



Chapter 7 Transportation

The efficiency of the transportation and circulation network is an important factor in maintaining Kennett Square’s attractiveness as a place to live, work, visit, and shop. Sustaining the ability to move about and through the community by a variety of means is critical to maintaining the residents’ quality of life and the viability of businesses.

The overall goal of the Transportation Chapter is attain a balanced, multi-modal transportation network that gets people where they want to go while balancing environmental, economic, and neighborhood impacts. A balanced network is one in which each mode, or type of transportation, is able to contribute to an efficient network of services meeting varied user needs. For example, this chapter contains policies that will help walking become more viable for short trips and calming traffic to increase safety, while still preserving auto-mobility. In addition to addressing pedestrians, streets, and transit, the chapter also includes policies related to: regional collaboration, bicycling, parking, freight movements, trails, and other components of the transportation system. Taken together, these policies advance a strategy for increased transportation choices in a manner that strengthens the Borough and helps achieve a clean and sustainable environment.

This chapter describes the existing system of transportation and circulation facilities and describes recommendations to address the needs of the system.

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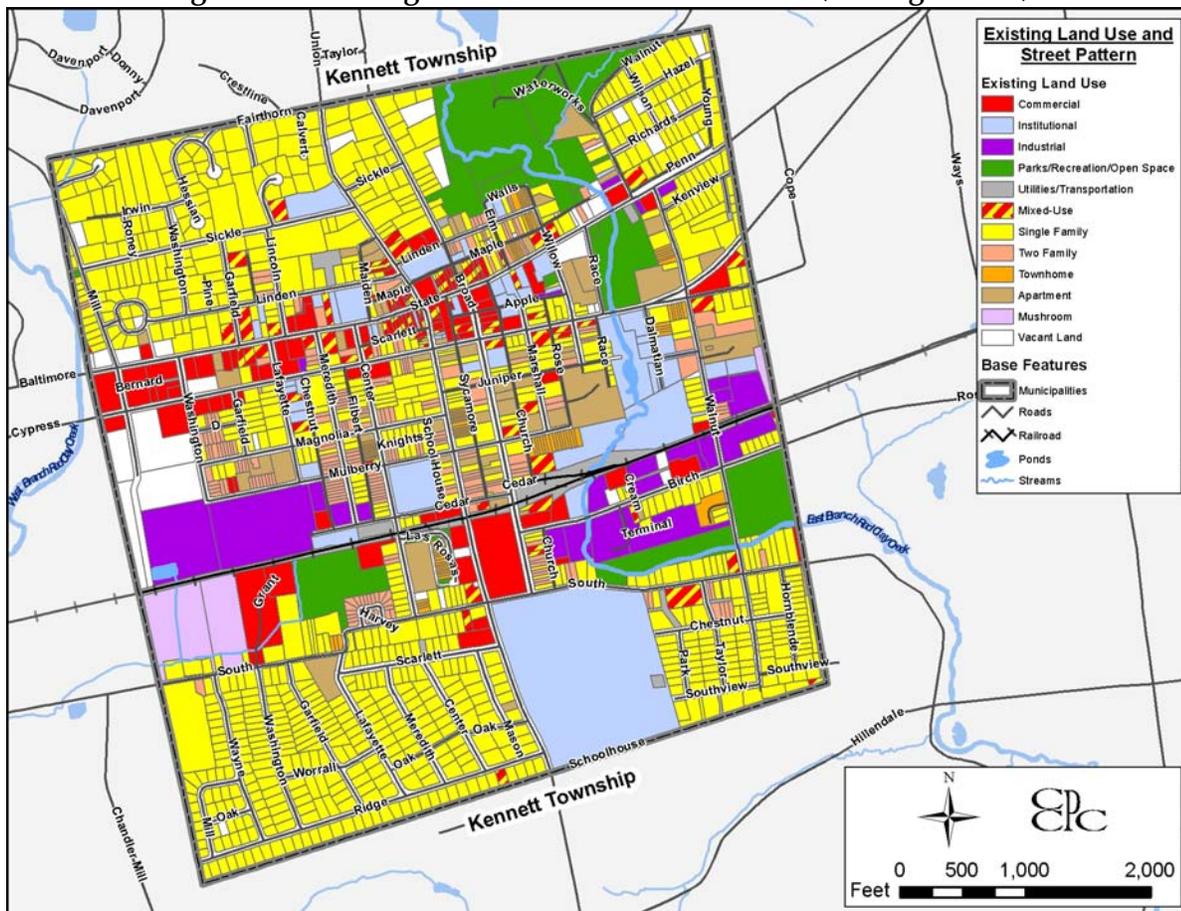
INVENTORY

The following inventory provides an overview of existing conditions within the Borough and an analysis of data, policies, and ordinances relevant to transportation issues.

LAND USE PATTERNS

Kennett Square Borough is an urban municipality located along a major thoroughfare in southern Chester County (Baltimore Pike) and near major regional roadways (US Route 1, Route 52, Route 82, and Route 41). State Street functions as the commercial “main street” of the Borough in conjunction with Cypress Street as the primary commercial corridor. In addition to “downtown,” the commercial and industrial uses along Birch Street and west South Street and the high school in the south/central portion of the Borough all contribute towards traffic generation throughout the Borough. The single family residential neighborhoods at the four corners of the Borough are the only homogenous areas in terms of land use and potentially have less through traffic. Kennett Square is primarily surrounded by suburban land uses with rural areas on the periphery. Being located within a broader region with developing areas, traffic congestion and through traffic are issues within the Borough and the surrounding area. See Figure 7-1 and Chapter 4: Land Use, for more information in regard to land use patterns and land use planning.

Figure 7-1: Existing Land Use and Street Patterns (See Figure 4 -1)



- **Issues/Analysis** - The Borough was primarily built-out during times with different transportation needs and priorities. As a result, a wide range of transportation issues remain to be addressed, particularly because the ability to expand road widths or rights-of-way is extremely limited. Aside from locations where new connections can be made with existing roads, redevelopment of the road network within the Borough is limited. Therefore, maximizing the usability of the existing road network is a priority.

TRANSPORTATION DATA

Commuting Patterns

The percentage of Kennett Square residents working within the Borough and at home decreased between the 1990 Census and the 2000 Census, however the 2005-2009 American Communities Survey (ACS) estimate shows these percentages increased slightly between 2000 and 2009. Figure 7-2 displays census data for employment locations for employed residents from 1990 to 2009. Roughly a quarter of the employed residents work within the Borough and more than a third work within the Kennett Region (Kennett Square, Kennett Township, and New Garden Township). Finally, a little more than ten percent work in the West Chester Region and New Castle County in Delaware.

Figure 7-2: Resident Employment Locations by Percent 1990/2000/(2005-2009)

Census	In State	Outside State	In County	In Municipality	Worked at Home
1990	82%	18%	69%	30%	3.2%
2000	86%	14%	74%	22%	2.3%
2005-2009*	85%	15%	70%	23%	3.2%

Source: US Census 1990, 2000, 2005-2009 American Communities Survey* (see note on page 7-5)

Many people travel to and from the Borough for work. Figure 7-3 provides data from the 2000 Census displaying regions where Kennett Square residents worked at that time. Figure 7-4 provides a visual representation of more recently available information (2007-2009 ACS). The largest concentrations of employment for Borough residents are in and around the Borough with secondary concentrations around West Chester and Wilmington, DE. Lastly, Figure 7-5 shows where people who work within Kennett Square live. A majority of these people live in the Borough and the surrounding region with other concentrations in Wilmington and the Boroughs of West Chester, Oxford Borough, and West Grove. This information provides an understanding of primary travel patterns and how road and corridor issues and improvements impact work trips.

Figure 7-3: Work Locations for Borough Residents (2000 U.S. Census)

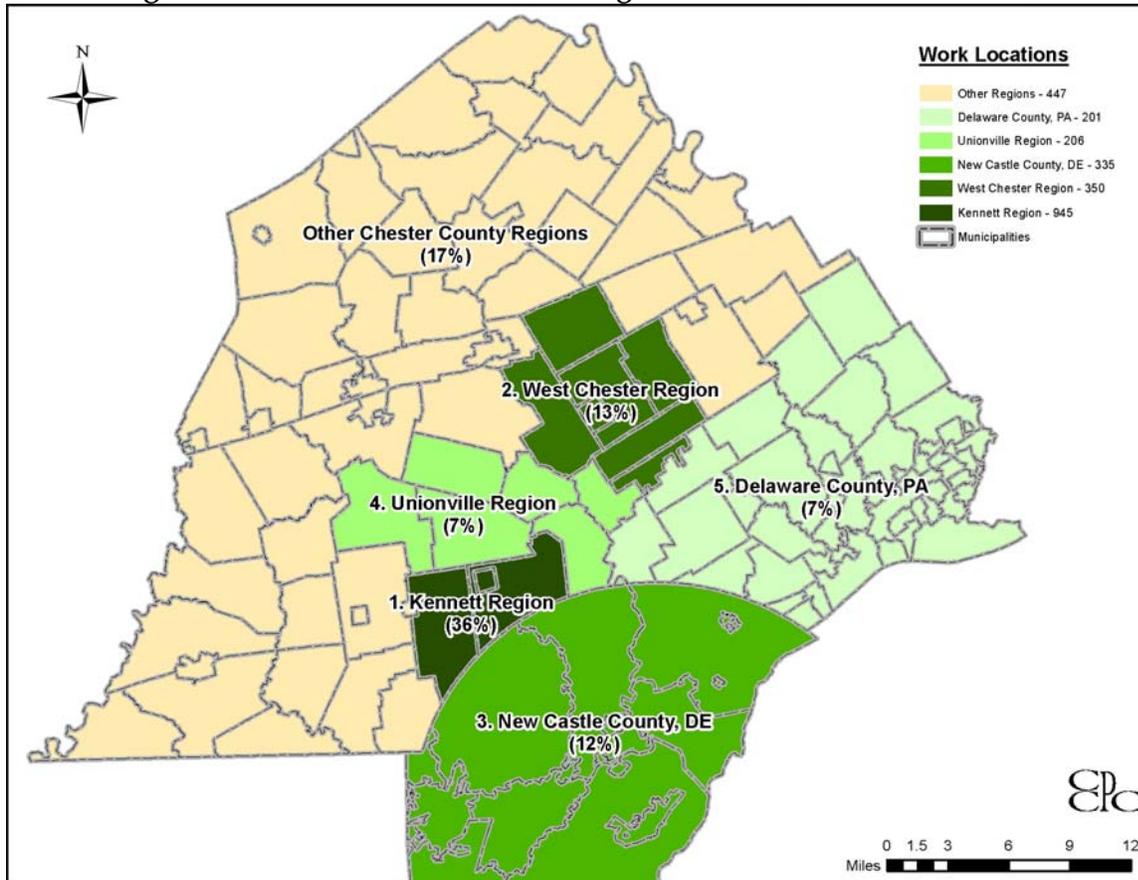
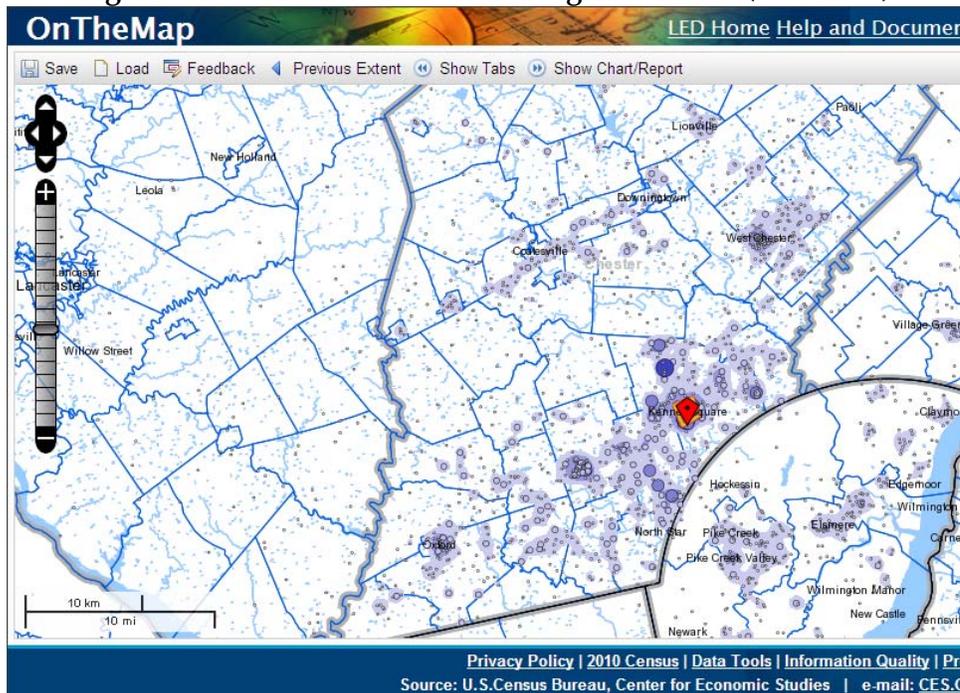
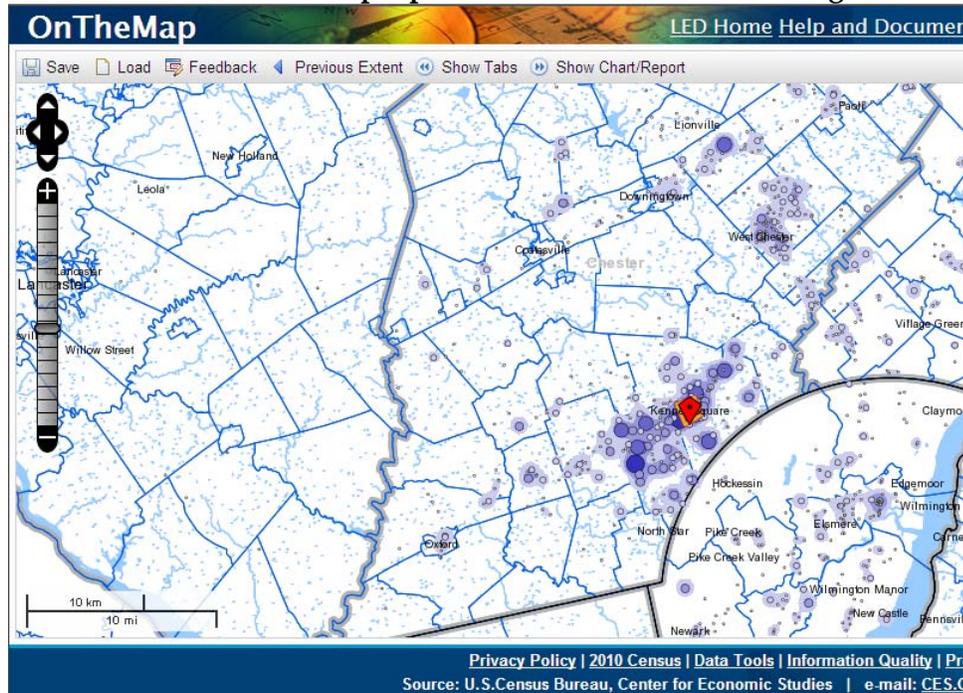


