Route 30, Unity Township
Land Use Initiative

Final Report

June 28, 2001

Prepared for:
Southwestern Pennsylvania Commission
Regional Enterprise Tower
425 Sixth Avenue, Suite 2500
Pittsburgh, Pa 15219

Prepared by:
URS Corporation
1370 Washington Pike Suite 203
Bridgeville, Pa 15017

in association with:
McCormick, Taylor and Associates
Seven Parkway Center
Suite 201
Pittsburgh, PA 15220
Route 30, Unity Township
Land Use Initiative

Final Report

TABLE OF CONTENTS

INTRODUCTION ........................................................................................................................................ 1
SPC EARLY OPTIONS STUDY .................................................................................................................. 1
THIS INITIATIVE ...................................................................................................................................... 2

PROJECT GOALS ..................................................................................................................................... 3

STUDY APPROACH ................................................................................................................................. 3

TASK 1: CORRIDOR INVENTORY (EXISTING CONDITIONS) ................................................................. 3
TASK 2: FUTURE OF CORRIDOR (FUTURE BASELINE CONDITIONS WITHOUT LAND USE INCENTIVES) ...... 4
TASK 3: SHAPING THE FUTURE (CORRIDOR VISION) .......................................................................... 4
TASK 4: THE PLANNING TOOLS (RECOMMENDATIONS) ................................................................. 4

ROUTE 30 CORRIDOR ............................................................................................................................ 4

LAND USE .............................................................................................................................................. 4
POPULATION / EMPLOYMENT PROJECTIONS .................................................................................. 7
TRANSPORTATION ............................................................................................................................... 8
Commuting Patterns ............................................................................................................................. 8
Access along Route 30 .......................................................................................................................... 9
Congestion .......................................................................................................................................... 11
Accident History .................................................................................................................................. 11

CONCLUSIONS ....................................................................................................................................... 11

PLANNING TOOLS (RECOMMENDATIONS) .................................................................................... 12

RECOMMENDATION #1 COORDINATION WITH PENNDOT ........................................................ 12
Recommendation 1A: Concurrent Review of Highway Occupancy Permits (HOP) ............................ 12
Recommendation 1B: Context Sensitive Design Applications with Future PennDOT Projects ....... 12

RECOMMENDATION #2 TRAFFIC SIGNAL IMPROVEMENTS ...................................................... 14
Recommendation 2A: Interconnection of Signals ............................................................................. 14
Recommendation 2B: Coordination of Future Signals ..................................................................... 14
Recommendation 2C: Evaluation of traffic signal timing (cycle length) once every five (5) years .... 14
Recommendation 2D: Replacement of Current Traffic Signals with LED Signals........................... 14

RECOMMENDATION #3 ACCESS MANAGEMENT ORDINANCES .................................................... 15
Recommendation 3A: Overlay Zone along Route 30 ....................................................................... 15
Recommendation 3B: Driveway Standards ....................................................................................... 17
Recommendation 3C: Access between Developments...................................................................... 17
Recommendation 3D: Access inside Developments ........................................................................... 17

APPENDIX ............................................................................................................................................. 18

DRAFT ACCESS MANAGEMENT ORDINANCE ............................................................................. 18
PUBLIC MEETING SURVEY AND RESPONSES ............................................................................... 34
LIST OF TABLES

TABLE 1: UNITY TOWNSHIP ZONING DISTRICTS ................................................................. 5
TABLE 2: UNITY TOWNSHIP HOUSEHOLD, POPULATION, AND EMPLOYMENT PROJECTIONS 7
TABLE 3: WESTMORELAND COUNTY HOUSEHOLD, POPULATION, AND EMPLOYMENT PROJECTIONS ........................................................................................................ 7
TABLE 4: NINE-COUNTY SPC REGION HOUSEHOLD, POPULATION, AND EMPLOYMENT PROJECTIONS ........................................................................................................ 7

LIST OF FIGURES

FIGURE 1: ZONING MAP ........................................................................................................... 6
FIGURE 2: UNITY TOWNSHIP HISTORICAL AND PROJECTED POPULATION ....................... 8
FIGURE 3: WHERE UNITY TOWNSHIP RESIDENTS WORK .................................................. 9
FIGURE 4: ACCESS POINTS ALONG ROUTE 30 .................................................................... 10
FIGURE 5: DRAFT OVERLAY ZONE MAP ................................................................................ 16
INTRODUCTION
Unity Township is a 67 square mile, Second Class Township located in Westmoreland County, PA. The 1990 Census indicates that the township has a population of 20,109. Housing and commercial development has consistently grown over recent years. According to township officers, approximately 170 building permits were issued in the past year, where roughly 100 were for new residential units.

Current land usage in the Township is predominately commercial, agricultural and open-space. Residential growth is occurring throughout the township, with the most growth occurring in the western area. Most commercial activity is located along Route 30. Unity instituted zoning in 1991.

Transportation facilities and modes in the county include roadway, aviation and transit. The primary roadway for the township is Route 30. Route 30 bisects Unity in an East-West configuration. Traffic counts taken by SPC in 1996 estimate the average daily traffic at 37,310 near the intersection of Route 30 and SR 981. Other primary routes include SR 981 and SR 982. Unity Township is also home of the Westmoreland County Airport, recently named the Arnold Palmer Regional Airport. This airport is the 5th largest in the Commonwealth. In addition to air transportation, Westmoreland County Transit Authority also serves the area. The primary transit routes in the Township utilize a park-n-ride lot at the Airport and the Route 30 corridor.

SPC Early Options Study
The Southwestern Planning Commission (SPC) conducted an Early Options Analysis of the Route 30 Corridor as part of their Unified Planning Work Program in 1999-2000. The objectives of this analysis was to identify the issues relating to land use and transportation in this corridor and define the scope of future projects relating to these issues. Key stakeholders in this study included Unity Township officials, Pennsylvania Department of Transportation (PENNDOT) District 12-0 personnel and Westmoreland County Planning Department, to name a few. Below is a compilation of the primary issues and concerns that were identified in the study:

Land Use - General
Residents and officials in the township are concerned about the growing developmental pressure along the Route 30 corridor. This includes large development projects (for example, the proposed Walmart), general expansion from the Greensburg area and residential development east of the airport.

Southwestern Pennsylvania Commission
Route 30 Unity Township Land Use Initiative
Final Report
 Route 30, Unity Township
Land Use Initiative

Final Report

INTRODUCTION
Unity Township is a 67 square mile, Second Class Township located in Westmoreland County, PA. The 1990 Census indicates that the township has a population of 20,109. Housing and commercial development has consistently grown over recent years. According to township officers, approximately 170 building permits were issued in the past year, where roughly 100 were for new residential units.

Current land usage in the Township is predominately commercial, agricultural and open-space. Residential growth is occurring throughout the township, with the most growth occurring in the western area. Most commercial activity is located along Route 30. Unity instituted zoning in 1991.

Transportation facilities and modes in the county include roadway, aviation and transit. The primary roadway for the township is Route 30. Route 30 bisects Unity in an East-West configuration. Traffic counts taken by SPC in 1996 estimate the average daily traffic at 37,310 near the intersection of Route 30 and SR 981. Other primary routes include SR 981 and SR 982. Unity Township is also home of the Westmoreland County Airport, recently named the Arnold Palmer Regional Airport. This airport is the 5th largest in the Commonwealth. In addition to air transportation, Westmoreland County Transit Authority also serves the area. The primary transit routes in the Township utilize a park-n-ride lot at the Airport and the Route 30 corridor.

