

CHAPTER 7
TRANSPORTATION PLAN

INTRODUCTION

A community’s transportation network affects the daily lives of virtually all its residents. An efficient transportation system is considered vital to a high quality of life, and is a basic requirement for community stability. From a long-range planning perspective, the transportation network is a significant element affecting both how a community plans its growth and its physical design. In this way, Franklin Township’s transportation system plays a key role in maintaining the municipality’s rural character.

ROADWAY INVENTORY

The roadway network in Franklin Township is completely rural in character, with cartways and traffic volumes that are low relative to other areas of Chester County. This scale is quite appropriate to land use in the Township, and facilitates both intra-municipal traffic and through traffic:

Table 7-1: Roadway Network (Chester County Planning Commission)

Road Name	Ownership	ID	Functional Classification	Cartway	Volumes
Appleton Rd.	State	SR 3007	Rural Local Distributor between 896 and Lewisville – Stricklersville Rd.	20’	2000
Appleton Rd.	State	SR 3007	Rural Local Distributor between Lewisville Strickersville Rd and Maryland State Line	20’	700
Strickersville	State	SR 3006	Local Distributor between Elk Township State Line and Appleton Rd.	16’	450
Strickersville	State	SR 3006	Local Road between Appleton Rd. and London Britain Township Line	20’	850
Good Hope Road	State	SR 3009	Rural Local Distributor	19’	1400
Lewisville-Chesterville Rd.	State	SR 841	Rural Minor Collector between New London Township Line and 896	21’	1700
Lewisville-Chesterville Rd.	State	SR 841	Rural Minor Collector between London Grove Township Line and 896	21’	1400
Newark – New London Rd.	State	SR 896	Minor Arterial between Kemblesville and London Britain Township Line	21’	9200
Newark – New London Rd. ¹	State	SR 896	Minor Arterial between New London Township Line and Kemblesville	21’	8800
North Creek Rd.	State	SR 3103	Rural Local Distributor	18’	1600
Chesterville – Landenberg Rd.	State	SR 3024	Rural Local Distributor	22’	1100
Pennock Bridge Rd.	State	SR 3022	Rural Local Distributor	19’	350
Clay Creek Rd.	Local		Rural Local Distributor	N/A	N/A
Flint Hill Rd.	Local		Rural Local Distributor	N/A	N/A

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Mount Olivet Rd.	Local		Rural Local Distributor	N/A	N/A
Walker Rd.	Local		Rural Local Distributor	N/A	N/A
Gypsy Hill Rd.	Local		Rural Local Distributor	N/A	N/A
Hess Mill Rd.	Local		Rural Local Distributor	N/A	N/A

Indicative of this rural character, no traffic volumes exceed 10,000 daily trips, and no cartwidths are in excess of 22 feet. None of the County’s larger roadway classification (Expressways, Major Arterials, Major Collectors) are found in the Township. Instead, the four smaller roadway classification of Minor Arterials, Minor Collectors, Local Distributors and Local Roads describe the Township’s roads. The classifications are useful in showing the character of the Township’s roads, as well as their relative scale in other parts of the County.

Minor arterials are roadways with greater concern for mobility than property access and can handle daily traffic volume range of 8,000- 20,000 vehicles. Posted vehicle speed is 35-55 miles per hour. These roads have some control of property access and maintain a corridor length of over 10 miles. Connections are made between multiple landscapes, centers, and some inter-county trips. Minor Arterials sustain high truck mobility with wide lanes and shoulders- no medians or turning lanes. On-street parking is limited to urban areas and bicycle/ pedestrian access is only through adjacent facilities and crossings. Through traffic makes over 50% of the total traffic.

Minor collectors are roadways with even priority for mobility and access and can handle daily traffic volume range of 1,000- 5,000 vehicles. Posted vehicle speed is 35-55 miles per hour. All roads and properties have access to this road with a corridor length of 2-10 miles. Connections are made between villages and multiple neighborhoods, (primarily intra-county trips.) The Minor collector sustains moderate truck mobility with two lanes, no medians and limited turning lanes. On-street parking is discouraged outside “center” areas and bicycle/ pedestrian access is only through adjacent facilities and crossings. Through traffic makes up 25-50% of the total traffic.

Local distributors are established for accessibility more so than mobility and handle daily traffic volumes of less than 1,500 vehicles. Posted vehicle speed is less than 45 miles per hour. Priority is given to property access with a corridor length of less than 4 miles. Connections are made between neighborhoods, with some inter-municipal trips. Local distributors sustain local delivery only with narrow lanes. On-street parking is limited outside “centers” and bicycle/ pedestrian access is given high priority. Through traffic makes up less than 25% of the total traffic.