Figure 7-4: Work Locations of Borough Residents (2007-2009)



U.S. Census, American Community Survey 2007-2009*

Figure 7-5: Home location for people who work within the Borough (2007-2009)



U.S. Census, American Community Survey 2007-2009*

Modes of Travel

The automobile is the preferred mode of transportation for Borough residents. This is evident by the percentage of people who drove alone in Figure 7-6. This figure, coupled with residents who carpool, resulted in nearly 90 percent of residents relying on the automobile for travel between home and work. However, 16 percent of Borough residents carpooled, well above the average for Chester County. Similarly eight percent used “other means” which may include walking, cycling, or motorcycles. Roughly two percent of the residents worked at home, less than the County average. Finally, less than one percent used public transportation. These numbers generally reflect the overall commuting patterns in Chester County. However, typically indicative of a more urban area are the higher figures for “other means” and carpooling. The almost negligible percent using transit can be attributed to the limited public transportation opportunities in southern Chester County. The 2007-2009 American Community Survey does not report significant changes in transportation patterns since the 2000 Census. (Note: This data is not available in the 2010 U.S. Census)

***Note: The American Community Survey is based upon small sample surveys collected on an annual basis. Because of this the data is not as accurate as previous decennial census data, but is still useful for planning purposes.**

Figure 7-6: Means of Travel to Work In Percent (2000/2007-2009 ACS)

	Drove Alone		Carpool		Public Transit		Other		Worked at Home	
	2000	07-09	2000	07-09	2000	07-09	2000	07-09	2000	07-09
Kennett Square	74%	77.5%	16%	16%	<1 %	<1%	8%	2.7%	2.3%	3.2%
Chester County	81%	81%	8.6%	7.7%	2.6%	2.6%	3%	3%	5%	5%

Source: US Census 2000, 2007-2009ACS*

- **Issues/Analysis** - As roughly a third of residents who are employed also work within the Borough, enhancing the capability for pedestrian movement through improvement to sidewalks, pedestrian amenities, bicycle facilities and amenities, and trails should be a priority to increase quality of life for residents and the viability of businesses. Further, as many residents work within the immediately surrounding region, providing alternative means of travel from single occupancy vehicle is another priority. Transit opportunities from residential areas to employment centers should also be evaluated.

Roadways

Kennett Square is influenced by several major transportation corridors, including US Route 1, Baltimore Pike, Route 82, Route 926, Route 52, and Route 41. Figure 3-11, Regional Setting, depicts the location of these regional roadways. The Borough itself has generally a grid pattern of streets. State and Cypress Streets are two one way streets that function as the primary east-west corridor through the Borough while Union Street is the primary north-south thoroughfare. South Street forms the primary east-west street across the southern portion of the Borough while Walnut Street is a significant north-south street in the eastern portion of the Borough. As the Borough is primarily built out, the street pattern, rights-of-way, and road widths are unlikely to change significantly.

Road Ownership

All public roads that are completely within the Borough's boundaries are owned and maintained by the Borough except for Route 82 (Union Street/East South Street.) which is owned and maintained by PennDOT. The Borough has roughly 20 linear road miles in addition to approximately one additional mile for state Route 82. No serious issues were identified with the roadways within the Borough.

Traffic Volumes/Crash Data

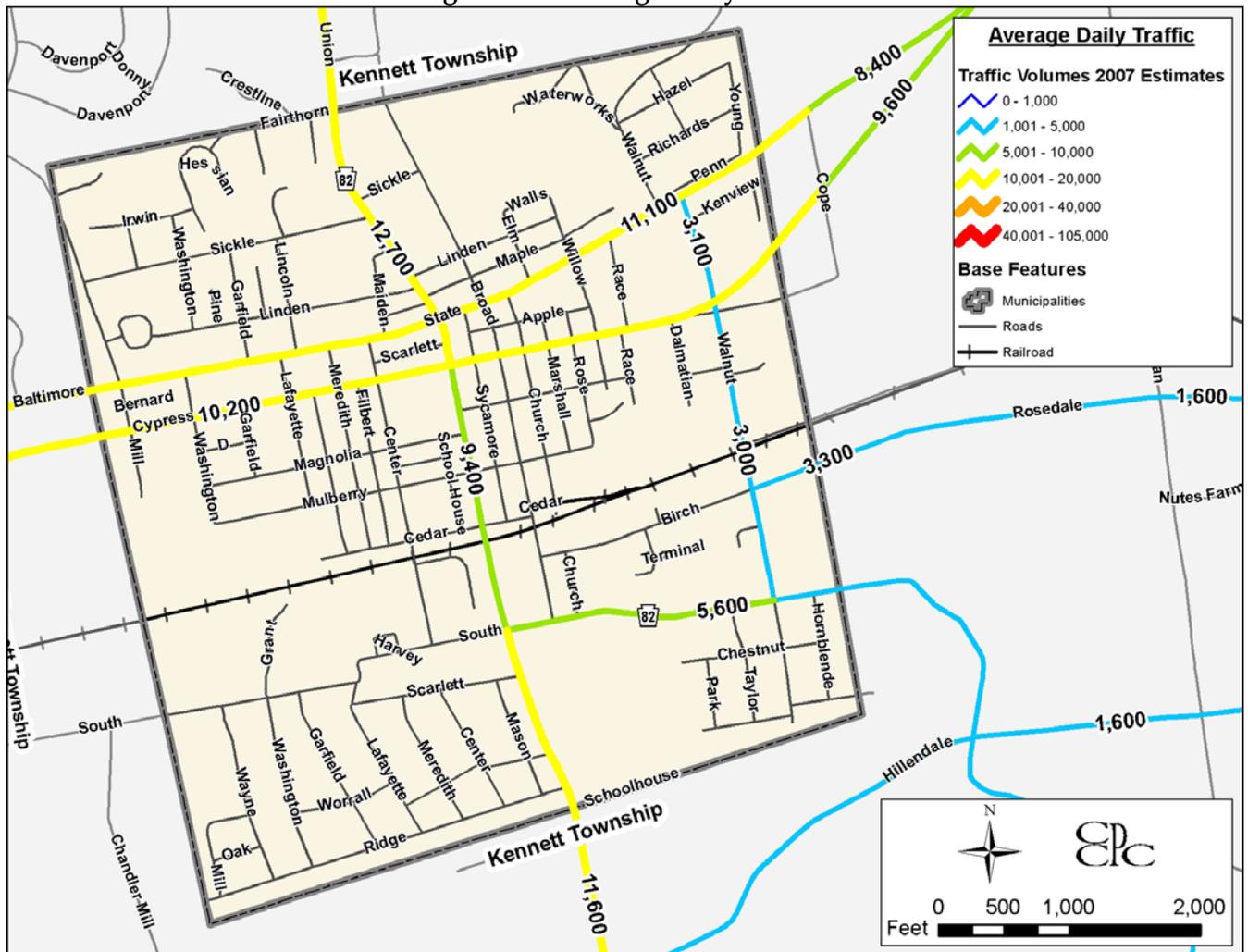
Within the Borough, State, Cypress, and Union Street all carry significant though traffic. Figure 7-7 depicts the average daily traffic (ADT) volume of the major roadways in Kennett Square.

Bridges

There are five bridges in the Borough, all of which are state owned. The Walnut Street bridge was recently resurfaced but has been identified for potential replacement.