SPC Early Options Study
The Southwestern Planning Commission (SPC) conducted an Early Options Analysis of the Route 30 Corridor as part of their Unified Planning Work Program in 1999-2000. The objectives of this analysis was to identify the issues relating to land use and transportation in this corridor and define the scope of future projects relating to these issues. Key stakeholders in this study included Unity Township officials, Pennsylvania Department of Transportation (PENNDOT) District 12-0 personnel and Westmoreland County Planning Department, to name a few. Below is a compilation of the primary issues and concerns that were identified in the study:

Land Use - General
Residents and officials in the township are concerned about the growing developmental pressure along the Route 30 corridor. This includes large development projects (for example, the proposed Walmart), general expansion from the Greensburg area and residential development east of the airport. The
township desires ways to manage this growth so that the pleasant quality of life in the township remains.

The aesthetic nature of the corridor is important. The township desires buffer areas between the commercial and residential areas in the corridor. Signing, pedestrian amenities and general landscaping along the corridor is also a concern.

Unity Township’s zoning ordinances are considered vague in some areas, which has led to the goals of the community not being met. Officials also feel they have not used planning tools to their fullest potential.

**Land Use - Aviation**
The implication of the Airport in relation to the surrounding land use needs to be constantly considered. The main land use issues involve the current and future runway protection zones and the noise overlay zones. (Hazardous wildlife attractants are not considered an issue at this time.)

**Land Use - Roadway**
The land use decisions along the Route 30 corridor has direct implications on the future congestion and safety on Route 30 and other primary roadways.

PENNDOT has little authority over direct land use access to its facilities. With the growing developmental pressures along the corridor, Route 30’s congestion and safety issues will increase unless managed.

**Transportation - Roadway**
Several existing capacity and safety issues exist in the corridor. These include:

- There are currently no incentives for developments to consider common driveways and access roads (access management tools) into their plans;
- Lack of bicycle/pedestrian linkages with St. Vincent College and between residential and commercial areas.
- There are several problem intersections in the corridor. These include:
  - Capacity issues at the Route 30/981 intersection;
  - Safety concerns on access roads to the airport – especially the 4-way stop at Manito;
  - Access is difficult from Mission Street to SR 981 Southbound. This is especially difficult for school buses. The school district would prefer a signal be installed at the intersection of Theater Street and Route 30;
  - Turning traffic from Route 30 near Mt. Royal Plaza;
  - Safety concerns at the Route 30/SR 217 intersection;

**This Initiative**
With the Early Options Study, SPC solicited URS Corporation (and its subconsultant, McCormick Taylor Associates) to continue the work initiated. This initiative’s purpose
was to devise the implementation tools recommended by the Early Options Study. This was to be completed while proactively working with the already established Advisory Committee.

PROJECT GOALS
The goals of the initiative were stated early and reiterated throughout the process. The primary goal statement was:

“To provide Unity Township with the proper tools to effectively manage development and preserve the transportation capacity of the Route 30 corridor.”

A secondary goal of the initiative was to provide tools that not only would be effective, but also had a strong chance of being easily implemented in the short term. One reason for this approach was that PENNDOT was in the process of reviewing major projects in the area (Laurel Valley Transportation Project and the Route 30/ SR 981 intersection). Concentrating on these projects would duplicate efforts. A second reason was to use the results of this initiative as a demonstration to other areas in the Commonwealth of strategies that can be implemented quickly and with little controversy and funding.

STUDY APPROACH
To achieve the primary and secondary goals listed above, the study team adopted the following strategy:

1. Build upon existing information – do not duplicate.
2. Do not generate “generic” tools - tailor development tools to Unity Township.
3. Work closely with the project stakeholders.
4. Concentrate on the tools and the implementation of the tools.

The initiative was broken down into four tasks. These tasks were the following:

- Task 1: Corridor Inventory (Existing Conditions)
- Task 2: Future of Corridor (Future Baseline Conditions without Land Use Incentives)
- Task 3: Shaping the Future (Corridor Vision)
- Task 4: The Planning Tools (Recommendations)

Below is a brief description of each of these tasks. At the beginning and end of each milestone, the Advisory Committee was involved. This involvement included soliciting ideas / opinions, identifying recourses and refining recommendations.

**Task 1: Corridor Inventory (Existing Conditions)**
This task was comprised of collecting and inventorying existing information on the Route 30 corridor. This includes information from SPC, Unity Township, adjacent townships,
Westmoreland County, the Westmoreland County Airport, Westmoreland County Transit Authority, Latrobe School District, PENNDOT District 12-0 and members of the Study Advisory Committee. This task also included collecting field information to enhance the existing Early Options Study and GIS information.

**Task 2: Future of Corridor (Future Baseline Conditions without Land Use Incentives)**

This task involved developing both the existing and baseline information on the Route 30 corridor and analysis of that information. The major emphasis was on the following:

- Unity Township’s Population and Employment Forecasts;
- Analyzing the current trend in development activity;
- Performing Geographic Information Systems (GIS) constraint analysis; and
- Developing and analyzing traffic forecasts along the corridor.

**Task 3: Shaping the Future (Corridor Vision)**

For Task 3, the study team identified and developed the land use tools. This involved sharing the analysis of Task 2 and identifying the main issues and concerns of the analysis with the Advisory Committee. Sample tools were then developed and discussed with the Advisory Committee. The recommendations were then revised and refined to meet the requirements of the township. A Public Informational Meeting was then held in Unity Township. The purpose of the meeting was to educate the participants on the implementation tools and solicit comments. A survey was conducted with the participants to identify the overall acceptance of the recommendations.

**Task 4: The Planning Tools (Recommendations)**

Based on the results of Task 3 the final recommendations were developed, and this report was developed.

**ROUTE 30 CORRIDOR**

To understand why the recommendations of this report were made, the reader must understand how the Route 30 Corridor has developed and where the trends indicate it is going. The following section gives a summarization of the pertinent issues in this corridor.

**Land Use**

As stated in the introduction, Unity Township is a 67 square mile, Second Class Township located in Westmoreland County, PA. It is geographically located 8 miles east of Greensburg (county seat). The Route 30 directly connects Unity Township with Hempfield (to the west) and Derry Township (to the east). Latrobe Borough is directly north of Route 30 along the SR 981 and 982 corridors.

Current land usage in the township is predominately commercial, agricultural and open-space. Residential growth is occurring throughout the township, with the most growth occurring in the western area. Most commercial activity is located along Route 30.
instituted zoning in 1991. **FIGURE 1** on the following page illustrates the current zoning in Unity Township. **TABLE 1** below indexes the zoning districts.

