with 296 percent and 264 percent increases, respectively. There are modest increases on the east and west legs and some reductions as well. Overall, the increase in North-South traffic reflects the anticipated future growth in the U.S. 42 and U.S. 33 corridors in and near the Village of Plain City.

Table 5 – P.M. Peak Hour Roadway Volume Comparison

	Intersection Leg	2008 Two-Way Volume	Projected 2030 Two-Way Volume	Percent Growth
U.S. 42 Bypass at N. Chillicothe Street	North	730	2160	296%
	South	470	1240	264%
	East	940	870	93%
	West	N/A	N/A	N/A
U.S. 42 at SR 161	North	470	1240	264%
	South	860	1490	173%
	East	800	950	119%
	West	460	530	115%
U.S. 42 at West Ave./Perry Pike	North	860	1490	173%
	South	640	1380	216%
	East	390	330	85%
	West	330	360	109%
Chillicothe St. at SR 161	North	940	870	93%
	South	260	790	304%
	East	880	950	108%
	West	800	950	119%
Chillicothe St. at West Ave./Perry Pike	North	260	790	304%
	South	270	780	289%
	East	160	280	175%
	West	390	330	85%

*N/A – intersection leg does not exist.

V. Recommended Thoroughfare Plan

The recommended Thoroughfare Plan is shown in Figure 11 on the following page. A roadway's functional classification was initially determined using the City of Dublin's TDM and the Village of Plain City Comprehensive Plan.

Functional classification is a roadway hierarchy that describes the roadway's priority function in providing transportation within and through Plain City and access to adjacent land. In the transportation system, arterials are roads that primarily move traffic within the Village and to other areas. Therefore, ensuring that arterials are able to move traffic is of great importance. Some classifications were modified in the model based on the observed characteristics of the roadway as shown in Figure 11. Posted speeds for arterials in and around Plain City are typically 50 or 55 m.p.h. Please refer to Figure 3 to determine where the speed limit differs. For arterials, providing direct access to adjacent land is less of a priority.

Collector roads move traffic and provide access to adjacent land. Speeds are typically lower on collectors than arterials given the balance needed in addressing throughput and access. In Plain City, the posted speed on most collectors is 35 m.p.h. or less. Travel speeds are higher on rural collectors outside of the Village limits than collectors within the Village limits.

Lastly, providing direct access to adjacent lands is the primary function for Local roads. Speeds are less than 35 m.p.h. for local roads compared with the other two levels of functional classification.