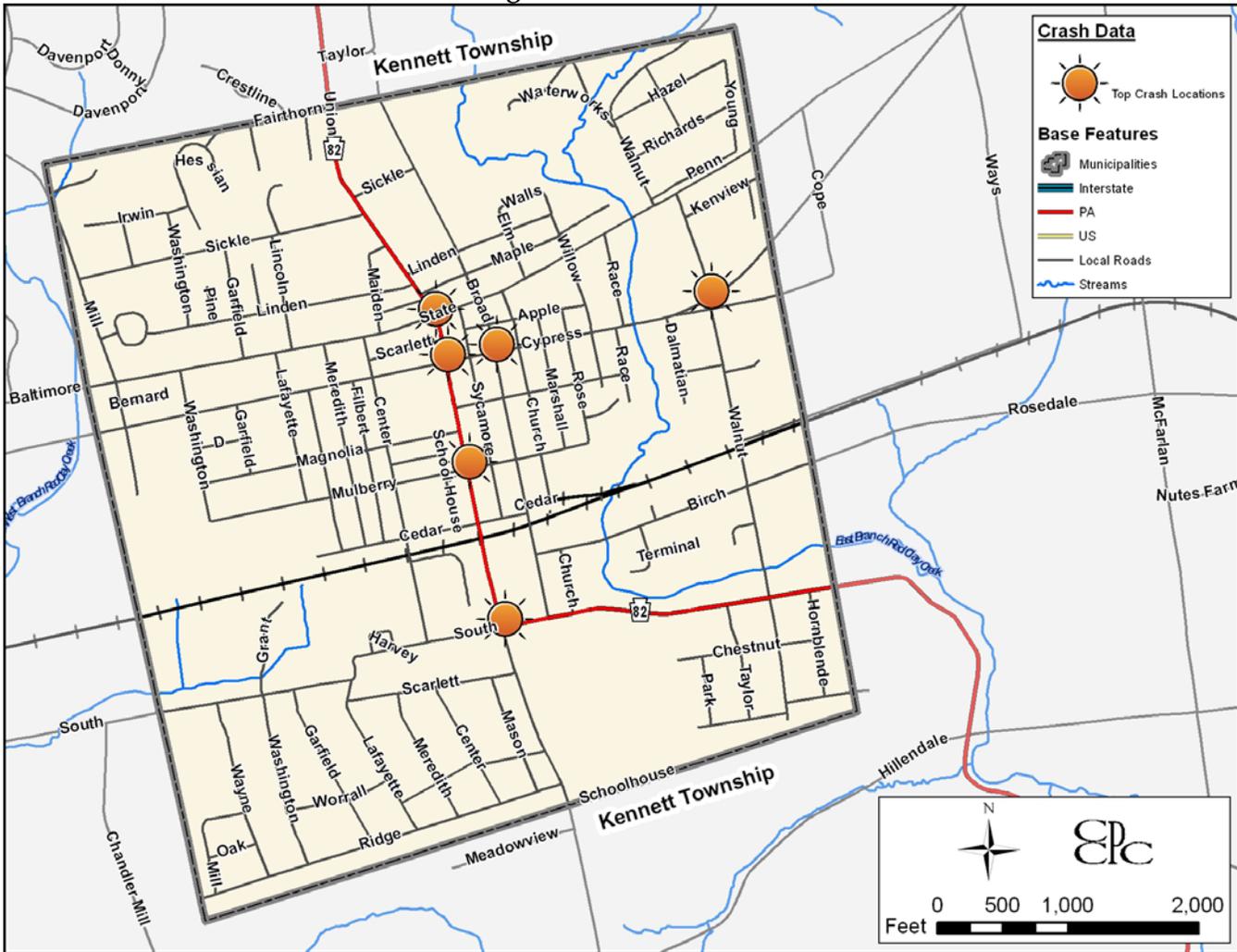
Figure 7-7: Average Daily Traffic



Crash data is collected by PennDOT and distributed to Chester County Planning Commission (CCPC) for planning and analysis purposes. According to PennDOT a “reportable crash” is one in which an injury or a fatality occurs or at least one of the vehicles involved requires towing from the scene.” This definition does not include every accident, but provides data that is both consistent and reliable. Information on specific crashes is not available, but analysis does provide insight into where there might be particular areas that should be evaluated for improvements. Figure 7-8 depicts the top five priority locations for safety improvements based on an analysis of the crash data.

PennDOT defines a “crash” as follows; “A reportable crash is one in which an injury or a fatality occurs or at least one of the vehicles involved requires towing from the scene.” Therefore, not every accident or “fender bender” is accounted for but this data is both consistent and reliable.

Figure 7-8: Crash Data



PennDOT crash data 2007-2009

- **Issues/Analysis** - Higher volume roadways that carry through traffic and the intersections along these roadways may require improvements. Areas where there are higher incidents of crashes should be evaluated to identify methods to increase safety.

ALTERNATIVE MODES OF TRANSPORTATION

Pedestrian and Bicycle Facilities

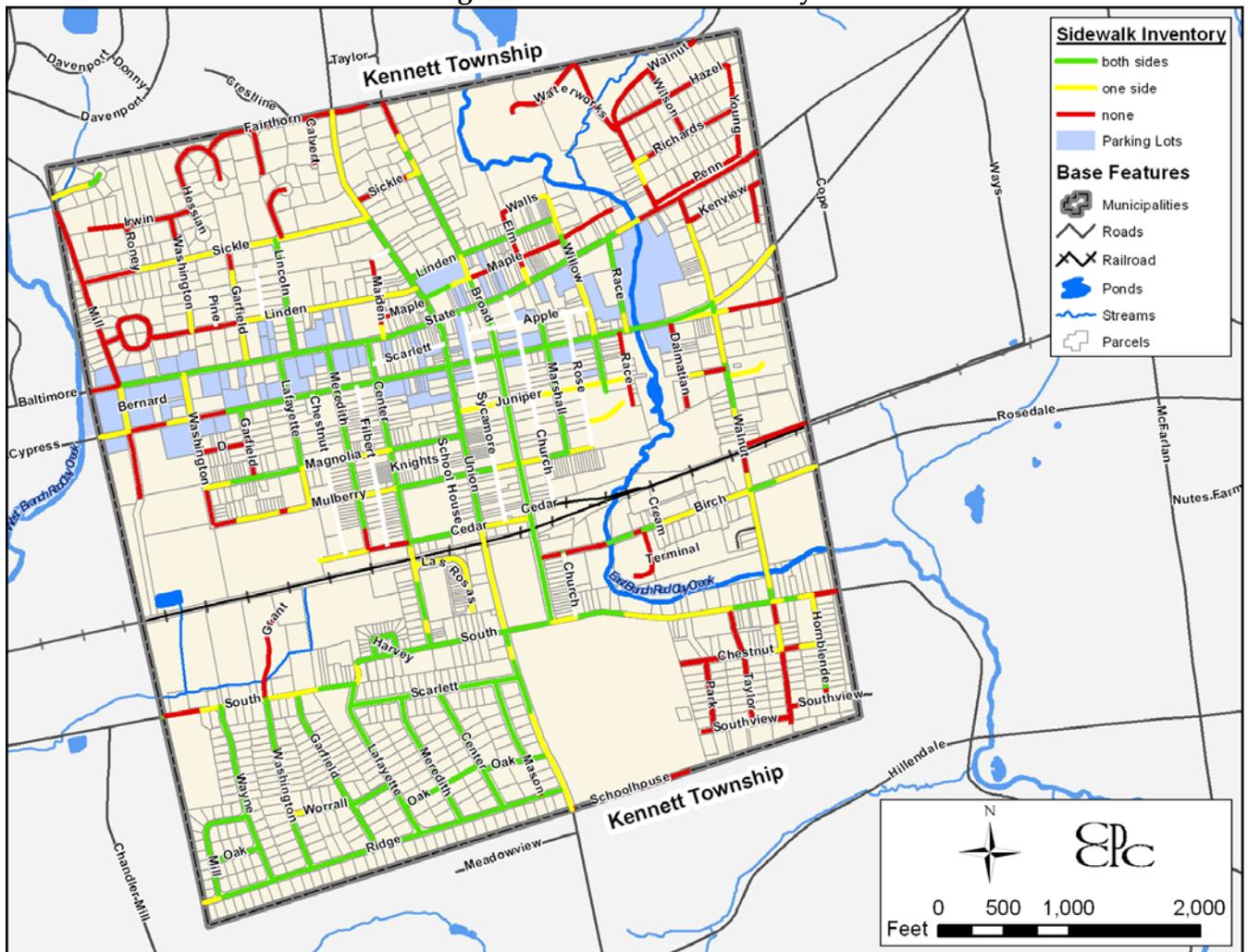
Pedestrian movement is a key component of the Kennett Square transportation system, while bicycling currently plays a more limited role within the Borough. Although the majority of residents drive to work, many trips within Kennett Square can be accommodated by foot or bicycle. Enhancing pedestrian facilities is particularly important for businesses along the primary corridors as parking opportunities occur either through on-street parking or primarily smaller parking lots requiring patrons to use sidewalks to reach local businesses. A quality pedestrian environment increases the quality of life for residents and reduces the need to use an automobile for trips within the Borough. A

complete network of sidewalks and connectivity to area trails is an important component in encouraging pedestrian and bicycle activity. Installing amenities for bicycles, such as bike racks, is an important step towards increasing and encouraging this mode of transportation.

Sidewalks

A sidewalk survey was completed as a part of this plan to identify missing sidewalk connections. The results of this survey are included on Figure 7-9 Sidewalk Inventory, and further addressed under Recommendations in this chapter and Chapter 4, Land Use.

Figure 7-9: Sidewalk Inventory



There are sidewalks on most residential streets particularly within the center of the Borough. Figure 7-9 notes the existence of sidewalks within the Borough. The State Street corridor within the center of the Borough also provides pedestrian amenities like benches, planters, and lights to provide a sense of safety for pedestrians. In the neighborhoods in the center of the Borough, sidewalks are relatively complete with most streets having sidewalks on at least one side of the street. The neighborhoods at the four corners of the Borough are generally lacking sidewalks with the exception of Stenning Hills in the southwest. While there is an extensive sidewalk network in the Borough, there are areas where key

connections are lacking, as noted in red on Figure 7-9. For a more detailed discussion of sidewalks and specific recommendations, see the individual Character Areas in Chapter 4, Land Use.

Trails

Trails are also an important part of pedestrian and bicycle circulation. Existing trails within Kennett Square are primarily for recreational activity, and are located within Anson B. Nixon Park and along the East Branch of the Red Clay Creek from Anson B. Nixon Park to the soccer fields in the southeastern portion of the Borough. The Red Clay Creek Trail is a nearly continuous trail through the Borough. However, a vital link across the railroad is necessary to provide a complete facility that connects the northern and southern ends of the Borough. Trails are discussed in more detail in Chapter 11, Parks, Recreation, and Open Space, and proposed and existing alignments are displayed on Figure 11-3 and 11-8. The proposed trail alignments depicted on these Figures would link open space areas within the Borough (such as Anson B. Nixon Park, the Borough property adjacent to the Fire Station, the Kennett Community Park/Pool, and the soccer fields) with residential areas and employment centers, and link to trails extending into Kennett and East Marlborough townships (See Figure 11-9).

- **Issues/Analysis** - The Borough has a good system of sidewalks and a trail that is nearly complete, however improvements can be made by creating connections where deficiencies exist. Filling gaps in the sidewalk network and installing bicycle amenities will be a priority for increasing bicycle and pedestrian mobility. Additional infrastructure such as signage, trailheads, bicycle routes, and bike racks should be added to further encourage bicycle and pedestrian activity.

Transit and Other Transportation Options

The only bus route in Kennett Square is the SCCOOT bus, which is managed by the Transportation Management Association of Chester County (TMACC). The SCCOOT bus service connects Oxford to West Chester with stops in West Grove, Lincoln University, Kennett Square, and Longwood Gardens. The service runs Monday through Saturday. The SCCOOT bus is currently financially supported with federal and state funds through the Job Access and Reverse Commute (JARC) Grant Program, County funds, and funds from Lincoln University. JARC is a competitive grant program that helps fund transportation services that facilitate access to jobs for lower income persons as well as reverse commute trips for the general public.

- **Issues/Analysis** – Dedicated and reliable funding resources are needed to continue providing the bus service in the future. Bus stop amenities, including bus shelters and crosswalks, can be provided for the safety and convenience of riders. Additional transit opportunities should be evaluated including increasing the capabilities of SCCOOT or additional opportunities for transit to appropriate locations. Park and ride lots are an additional option to promote ridesharing.