Local roads are established with no priority for mobility and handle daily traffic volumes of less than 1,000 vehicles. Posted vehicle speed is less than 35 miles per hour. Priority is given to property access with a corridor length of less than 2 miles. These roads link individual properties to distributors and collectors. Local roads sustain delivery only with narrow lanes. On-street parking is appropriate on selected streets and bicycle/ pedestrian access is given high priority. Through traffic makes up less than 10% of the total traffic.

On state routes, PennDOT also assesses roads. Some data collection is out of date, though these figures are still useful in assessing the impacts of truck traffic on roads.

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Table 7-2: State Route Volumes and Truck Traffic (PennDOT)

Road	State Route	Section	ADT	Truck	% Truck	Year
Appleton Rd.	3007	MD to Strickersville Rd.	1,519	137	9.0%	2004
Appleton Rd.	3007	Strickersville Rd. to New London Rd.	2,113	190	9.0%	2000
Strickersville Rd.	3006	Appleton Rd. to Londen Britain Twp.	1,080	97	9.0%	2003
Strickersville Rd.	3006	Appleton Rd. to Berkshire Rd.	457	43	9.4%	1976
Strickersville Rd.	3006	Berkshire Rd. to Elk Twp.	420	41	9.8%	1976
New London Rd.	0896	MD to Appleton Rd.	9,495	759	8.0%	2003
New London Rd. ¹	0896	Appleton Rd. to Chesterville Rd.	9,300	837	9.0%	2000
Newark/New London Rd.	0896	Chesterville Rd. to Hess Mill Rd.	7,570	680	9.0%	2000
Chesterville Rd.	0841	New London Rd. to Lewisville Rd.	1,778	135	7.6%	1991
Chesterville Rd.	0841	New London Rd. to N. Creek Rd.	1,789	161	9.0%	2000
Wickerton Rd.	0841	Chesterville Rd. to Church Hill Rd.	1,951	175	9.0%	2002
N. Creek Rd.	3103	Chesterville Rd. to London Britain Twp.	1,666	150	9.0%	1998
Chesterville Rd.	3024	N. Creek Rd. to Skycrest Drive	1,111	99	8.9%	2001
N. Bank Rd.	3011	Chesterville Rd. to London Grove Twp.	236	17	7.2%	1976
Mercer Mill Rd.	G634	Hunters Run Dr. to Running Deer Trl.	1,067	0	0.0%	1999
Pennock Ridge Rd.	3022	Wickerton Rd. to New London Twp.	360	57	15.8%	2000
Good Hope Rd.	3009	New London Rd. to London Britain Twp.	1,466	132	9.0%	2002

Newark Road / New London Road (SR 896)

SR 896 is the principal transportation corridor in the Township. A study of the 896 corridor has been commissioned and is currently underway. The study is being supported by New London, Penn, Upper Oxford and Franklin Townships and the Chester County Planning Commission. That study is considering present and future conditions along 896 in terms of Land Use, Access Management, and Utilization, but no major recommendations for increasing capacity are anticipated. A number of recommendations are made within this comprehensive plan that should be considered in the 896 corridor study.

While SR 896 is the Township’s primary travel route, it remains only a minor arterial. The route does experience some truck traffic however, which can be detrimental to the rural atmosphere of the Township. Additionally, concerns such as speeding, and access management make for dangerous situations at a number of intersections.

Norfolk-Southern Railroad is currently working on an initiative that would utilize the Susquehanna River mainline to the Amtrak mainline for the transportation of goods south into Delaware. Many of the goods currently coming into the Harrisburg rail depot and subsequently loaded onto trucks for points south, would now travel directly by rail to Delaware, bypassing Franklin Township and significantly reducing truck traffic on SR 896.

¹ The preliminary drafts of the SR-896 Corridor Study indicate that in 2005, this segment of SR-896 experienced a daily volume of 9,800 vehicles. While this exceeds both Chester County and PennDOT figures, it is still within the bounds of its current functional classification.

A significant influencing factor of SR 896 is traffic (trucks in particular) originating from SR 41. A project currently underway that may have a significant impact on traffic along the SR 896 corridor is the study of the SR 41 corridor that is currently underway. SR 41, though outside of Franklin Township, is a road which is currently deficient in capacity, and which has exceptionally heavy truck traffic, by some estimates as much as 30 percent, with 18 percent of that traffic being eighteen wheeled tractor-trailers. The current study of the SR 41 corridor has encountered significant political opposition to the idea of expanding the capacity of the roadway. In fact, this study was one of 27 projects currently announced by the Governor's office as in need of re-evaluation, which has put completion of the draft Environmental Impact Statement (EIS) on hold, thereby putting the entire project indefinitely on hold. Opposition has also led to a study of traffic calming measures along SR 41 including the idea of establishing a series of roundabouts along the roadway.