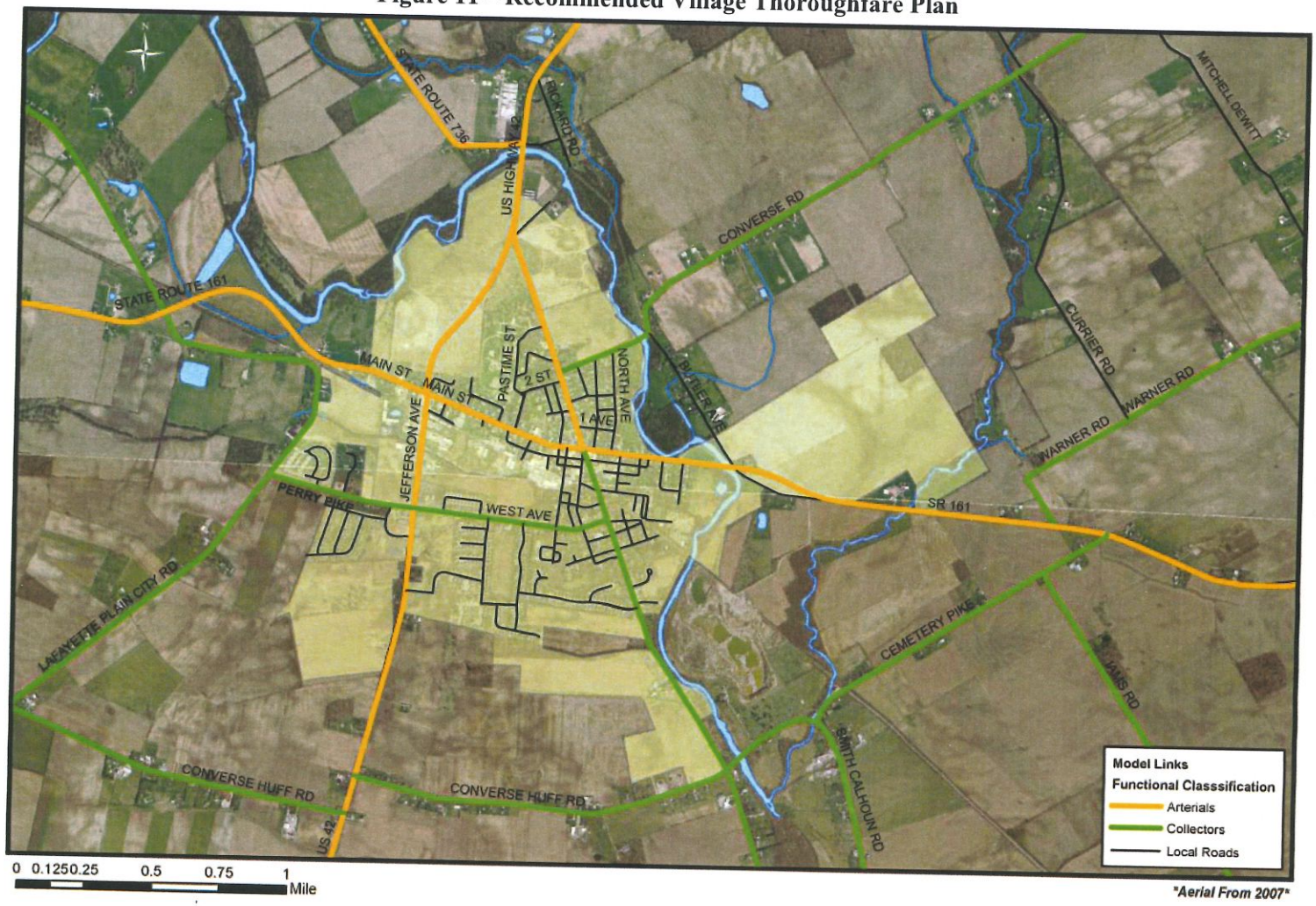
It is useful to keep in mind the functional classification in zoning and development matters. Rather than allowing a direct curb cut along an arterial, it is more strategic to incorporate an internal roadway system in a large tract of land that is adjacent to an arterial. This minimizes the number of driveways/roads intersecting the arterial and preserves the arterial's primary function. Preserving the functional integrity of each of the classifications is critical to acceptable operation of the Village's future transportation system.

As noted in the existing and future conditions section, the left turns from the stop controlled directions of the U.S. 42/West Ave./Perry Pike intersection fail in the 2008 existing year P.M. peak hour. By 2030, there are failing movements at the intersections of U.S. 42 Bypass at N Chillicothe St., U.S. 42 at West Ave./Perry Pike, and Chillicothe St. at West Ave.

In an effort to mitigate these potential areas of congestion, the three 2030 intersections with failing movements were analyzed with the same vehicle volumes but using varying traffic control measures. First, the two-way stop control intersections were replaced with traffic signals. No additional turn bays were added. The resulting LOS from this analysis are shown in Figure 12. At all three intersections the failing movements are improved to an acceptable LOS and an acceptable overall intersection LOS is achieved.

Next, the same three failing intersections were also analyzed using a single lane modern roundabout in place of the two-way stop control.

Figure 11 – Recommended Village Thoroughfare Plan



There is added benefit in a roundabout versus a signal. As can be seen in Figure 13, the roundabouts produce identical LOS results as the signals in the evaluation except at the U.S. 42 Bypass and N. Chillicothe St. intersection. In fact, the LOS for the intersection of U.S. 42 Bypass and N. Chillicothe St. actually functions slightly better as a modern roundabout.