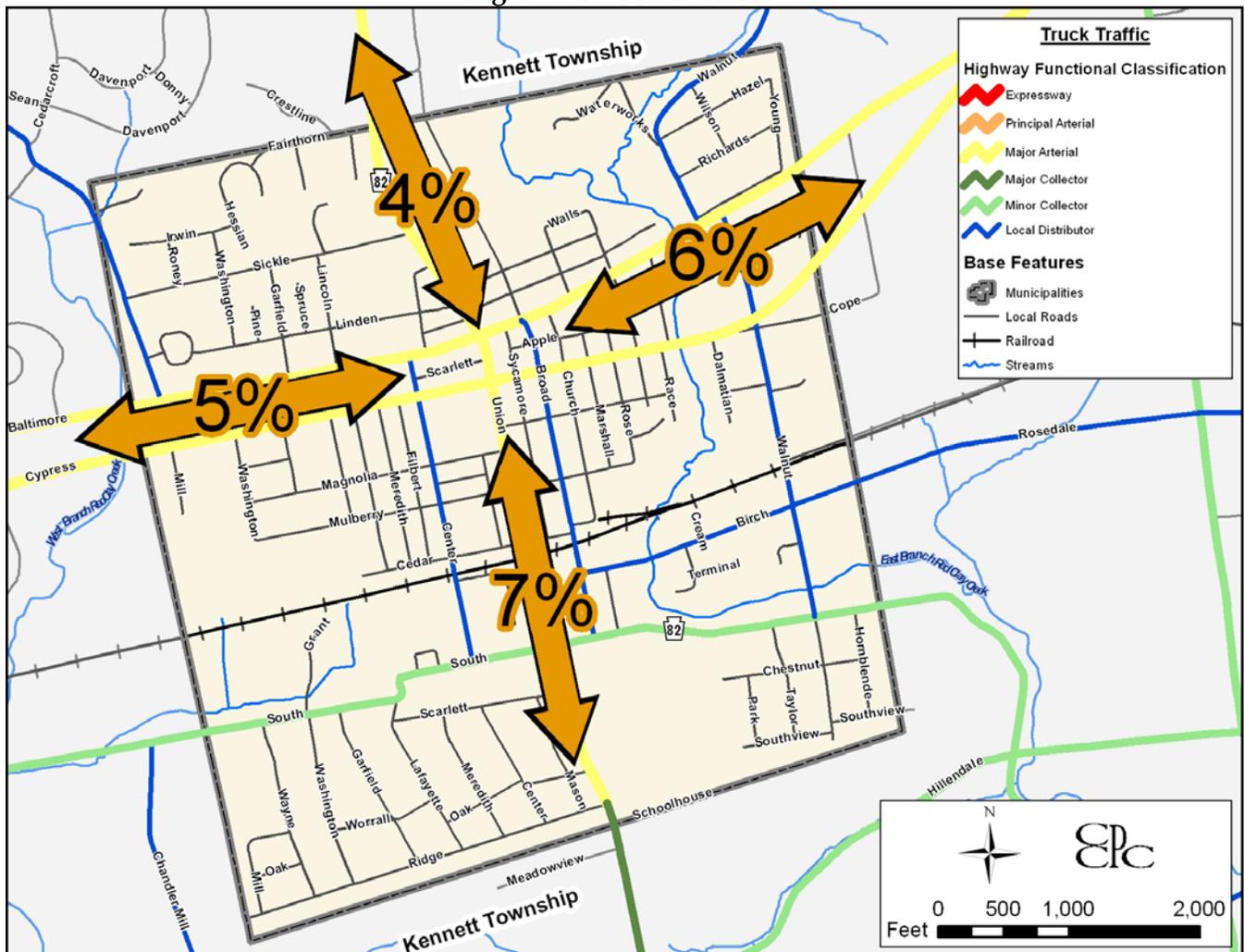
MOVEMENT OF GOODS

Truck Traffic

Truck traffic is an issue in the Borough due to their slow acceleration and difficulty with turning movements which is characteristic of these vehicles among the tight grid pattern of streets within the Borough. While trucks are a concern, particularly larger tractor-trailers, they are also necessary to the functioning of the business community. Truck traffic makes up only a small percentage of the total traffic volume within the Borough as shown in Figure 7-10. In general, truck traffic greater than 10 percent is considered significant. The greatest percentage of truck traffic (seven percent) comes from the south along Union Street. This suggests that a large number of trucks in the Borough come from the mushroom industry in this area of the County. Observations show that tractor-trailers are primarily traveling through the Borough across Baltimore Pike, locally known as State and Cypress streets. Because Baltimore Pike is a major regional arterial, it is unlikely there is an alternative means of significantly reducing the number of trucks traveling through the Borough.

Note: The definition of a “truck” for this discussion is generally any vehicle with more than two axles. The data referenced adheres to this definition.

Figure 7-10: Truck Traffic



- **Issues/Analysis** - Despite the low percentage of total traffic volume, truck traffic does have impacts in regard to safety, noise, pedestrian movement, and outdoor dining experience at local restaurants. Efforts should be made to minimize the impact of truck traffic through a variety of means. Potential remedies include traffic calming, intersection modifications, and working at a regional level to find alternatives to reduce truck traffic through the Borough.

Rail

The Octoraro Rail line is a short line freight railroad running through the southern portion of the Borough. The line is operated by the East Penn Railroad (part of Regional Rail LLC) which operates roughly one hundred miles of railroad in southeastern Pennsylvania and Delaware. East Penn offices are located in the Borough on South Broad Street adjacent to the rail line. The line currently runs to the Herr's facility in West Nottingham Township in southwestern Chester County and connects to the Wilmington and Northern rail line in Chadds Ford to Wilmington and subsequently connects with national rail systems. East Penn is expanding operations and it is likely the rail line will continue to become more active.

- **Issues/Analysis** - The rail line provides an opportunity for economic development along the rail corridor. This unique facility may attract businesses and industry that are interested in utilizing the rail line to efficiently send and receive materials or products. The rail line may serve to reduce the number of trucks traveling through the Borough and surrounding region.

PARKING

In the core downtown area of Kennett Square, parking facilities are generally sufficient to meet demand. A parking survey was conducted in 1999 during the development of the 2001 Comprehensive Plan. That survey indicated that there was adequate parking in the downtown commercial areas at that time (See Appendix 7-A). A similar effort was conducted for this plan in 2010, with similar results.

Approximately 400 marked parking spaces were identified along the State Street and Cypress Street corridors. The Genesis parking garage provided approximately 40 public parking spaces in addition to 70 spaces in other public lots. Counts conducted indicated that approximately 60 percent of the spaces surveyed were available during the day, a high degree of availability. The metered on-street parking spaces along State Street near the intersection with Union Street were the highest used spaces.

There are various restrictions on parking in the residential neighborhoods, however the parking study focused on the core downtown area and did not explore issues in the residential areas of the Borough. A detailed description of the restricted and permitted parking areas were not included in this plan, nor are recommendations included to deal with those specific issues. The parking study was intended to provide a sense of parking availability in the core downtown area, which concluded that there is generally not a shortage of parking outside of special events or unusual peak periods.



- **Issues/Analysis:** Parking is a constant issue for urban areas such as the Borough. Inevitably parking is always a concern or priority for some party whether it be a resident, business owner, or for a particular event. The data collected for this plan suggests that, in the downtown core of the Borough, parking supply is generally not a problem. However, on certain days or at certain times parking availability may be limited. Parking is not a static issue and may be affected by a new business that becomes popular or growing families along a particular street. The Borough will need to maintain an awareness of the changing parking needs and make adjustments as necessary. A few specific strategies and changes or improvements to signs may remedy certain parking issues within the Borough.

FUNDING

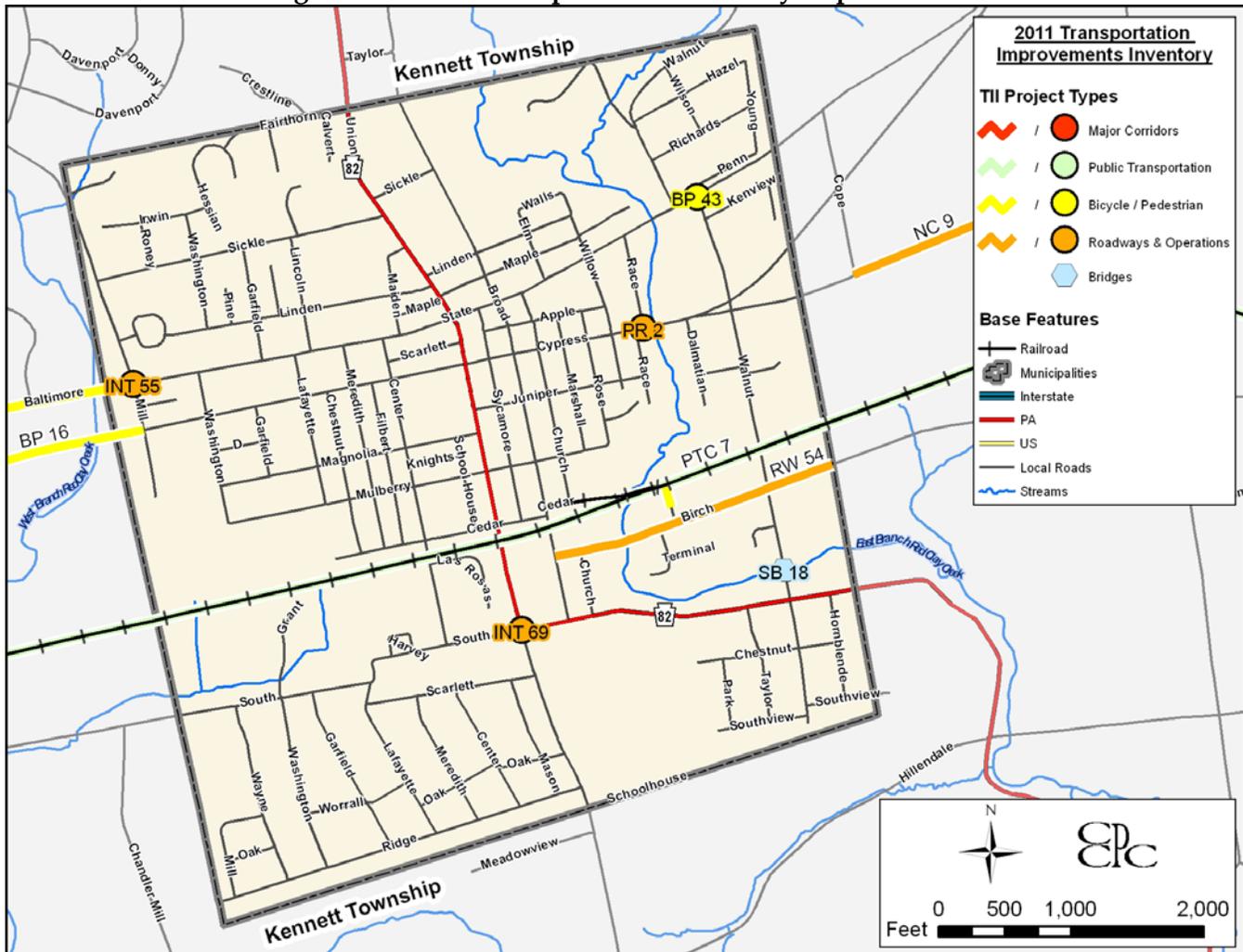
Transportation Improvements Inventory (TII) / Transportation Improvements Program (TIP)

The Chester County Planning Commission (CCPC) Transportation Improvements Inventory (TII) is an inventory of proposed improvements submitted by municipalities to the CCPC that are combined into a single report, which is updated every two years. The Inventory also serves as the basis for CCPC recommending the advancement of transportation feasibility studies and highway occupancy permit (HOP) improvements. Inclusion on the TII is the first step for a proposed improvement to become a project listed on the Delaware Valley Regional Planning Commission (DVRPC) Transportation Improvements Program (TIP). The TIP is the regionally agreed upon list of priority transportation projects, as required by federal law. The TIP document must list all projects that intend to use federal funds, along with all non-federally funded projects that are regionally significant. Other state funded capital projects are also included. The projects include bicycle, pedestrian, freight related projects, innovative air quality projects, and the more traditional highway and public transit projects. The TIP is approved by the Pennsylvania legislature and Federal Highway Administration every other year. Figure 7-11 shows projects listed on the 2011 TII both within the Borough and significant projects in the surrounding region. Figure 7-12 shows the 2011 TII projects in the southeastern region of the County.

Figure 7-11: 2011 Transportation Improvements Inventory (TII)

TII #	Project Title	Municipality	Project Type
PTC 7	Octoraro Passenger Rail	Kennett Square	New Passenger Rail Service
FRR 1	Octoraro Rail Line Rehabilitation	Kennett Square, etc.	Track and Tie replacement / Bridges
BP 43	E State Street Gateway at Walnut Street	Kennett Square	Streetscape / Gateway
BP 49	Red Clay Greenway: Cream Street to Railroad	Kennett Square	Multi-Use Trail
SB 18	South Walnut Street over Red Clay Creek	Kennett Square	Bridge Replacement
PR 2	Kennett Park and Ride: Race Street at Cypress Street	Kennett Square	Park and Ride Lot
RW 22	Cypress Street: Center Street to New Garden	Kennett Square	Reconstruction / Streetscape
RW 54	Birch Street: Broad Street to Kennett Twp.	Kennett Square	Reconstruction
INT 55	Cypress Street at Mill Lane	Kennett Square	Intersection Improvements
INT 69	South Street at Union Street	Kennett Square	Improve Turning Radii / Reconstruction

Figure 7-12: 2011 Transportation Inventory Improvements



All other TII projects await consideration for inclusion on future TIPs. There is intense competition for transportation funding within the DVRPC region and nationally, which reflects the inadequacy of transportation funding at the local, state, and national levels, a trend that is expected to continue. In Chester County alone, there are 450 transportation projects listed on the TII; each is competing for funding with projects across the DVRPC region.

REGIONAL ISSUES

The Borough is only one square mile, situated just south of the U.S. Route 1 expressway, and is traversed by a major regional roadway (Baltimore Pike). For these and other reasons, Kennett Square has little control over many factors influencing travel patterns that affect the Borough. Land uses along the Baltimore Pike corridor and interchanges with Route 1 are two factors that impact the Borough. It is important that the Borough communicate with municipalities in the region to remain aware of changes and participate in planning efforts that may impact the Borough.

