State and Federal Transportation Information for Comprehensive Planning at the County and Municipal Levels of Government

State Level

In 2007 PennDOT adopted *Smart Transportation* policies and guidelines. The following references are taken from “Smart Transportation Guidebook” “Planning and Designing Highways and Streets that Support Sustainable and Livable Communities”.

“The goal of the Guidebook is to integrate the planning and design of streets and highways in a manner that fosters development of sustainable and livable communities. The Guidebook has equal applicability to rural, suburban and urban areas…. The principles and concepts in the Smart Transportation Guidebook are offered for use and thoughtful deliberation in all communities throughout Pennsylvania…” Allen D. Biehler, Secretary, PennDOT

Smart Transportation proposes to manage capacity by better integrating land use and transportation planning. The desire to go “through” a place must be balanced with the desire to go “to” a place…. The Guidebook intends to help agencies, local governments, developers and others plan and design roadways that fit within the existing and planned context of the community through which they pass.”

Principle 4. Plan for alternative transportation modes

The needs of pedestrians, bicyclists and transit users must be considered in designing all roadway projects. Sidewalk networks should be well connected with opportunities for regular, safe street crossings. **On collector and arterial roadways, bike lanes or wide curb lanes can encourage people to bike rather than drive for short and moderate distance trips.** If a roadway is designed to discourage vehicular speeding, it can be comfortably used by pedestrians and bicyclists alike….By encouraging alternative transportation, communities can break the pattern of sprawling suburbs with rapidly multiplying vehicular trips and congestion.

Chapter 7 Roadway Guidelines

The shoulder is the portion of the roadway contiguous with the traveled way that accommodates stopped vehicles, emergency use and bicyclists. … a shoulder of 4 to 6 ft. in width narrows the travel lane for motorists and provides a dedicated area for bicyclists….the dimensions refer to paved surfaces only. Paved shoulders are more advantageous for bicycle travel and should be encouraged.

7.4 Bicycle Facilities

Encouraging alternative transportation modes is a key principle of smart growth development. All reconstruction or restriping projects for arterial and collector roadways should routinely consider the best means of accommodating bicyclists.
7.4.1 Facility Types  There are 3 principal types of bike facilities:

1. Shared roadway….
2. Bike lane…
3. Shared use path …The term bicycle path is rarely used for these facilities since they are shared by many other non motorist modes such as pedestrians and roller skaters…they are highly valued for their recreational opportunities. **However, they are much less functional for everyday transportation than the first two categories discussed.** They access relatively few land uses within their community. When installed parallel to roadways, shared use paths experience a higher rate of motorist - bicyclist conflicts and crashes than on road facilities…..

Due to the limitations of shared use paths, states and local governments should emphasize bike lanes and compatible shared roadways to accommodate bicycle use….

Bicycle education is highly recommended for supplementing all facility types……

**The AASHTO Guide for the Development of Bicycle Facilities is the most authoritative national guide for designing bicycle facilities.** (references PennDOT Bicycle and Pedestrian Master Plan)

7.4.2 Bike Lanes
Bike lanes are the ideal facility for accommodating basic bicyclists…..
A bike lane width of 5 ft. is recommended by AASHTO. Widths of 6 ft. are recommended with the presence of considerable truck traffic and under most circumstances when roadway speeds exceed 40 mph. …

7.4.3 Shared Roadway – Paved shoulder and wide curb lane

….Given the relatively narrow rights of way for many roadways in (PA), wide curb lanes are often the most practical bicycle facility….often preferred by experienced bicyclists…Bike lanes also may collect more debris than wide curb lanes since they are not swept by the movement of passing traffic.

The recommended width for a wide curb lane on most streets is 14 ft….

Bicyclists appreciate any extra width provided to them on higher order roadways, whether the curb lane width meets the recommended standard or not. If space is available in restriping a multi lane roadway, the outside lanes should be wider than the inside lanes.

7.4.4 Facility Selection
Guidance on selecting a bicycle facility should be provided by a bike network plan that identifies the most important bicycle generators in the community, and provides
recommendations on how to best accommodate bicyclists between those destinations. Bicycle generators include schools, parks, major shopping areas, employment centers, transit stations, and large residential developments.

A bike network plan should identify roadways for bike lanes, compatible shoulders or shared lanes, and shared use paths. In many cases, the selected roadways will be arterial and collector roadways. **Bicyclists prefer to travel on these roadways for the same reason that motorists do: they provide the most direct route to key destinations.**

7.4.5 Road Diets and other treatments…

features desired by bicyclists:

* Adequate width travel lanes to accommodate bicyclists

* Signals capable of detecting bicycles or operating on pretimed phases. In short, the ability to navigate through an intersection without the need to dismount the bicycle.

* Low vehicular speeds.

* Good sight distance/visibility of signals and conflicting vehicles.