Currently, the status of the SR 41 study, as a viable, active project, has drawn increased attention to that corridor. This could have significant impacts on traffic patterns along SR 896. Unfortunately for Franklin Township, as SR 41 is outside of the Township's jurisdiction, the Municipality is rather limited in its ability to stake-out a position for maintaining the function of SR 896 as a rural major collector and maintaining the status of SR 41 as a main arterial. Perhaps the Township's greatest opportunity in the area is as part of the SR 896 corridor study, where it can incorporate the potential effects of any future improvements to SR 41 on the SR 896 corridor. These results must be made known to state legislators and an active effort made to prevent the politicizing of the SR 41 study to the point where the hazards of dumping traffic from SR 41 to SR 896 are ignored.

In conjunction with the effort to reduce truck traffic on SR 896, the Township must address the residential growth that is occurring in the Township with its accompanying growth in automobile traffic. In order to ensure the continued efficient movement of vehicles along the roadway, the Township should develop, as part of the SR 896 study, an access management plan for any development along the SR 896 corridor, and perhaps for other major roadways in the Township as well. Each development should be required to submit, as part of a Traffic Impact Statement (TIS) a study of how the proposed construction will affect the movement of traffic along the roadway. Also, roadway intersections along SR 896 and along all Township roads where possible should have opposite side street centerlines lined up with one another to prevent a series of opposite road intersections separated by only a few hundred feet. This type of roadway development is safer and more efficient in almost all cases, despite what might be an increase in developer costs.

Any increase in traffic volume on SR 896 will generate additional flows on periphery roads. For this reason, as well as the increase the Township's flexibility when dealing with future traffic concerns, the focus should be on developing fluid road networks throughout the Township to facilitate intra-municipal traffic. These connections should have the locality as their primary focus, with attention given to discourage the migration of through traffic from SR 896 onto local roads.

Of critical concern to this network are the intersections of SR 896 with SR 841, and SR 896 with

Appleton Road. Increased traffic volumes, truck traffic, and limited sight distances have created dangerous situations at these intersections. Beyond safety concerns, these intersections diminish the usefulness of other portions of the Township's road network, complicating travel for local residents. Key to these improvements are considerations of rural character, particularly with regard to low impact traffic control devices and preventing the radial influence of through traffic. In this way, roundabouts may be appropriate at these intersections, as they would facilitate better local movement and safety, without the impacts associated with traffic signals and lane widening or lane additions.

The land use portion of this comprehensive plan has addressed the appropriateness of development along the SR 896 corridor. The Township should institute the zoning and land use changes outlined in the Future Land Use chapter in order to minimize strip development along SR 896, with its accompanying array of access points, and where development is to occur, the Township should make maximum use of interior access drives which collect traffic from entire development areas and deposit that traffic at a limited number of ingress/egress points. Ultimately, it is paramount that the Township use Transportation as a tool in concert with land use goals to maintain its rural character.

Turnback Program

There are a number of roads within the Township that may be considered initially for turnback by the state to the Township. The Township should be very careful about accepting turnback of the state roads that are located within its borders. Many of these roads are narrow, two lane roads that, based on history, may have been paved without the construction of solid and sufficient road bases. Maintenance issues that arise from deterioration of the road base can be costly, and will not be repaired by PennDOT prior to turnback. The Township should have any road that it is considering for turnback carefully evaluated.

Current Commuting Patterns

Franklin Township remains a bedroom community. The vast majority of the residents, who work outside of the home, also work outside of the Township. As a result, there is a significant dependence on the automobile for travel within and outside of the Township.

Table 7-3: Commuter Patterns (2000 U.S. Census)

Place of Work	Number	Percent
Chester County	717	39.68
Bucks County	8	0.44
Delaware County	107	5.92
Lancaster County	18	1.00
Montgomery County	42	2.32
Philadelphia County	21	1.16
Other PA Counties	29	1.6
New Castle County, DE	782	43.28
Cecil County, MD	29	1.6
Other	54	3.0

Table 7-4: Commuter Means of Transportation (1990, 2000 U.S. Census)

	1990		2000	
	Total	Percent	Total	Percent
Drive Alone	1236	86.55	1489	82.4
Car Pool	112	7.84	136	7.5
Public Transportation	0	0	13	.7
Walked	17	1.19	45	2.5
Worked at Home	49	3.43	119	6.6
Bicycle	8	.56	0	0
Motorcycle	0	0	0	0

While the means of transportation have remained relatively constant, one notable exception is the number of people now working at home. This segment of the population nearly doubled between 1990 and 2000. With the advent of information technologies making home employment more feasible, the Township should take these trends into account in future transportation planning.