- **Issues/Analysis:** Many of the Borough's transportation issues originate from external sources and most remedies are reliant upon implementation outside of the Borough. Communication and coordination with other municipalities in the region is important to maintain awareness of issues and influence improvements to positively affect the Borough.

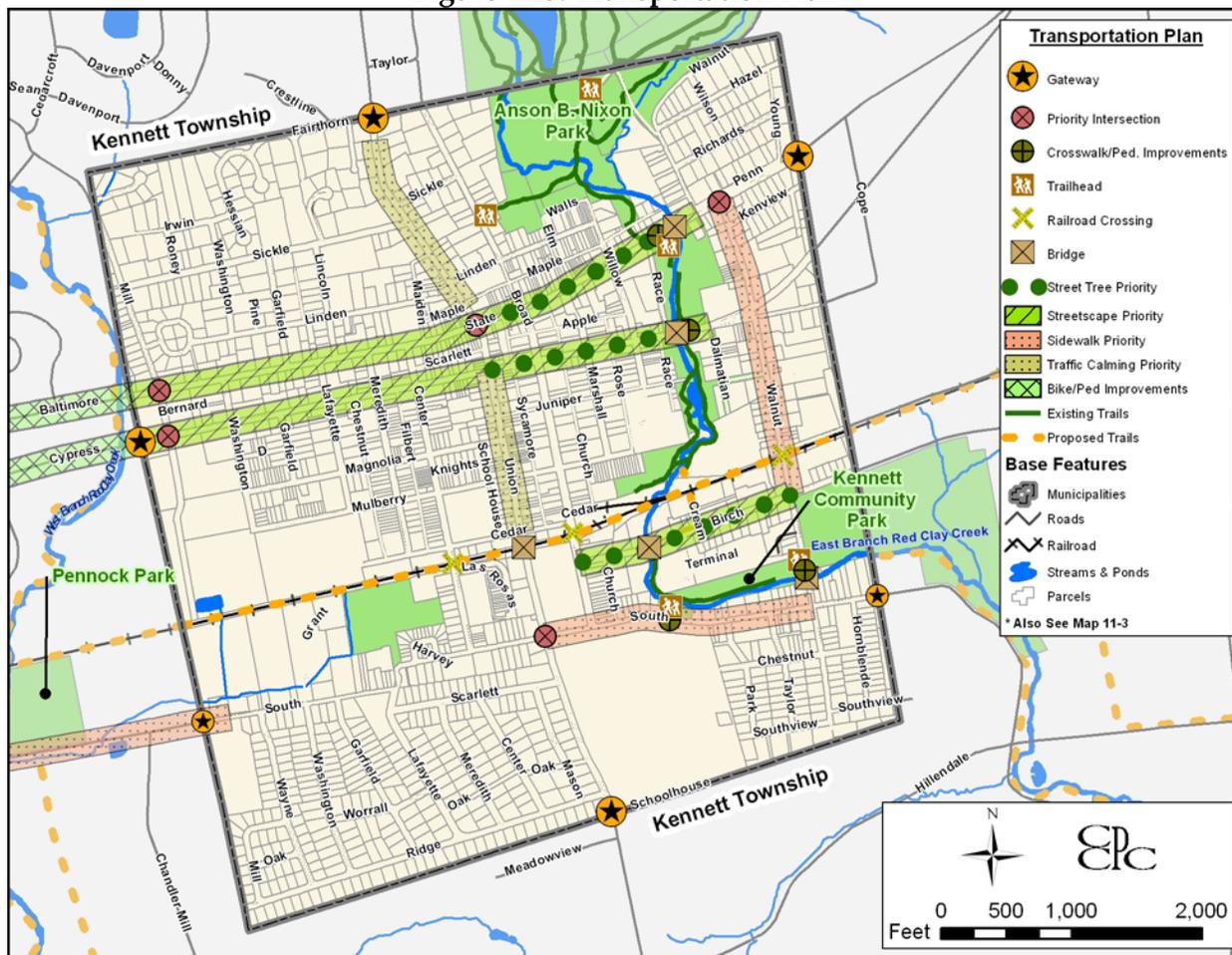
TRANSPORTATION PLAN

OVERVIEW OF TRANSPORTATION PLAN

The Borough's transportation resources have been significantly impacted by decades of development. For the early part of its history, the Borough was a small town surrounded by rural or low density residential communities. However, it has become a regional center with a vibrant downtown surrounded by primarily suburban land uses coupled with commercial development along Baltimore Pike. The wide variety of land uses add to the complexity of the transportation system, each generating different factors (parking needs), perspectives (commercial vs. residential), and attention (volume).

The overall goal of the Transportation Plan is to attain a balanced, multi-modal transportation network in which each mode is able to contribute to meeting the needs of the Borough's residents, visitors, and businesses. In addition to roadways, the plan recommendations address: regional collaboration, parking, truck traffic, access management, traffic calming, pedestrian and bicycle facilities, and other components of the transportation system. Collectively, the recommendations advance a strategy for increased transportation choices to achieve a sustainable transportation system that maintains a high quality of life for residents while maintaining a vibrant business community. Please see Figure 7-13 Transportation Plan as a visual reference for many of the recommendations below.

Figure 7-13: Transportation Plan



Relationship Between Resources

For the transportation network to function at maximum efficiency and safety, it must be looked at in a comprehensive manner. It is essential to research and address each mode and facility on an individual basis, but also essential to recognize the interrelationships between modes and how they interact and affect one another. An individual focus on each transportation mode, with an awareness of interrelationships, will increase effectiveness, create opportunities, improve safety, and meet the transportation needs of the Borough.

Key Transportation Issues and Deficiencies

Based on the preceding analysis, a few primary themes can be identified:

- 1) *Maintaining appropriate characteristics of roadways by balancing between access needs and managing traffic flow.* The Borough must maintain mobility on Borough roadways to provide for work trips, shopping, and resident needs while facilitating on-street parking, business deliveries, and promoting safety for both automobiles and pedestrians.

2) *Maintaining and enhancing alternative modes of transportation through the improvement to sidewalks, trails, and appropriate transit alternatives.* Expand facilities for pedestrian movements by creating a complete and connected network of sidewalks and trails and enhance appropriate transit alternatives for work trips and to increase quality of life for residents.

3) *Evaluating and making appropriate changes to adjust behaviors concerning truck movements.* Make improvements to further minimize the impact of through truck traffic and facilitate appropriate truck traffic.

4) *Addressing changing on and off street parking needs and issues.*

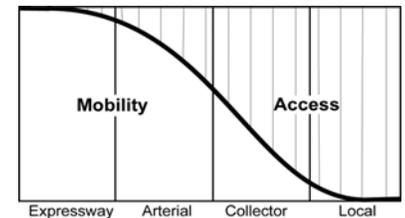
Expanding upon the themes outlined above, the following recommendations address how the Borough's transportation system can be maintained and enhanced and connections to adjacent municipalities and regional destinations can be improved.

SYSTEM-WIDE RECOMMENDATIONS

System-wide recommendations are general recommendations that provide overarching principles or apply to the Borough as a whole.

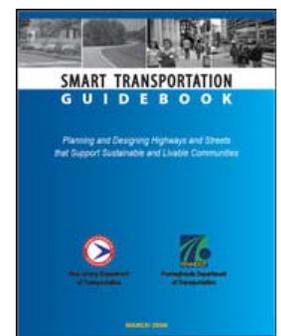
Functional Classification

Roadways can function in different manners, serving varying traffic volumes, trip lengths and purposes, and accommodating varying traffic speeds. When a road functions in a manner that is not consistent with its design, safety and capacity are compromised. The Functional Classification System organizes various roads and road segments in a hierarchy based on the function each serves. The relationship between access and mobility is a key aspect of roadway classification. Accessibility refers to the ease of entering or exiting a roadway from adjacent properties while mobility refers to the ability of traffic to travel freely along a roadway. These roles have an inverse relationship; the more efficiently a road can move traffic, the less efficiently it provides access to adjacent properties, and vice versa. Figure 7-14 in recommendation T-1 depicts the Highway Functional Classification of Kennett Square's roadways, which range from local roads (numerous) to South and Walnut streets as major collectors and State, Cypress, and Union as arterial roadways. Functional classification is only one way to look at a roadway and increasingly, not only the function, but the context of the roadway is being considered when determining roadway design.



Context Sensitive Design

The context of the roadway is equally, if not more important than its functional classification. An arterial roadway within a suburban area may differ significantly from an arterial in an urban area such as Kennett Square. This second factor of context has received an increasing amount of legitimacy and a growing body of background data supports contextualization of roadways as a key determinate of roadway design. Further, the support for and implementation of appropriate roadway design based on context has increased at



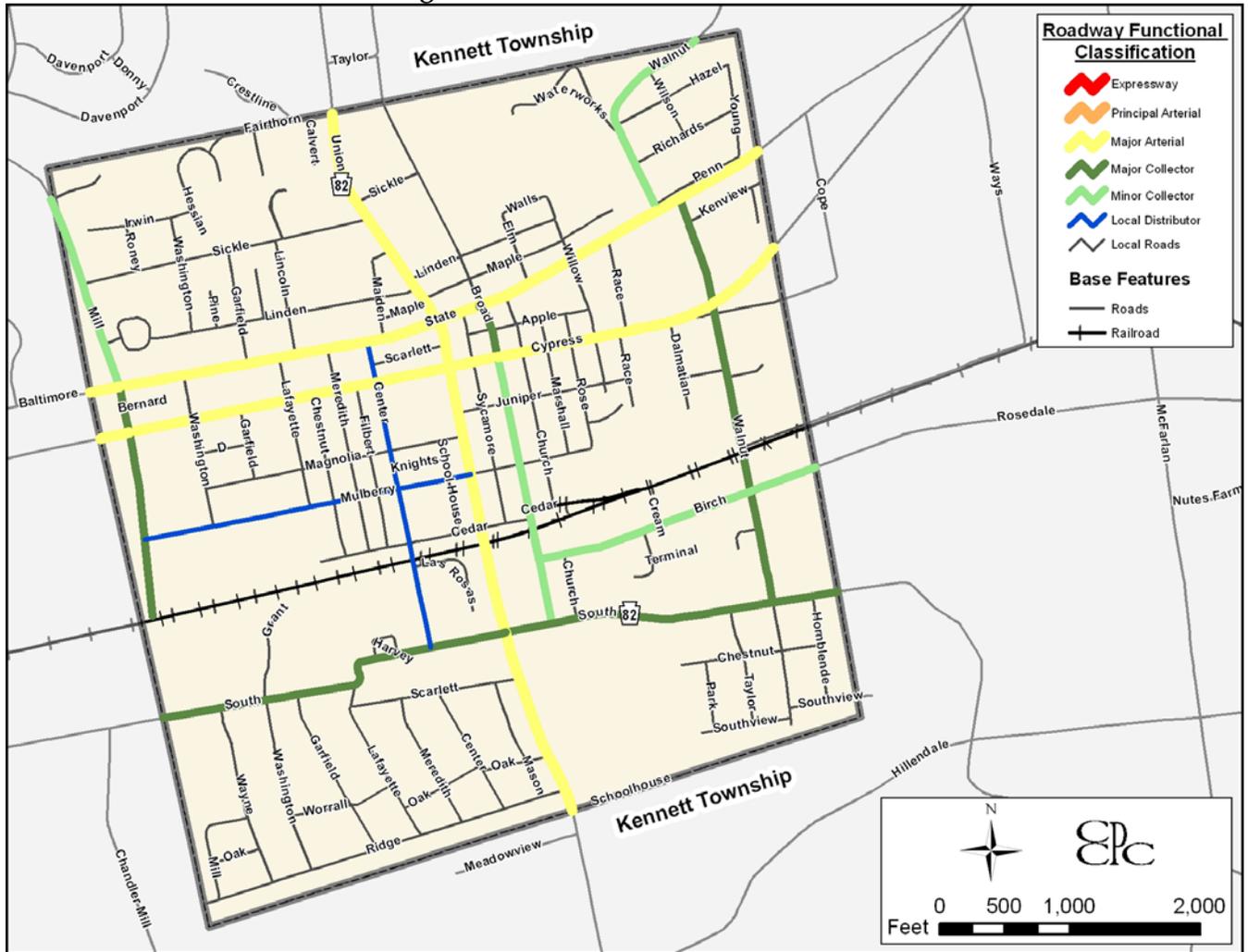
all levels. The most pertinent example of this is PennDOT’s SMART Transportation Guidebook adopted in March 2008. This guidebook provides a wealth of information that may be applied to roadways regardless of ownership. Most importantly, it has changed PennDOT’s process of dealing with roadways by an increasing focus on appropriate local context. Evaluating the context of roadways is important to moving forward with recommendations to address particular issues on specific roadways.