Figure 12 – Projected 2030 Peak Hour LOS with Additional Signals

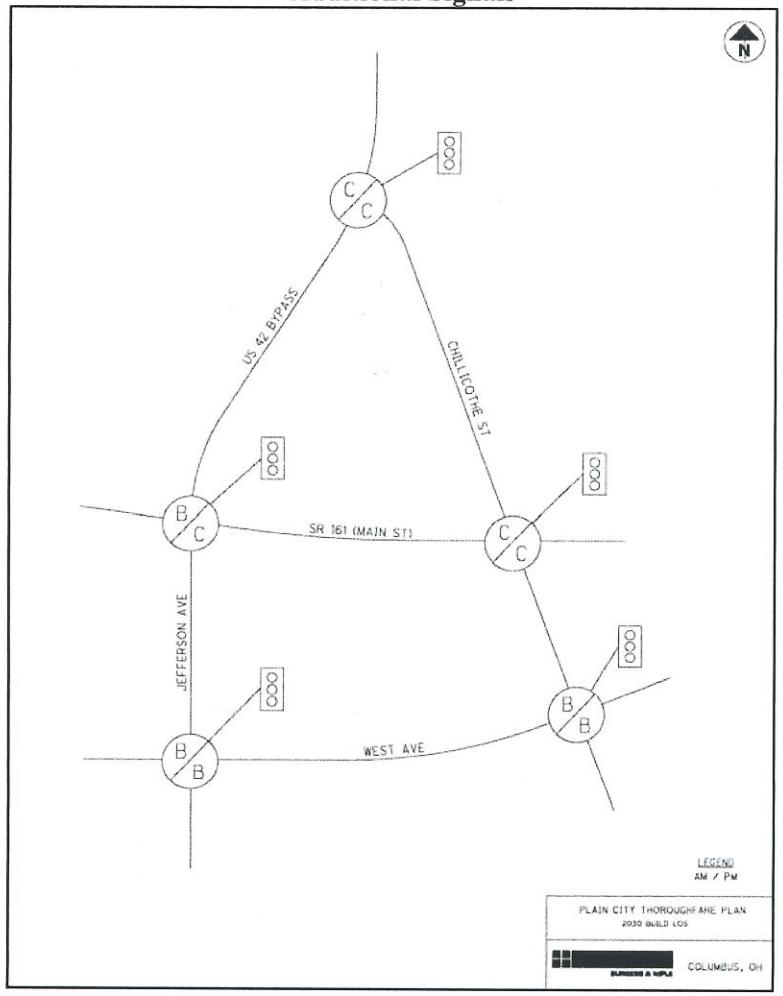
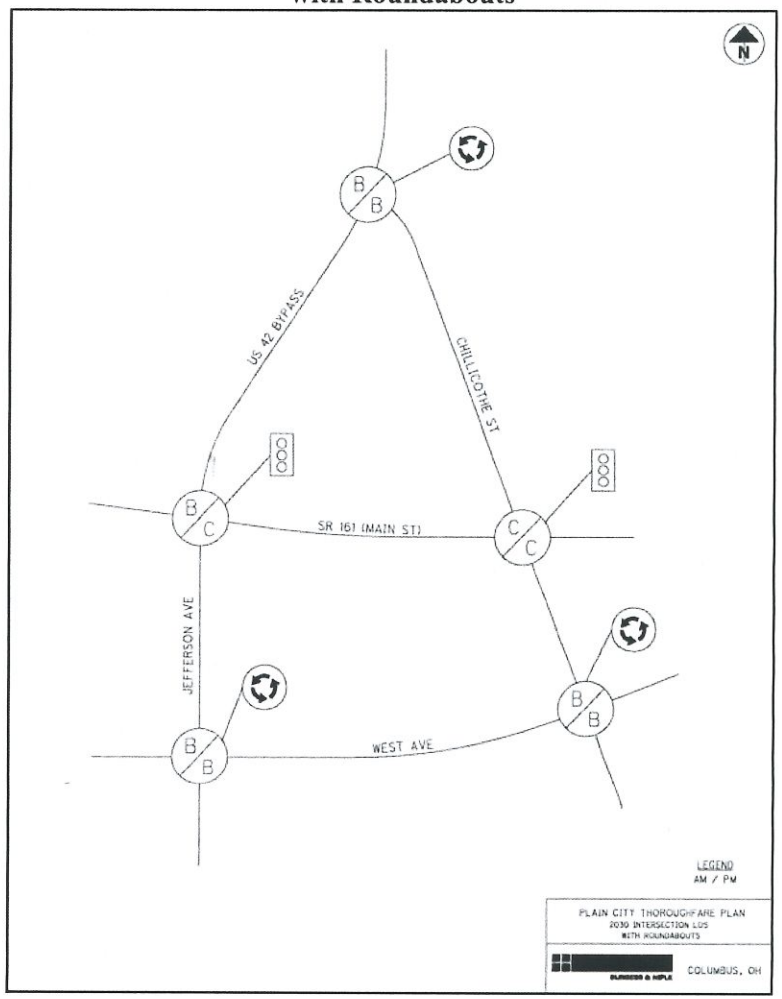