Public Transportation

There is currently no public transportation available in Franklin Township. The nature of the Township, particularly its low density, makes the establishment of public transportation by a traditional provider, such as SEPTA, unlikely. There are some possibilities for limited future public transportation in the Township, however, and they include the possibility that a subscription service may be started by a corporation or group of corporations to serve the 896 corridor and the large population of Franklin Township residents that commute outside of the Township each day. The Township may want to consider, both for the purposes of facilitating such a service, and in order to encourage carpooling, the establishment of a strategically located park and ride lot along the 896 corridor. All of these are endeavors that would be well suited to intermunicipal cooperation, and well as coordination with area churches, whose parking facilities are largely vacant on weekdays.

For those using public transportation, SEPTA’s R-2 line, serving Delaware is the nearest access point.

Table 7-5: SEPTA R-2 Delaware Station Ridership FY 2005 (SEPTA)

Station	Average Daily Boardings
Newark	279
Churchman's Crossing	177
Wilmington	637
Claymont	475

These stations provide access to Philadelphia, as well as access to Amtrak’s Northeast Corridor. The Newark station, the closest to Franklin Township, is on DelDOT’s Capital Improvement Plan for relocation, and development into a transportation center. This follows on the heels of recent improvements to the station at Wilmington. These may all have potential to increase ridership in general and public transportation usage in particular in Franklin Township.

Bicycle Routes

Chester County’s Long Range Transportation Document – Connecting *Landscapes* currently shows a number of possible bicycle routes through the Township. These routes include:

Table 7-6: Possible Bicycle Routes

Route	Status	Rider Level
SR 896	Major Improvements Needed	Advanced
Appleton Road	No Major Improvements Needed	Beginner
Stricklersville W. of Appleton	Widen/Resurface Shoulders	Intermediate
Stricklersville E. of Appleton	No Major Improvements Needed	Intermediate

Sidewalks/Trails

The Township’s rural development does not lend itself particularly well to a large network of sidewalks. The cost of traversing the significant distances between residences in much of Franklin is a significant component to making paved/concrete pedestrian connections practical. However, this is not the case with Kemblesville Village, where an improved network of sidewalks could prove quite beneficial. Increasing the walkability of Kemblesville would also benefit farther reaching goals of Traditional Neighborhood Development (TND). Pedestrian connections elsewhere in the Township should focus on an integrated trails network, which is outlined in Chapter 9: Open Space and Recreation.

Chester County Long Range Transportation Planning

The Township currently has a limited number of projects on the County's Long-Range Transportation Plan. These projects include:

- Replacement of SR 841 bridge over Tributary of White Clay Creek
- Replacement of Mt. Olivet Road Bridge over Mackey's Run

Of these two projects, the first is targeted to receive funding for engineering in years 5-8 of the 12 year plan, while the second project included on the list is scheduled to receive funding for engineering in years 8-12 of the twelve year plan.

Also included in the County's long-range plan is a list of *operational improvements not funded*, or what can accurately be described as a true wish list of projects. Franklin Township projects found on this list include:

- Safety improvements at SR 896 and Den Road
- Safety improvements at SR 896 and Peacedale Road
- Safety improvements at SR 841 and Flint Hill Road
- Safety improvements at SR 841 and School House Road
- Safety improvements at SR 841 and N. Creek Road
- Safety improvements at SR 841 and Gypsy Hill Road

These projects occupy positions 96, 97, 134, 138-140 and 151, respectively, on the prioritized list of improvements, which currently makes their funding and completion a long-term proposition.

Notable omissions from these lists are the intersections of SR 896 with SR 841, Appleton Road, and Good Hope Road. These intersections are of high concern in the township, however, and the Township may want to consider advocating for their inclusion.

In general, the County uses a number of criteria when developing its long-range transportation plan. Among these are safety, the functional classification of the roadway, regional benefit of the project and the willingness or commitment shown by the affected municipality or municipalities to the project. One way of improving a project's location on the priority list, therefore, is by demonstrating that commitment, perhaps, through the commissioning of a feasibility study for the project. Completion of a feasibility study is something that may be within the financial capability of the Township, while other costs such as engineering and construction may not be within the Township's means.