*Note: The recommendations in this plan are consistent with Smart Growth Principles (SG) and Smart Transportation Themes (ST). (See Appendix 7-C and 7-D) Smart Growth policies come from a growing national program focusing on more sustainable development. Smart Transportation policies are adopted by PennDOT at the state level and apply more directly to transportation related issues.

Roadways

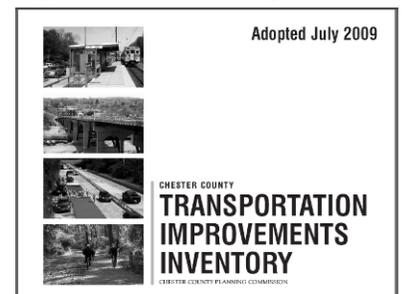
T-1 Utilize the functional classification outlined in Figure 7-14 and Appendix 7-B for future road improvements. The functional classification as described above, is a departure from the way functional classification has been used in the past. The criteria in Appendix 7-B provide general guidance on features and amenities for future roadway improvements that will assist in accomplishing many of the goals and recommendations of this plan. The Borough Subdivision and Land Development Ordinance should be amended appropriately to be consistent with the standards and concepts provided in this plan and in Appendix 7-B.

Figure 7-14: Functional Classification



T-2 Maintain and update a road improvements inventory to prioritize improvements and to secure funding for projects. The Borough maintains a road inspection and maintenance schedule as part of the annual inspection required by the State Liquid Fuels Fund requirements. The Borough should prepare a road improvement inventory that lists necessary and desired road improvement projects within the Borough in conjunction with the annual inspection. This inventory would facilitate prioritizing projects for capital improvements and applying for funding. Additionally, the inventory can facilitate the Borough’s recommendations to the County Transportation Improvement Inventory (TII) and the State Transportation Improvement Program (TIP), in addition to applications for other alternative funding sources such as grants offered by the State.

Coordination with Chester County Planning Commission (CCPC) on transportation needs is critical to translating identified needs into projects, and putting them on the path to funding. It is particularly important that Kennett Square advance projects with feasibility studies, engineering studies and other preliminary



planning work through coordination with CCPC and other agencies as appropriate, as these efforts can advance projects while awaiting final engineering and construction funding.

Given that transportation needs far outweigh available funds, it is imperative that the Borough remain proactive in advocating for its projects, and diligent in seeking out funding from all available sources. Additionally, given that national and state funding is very limited at this point and for the foreseeable future, the Borough should consider whether there are options to implement a local funding source for transportation improvements.

- T-3 Address the maintenance of and improvements to local roads on a continuing basis in the annual budget and capital improvements plan.** With ownership of a majority of public roads located within the Borough, there is a unique opportunity to ensure that the roads are maintained properly and move forward with many improvements and recommendations.

Specific Improvements for Intersections/Corridors (See Figure 7-13):

- T-4 Investigate improvements to the Union/South Street intersection.** This important intersection is adjacent to the Kennett High School and handles not only significant vehicular traffic, but is important to pedestrian traffic, particularly for students. If possible, this intersection should be expanded to improve the geometry for turning movements. Additionally, the crosswalks can be improved to address pedestrian safety and visibility issues. Possible crosswalk improvements include high visibility striping, lighting, or raised or textured pavement. It is likely that “countdown” timers will be installed at this and all Borough intersections in the near future. Countdown timers include both a visual and audible signal for pedestrian crossings in compliance with the Americans with Disabilities Act.

- T-5 Investigate improvements to the State/Walnut Street intersection.** This off-set intersection presents difficulties making left hand turns onto State Street due to high speeds and a lack of traffic control devices on State Street. Similar difficulties extend to pedestrians (or vehicles) attempting to cross State Street to North Walnut Street to access Anson B. Nixon Park. Further measures should be considered, potentially in conjunction with gateway improvements (see Recommendation T-19) to slow traffic on State Street, provide a safe pedestrian crossing, and provide aesthetic improvements.

- T-6 Investigate improvements to the intersections of Mill Road with State and Cypress Streets.** These two signalized intersections are located in the western end of the Borough. Due to the volume of trucks on both State and Cypress streets and the number of trucks using Mill Road from generators in the southern portion of the Borough, these intersections should be evaluated for improvements in consideration of truck movements and safety improvements for pedestrians. Due to potential redevelopment along Mill Road on the NVF property and the Magnolia Place development, improvements to the Mill Road intersections should also be considered.



- T-7 Investigate safety improvements to South Union Street.** South Union Street between Cypress and South Street should be considered for safety improvements due to higher incidence of crashes as indicated by PennDOT crash data. The number of conflicts from on-street parking and cross streets with through traffic contributes to this scenario. Reducing the number of turns off of Union Street by making certain streets one-way, banning left hand turns at specific locations, or installing traffic calming measures to reduce speed and promote safety should be considered. Lastly, the speed limit in this area is 35 mph. This speed is inconsistent with the majority of Borough Streets, except for State and Cypress Street. Due to the residential nature of South Union Street, reducing the speed limit to 25 mph should be considered.
- T-8 Investigate improvements to the Kennett High School Access.** The presence of the High School within the Borough is a welcome amenity that promotes a community atmosphere and provides a walkable facility to many residents, however, it does present issues from a transportation standpoint. In particular, the number of buses generated by the school creates challenges in regard to the intersection of South and Union Street, in addition to heavy automobile traffic at peak periods. Continual evaluation of the access to and circulation patterns within the school site should be made and adjustments considered to minimize the effects on the South/Union Street intersection. Bus routing should be prioritized to avoid the intersection if possible or to minimize bus turning movements at the intersection. Minimizing left turns into and out of the school property should also be a priority. Lastly, in support of Recommendation T-4, improvements to the South/Union Street intersection should be considered, including the potential for geometric improvements to increase turning radius, the addition of turn lanes, and pedestrian improvements.

Bridges

- T-9 Monitor and identify necessary maintenance and improvements to bridges within the Borough.** While none of the five bridges within the Borough are owned or maintained by the Borough, the Borough should make a proactive effort to ensure these facilities are adequately maintained, upgraded, or replaced as necessary. In particular, as improvements or replacement occurs, bridges should include facilities for pedestrians and bicycles such as sidewalks and adequate shoulder width. See Figure 7-13.



Ordinances

- T-10 Create and adopt an Official Map to delineate the desired locations of new roadways and pedestrian and bicycle facilities in the Borough and to ensure that the future transportation network is consistent with the Borough's vision.** Official maps can serve a valuable function for a municipality, providing a tool for preserving transportation options without requiring an immediate commitment on the part of the municipality. Roadways, trails, facilities, parks, and other infrastructure needs are all items that may be placed on an official map. For further

information see PennDOT publication PUB703, *The Official Map: A Handbook for Preserving and Providing Public Lands and Facilities*. The document is available on the PennDOT website: www.dot.state.pa.us

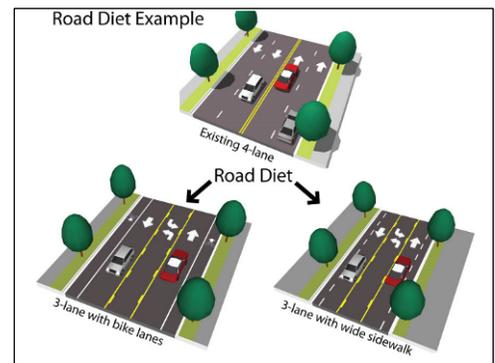
- T-11 Implement periodic reviews of the Zoning Ordinance, Subdivision and Land Development Ordinance, and other Borough regulations to ensure that roadway, sidewalk, and trail standards are current.** Although Kennett Square’s regulations are currently up to date, technical standards are evolving, particularly in regard to sidewalks, bikeways, and trails. Periodic reviews of regulations will best position the Borough to deal with land use changes and proposed development. Appropriate regulations require appropriate facilities, but also encourage flexibility and criteria so that new facilities may be designed to fit specific situations where “one size fits all” requirements would otherwise preclude the development of an amenity such as a trail. See also Recommendation PR-34, on Page 11-35 regarding trail and path definitions.
- T-12 Address traffic issues related to redevelopment projects.** Although there is limited subdivision and land development potential in the Borough, there is always potential for redevelopment and/or changes in use, as indicated by the Magnolia Place and NVF proposals. The Borough should review both the zoning ordinance and subdivision ordinance to ensure that provisions are in place to require appropriate improvements to roadways and pedestrian facilities commensurate with new development. Measures such as requiring transportation impact studies, traffic calming, appropriate roadway improvements, the inclusion of pedestrian facilities, and appropriate parking requirements are imperative to maintaining and expanding an effective transportation network. This effort should begin with the Planning Commission reviews of sketch and preliminary plans and taking a proactive approach towards making recommendations for improvements during the preliminary phases of development proposals. Examining the need for appropriate zoning changes should also be a priority.

Coordination

- T-13 Coordinate with surrounding municipalities on regional transportation issues, particularly traffic circulation, through traffic, and a trail network.** Kennett Square Borough has already begun the process of working with Kennett, New Garden, East Marlborough, Pocopson, and Pennsbury townships on a regional trail network. As Baltimore Pike and Union Street are thoroughfares through the region, coordination on improvements to and development along these roadways is imperative. Advancing transportation improvement projects requires the support of all affected municipalities. Regular coordination will ensure that Kennett Square Borough and its surrounding municipalities are working together for future improvements. Maintaining a Borough representative on the Kennett Area Regional Planning Commission and supporting the continuation of the commission should be a priority.

Studies

- T-14 Conduct an origin and destination study for the Borough.** Such a study would provide current specific data on traffic flow through the Borough to assist with prioritizing improvement projects. Understanding the vehicular and pedestrian movements would provide valuable data for proposed traffic calming measures, intersection improvements, sidewalk maintenance or installation, trail improvements, bicycle facilities, and parking improvements.
- T-15 Undertake a way finding study and initiate improvements to the signage within the Borough.** Such a study would provide information to assist visitors in finding parking options and key destinations while improving aesthetics by reducing sign clutter and enhancing signage within the Borough. Inadequate or unclear signage is a common cause leading to a perception of a lack of parking opportunities. Clear and legible signs are essential. Developing a theme for signs within the Borough such as common color scheme or sign type is recommended.
- T-16 Undertake a traffic calming study.** The Borough should undertake a traffic calming study to investigate where measures may provide opportunities to resolve specific issues, create an opportunity for residents to provide input, and develop a comprehensive guide for the Borough that will increase the potential for funding of identified improvements. Ordinance requirements, if identified as a result of the study, should be implemented. The existing Neighborhood Traffic Management Program provides a good base for the development of a traffic calming study. See also the Traffic Calming / Access Management section below. See Figure 7-13.
- T-17 Consider a “road diet” for State and Cypress streets.** A road diet considers reducing the number of travel lanes and/or effective width to achieve geometric improvements such as the inclusion of bike lanes, boulevards, or turn lanes while achieving desired goals such as slowing traffic and improving safety.



Traffic Calming / Access Management

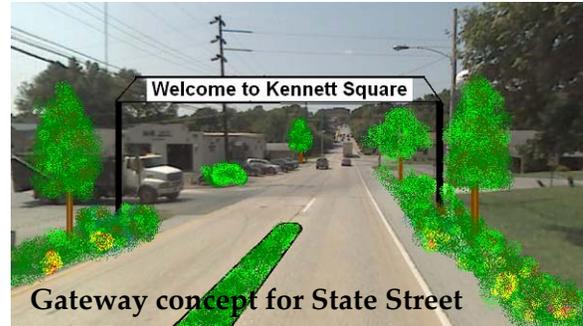
- T-18 Investigate, and implement where necessary, traffic calming measures to improve the overall safety of the transportation network.** Kennett Square Borough has implemented several traffic calming measures in recent years (e.g. State Street speed humps), but other opportunities may be necessary or preferable. Implementing traffic calming measures that serve all modes of transportation and seeking funding to address multi-modal issues are vital to the success of this



recommendation. The Borough has a neighborhood traffic management program that provides for residents to initiate traffic calming measures. This program should be publicized to residents to make them aware of this opportunity. The Borough should also undertake a traffic calming study to identify issues and implement solutions as recommended by T-16.