Figure 13 – Projected 2030 Peak Hour LOS with Roundabouts



Capital Improvement Program

Cost and Benefit: Signals and Modern Roundabouts

For thoroughfare planning, traffic signals generally cost $150,000 per signal including equipment and installation. In addition, there are annual fixed costs of electrification of the signal and periodic maintenance.

The total equipment cost for 3 traffic signals would be $450,000 in current year (2009) dollars.

The cost for single lane modern roundabouts tends to be $1M each. Due to the traffic calming and aesthetic benefits of roundabouts, these are viewed as progressive solutions with many benefits. In addition to slowing traffic, roundabouts also result in lower crash severity for some crash types because crashes would occur at slower speeds.

The total cost for installation of 3 modern roundabouts would be $3M in current year (2009) dollars.

Based on recent study information, a roundabout configuration is usually much safer. This is because the roundabout has fewer conflict points. There is also a reduction in the severity of crashes when comparing a roundabout to a signal. Additional benefits include less delay, more aesthetic opportunities, reduced noise, reduced emissions, and lower operating costs. They can also serve as a traffic calming measure since they have the appropriate geometric features to ensure slow entering and circulating speeds. Roundabouts do have some limitations. Typically, they require more right-of-way than a signalized intersection. For the intersections in Plain City, the space requirement may be unavailable and therefore make a roundabout an unacceptable solution.

Funding Sources

Traffic signals typically have to go through additional analysis to determine if the traffic condition warrants the added expense of signals. To date, there is no warrant analyses required for roundabouts. So, although modern roundabouts are more expensive, there may be more funding and policy flexibilities to install them compared to signals. Signals are usually tied to federal and state safety funds which require safety studies.

Some possible local government funding sources through the State of Ohio would include:

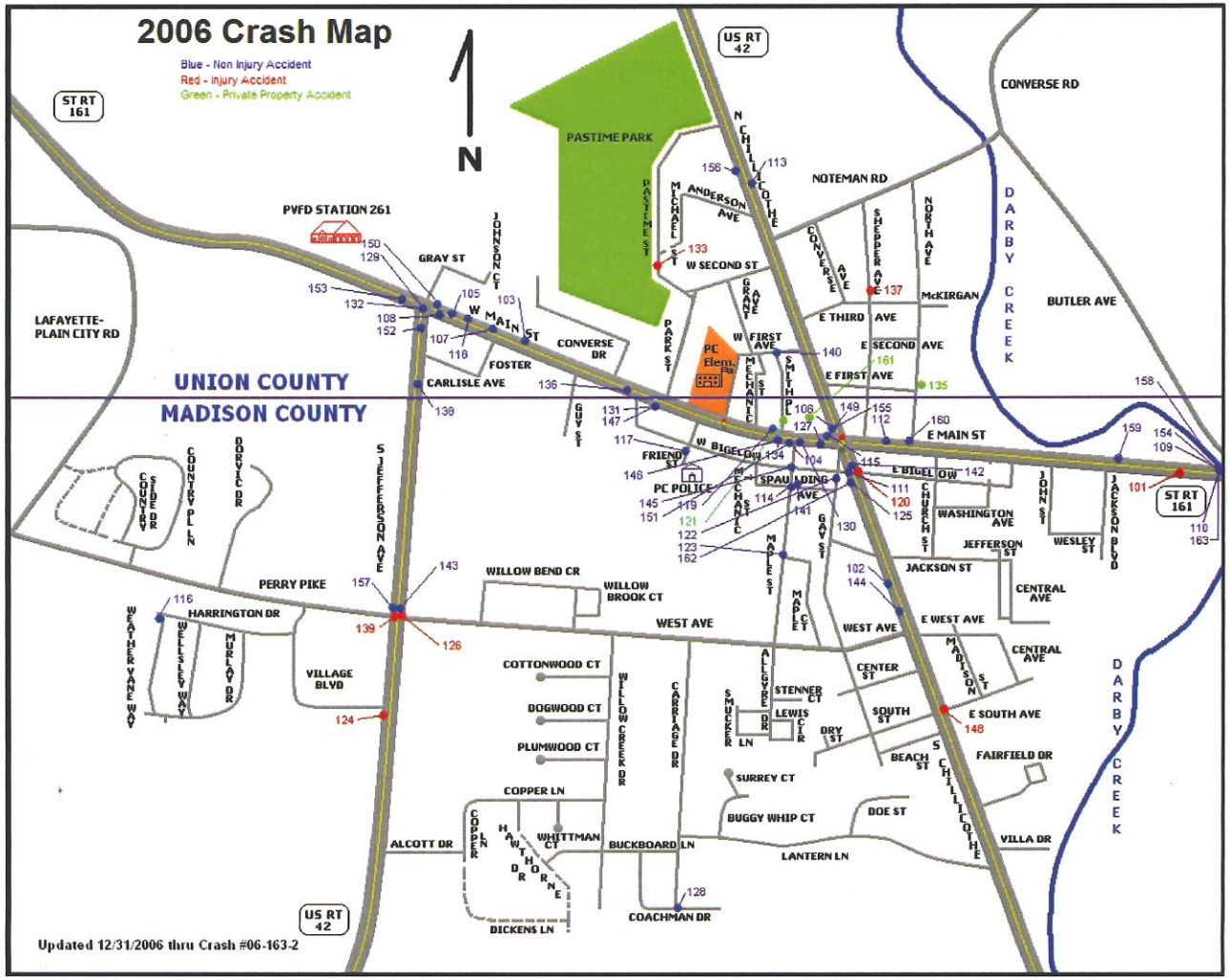
- HSP Safety Program Funds through Ohio Department of Transportation
- Ohio Public Works Commission SCIP/LTIP Funding
- State Infrastructure Bank (loan)
- Madison/Union County
- Local bonds
- Other Programs and Sources