### TABLE 1: UNITY TOWNSHIP ZONING DISTRICTS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Primary Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Conservation</td>
</tr>
<tr>
<td>A</td>
<td>Agricultural</td>
</tr>
<tr>
<td>R-1</td>
<td>Suburban Residential</td>
</tr>
<tr>
<td>R-2</td>
<td>Neighborhood Residential</td>
</tr>
<tr>
<td>R-3</td>
<td>Village Residential</td>
</tr>
<tr>
<td>R-4</td>
<td>Apartment Residential</td>
</tr>
<tr>
<td>I</td>
<td>Institutional</td>
</tr>
<tr>
<td>B-1</td>
<td>Rural Commercial</td>
</tr>
<tr>
<td>B-2</td>
<td>Community Commercial</td>
</tr>
<tr>
<td>B-3</td>
<td>Office Commercial</td>
</tr>
<tr>
<td>M-1</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>I-AP</td>
<td>Institutional – Airpark</td>
</tr>
</tbody>
</table>

Aerial photography from 1994 and field views during the study were used to determine the current state of development along the corridor. A business inventory packet was generated for the advisory committee’s use. This inventory included approximately 200 businesses. *Using this information, it was determined that about 85% of the land along the Route 30 corridor is available for development.* (It should be noted that for this calculation, land usage within a one-mile width of Route 30 was considered. Although some land is active farmland, it was considered vacant if the area was not currently zoned agricultural.)
FIGURE 1: ZONING MAP
**Population / Employment Projections**

Population and Employment Projections were obtained from SPC’s Year 2025 Long Range Forecast (adopted July 31, 2000). This forecast estimates population, household and employment on a municipal level for the Years 1997, 2002, 2010, 2020 and 2025. **TABLES 2, 3 and 4** illustrate these projections for Unity Township, Westmoreland County and the nine-county SPC area, respectively.

**TABLE 2: UNITY TOWNSHIP HOUSEHOLD, POPULATION, AND EMPLOYMENT PROJECTIONS**

<table>
<thead>
<tr>
<th>Category</th>
<th>1997</th>
<th>2025</th>
<th>2025-1997</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>7,491</td>
<td>9,581</td>
<td>2,090</td>
<td>28%</td>
</tr>
<tr>
<td>Population</td>
<td>21,169</td>
<td>27,725</td>
<td>6,556</td>
<td>31%</td>
</tr>
<tr>
<td>Employment</td>
<td>8,921</td>
<td>11,521</td>
<td>2,600</td>
<td>29%</td>
</tr>
</tbody>
</table>

**TABLE 3: WESTMORELAND COUNTY HOUSEHOLD, POPULATION, AND EMPLOYMENT PROJECTIONS**

<table>
<thead>
<tr>
<th>Category</th>
<th>1997</th>
<th>2025</th>
<th>2025-1997</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>147,418</td>
<td>188,016</td>
<td>40,598</td>
<td>28%</td>
</tr>
<tr>
<td>Population</td>
<td>374,686</td>
<td>451,161</td>
<td>76,475</td>
<td>20%</td>
</tr>
<tr>
<td>Employment</td>
<td>166,162</td>
<td>184,009</td>
<td>17,847</td>
<td>11%</td>
</tr>
</tbody>
</table>

**TABLE 4: NINE-COUNTY SPC REGION HOUSEHOLD, POPULATION, AND EMPLOYMENT PROJECTIONS**

<table>
<thead>
<tr>
<th>Category</th>
<th>1997</th>
<th>2025</th>
<th>2025-1997</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>1,016,830</td>
<td>1,243,317</td>
<td>226,487</td>
<td>22%</td>
</tr>
<tr>
<td>Population</td>
<td>2,565,957</td>
<td>2,993,583</td>
<td>427,626</td>
<td>17%</td>
</tr>
<tr>
<td>Employment</td>
<td>1,366,365</td>
<td>1,603,918</td>
<td>237,553</td>
<td>17%</td>
</tr>
</tbody>
</table>

SPC projections utilize various socioeconomic data and trends to model the population, households and employment levels. The regional forecast is the product of a national econometric forecasting model created by Regional Economic Models Incorporated, and adjustments were made by SPC to reflect proposed large economic development and transportation projects in the SPC Long Range Plan.

Unity Township has in the past, and is expected to continue to do so, grown faster than the rest of Westmoreland County. **FIGURE 2** illustrates the historical and projected population growth of the township.
FIGURE 2: UNITY TOWNSHIP HISTORICAL AND PROJECTED POPULATION

![Population Graph]

Source: U.S. Census and SPC 2025 Long Range Forecast.

**Transportation**
Transportation facilities and modes in the county include roadway, aviation and transit. The primary roadway for the township is Route 30. Route 30 bisects Unity in an East-West configuration. The roadway is a four-lane arterial with recent addition of a median barrier along most of its length in the Township. Previous to the barrier between SR 981 and Hempfield Township, the median area was not restricted.

Other primary routes include SR 981 and SR 982. Unity Township is also home of the Westmoreland County Airport, recently named the Arnold Palmer Regional Airport. This airport is the 5th largest in the Commonwealth. The current access point into the Airport is SR 981. Westmoreland County Transit Authority also serves the area. The primary transit routes in the Township utilize a park-n-ride lot at the Airport and the Route 30 corridor.

**Commuting Patterns**
A majority of the Unity Township residents work in adjacent communities. According the U.S. Census 1990 Journey to Work data, over 56% of the Unity’s residents work in either Latrobe (35%) or Greensburg (21%). FIGURE 3 below gives the complete breakdown of work locations.
FIGURE 3: WHERE UNITY TOWNSHIP RESIDENTS WORK
1990 Census

One particular observation can be made from this data. Roadways connecting Unity with these municipalities can be considered major commuter pathways for the township. This would include the Route 30 corridor, along with SR 981 and SR 982.

Access along Route 30
A key component relating to both congestion and safety is access. Access is defined as the ability to enter or leave a public street from or at an adjacent driveway or another public street. Currently, Route 30 in Unity Township has 71 access points. Of these access points, 57 are driveways and 14 are intersecting roads. Six access points are signalized intersections. The locations of these access points are shown in FIGURE 4.
FIGURE 4: ACCESS POINTS ALONG ROUTE 30
(S.R. 2015 to Wingate Inn)
Congestion
Current congestion is generally located at the signalized intersections on Route 30 between SR 981 and SR 982. This area contains three signalized intersections and is currently the most developed in terms of commercial area. The most recent long-term traffic study in the area was conducted by PENNDOT for the Laurel Valley Transportation Project. This Study incorporated the Business and Population Forecasts of SPC and added additional developments that had not been incorporated into the SPC Forecasts. The results of these forecasts indicate traffic increasing by 35% in the next 20 years (1.78 per year linear growth). The highest traffic growth point is the Route 30 / SR 981 intersection area.

A queuing analysis was performed on the Route 30 / 981 intersection using these future traffic projections. The result of the analysis showed that queue lengths of over 400 ft on all four approaches will occur in the future PM peak hour. Two of the approaches (Route 30 Eastbound and SR 981 Northbound) will have queue lengths of over 700 ft.

Accident History
PENNDOT District 12-0 provided five year (1995-2000) accident history records for Route 30 in Unity Township. A summary of those records revealed the following:

- 82 accidents / year
- 61% involve injuries
- 1.8 fatalities / year
- 30% involve tailgating or failing to heed stopped vehicle
- 70% rear end and angle collisions

It should be noted that this information reflects accident trends prior to the recent betterment program along the corridor. More recent accident records may reveal a drop in the above trends.