Maintenance

With a majority of its transportation infrastructure already in place, a properly integrated and regular program of maintenance will be of equal, if not greater importance, to new capital projects when it comes to maintaining the functionality of the Township's roadway system. Improperly maintained roads will deteriorate leading to non-budgeted emergency expenditures for repairs, or to drivers bypassing those routes and thereby putting an ever increasing traffic load on the limited number of remaining roadways, leading to deterioration of these routes, and

setting up an endless cycle of deterioration that the Township maintenance staff will not be able to keep up with as the years go by. Additionally, intersections where sight distance is inadequate, or where drainage problems lead to frequent flooding, or where alignment issues make turns difficult, all act as bottlenecks in the transportation system and increase the number of accidents. In order to minimize these future issues the Township should continue to implement its multi-year *Streets* program, similar to a capital improvements program, but focused on maintenance issues.

CONCLUSION

The township's rural transportation network is well suited to servicing the needs of the residents. However, through traffic will strain this capacity. Therefore, it is critical the Township take steps to limit transportation impacts, and to plan for future land use to compliment rural transportation patterns rather than aggravate them. Traffic calming measures, access management, increased public transit options, and improving local road network flows can all contribute to a manageable transportation network.

RECOMMENDATIONS

1. Having already taken the steps of inventorying and pricing its *Streets* program, the Township should continue to develop a prioritized list of maintenance needs, whether they be mill and overlay, tree/brush removal, or sight distance improvements. These projects should then be placed into a three to five year program with a multi-year budget established. The road survey should be conducted on an annual basis and the prioritized list updated so that the municipality can continue to accurately fund its maintenance needs on a three to five year cycle. During the survey, the Township should ensure that residents are not encroaching upon dedicated rights-of-way and clear sight triangles, and take action to restore the sanctity of those areas when found.
2. The Township should give very careful consideration to any new traffic patterns created by new residential or commercial development. Access management at ingress/egress points of each development in the Township should be the top concern in this regard, particularly along the SR-896 corridor.
3. To preserve rural character, increase the predictability of new traffic patterns, and to enable the municipality to plan according, Franklin Township must use the Future Land Use chapter as a guide to the placement of new development.
4. Make Route 896 less desirable as a truck route.
5. The Township should initiate a project to improve the intersection of SR 896 and Appleton Road. Currently, this project is not on PennDOT's list of projects or even on the County and DVRPC long-range transportation plan. The Township should fund a feasibility study that would determine an appropriate project for improving the intersection. After the completion of the study, the Township should seek to have the project placed on the County's long range transportation plan, and contact state legislators to ensure that the project makes it to the TIP and is fully funded.
6. Along with neighboring municipalities, the Township should explore the possibilities of operating a scale to reduce traffic along SR 896. This may provide a sufficient deterrent to heavy trucks, and reduce the overall volume of traffic traveling through the corridor, whether on 896 itself, or between US 1 and SR 796. If the Township chooses to pursue this option, it should be certain to involve PennDOT in the planning, to avoid possible conflicts regarding access to the weigh station. The lack of a municipal police force also complicates matters, though this could be mitigated if other communities along SR 896 are involved in the effort. This could also reduce costs related with the operation of the weigh station, and the provision and maintenance of the equipment.
7. Explore the use of a rural roundabout for dangerous intersections along SR 896. This would serve to calm traffic, as well as alleviate the dangerous situation currently at the intersection, particularly in locations such as SR 841, Appleton Road, and Good Hope Road. Additionally, the township should advocate for each of these intersection improvements being added to the County's Long-Range Transportation Plan.

8. When necessary to initiate projects, and financially practicable for the municipality, feasibility studies of various transportation projects should be undertaken by the Township.
9. Franklin Township should make other Townships along the SR 896 corridor aware of the efforts of Norfolk Southern. Support for this initiative should be expressed in the SR 896 study currently underway. Franklin and other Townships should contact Norfolk Southern regarding this project and express their support, as well as expressing support for the idea to state and national representatives
10. Improve the Township's transportation network with a focus on intra-municipal movement.
11. Any sidewalk improvements within the Township should be focused on Kemblesville.
12. Manage access to new developments and commercial locations to minimize dangerous intersections, particularly with SR 896. This should include traffic TISs from all developers, as well as street centerline alignments with existing roadways, all towards the goal of reducing the number of dangerous intersections in the Township.
13. Carefully evaluate any road under consideration for turnback, to assess the viability of the project within the Township.
14. Promote Park-and-Ride and carpooling options to Newark and associated transit with neighboring municipalities.
15. Use the Route 896 Corridor Project to influence transportation planning along the SR 41 corridor.
16. The Township should consider the impacts of home employment on future traffic patterns.
17. Employ traffic calming measures, particularly in residential areas, to increase safety for local residents and deter through traffic from deviating onto local roads.