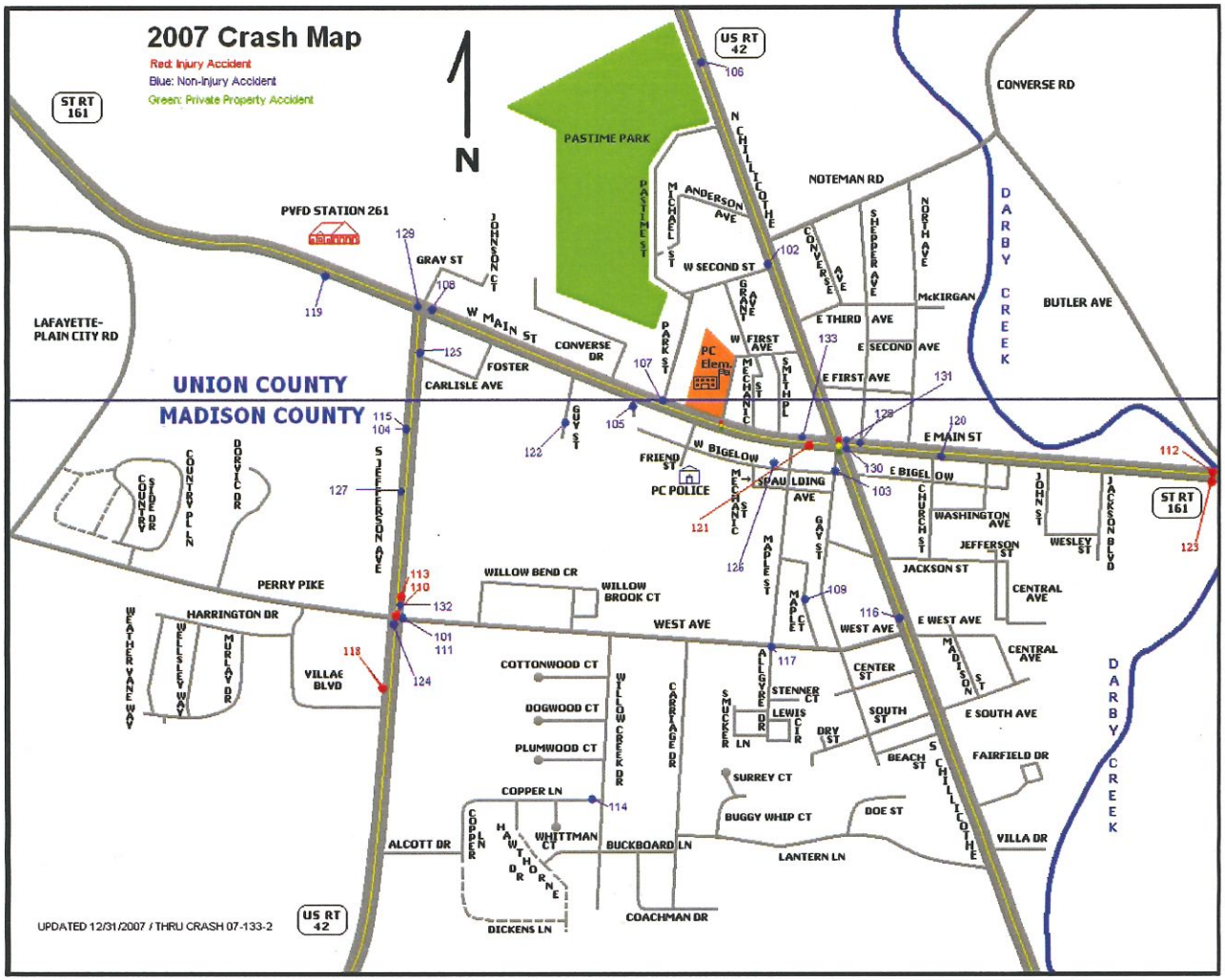
Project Phasing

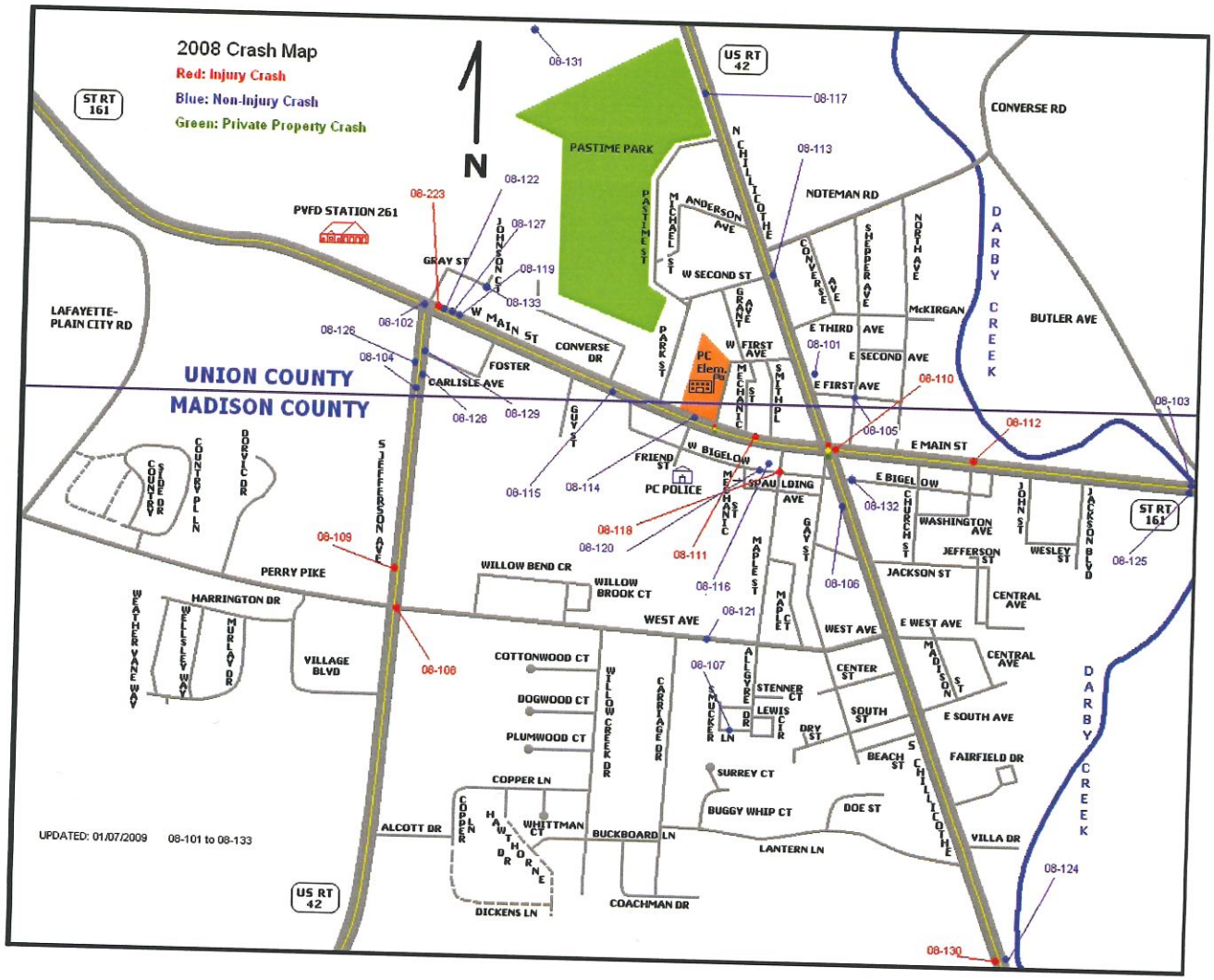
The intersection of U.S. 42 and West Avenue/Perry Pike functions currently at LOS F. It is recommended that this intersection be improved first to benefit the community. Because this intersection is in a commercial and residential area, an intersection improvement that slows traffic on U.S. 42 is beneficial to reducing crashes at this location and allow improved traffic flow for vehicles coming from the side street (West Avenue).