Conclusions
After reviewing the above parameters of the Route 30 corridor, several conclusions were developed and supported by the Advisory Committee. Below are the key conclusions:

- Historical and current data, along with future projections, indicate that Unity Township is in a long term growth trend in terms of population, households, and employment;
- The Route 30 corridor is the primary, non-residential development corridor in the Township;
- Because of this growth, along with neighboring growth, the Route 30 corridor will continue to experience traffic congestion and traffic growth.
Planning Tools (Recommendations)
As stated earlier, a goal of the initiative was to provide tools that not only would be effective, but also had a strong chance of being easily implemented in the short term. With that in mind, the study team developed the recommendations in this section.

**RECOMMENDATION #1 COORDINATION WITH PENNDOT**

**Recommendation 1A: Concurrent Review of Highway Occupancy Permits (HOP)**
It is recommended that Unity Township request PENNDOT to review any HOPs pertaining to the Route 30 Corridor. This will provide early coordination during the permitting process of developments and enhance the partnership between the two entities.

To request this, a letter to the Permitting Office of PENNDOT Central Office must be sent requesting this action. The municipality will then be placed on a list of reviewer with PennDOT District 12-0. Currently, only three municipalities request this action in District 12-0.

This action is allowed under the Pennsylvania Code Title 67, Chapter 441. Access to and Occupancy of Highways by Driveways and Local Roads. Section 441.3(j) states the following:

(j) Review by municipalities, planning commissions, and zoning boards. Review by municipalities, planning commissions, and zoning boards shall comply with the following:

(1) Certain local governing bodies wish to review driveway applications within their jurisdictions.

(2) A listing of these municipalities and local agencies is available from the appropriate district office.

(3) Each application for an access driveway within one of these jurisdictions must be accompanied by evidence which indicates that the location and type of access being requested has been reviewed by that municipality or agency.

(4) The Department will consider any comments or recommendations resulting from this review prior to approving the access permit.

**Recommendation 1B: Context Sensitive Design Applications with Future PENNDOT Projects**
Context-sensitive design can be defined as melding the design process for highway and bridge projects with consideration of the community values and environmental resources of the project area. The scope of the project should be developed in the context of the environmental conditions that currently exist so that the project may be blended into
these conditions. The goal is to balance safety, mobility and transportation needs, while preserving scenic, historic, aesthetic, cultural, environmental and community values. Context-sensitive design involves a collaborative, interdisciplinary approach in which citizens are part of the design team.

Throughout the study, the issue of the aesthetic nature of the Route 30 Corridor has surfaced repeatedly. More specific, the Route 30 / SR 981 intersection has been referred to as the “gateway” to the Arnold Palmer Regional Airport, the Westmoreland Industrial Park and Kenametal.

As PENNDOT considers and programs transportation projects along this corridor, this study recommends including a context-sensitive design element in the scope of the projects. Currently, the following projects associated with the Route 30 Corridor are programmed in the 2001-2004 Transportation Improvement Program:

- Route 30 / SR 981 Intersection Improvement
- SR 1045 Relocation
RECOMMENDATION #2 TRAFFIC SIGNAL IMPROVEMENTS

Recommendation 2A: Interconnection of Signals
Interconnecting signals in a system is recommended to avoid blockage problems at intersections. The coordinatability factor determines the measure of the desirability of coordinating intersections.

Analysis was performed on the six existing signals along the Route 30 corridor in Unity Township. The following signals are recommended for interconnection:

- S.R. 981
- Mt Laurel Plaza
- Route 30 Plaza

Recommendation 2B: Coordination of Future Signals
Future installation of signals along the Route 30 corridor, between S.R. 2015 and Lentz Road, shall be analyzed to determine if interconnection with adjacent signals is warranted.

Recommendation 2C: Evaluation of traffic signal timing (cycle length) once every five (5) years.
Performing periodic optimizing of the systems’ cycle timing will decrease such factors as total signal delay, travel time delay and fuel consumption. Analysis has shown that optimizing the existing system would have the following annualized benefits:

- 20,000 hours savings in delay
- 13,000 gallons of fuel savings
- $20,000 in fuel cost savings

Recommendation 2D: Replacement of Current Traffic Signals with LED Signals
Although not within the scope and objectives of this study, our advisory committee members felt this topic was worth highlighting. LED (Light Emitting Diode) signals are now economically available. LED signals use approximately 85% less energy than regular signals. They also have estimated lives of 10 years (Typical signal bulbs last six months). The net savings in energy and maintenance costs to Unity Township is approximately $3600 per year.
RECOMMENDATION #3 ACCESS MANAGEMENT ORDINANCES
The core recommendation to this initiative is to adopt access management policies for the corridor. The Federal Highway Administration’s official definition of access management is “the process that provides access to land development while simultaneously preserving the flow of traffic on the surrounding system in terms of safety, capacity, and speed.” In practical terms, it means managing the number of driveways that a vehicle may encounter without hampering reasonable access to a property. It also means removing slower, turning vehicles from the arterial as efficiently as possible. Access management deals with the traffic problems caused by unmanaged development before they occur.

Several before and after studies have confirmed that access management programs result in fewer accidents, greater capacities and shortened travel times.

Recommendation 3A: Overlay Zone along Route 30
Sometimes the highway corridor is designated as a unique zoning district. More often, an overlay district is placed along the corridor. The corridor district sets zoning ordinance requirements which facilitate safe travel along the corridor, through permitting compatible land uses and requiring their siting and access design to be in keeping with the character of the corridor. Examples include land use limitations and access management.

An overlay zoning district applies regulations to an area in addition to and superseding the requirements of the underlying zoning district(s). Such a district may recognize unique features, either natural or man-made, requiring special attention, or may facilitate development of a special character. Overlay zoning allows regulations to be tailored to specific conditions. Administration is the same as any zoning.

A draft overlay zone is shown in FIGURE 4 below. The zone encompasses the non-residential and non-agricultural areas along Route 30.
FIGURE 5: DRAFT OVERLAY ZONE MAP
Recommendation 3B: Driveway Standards

Driveway density (the number of driveways per block or per mile) and the design of driveways are very important considerations in access management. These roadway characteristics are basic issues in any access management plan or program.

Driveway density is important because accident rates increase dramatically as the number of driveways per mile increases along urban arterial roadways.

Why is driveway spacing important?
Motorists turn left and right into and out of driveways when permitted. Traffic turning into and out of driveways moves more slowly than through traffic. This speed difference produces conflicts that may lead to broadside and rear-end collisions between vehicles. Traffic safety research commissioned by the Minnesota Department of Transportation shows that roadways with a large number of closely spaced driveways are always less safe than similar roads where driveway access is more limited. For example, an urban route with 100 feet between driveways should experience roughly twice as many accidents as a route with similar turning and through volumes with 250 feet between drives.

Recommendation 3C: Access between Developments

Shared Driveways—When a developer proposes to establish more than one business or other non-residential development at a given location, or when a series of adjacent developments are proposed over time, municipal officials have an excellent opportunity to require shared commercial driveways. Shopping centers and mini-malls should have shared commercial driveways. However, even a shared entrance for a smaller development involving two or three businesses is beneficial and helps preserve the traffic carrying capacity of the arterial.