T-19 Implement gateway improvements to calm traffic and provide for aesthetic and visual cues at entranceways to the Borough.

In addition to the improvements to east State Street in fall 2010, the Borough should implement gateway treatments at major entrances to the Borough including east State Street, west Cypress Street, and north and south Union Street. Gateways influence drivers perception to make them aware that they are entering an area with more variables such as on street parking, traffic signals, intersections and most importantly pedestrian traffic. Gateways may include a sign in addition to traffic calming features such as a center island, a speed table, pavement texture, rumble strips, plantings, or other aesthetic features. Gateways should have a common theme and include signage with similar text and an emblem that represents the Borough to convey a sense of community at entry points. See Figure 7-13. *Note: The implementation of gateways was also a suggestion of the 2006 Kennett Square Borough Vision Plan.



T-20 Continue to consider the best methods to manage access along Borough roads to minimize conflicts and improve mobility.

Generally, access management issues are not critical within the Borough. However, there are portions of the Borough where access management improvements could be made, and access management should be improved as necessary whenever development or redevelopment occurs. The Borough should consider zoning amendments that require defined access points and maximum width of access points. Access management improvements in the Borough are mainly applicable to State and Cypress streets.



ALTERNATIVE MEANS OF TRANSPORTATION

Pedestrian and Bicycle Circulation

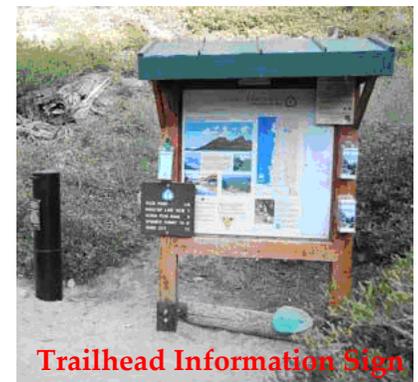
See Figure 7-13 for a depiction of pedestrian and bicycle circulation recommendations. See also Chapter 11: Parks, Recreation, and Open Space and related maps for additional recommendations for pedestrians.

Sidewalks and Trails

- T-21 Continue efforts to expand sidewalks throughout the Borough and require sidewalks in all new development.** Sidewalks exist throughout the Borough, but particular areas remain where improvements or connections could be made. The Borough should continue efforts such as those made recently on west South Street, to provide sidewalks throughout the Borough enabling safe pedestrian movement and promoting non-automotive transportation. See Figure 7-9 for current sidewalk facilities. See also Figure 7-13.
- T-22 Support trail proposals that further a pedestrian and bicycle network.** The grid network of Kennett Square and the primarily complete sidewalk network, combined with the Red Clay Creek trail, provide an excellent starting point for a pedestrian and bicycle network. However, there are missing links and safety improvements that are necessary to take full advantage of the opportunities available. Linking open space areas within the Borough (Anson B. Nixon Park, Kennett Community Park), institutional uses (schools, soccer fields, YMCA), with the residential and commercial areas of the Borough is critical. Further connection with regional trails is an additional goal. Completion of the Red Clay Creek trail should be a priority, particularly developing a means to cross the railroad. Additional information and discussion is provided in Chapter 11, Parks, Recreation, and Open Space, and existing and proposed trail alignments are depicted on Figure 11-3.

Specific Concepts for Sidewalk/Trail Improvements:

- T-23 Construct trailheads at key locations.** While the Red Clay Creek trail is mostly complete within the Borough, additional improvements could assist in augmenting this facility. Trailheads should be considered where the trail intersects streets or at select locations to provide visual references for the trail as well as maps or information for users, dog litter bags, emergency information, and other similar amenities. See Figure 7-13.



- T-24 Install signs and maps throughout the Borough.** Similar to the idea of trailheads for the trail, the Borough should consider the placement of maps around the Borough, potentially at kiosks such as the one in the walkway at Genesis. The maps could identify key destinations such as the Borough Hall, Library, Post Office, YMCA, schools, public parking, the Red Clay Creek trail, and parks. Other information such as a list of restaurants or historic buildings could be included. Using digital media such as listing webpages on signs or including QR Codes for Smart Phones should be considered to provide information and tourism opportunities. Local businesses could help by sponsoring the maps or kiosks.



Crosswalks

- T-25 Construct walkways at key locations to improve pedestrian safety.** Crosswalks with enhancements decrease conflicts between motorists and pedestrians by more clearly delineating the pedestrian right of way and slowing traffic. Textured crosswalks, raised crosswalks, and bulb-outs at intersections to decrease width for walking may all be appropriate in the Borough either at intersections or at certain mid-block sections. Providing crosswalk improvements where the Red Clay Creek trail crosses any street should be considered. See also recommendation PR-26 on page 11-32 and Figure 11-3 and 11-8. See Figure 7-13.



Mid-block crosswalk with bulb-outs

Specific Improvements for Crosswalks/Walkways:

- T-26 Improve intersections in the downtown core.** Consideration should be given towards further improvements to the four major intersections (listed below) in the “down town core” due to the traffic volumes and pedestrian traffic. The intersection of State and Cypress streets with Union and Broad streets should receive consideration for improvements to improve traffic calming and for pedestrian safety due to the high volume of traffic of both motorists and pedestrians. In addition, these intersections provide key connections between the different neighborhoods in the Borough and should receive treatments to properly accommodate pedestrian traffic. Lastly, improving the aesthetics of these intersections and providing a common theme may assist in identifying the downtown core as an extension and improvement of the streetscape. The priority for potential improvements is recommended as follows (from highest to lowest): State/Union, Cypress/Union, State/Broad, Cypress/Broad.



Intersection with pedestrian and traffic calming improvements

- T-27 Construct improvements at the State/Union Street intersection.** This busy intersection effectively serves as the center of the Borough, further accentuated by the Genesis clock tower. The Borough should consider implementing improvements to this important intersection to make the intersection more pedestrian friendly. Concepts may include a raised intersection, raised crosswalks, textured crosswalks (stamped concrete), planters or some other aesthetic features at the corners, or bulb outs.
- T-28 Construct improvements at the South/Union Street intersection.** Improvements should be considered to this intersection to increase safety and use for pedestrians, particularly students, in addition to other potential improvements for vehicles such as increased turn radius. Concepts for pedestrian safety could include a raised intersection, raised crosswalks, textured

crosswalks, crossing lights, a dedicated pedestrian phase at traffic signals, or other treatments.

*Note: Promoting pedestrian improvements/improving walkability were recurrent topics in the 2006 Kennett Square Borough Vision Plan.

Streetscapes

T-29 Continue streetscape improvements as funding becomes available, focusing on the State and Cypress Street corridors. Streetscape improvements have already been completed along the State Street corridor within the core of downtown, but continuation of streetscapes, particularly in the downtown area will achieve a more cohesive environment for this important area of the Borough. Further consideration should be given to extending the streetscape on both State and Cypress Street to the west and east to provide a cohesive corridor and spur further economic development efforts.

T-30 Prioritize streetscape improvements for Birch Street. Birch Street is a key area of the Borough that may see redevelopment in the future. Streetscaping should be a priority on Birch Street to complement redevelopment efforts and should be implemented to encourage redevelopment along Birch Street. Working with existing uses, requiring sidewalks and streetscapes in new development, and seeking alternative funding sources are all possibilities to move this process forward. The inclusion of sidewalks, street trees, and other elements along Birch Street should be considered a priority and non-negotiable. Accommodation of the Red Clay Creek trail along future sidewalks on Birch Street may be necessary to connect the existing sections. Signs and pedestrian crossings for the trail should also be incorporated in improvements. *Note: Promoting redevelopment and pedestrian improvements to Birch Street was a suggestion of the 2006 Kennett Square Borough Vision Plan. See Figure 7-13.



T-31 Install tree plantings along priority roadways. In addition to the continuation of streetscape improvements, certain streets should also receive priority for the addition of street trees (particularly along State and Cypress Streets as noted in recommendation T-30). While street trees should be considered throughout the Borough, specific segments should be prioritized to create an “urban greenway” between particular areas and the Red Clay Creek trail. State Street between Union Street and the Red Clay Creek is one example where street trees should be a priority. See Figure 7-13.

T-32 Incorporate pedestrian amenities. Signs, plantings, lighting, bike racks, benches, information kiosks, and other pedestrian amenities should be placed throughout the Borough as appropriate to facilitate pedestrian movement. Funding may be provided by soliciting businesses, recreational groups, and other organizations where by benches, bike racks, or other features may be purchased and installed by the Borough through a monetary donation. The funding

entity would be recognized by a plaque, engraving, or some other permanent application. See also recommendation T-34.

Bicycles

Bicycle improvements can support transportation, recreation, social and economic development goals.

T-33 Create safe cycling routes through Kennett Square that avoid the main roads. While State, Cypress, and Union streets are the most direct routes through the Borough, they are not necessarily the safest or most enjoyable for a bicyclist. Unless a road diet approach is taken on these major roadways to include bike lanes, alternative routes are more appropriate. Identification of alternate north/south and east/west biking routes and posting of this information in various formats, including the Borough’s website or the placement of “bike route” and “share the road” signs, would offer bicyclists safer and more enjoyable options. See also Chapter 11: Parks, Recreation, and Open Space Plan, particularly the section on *Trail and Pedestrian Networks* and Figure 11-8.



T-34 Facilitate the placement of bike racks throughout the Borough to encourage cycling. Place bike racks throughout the Borough to advocate the use of this transportation mode. The Borough should encourage the placement of bike racks at schools, the YMCA, Genesis, the Library, churches, stores, and similar uses. The Borough could consider programs to potentially cost share, provide incentives, volunteer to initiate a bulk purchase of racks for willing participants, or some other means to initiate the placement of additional racks throughout the Borough.

T-35 Consider a bike sharing program and bicycle tourism. The Borough should consider implementing a bike sharing program or encouraging a local business to facilitate bike sharing or bike rentals. The Borough of Pottstown has a successful bike share program and these programs are gaining momentum throughout the region. Bike rental businesses are an increasingly common tourism generator. Due to the popularity of the Brandywine Valley and the number of historic sites within the area, increasing bicycle tourism should be encouraged.

- T-36 Coordinate bicycle routes with municipalities in the region.** Connections to regional bike routes and the implementation of additional bicycle facilities should be advocated. A specific initiative should include bike and pedestrian improvements to Baltimore Pike both to the west and east of the Borough. Some improvements were made to Baltimore Pike from Toughkenamon in New Garden to the Borough of West Grove, but further improvements could be made, in particular between Toughkenamon and Kennett Square. This segment is currently used by pedestrians and should be a priority. Low cost improvements such as pavement markers, restriping, and signage may provide adequate facilities. However, more significant enhancements including shoulder improvements, bike lanes, or even sidewalks or an off-road paved trail should be considered. Advocating this effort through the Borough’s representative to the Kennett Area Regional Planning Commission is one means of achieving this recommendation in addition to similar efforts such as regional trails suggested in recommendation T-22. See also Chapter 11, Parks, Recreation, and Open Space and associated maps for more information on a future regional pedestrian network. See Figure 11-8 and 11-9 in Chapter 11 and Figure 7-13.



Transit and other Transportation Options

- T-37 Increase opportunities for ridesharing, carpooling, and other forms of transportation.** In 2009 the Borough applied for a Pennsylvania Community Transportation Initiative (PCTI) grant to create a park and ride at the northwest corner of Cypress and Race streets, which unfortunately was not funded. The Borough should reapply for this project and consider the addition of similar facilities, particularly where new development or redevelopment occurs. The addition of park and ride facilities, bus shelters, and other multi-modal amenities should be examined and appropriate facilities should be incorporated. Further, successful park and rides and/or shuttles can be a preliminary step towards implementing public bus or other transportation services.
- T-38 Consider the potential for additional or alternative transportation services.** Communication and coordination with major employers within the Borough should be considered. Employers such as Genesis and Kaolin Mushrooms, in addition to regional employers who have many employees living in the Borough, may provide the potential for ridesharing or shuttle service. These services have been accomplished in other parts of the County and can both reduce congestion and potentially create cost savings. The potential for the extension of DART or SEPTA services to Kennett Square should be investigated as warranted. The success of the aforementioned ridesharing or shuttle service may provide a first step towards establishing additional services from public providers such as DART or SEPTA. Lastly, consideration of shuttle services for seniors should be considered. Due to the number of facilities in the region such as the senior center, Friends Home, Kendal, and Jenners Pond (to the west), the potential

for transportation specifically for seniors or factored to accommodate seniors should be considered.