The remaining intersections will reach LOS F in the future as traffic volume and development increases. After the U.S. 42 and West Ave. intersection, the next intersection to improve should be West Avenue and South Chillicothe Street. The remaining intersection of U.S. 42 Bypass and Chillicothe Street can be deferred and reassessed again in the future to determine when the improved intersection is required.

Appendix


2006 Crash Map
Blue - Non Injury Accident
Red - Injury Accident
Green - Private Property Accident
N
US RT 42
ST RT 161
PASTIME PARK
CONVERSE RD
NOTEMAN RD
PVFD STATION 261
GRAY ST
W SECOND ST
E SECOND AVE
E THIRD AVE
E FIRST AVE
McKIRGAN
BUTLER AVE
DARBY CREEK
LAFAYETTE-PLAIN CITY RD
W MAIN ST
CONVERSE DR
FOSTER
CARLISLE AVE
UNION COUNTY
MADISON COUNTY
PC Elem.
PC POLICE
E MAIN ST
W BIGELOW
E BIGELOW
SPAULDING AVE
FRIEND ST
JEFFERSON AVE
PERRY PIKE
WILLOW BEND CR
WILLOW BROOK CT
WEST AVE
E WEST AVE
JACKSON ST
CENTRAL AVE
WASHINGTON AVE
JEFFERSON ST
WESLEY ST
JACKSON BLVD
HARRINGTON DR
VILLAGE BLVD
COTTONWOOD CT
DOGWOOD CT
PLUMWOOD CT
COPPER LN
ALCOTT DR
WHITTMAN CT
BUCKBOARD LN
LANTERN LN
BUGGY WHIP CT
SURREY CT
DOE ST
VILLA DR
COACHMAN DR
DICKENS LN
FAIRFIELD DR
CENTER ST
SOUTH ST
E SOUTH AVE
BEACH ST
Updated 12/31/2006 thru Crash #06-163-2