Recommendation 3D: Access inside Developments

Access Management inside developments can includes several areas. This includes putting limits on the number of outparcels, emergency access standards, transit access, reverse frontage requirements, shared access, and site plan review procedures. These tools help ensure safe and smooth traffic flow internal to a development, which can also ensure safe and smooth traffic flow to and from the site.
APPENDIX

Draft Access Management Ordinance
The following is a draft access management ordinance developed during this study for Unity Township’s consideration. Sections in bold italics need to be decided upon prior to the adoption process. The zoning map for the Township would also need to be revised to exhibit the Overlay Zone.

I. Intent and Purpose
The intent of this ordinance is to provide and manage access to land development, while preserving the regional flow of traffic in terms of safety, capacity, and speed. Major roadways, including highways and other arterials, serve as the primary network for moving people and goods. These transportation corridors also provide access to businesses and homes and have served as the focus for commercial and residential development. If access systems are not properly designed, these roadways will be unable to accommodate the access needs of development and retain their primary transportation function. This ordinance balances the right of reasonable access to private property, with the right of the citizens of Unity Township and the Commonwealth of Pennsylvania to safe and efficient travel.

To achieve this policy intent, state and local roadways have been categorized by function and classified for access purposes based upon their level of importance. Regulations have been applied to these roadways for the purpose of reducing traffic accidents, personal injury, and property damage attributable to poorly designed access systems, and to thereby improve the safety and operation of the roadway network. This will protect the substantial public investment in the existing transportation system and reduce the need for expensive remedial measures. These regulations also further the orderly layout and use of land, protect community character, and conserve natural resources by promoting well-designed road and access systems and discouraging the unplanned subdivision of land.

II. Applicability
This ordinance shall apply to all arterials and selected collectors within Unity Township, as identified in Table 1, and to all properties that abut these roadways. The standards of the Pennsylvania Department of Transportation shall apply to all roadways on the State Highway System.

III. Conformance with Plans, Regulations, and Statutes
This ordinance is adopted to implement [cite specific policies] of Unity Township as set forth in the Unity Township Comprehensive Plan. In addition, this ordinance conforms with [cite specific policies] of the Southwestern Pennsylvania Commission as specified in the 2025 Transportation and Development Plan for Southwestern Pennsylvania and the planning policies of the Pennsylvania Department of Transportation set forth in the Pennsylvania Statewide Long Range Transportation Plan (PennPlan). The ordinance also
conforms with the standards of the Pennsylvania Department of Transportation and policy and planning directives of the federal Transportation Equity Act of 1998.

IV. Definitions
Access – A way or means of approach to provide vehicular or pedestrian entrance or exit to a property.

Access Standards – A ranking system for roadways used to determine the appropriate degree of access management. Factors considered include functional classification, the appropriate local government’s adopted plan for the roadway, subdivision of abutting properties, and existing level of access control.

Access Connection – Any driveway, street, turnout or other means of providing for the movement of vehicles to or from the public roadway system.

Access Management – The process of providing and managing access to land development while preserving the regional flow of traffic in terms of safety, capacity, and speed.

Access Management Plan (Corridor) – A plan illustrating the design of access for lots on a highway segment or an interchange area that is developed jointly by the state, the metropolitan planning organization, and the affected jurisdiction(s).

Cartway – That area of road surface from curb line to curb line or between the edges of the paved or hard surface of the roadway, which may include travel lanes, parking lanes, and deceleration or acceleration lanes.

Connection Spacing – The distance between connections, measured from the closest edge of pavement of the first connection to the closest edge of pavement of the second connection along the edge of the traveled way.

Corner Clearance – The distance from an intersection of a public or private road to the nearest access connection, measured from the closest edge of the pavement of the intersecting road to the closest edge of the pavement of the connection along the traveled way. (see Figure 1)
Corridor Overlay Zone – Special requirements added onto existing land development requirements along designated portions of a public thoroughfare.

Cross Access – A service drive providing vehicular access between two or more contiguous sites so the driver need not enter the public street system.

Deed – A legal document conveying ownership of real property.

Easement – A grant of one or more property rights by a property owner to or for use by the public, or another person or entity.

Frontage Road – A public or private drive which generally parallels a public street between the right-of-way and the front building setback line. The frontage road provides access to private properties while separating them from the arterial street. (see also Service Roads)

Functional Area (Intersection) – That area beyond the physical intersection of two controlled access facilities that comprises decision and maneuver distance, plus any required vehicle storage length, and is protected through corner clearance standards and driveway connection spacing standards.
Functional classification – A system used to group public roadways into classes according to their purpose in moving vehicles and providing access.

Joint Access (or Shared Access) – A driveway connecting two or more contiguous sites to the public street system.

Lot – A designated parcel, tract, or area of land established by a plat or otherwise as permitted by law and to be used, developed or built upon as a unit, which is recognized as a separate legal entity for purposes of transfer of title, has frontage upon a public or private street, and complies with the dimensional requirements of this code.

Lot, Corner – Any lot having at least two (2) contiguous sides abutting upon one or more streets, provided that the interior angle at the intersection of such two sides is less than one hundred thirty-five (135) degrees.

Lot Depth – The average distance measured from the front lot line to the rear lot line.

Lot, Flag – A large lot not meeting minimum frontage requirements and where access to the public road is by a narrow, private right-of-way or driveway.

Lot, Nonconforming – A lot the area or dimension of which was lawful prior to the adoption or amendment of a zoning ordinance, but which fails to conform to the requirements of the zoning district in which it is located by reasons of such adoption or amendment.

Lot, Through (also called a double frontage lot) – A lot that fronts upon two parallel streets or that fronts upon two streets that do not intersect at the boundaries of the lot.

Lot Frontage – That portion of a lot extending along a street right-of-way line.

Lot of Record – A lot or parcel that exists as shown or described on a plat or deed in the records of the county recorder of deeds office.

Lot Width – The horizontal distance between side lot lines measured parallel to the front lot line at the minimum required front setback line.

Simple Subdivision – A subdivision of land into not more than two (2) lots where there are no roadways, drainage, or other required improvements. [Note: This may not apply to Unity Townships as many townships do not differentiate between major and minor subdivisions]

Nonconforming Access Features – Features of the access system of a property that existed prior to the date of ordinance adoption and do not conform with the requirements of this code.
Outparcel – A parcel of land abutting and external to the larger, main parcel, which is under separate ownership and has roadway frontage.

Parcel – A division of land comprised of one or more lots in contiguous ownership.

Pedestrian cross access – A walkway providing pedestrian access between two or more contiguous sites so that the pedestrian does not mingle with traffic.

Plat – The map or plan of a subdivision or land development, whether preliminary or final.

Public Road – A road under the jurisdiction of a public body that provides the principal means of access to an abutting property.

Reasonable Access – The minimum number of access connections, direct or indirect, necessary to provide safe access to and from the thoroughfare, as consistent with the purpose and intent of this code and any applicable plans and policies of Unity Township.

Right-of-Way – Land reserved, used, or to be used for a highway, street, alley, walkway, drainage facility, or other public purpose.

Service Road – A public or private street or road, auxiliary to and normally located parallel to a controlled access facility, that maintains local road continuity and provides access to parcels adjacent to the controlled access facility.