- T-39 Continue to support the SCCOOT bus route through the Borough, which provides convenient access for Borough residents and visitors.** The SCCOOT bus provided by the Transportation Management Association of Chester County (TMACC) provides the only existing public transportation service to Kennett Square and southwestern Chester County. The Borough should continue to support this service and help identify and communicate concerns and opportunities to enhance or expand this or other similar service in the future. The Borough should consider amending the Subdivision Ordinance to require the provision of bus shelters and pedestrian amenities for certain uses or developments of significance (e.i.: large multi-family developments or larger commercial or office uses).

MOVEMENT OF GOODS

Trucks

- T-40 Adjust critical roadways and intersections to minimize effects of truck traffic on safety within the Borough.** Continue improvements to key intersections such as Mill/Cypress Street in addition to the potential for traffic calming measures on State and Cypress streets to mitigate truck speeds within the Borough without impeding mobility.
- T-41 Coordinate with municipalities within the region on transportation and development issues that have an effect on truck movements.** While applications like traffic calming may help reduce impacts such as the speed of trucks within the Borough, reducing the number of trucks moving through the Borough is unlikely to be affected by changes within the Borough. Improvements within the region such as the realignment of the Newark Road/Baltimore Pike intersection in New Garden Township may have some impact on reducing the number of trucks traveling through the Borough and such efforts should be supported by the Borough. The Borough should maintain a representative to the Kennett Area Regional Planning Commission (KARPC) to influence projects that may affect truck traffic on a regional scale.
- T-42 Communicate with known local and regional companies that contribute to truck traffic through the Borough to help mitigate and/or reduce the impact of truck traffic within the Borough.** Collaborate with Kaolin Mushrooms, Modern Mushroom, Manfredi and other companies that generate significant truck traffic.
- T-43 Consider designating spaces for delivery and pick-ups on State and Cypress streets or investigate alternatives.** Trucks create congestion on key roadways due to double parking for deliveries and pick-ups. The Borough should consider providing designated spaces for delivery and pick-ups on State and Cypress streets. Loading times and other restrictions can also be placed. For example, a sign with “Trucks Only, Delivery Times” can be posted at specified spots, so these spaces are not lost to downtown patrons during other times. This is an effective way to reduce double parking and retain as much parking as possible on the main

streets. Using designated spaces in alleys or rear parking areas should also be investigated. This could be accomplished through a coordinated discussion with the business community to determine the best strategy.

Rail

T-44 Coordinate with East Penn Railroad to remain aware of the railroad operations and potential to serve businesses within the Borough. East Penn’s operating facility is located on South Broad Street within the Borough. The railroad uses this facility to work on engines and railstock, in addition to the rails, bridges, and crossings throughout the Borough. It is imperative the Borough remain aware of the rail lines operations as rail operations continue to increase and affect the Borough. The continued success of the rail line may positively impact development or redevelopment of properties throughout the region, particularly along the rail line itself. Consequently, this will contribute to the commercial/industrial base, increased tax revenue, and provide jobs.



T-45 Ensure safety at railroad crossings. As East Penn Railroad continues to increase their operations, the functioning and safety of the at-grade rail crossings in the Borough becomes progressively important. The Borough should communicate any concerns to East Penn about the need for improvements at crossings, such as appropriate warning lights and crossing gates.

PARKING

T-46 Periodically evaluate parking issues within the Borough and make adjustments as necessary. In addition to commercial parking issues for the State and Cypress Street corridors, other areas of the Borough may have parking issues that need to be periodically addressed. Parking related to spill over from the downtown, residential permit parking, residential parking related to multi-family uses, on-street parking, and parking for accessory residential uses (carriage houses) may all require adjustments from time to time. The following is a more detailed list of issues that may be considered to remedy parking issues within the Borough:

- **Residential areas:**
 - Continually evaluate on-street parking needs.
 - Adjust on-street permit parking in relation to needs.
 - Evaluate the need for intermittent parking for institutional uses and community events and create a plan for these events.
 - Adjust parking ratios and requirements for multi-family uses and carriage houses in ordinances.



- **Commercial areas:**
 - Encourage appropriate parking for business owners and employees that do not conflict with or adversely affect customer parking.
 - Consider adjustments to required parking ratios and contributions to the Borough parking fund in order to maintain and expand appropriate public parking facilities.
 - Maintaining awareness and maintenance of parking needs is essential. Parking is not a one time fix and diligence is required. A variety of strategies should be considered in addition to routine review of parking needs.
 - Assess the need for and appropriateness of additional parking garages.
 - Monitor issues with deliveries and effect changes as necessary. Adjusting delivery times and locations are both options.

T-47 Conduct periodic parking surveys to determine parking needs within the Borough and conduct a formal study to identify more specific parking solutions where warranted. The survey conducted for this plan determined that parking within the downtown is adequate, although peak periods may exceed demand in certain areas, particularly on street metered spaces in the core of downtown (State Street from Center to Elm Street, Union and Broad between State and Cypress Streets). Parking within the Borough remains a concern and periodic surveys would assist in clarifying the needs of residents, shoppers, visitors, employees, and business owners. Where particular issues are identified, more detailed surveys and analysis could be completed to help identify a solution. A consultant with specific expertise in parking analysis and strategies may be necessary to address these issues. More comprehensive and clear signage within the Borough as identified in recommendation T-15 may help with parking issues. In many urban areas, parking is often a perception unsupported by data and clear, easily identified signs can assist in alleviating parking issues.

T-48 Coordinate with large traffic generators to reconfigure parking and access patterns or potentially add parking spaces (garage) and improve traffic flow. Genesis, the Post Office, YMCA, schools, and Library are primary traffic generators within the Borough. The Borough should remain active in communicating with these entities to ensure adequate parking facilities are maintained or developed to create mutually beneficial parking for these uses and the general public. Consideration should be given to the impact the additional parking facilities will have on adjacent roadways and intersections. In addition, appropriate pedestrian facilities should be included with new development such as sidewalks, paths, bike racks, benches, and bus shelters.

APPENDIX

Appendix 7-A: Parking Data

Kennett Square Borough Parking Survey						
ON-STREET PARKING						
*marked and estimated unmarked		Spaces Filled		Percent of Spaces Used		
Unmetered On-Street	Number of Spaces	10:00 AM	2:00 PM	10:00 AM	2:00 PM	Combined Average
Total On-Street Unmetered	239	66	70	27.6	29.3	28.5
Metered On-Street	Number of Spaces	Spaces Filled		Percent of Spaces Used		
		10:00 AM	2:00 PM	10:00 AM	2:00 PM	Combined Average
Total On-Street Metered	158	80	70	50.6	44.3	47.5
TOTAL ALL ONSTREET PARKING	397	146	140	36.8	35.3	36.0
PARKING LOTS						
Public Lots	Number of Spaces	Spaces Filled		Percent of Spaces Used		
		10:00 AM	2:00 PM	10:00 AM	2:00 PM	Combined Average
Total Public Lots	110	43	59	39.1	53.6	46.4
All PUBLIC PARKING SPACES						
Counted 9/1/2010 CCPC	TOTAL ALL PUBLIC PARKING SPACES	Number of Spaces	Spaces Filled		Percent of Spaces Used	
			10:00 AM	2:00 PM	10:00 AM	2:00 PM
			Combined Average			
	507	189	199	37.3	39.3	38.3

Appendix 7-C: Smart Growth Principles

www.smartgrowth.org

1. **Create Range of Housing Opportunities and Choices.** Providing quality housing for people of all income levels is an integral component in any smart growth strategy.
2. **Create Walkable Neighborhoods.** Walkable communities are desirable places to live, work, learn, worship and play, and therefore a key component of smart growth.
3. **Encourage Community and Stakeholder Collaboration.** Growth can create great places to live, work and play -- if it responds to a community's own sense of how and where it wants to grow.
4. **Foster Distinctive, Attractive Communities with a Strong Sense of Place.** Smart growth encourages communities to craft a vision and set standards for development and construction which respond to community values of architectural beauty and distinctiveness, as well as expanded choices in housing and transportation.
5. **Make Development Decisions Predictable, Fair and Cost Effective.** For a community to be successful in implementing smart growth, it must be embraced by the private sector.
6. **Mix Land Uses.** Smart growth supports the integration of mixed land uses into communities as a critical component of achieving better places to live.
7. **Preserve Open Space, Farmland, Natural Beauty and Critical Environmental Areas.** Open space preservation supports smart growth goals by bolstering local economies, preserving critical environmental areas, improving our communities' quality of life, and guiding new growth into existing communities.
8. **Provide a Variety of Transportation Choices.** Providing people with more choices in housing, shopping, communities, and transportation is a key aim of smart growth.
9. **Strengthen and Direct Development Towards Existing Communities.** Smart growth directs development towards existing communities already served by infrastructure, seeking to utilize the resources that existing neighborhoods offer, and conserve open space and irreplaceable natural resources on the urban fringe.
10. **Take Advantage of Compact Building Design.** Smart growth provides a means for communities to incorporate more compact building design as an alternative to conventional, land consumptive development.

Appendix 7-D: Smart Transportation Themes

PennDOT's 10 Themes of Smart Transportation

- 1. Money Counts:** All DOTs are currently operating in a hugely challenging financial environment. Cost inflation has been rampant, sharply eroding PennDOT's purchasing power. Meanwhile, high gas prices are resulting in people driving less for the first time since the 1970s. This leads to lower gas tax revenue, transportation's primary funding source. Smart Transportation provides us with an innovative approach to these challenges so that we can continue providing great service to the Commonwealth's residents.
- 2. Leverage and preserve existing investments:** Previous generations of Pennsylvanians have made enormous investments in infrastructure. Those investments can be seen all over the Commonwealth, from old stone arch bridges to the cobblestone streets surrounding Independence Hall. As one of the oldest states in the nation, Pennsylvania has spent billions over the past 300 years building roads and highways, rail lines and runways, canals and ports. Smart Transportation asks us to place an emphasis on leveraging and preserving these existing investments when creating our programs.
- 3. Choose projects with high value/price ratio:** Big, complicated projects are often considerably more expensive and have more damaging impacts, but may offer only limited increases in value over the smaller-scale and less expensive options. For instance, if a large potential solution costs \$50 million more than a simpler alternative, but only results in 15 seconds less travel time delay through a corridor, is it worth the added cost?
- 4. Safety always and maybe safety only:** Safety for all users remains the most important consideration in planning and building our transportation system. Smart Transportation does not change this focus, but simply asks us to look for more innovative ways to continue improving our safety record.
- 5. Look beyond level-of-service:** Conventional traffic performance measures, such as "level-of-service" (LOS), have dominated how we evaluate transportation problems and solutions; we should also begin considering other performance measures to evaluate project need and potential alternatives. These measures may include things like travel time, multi-modal access, or the economic development opportunities certain alternative might bring (or inhibit).
- 6. Accommodate all modes of travel:** An efficient transportation system should consider the infrastructure necessary to support all modes of travel, including walking, bicycling, transit, and private automobiles. This is especially important in an era of \$4 gasoline, when many of our families are spending 30% or more of their income on transportation.
- 7. Enhance local network:** Disconnected, sparse local street networks inevitably lead to significant strains on state roads. A highly connected local network, which provides residents a variety of route options for their daily needs, is necessary for state facilities to function as designed.

8. **Build towns not sprawl:** Transportation strongly influences existing and future land uses and the character of local communities. Smart Transportation asks us to consider the impacts of our transportation decisions: will they help create great places for people to live, or will they encourage sprawl? Will they help a municipality achieve their economic development goals? Does the project fit into the vision of the community?
9. **Understand the context; plan and design within the context:** Context-sensitive solutions (CSS) has been a part of the Department’s vernacular for many years. CSS is an antidote to the “one size fits all” approach. It requires that all transportation projects be planned and designed with careful consideration of the local land use, economic, environmental, and social contexts.
10. **Develop local governments as strong land use partners:** PennDOT does not have the jurisdiction to make land use decisions—we must partner with local governments to ensure that transportation solutions are consistent with a community’s land use goals, and that municipalities make land use decisions that take into account corresponding transportation needs and realities.

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