2007 Crash Map
Red: Injury Accident
Blue: Non-Injury Accident
Green: Private Property Accident
N
ST RT 161
US RT 42
PASTIME PARK
PVFD STATION 261
GRAY ST
JOHNSON CT
W MAIN ST
CONVERSE DR
FOSTER
CARLISLE AVE
LAFAYETTE-PLAIN CITY RD
UNION COUNTY
MADISON COUNTY
PARK ST
PC Elem
PC POLICE
FRIEND ST
W BIGELOW
E BIGELOW
E MAIN ST
SPAULDING AVE
MECHANIC ST
MAPLE ST
GAY ST
SMITH PL
W FIRST AVE
E FIRST AVE
E SECOND AVE
W SECOND ST
GRANT AVE
ANDERSON AVE
MILDRED ST
N CHILLICOTHE
CONVERSE AVE
SHEPPER AVE
NORTH AVE
McKIRGAN
NOTEMAN RD
CONVERSE RD
BUTLER AVE
DARBY CREEK
JACKSON ST
JEFFERSON ST
WASHINGTON AVE
CHURCH ST
JOHN ST
WESLEY ST
JACKSON BLVD
CENTRAL AVE
E WEST AVE
WEST AVE
CENTER ST
MADISON ST
E SOUTH AVE
SOUTH ST
DRY ST
BEACH ST
S CHILLICOTHE
FAIRFIELD DR
VILLA DR
LANTERN LN
DOE ST
BUGGY WHIP CT
SURREY CT
SMUCKER LN
ALLGYRE DR
LEWIS CIR
STENNER CT
CARRIAGE DR
WILLOW CREEK DR
BUCKBOARD LN
COACHMAN DR
WHITTMAN CT
COPPER LN
HAWTHORNE DR
DICKENS LN
ALCOTT DR
PLUMWOOD CT
DOGWOOD CT
COTTONWOOD CT
VILLAGE BLVD
MURRAY DR
WHEATLEY WAY
HARRINGTON DR
PERRY PIKE
WILLOW BROOK CT
WILLOW BEND CR
S ELLERSON AVE
DOUGLAS DR
COUNTRY PLN
COUNTRY SIDE DR
UPDATED 12/31/2007 / THRU CRASH 07-133-2


2008 Crash Map
Red: Injury Crash
Blue: Non-Injury Crash
Green: Private Property Crash
N
ST RT 161
US RT 42
PASTIME PARK
PVFD STATION 261
LAFAYETTE-PLAIN CITY RD
UNION COUNTY
MADISON COUNTY
W MAIN ST
E MAIN ST
CONVERSE DR
FOSTER
CARLISLE AVE
GRAY ST
JOHNSON CT
PARK ST
PASTIME ST
GUY ST
SMITH PL
MECHANIC ST
PC Elem.
PC POLICE
FRIEND ST
W BIGELOW
E BIGELOW
STAULDING AVE
GAY ST
MAPLE ST
MAPLE CT
CHURCH ST
WASHINGTON AVE
JEFFERSON ST
JACKSON ST
WESLEY ST
JOHN ST
JACKSON BLVD
CENTRAL AVE
WEST AVE
E WEST AVE
CENTER ST
MADISON ST
SOUTH ST
E SOUTH AVE
BEACH ST
DRY ST
S CHILLICOTHE
FAIRFIELD DR
VILLA DR
LANTERN LN
DOE ST
BUGGY WHIP CT
SURREY CT
STENNER CT
ALGYRE DR
LEWIS CIR
SUCKER LN
CARRIAGE DR
WILLOW CREEK DR
COTTONWOOD CT
DOGWOOD CT
PLUMWOOD CT
COPPER LN
WHITTMAN CT
BUCKBOARD LN
COACHMAN DR
DICKENS LN
HAWTHORNE DR
ALCOTT DR
WILLOW BEND CR
WILLOW BROOK CT
PERRY PIKE
HARRINGTON DR
VILLAGE BLVD
WEATHERVANE WAY
WELLSLEY WAY
MURRAY DR
SHERIDAN AVE
COUNTRY PLN
COUNTRY SIDE DR
DORVIC DR
NOTEMAN RD
CONVERSE RD
BUTLER AVE
McKIRGAN
E THIRD AVE
E SECOND AVE
E FIRST AVE
W FIRST AVE
W SECOND ST
ANDERSON AVE
MICHAEL ST
GRANT AVE
CONVERSE AVE
SHEPPER AVE
NORTH AVE
N CHILLICOTHE
DARBY CREEK
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UPDATED: 01/07/2009
08-101 to 08-133