Stub-out (Stub-street) – A portion of a street or cross access drive used as an extension to an abutting property that may be developed in the future.

Subdivision – The division or redivision of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development. Provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten acres, not involving any new street or easement of access or any residential dwelling, shall be exempted.

Temporary Access – Provision of direct access to the controlled access facility until that time when adjacent properties develop, in accordance with a joint access agreement or frontage road plan.

V. Access Management Classification System and Standards
1. Roadways shall be classified by the following functional categories:
a. Local streets – streets that provide access to single family residential neighborhoods.

b. Collectors – streets that link Local Streets with the arterial system and serve residential areas primarily internal to one neighborhood.

c. Minor arterials – streets that feed the major arterial system, support moderate length trips, and serve activity centers.

d. Major arterials – streets and highways that provide service to traffic entering and exiting the city and between major activity centers within the city.

2. The classification of each roadway is defined by the Major Thoroughfare Plan of the Unity Township Comprehensive Development Plan.

3. All connections on facility segments that have been classified shall meet or exceed the minimum connection spacing requirements of that classification, as specified in Table 1.

Table 1: Minimum Connection Spacing

<table>
<thead>
<tr>
<th>Street Classification</th>
<th>Minimum Adjacent Spacing (ft)</th>
<th>Minimum Opposite Right Spacing (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Street</td>
<td>150</td>
<td>125</td>
</tr>
<tr>
<td>Collector</td>
<td>185</td>
<td>175</td>
</tr>
<tr>
<td>Minor Arterial</td>
<td>230</td>
<td>225</td>
</tr>
<tr>
<td>Major Arterial</td>
<td>275</td>
<td>300</td>
</tr>
</tbody>
</table>

4. Driveway spacing shall be measured from the closest edge of the pavement to the next closest edge of the pavement (see Definition section and Figure 1). The projected future edge of the pavement of the intersecting road shall be used in measuring corner clearance, where widening, relocation, or other improvement is indicated in an adopted local transportation plan or transportation plan of the metropolitan planning organization.

5. If the connection spacing of this code cannot be achieved, then a system of joint use driveways may be required in accordance with Section XX.

VI. Corner Clearance

1. Corner clearance for connections shall meet or exceed the minimum connection spacing requirements for that roadway.

2. New connections shall not be permitted within the functional area of an intersection or interchange as defined by the connection spacing standards of this code.

3. In addition to the required minimum lot size, all corner lots shall be of adequate size to provide for required frontyard setbacks and corner clearance on street frontage.
VII. Joint and Cross Access
1. Adjacent commercial or office properties classified as major traffic generators (i.e. shopping plazas, office parks), shall provide a cross access drive and pedestrian access to allow circulation between sites.

2. A system of joint use driveways and cross access easements shall be established wherever feasible in the Overlay Zone. The Overlay Zone shall apply to the full extent of these roads throughout Unity Township.

3. The building site shall incorporate the following:
   a. A continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management standards.
   b. A design speed of 10 mph and sufficient width to accommodate two –way travel aisles designed to accommodate automobiles, service vehicles, and loading vehicles;
   c. Stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross-access via a service drive;
   d. A unified access and circulation system plan that includes coordinated or shared parking areas is encouraged wherever feasible.

4. Shared parking areas shall be permitted a reduction in required parking spaces if peak demand periods for proposed land uses do not occur at the same time periods.

5. Pursuant to this section, property owners shall:
   a. Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;
   b. Record an agreement with the deed that remaining access rights along the thoroughfare will be dedicated to Unity Township and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;
   c. Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners.

VIII. Access Connection and Driveway Design
1. Driveway approaches must be designed and located to provide an exiting vehicle with an unobstructed view. Construction of driveways along acceleration or deceleration lanes and tapers is discouraged due to the potential for vehicular weaving conflicts.

2. Driveway width and flair shall be adequate to serve the volume of traffic and provide for rapid movement of vehicles off of the major thoroughfare, but standards shall not be so excessive as to pose safety hazards for pedestrians, bicycles, or other vehicles. *(Suggested standards appear in Figure 2 and 3).*
3. The length of driveways or “Throat Length” (see Figure 4) shall be designed in accordance with the anticipated storage length for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with on-site circulation. Throat length should be determined on a case-by-case basis, but generally varies according to the number of trips generated by the land use. Table 2 provides examples of different sized retail establishments and recommended driveway throat lengths. A traffic impact study based on peak hour demand will be conducted to determine the extent of potential queuing problems and how best to resolve them. These measures are generally acceptable for the principle access to a property and are not intended for minor driveways.
Figure 4: Minimum Throat Length

Table 2: Example throat length requirements

<table>
<thead>
<tr>
<th>Type of Retail Establishment</th>
<th>Recommended Throat Length</th>
<th>Approximate Number of Cars Per Lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small strip mall</td>
<td>75 to 95 feet</td>
<td>5</td>
</tr>
<tr>
<td>Small shopping center or large supermarket</td>
<td>200 feet</td>
<td>11</td>
</tr>
<tr>
<td>Large regional mall</td>
<td>500 feet</td>
<td>28</td>
</tr>
<tr>
<td>Major Arterial</td>
<td>275</td>
<td>300</td>
</tr>
</tbody>
</table>

IX. Requirements for Outparcels and Phased Development Plans
1. In the interest of promoting unified access and circulation systems, development sites under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall not be considered separate properties in relation to the access standards of this code. The number of connections permitted
shall be the minimum number necessary to provide reasonable access to these properties, not the maximum available for that frontage. All necessary easements, agreements, and stipulations required under Section VII shall be met. This shall also apply to phased development plans. The owner and all lessees within the affected area are responsible for compliance with the requirements of this code and both shall be cited for any violation.

2. All access to the outparcel must be internalized using the shared circulation system of the principle development or retail center. Access to outparcels shall be designed to avoid excessive movement across parking aisles and queuing across surrounding parking and driving aisles.

3. The number of outparcels shall not exceed one per ten acres of site area, with a minimum lineal frontage of 300 feet per outparcel or greater where access spacing standards for that roadway require. In such cases the right of direct access to the roadway shall be dedicated to Unity Township and recorded with the deed.

X. Emergency Access
1. In addition to minimum side, front, and rear yard setback and building spacing requirements specified in this code, all buildings and other development activities such as landscaping, shall be arranged on site so as to:
   a. Provide safe and necessary access for emergency vehicles around the complete property perimeter, and
   b. Provide necessary access to all hydrants and standpipes.

XI. Transit Access
1. In commercial or office zoning districts where transit service is available or is planned to be available within five years, provisions shall be made for adequate transit access, in the form of turn around loops or turnout bays. At a minimum, in the case of a loop or cul-de-sac, entrance curves shall have a 35 foot radius, and the internal circle shall have an inside radius of 30 feet and an outside radius of 52.5 feet. In the case of turnout bays, the curve radius shall be 35 feet, the distance from the roadside edge to the inside edge of the outside radius shall be 52.5 feet.
2. The transit cartways shall be sufficiently strengthened in accordance with accepted engineering standards to support the additional weight of transit vehicles.
3. Pedestrian access shall be provided to transit stops.