* Predictability of conflicting traffic flows, through the use of protected (green arrow) phases and exclusive travel lanes.

9.3 Operations and Maintenance

Snow removal
Bike lanes should also be cleared; snow should not be stored there (at the curb) until it melts.

(note: snow removal of multi use paths is also critical)

Pedestrian Facilities are also addressed by Smart Transportation Guidelines

“Therefore, the most fundamental action that can be taken by any municipality to improve pedestrian facilities is to amend its land development ordinance to require the installation of sidewalks for new and redeveloped land uses.

In suburban areas, developers have routinely requested waivers from sidewalk requirements, typically on the grounds that any anticipated pedestrian activity would be minimal. With few exceptions, this should not justify a waiver, given piecemeal suburban development patterns and the constant potential for redevelopment with more intensive uses.
Memo from M.G. Patel, P.E., Chief Engineer, April 4, 2007

Effective May 15, 2007, Department policy requires the evaluation of the access and mobility needs of pedestrians and bicycle users in highway and bridge transportation corridors. …The intent of this policy is to bolster the importance of pedestrians and bicycle travel as viable and connective modes of transportation. Previous policy allowed the evaluation of the access and mobility needs of pedestrians and bicycle users to be a design and planning option, not as a process requirement.

This change of policy applies to all projects that are programmed on their respective Transportation Improvement Program after the effective date. Efforts should be made to evaluate and accommodate all existing projects, including existing projects that have not received environmental clearance in the design process, and projects that were placed on the TIP prior to the effective date.…

This revised policy is consistent with the Department’s Rightsizing and Context Sensitive Solutions approaches to project development. This change in Department policy supports Linking, Planning and NEPA initiatives in regard to land-use, transportation, and related infrastructure planning. MPO/RPO and county-wide Pedestrian and Bicycle Master Plans (as required by Federal transportation legislation, the Pennsylvania Municipalities Planning Code, and subsequent municipal ordinances) will provide additional tools to identify, locate, and evaluate pedestrian and bicycle facilities in the context of the transportation network.”

2007 PennDOT Bicycle and Pedestrian Plan Excerpts

The intent of this plan is to more fully integrate bicycle/pedestrian transportation into PennDOT’s routine project development processes and to include our partners in the process at the appropriate levels of responsibility.

Pennsylvania is a place where residents and visitors of all ages can choose to bicycle and walk. People are able to bicycle and walk with confidence, safety and security in every community, both for everyday transportation and to experience and enjoy the remarkable natural resources of the state.

Its (Bicycle and Pedestrian Plan) purposes are to satisfy PennDOT’s planning responsibilities under federal law and provide guidance for the Department on how to address the integration of those modes into the routine transportation project development process.

Enhance the local network – As 40% of all trips in the U.S. are 2 miles or less and 18% are 1 mile or less, the bicycling and walking modes should be an option for those trip lengths.
Accommodate all modes – Options for more compact land use also lend themselves to increased use of the cycling and walking modes.

Maintenance – Cyclists and pedestrians are particularly sensitive to maintenance activities and more careful attention to that area of PennDOT responsibility will result in fewer problematic bike/ped mobility issues.

Federal Level

The FHWA has begun to implement internal changes in compliance with FHWA Policy and Design Guidance dated February 1999 and February 2000, commonly known as the Administrator Wykle memos. The conclusion of the February 2000 document states: “There is no question that conditions for bicycling and walking need to be improved in every community in the United States; it is no longer acceptable that 6000 bicyclists and pedestrians are killed in traffic every year, that people with disabilities cannot travel without encountering barriers, and that two desirable and efficient modes of travel have been made difficult and uncomfortable.”

“Every transportation agency has the responsibility and the opportunity to make a difference to the bicycle-friendliness and walkability of our communities. The design information to accommodate bicyclists and pedestrians is available, as is the funding. The United States Department of Transportation is committed to doing all it can to improve conditions for bicycling and walking and to make them safer ways to travel.”

PennDOT, planning partners, and municipalities must exercise their unique opportunity to evaluate and program pedestrian and bicycle modes as an integral part of their transportation network at the planning stage.

Sections 134 and 135 of SAFETEA-LU require state and regional planning for all transportation modes, with particular emphasis on bicycle and pedestrian transportation. Other sections of the act reinforce planning for those 2 specific modes. SAFETEA-LU requires that the modes be fully integrated into all phases of transportation planning and design, that bicycle and pedestrian safety be given elevated importance, that intermodal links be provided, and that system connectivity is a paramount goal.

SAFETEA-LU Planning requirements

134. Metropolitan transportation planning
POLICY – It is in the national interest to encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and between States and urbanized areas, while minimizing transportation related fuel consumption and air pollution through metropolitan and statewide transportation planning processes identified in this chapter;