XII. Nonconforming Access Features
1. Permitted access connections in place as of [date of ordinance adoption] that do not conform with the standards herein shall be designated as nonconforming features and shall be brought into compliance with applicable standards under the following conditions:
   a. When new access connection permits are requested;
   b. Substantial enlargements or improvements;
   c. Significant change in trip generation; or
   d. As roadway improvements allow
2. If the principal activity on a property with nonconforming access features is discontinued for a consecutive period of [180 or 365] days, or discontinued for any period of time without a present intention of resuming that activity, then that property must thereafter be brought into conformity with all applicable connection spacing and design requirements, unless otherwise exempted by the permitting authority. For use that are vacant or discontinued upon the effective date of this code, the [180 or 365] day period begins on the effective date of this code.

XIII. Corridor Access Management Overlay
1. The following requirements shall apply to segments of designated thoroughfares that are planned for commercial or intensive development. All land in a parcel having a single tax code number, as of [date of adoption], and fronting on a section of roadway included in the Overlay Zone, shall be entitled one (1) driveway/connection per parcel as of right on said public thoroughfare(s). When subsequently subdivided, either as metes and bounds parcels or as a recorded plat, parcels designated herein shall provide access to all newly created lots via the permitted access connection. This may be achieved through subdivision roads, joint and cross access, service drives, and other reasonable means of ingress and egress in accordance with the requirements of this Code. The following standards shall also apply:
   a. Parcels with large frontages may be permitted additional driveways at the time of adoption of these requirements provided they are consistent with the applicable driveway spacing standards.
   b. Existing parcels with frontage less than the minimum connection spacing for that corridor may not be permitted a direct connection to the thoroughfare under this Section where the Township Supervisors determine that alternative reasonable access is available to the site. (**Note: The Township Supervisors could allow for a temporary driveway as provided in Section VII with the stipulation that joint and cross access be established as adjacent properties develop.)
   c. Additional access connections may be allowed where the property owner demonstrates that safety and efficiency of travel on the thoroughfare will be improved by providing more than one access to the site.
   d. No parking or structure other than signs shall be permitted within 35 feet of the roadway right-of-way. The 35 foot buffer shall be landscaped with plants suitable to the soil and in a manner that provides adequate sight visibility for vehicles exiting the site. Property owners shall be permitted to landscape the right-of-way, pursuant to an approved landscaping plan.
   e. Permitted connections shall be identified on a map that shall be adopted by reference and that portion of a corridor affected by these overlay requirements shall be delineated on the Unity Township zoning map.

XIV. Reverse Frontage
1. Access to double frontage lots shall be required on the street with the lower functional classification.
2. When a residential subdivision is proposed that would abut an arterial, it shall be designed to provide through lots along the arterial with access from a frontage road or interior local road. Access rights of these lots to the arterial shall be dedicated to Unity Township and recorded with the deed. A berm or buffer yard may be required at the rear of through lots to buffer residences from traffic on the arterial. The berm or buffer yard shall not be located within the public right-of-way.

XV. Lot Width-to-Depth Ratios
1. To provide for proper site design and prevent the creation of irregularly shaped parcels, the depth of any lot or parcel shall not exceed 3 times its width.

XVI. Shared Access
1. Subdivisions with frontage on the state highway system shall be designed into shared access points to and from the highway. Normally a maximum of two accesses shall be allowed regardless of the number of lots or businesses served.
2. Subdivisions on a single residential access street ending in a cul-de-sac shall not exceed 25 lots or dwelling units, and the cul-de-sac shall have a minimum cartway radius of 50 feet.

XVII. Connectivity
1. The street system of a proposed subdivision shall be designed to coordinate with existing, proposed, and planned streets outside of the subdivision as provided in this Section.
2. Wherever a proposed development abuts unplatted land or a future development phase of the same development, street stubs shall be provided as deemed necessary by Unity Township to provide access to abutting properties or to logically extend the street system into the surrounding area. All street stubs shall be provided with temporary turn-around or cul-de-sacs unless specifically exempted by Unity Township, and the restoration and extension of the street shall be the responsibility of any future developer of the abutting land.
3. Collector streets shall intersect with collector or arterial streets at safe and convenient locations.
4. Subcollector and local residential access streets shall connect with surrounding streets to permit the convenient movement of traffic between residential neighborhoods or facilitate emergency access and evacuation, but such connections shall not be permitted where the effect would be to encourage the use of such streets by substantial through traffic.

XVIII. Simple Subdivisions
1. Unity Township may approve a Simple Subdivision that conforms to the following standards:
   a. Each proposed lot must be buildable in conformance with the requirements of this Code and all other applicable regulations.
b. Each lot shall abut a public or private street for the required minimum lot frontage for the zoning district where the lots are located.

c. If any lot abuts a street right-of-way that does not conform to the design specifications of this Code, the owner may be required to dedicate one-half the right-of-way width necessary to meet minimum design requirements.

2. Further subdivision of the property shall be prohibited unless applicants submit a plat or development plan in accordance with requirements for major subdivisions in this Code.

3. Unity Township shall consider a proposed Simple Subdivision upon the submittal of the following materials:
   a. An application form provided by Unity Township;
   b. 7 copies of the proposed Simple Subdivision plat;
   c. A statement indicating whether water and/or sanitary sewer service is available to the property; and
   d. Land descriptions and acreage or square footage of the original and proposed lots and a scaled drawing showing the intended divisions shall be prepared by a professional land surveyor registered in the Commonwealth of Pennsylvania. In the event a lot contains any principal or accessory structures, a survey showing the structures on the lot shall accompany the application.

XIX. Site Plan Review Procedures

1. Applicants shall submit a preliminary site plan for review by Unity Township. At a minimum, the site plan shall show:
   a. Location of access point(s) on both sides of the road where applicable;
   b. Distances to neighboring constructed access points, median openings, traffic signals, intersections, and other transportation features on both sides of the property;
   c. Number and direction of lanes to be constructed on the driveway plus striping plans;
   d. All planned transportation feature (such as auxiliary lanes, signals, etc.);
   e. Trip generation data or appropriate traffic studies;
   f. Parking and internal circulation plans;
   g. Plat map showing property lines, right-of-way, and ownership of abutting properties; and
   h. A detailed description of any requested variance and the reason the variance is requested.

2. Subdivision and site plan review shall address the following access considerations:
   a. The road system shall be designed to meet the projected traffic demand and the road network shall consist of hierarchy of roads designed according to function.
   b. The road network shall follow the natural topography and preserve natural features of the site as much as possible. Alignments shall be planned so that grading requirements are minimized.
c. Access shall be properly placed in relation to sight distance, driveway spacing, and other related considerations, including opportunities for joint and cross access. Entry roads shall be clearly visible from the major arterials.

d. Units shall front on residential access streets rather than major roadways.

e. Automobile movement shall be provided within the site without having to use the peripheral road network.

f. The road system shall provide adequate access to buildings for residents, visitors, deliveries, emergency vehicles, and garbage collection.

g. The edges of the roadways shall be landscaped. Sidewalks shall be provided alongside the road and they shall be set back sufficiently from the road. A landscaped planting strip between the road and the sidewalk shall be provided.

h. The pedestrian path system shall link buildings with parking areas, entrances to the development, open space, and recreational and other community facilities.

3. Unity Township reserves the right to require traffic and safety analysis where safety is an issue or where significant problems already exist.

4. After (10) days from filing the application, applicants must be notified by Unity Township if any additional information is needed to complete the application.

5. Upon review of the access application, Unity Township may approve the access application, approve with conditions, or deny the application. This must be done within 60 days of receiving the complete application.

6. Any application that involves access to the State Highway System shall be reviewed by the Pennsylvania Department of Transportation for conformance with state highway occupancy permit standards. Where the applicant requires access to the State Highway System, and a zoning change, or subdivision or site plan review is also required, development review shall be coordinated with the Pennsylvania Department of Transportation as follows:

   a. An access management/site plan review committee that includes representatives of the Pennsylvania Department of Transportation and Unity Township shall review the application. The committee shall inform the developer what information will be required for access review. Information required of the applicant may vary depending upon the size and timing of the development, but shall at a minimum meet the requirements of this section.

   b. Upon review of the application, the access management review committee shall advise the [permitting department] whether to approve the access application, approve with conditions, or deny the application.

7. If the application is approved with conditions, the applicant shall resubmit the plan with the conditional changes made. The plan, with submitted changes, will be reviewed within 60 days and approved or rejected. Second applications may only be rejected if conditional changes are not made.

8. If the access permit is denied, Unity Township shall provide an itemized letter detailing why the application has been rejected.
9. Where applications are approved, approved with conditions, or rejected, any aggrieved party shall have 30 days to file an appeal in accordance with the provisions of the Pennsylvania Municipalities Planning Code (MPC).

XX. Variance Standards
1. The granting of the variation shall be in harmony with the purpose and intent of these regulations and shall not be considered until every feasible option for meeting access standards is explored.

2. Applicants for a variance from these standards must provide proof of unique or special conditions that make strict application of the provisions unfeasible. This shall include proof that:
   a. indirect or restrict access cannot be obtained;
   b. no engineering or construction solutions can be applied to mitigate the condition; and
   c. no alternative access is available from a street with a lower functional classification than the primary roadway.

3. Under no circumstances shall a variance be granted, unless not granting the variance would deny all reasonable access, endanger public health, welfare or safety, or cause an exceptional and undue hardship on the applicant. No variance shall be granted where such hardship is self-created.

4. Unity Township may reduce the connection spacing requirements established in Table 1, Section V in situations where they prove impractical, but in no case shall the permitted spacing be less than 80% of the applicable standard, except as provided in Section XX.

5. Variation from the standards established in Table 1, Section V shall be permitted at the discretion of the Township Supervisors where the effect would be to enhance the safety or operation of the roadway. Examples might include a pair of one-way driveways in lieu of a two-way driveway, or alignment of median openings with existing access connections. Applicants may be required to submit a study prepared by a registered engineer to assist Unity Township in determining whether the proposed change would exceed roadway safety or operational benefits of the prescribed standard.

6. New connection shall not be permitted within the functional area of an intersection or interchange as defined by the connection spacing standards of this code, unless:
   a. No other reasonable access to the property is available, and
   b. Unity Township determines that the connection does not create a safety or operational problem upon review of a site-specific study of the proposed connection prepared by a registered engineer and submitted by the applicant.

7. Unity Township may reduce the required separation distance of access points where they prove impractical, provided all of the following requirements are met:
   a. Joint access driveways and cross access easements are provided wherever feasible in accordance with this section.
b. The site plan incorporates a unified access and circulation system in accordance with this section.

c. The property owner shall enter a written agreement with Unity Township, recorded with the deed, that pre-existing connections on the site will be closed and eliminated after construction of each side of the joint use driveway.

8. Unity Township may modify or waive the requirements of Section VII where the characteristics or layout of abutting properties would make development of a unified or shared access and circulation system impractical.

9. Variation from the general standards for driveway length or “throath length” as established in Figure 4, Section VIII shall be permitted for good cause upon approval of Unity Township.

10. This frontage requirement established in Section IX, subparagraph 3 may be waived where access is internalized using the shared circulation system of the principle development or retail center.
Public Meeting Survey and Responses
An Open House public meeting on the Route 30 Land Use / Transportation Study was held on Tuesday May 22, 2001. The meeting was held at the Greater Latrobe Senior High School from 6:00 PM – 8:00 PM.
Below is the questionnaire form used for the Open House:

![Questionnaire form](image)

<table>
<thead>
<tr>
<th>Recommendation #1</th>
<th>Recommendation 2D: Replacement of Current Traffic Signals with LED Signals</th>
</tr>
</thead>
<tbody>
<tr>
<td>COORDINATION WITH PENNDOT</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>Recommendation 1A: Concurrent Review of Highway Occupancy Permits (HOP)</td>
<td>1</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Recommendation 1B: Context Sensitive Design Applications with Future PennDOT Projects</td>
<td>1</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>RECOMMENDATION #2 TRAFFIC SIGNAL IMPROVEMENTS</td>
<td>Recommendation 3A: Overlay Zone along Route 30</td>
</tr>
<tr>
<td>Recommendation 2A: Interconnection of Signals</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Recommendation 2B: Coordination of Future Signals</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Recommendation 2C: Evaluation of traffic signal timing (cycle length) once every five (5) years</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**General Comments:**
Please use the space below and on the back of this form to provide any comments you feel are important to address as part of this study.

(Please use back of form for additional comments)
Total of 18 people participated in the Open House. The following are the results of the questionnaire:

**QUESTIONNAIRE RESULTS**

1 = STRONGLY AGREE  5 = STRONGLY DISAGREE

**RECOMMENDATION #1-COORDINATION WITH PENNDOT**

Recommendation 1A: Concurrent Review of Highway Occupancy Permits (HOP)

AVERAGE RATING – 1.3

Recommendation 1B: Context Sensitive Design Applications with Future PennDOT Projects

AVERAGE RATING – 1.5

**RECOMMENDATION #2-TRAFFIC SIGNAL IMPROVEMENTS**

Recommendation 2A: Interconnection of Signals

AVERAGE RATING – 1.2

Recommendation 2B: Coordination of Future Signals

AVERAGE RATING – 1.1

Recommendation 2C: Evaluation of traffic signal timing (cycle length) once every five years

AVERAGE RATING – 1.2

Recommendation 2D: Replacement of Current Traffic Signals with LED Signals

AVERAGE RATING – 1.5

**RECOMMENDATION #3-ACCESS MANAGEMENT ORDINANCES**

Recommendation 3A: Overlay Zone along Route 30

AVERAGE RATING – 1.4

Recommendation 3B: Driveway Standards

AVERAGE RATING – 1.8

Recommendation 3C: Access between Developments

AVERAGE RATING – 1.5

Recommendation 3D: Access inside Developments

AVERAGE RATING – 1.5
Additional comments received through this survey instrument was as follows:

- Find ways to get the support of our citizens.
- Find ways to get more township citizens involved as working member groups.
- Find different ways to get advertise actions relating to Route 30 land use.
- How do we get more citizens interested?

- I feel it is very important that the township & DOT work together more closely on these issues. To keep our township safe & as beautiful as it is now will take work & communication between everyone in the area. The more involvement of the whole community gives us more control over what “Unity” will be like in the future.

- The Driveway Standards Recommendation is a good idea but would not want to impose a major financial difficulty on homeowners.