

Bicycle Lanes - Planning, Design, Funding

2018 South Mountain Partnership Trails Workshop
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Policy Changes: BOP

Bicycle Policy Changes

The OLD Way - Bicycle Occupancy Permit

- ▶ Complicated
- ▶ Unclear on maintenance issues
- ▶ Essentially stopped all on-road bike lane projects

Bicycle Policy Changes

The New Way - Letter of Request

- ▶ Clarifies most maintenance responsibilities
- ▶ Simple to add bike lanes into a restriping project
- ▶ Separated Bike Lanes still require an agreement
- ▶ District 6 is working on multiple projects now in coordination with local governments

Engineering

NEW FACILITY DESIGNS COMING TO A ROAD NEAR YOU

Engineering Bike Lanes

Roadway design intended to be self-enforcing

Accommodating all modes, ages, and abilities

Flexible and inexpensive

Constrained by legislation in some cases

Standards change over time

Small Town and Rural Multimodal
Networks

Achieving Multimodal Networks: Applying
Design Flexibility and Reducing Conflicts

Separated Bike Lane Planning and Design
Guide

Bicycle Facilities and the Manual on
Uniform Traffic Control Devices (MUTCD)

AASHTO GREEN BOOK Design Flexibility

The intent of this policy is to provide guidance to the designer by referencing a recommended range of values for critical dimensions.

Good highway design involves balancing safety, mobility, and preservation of scenic, aesthetic, historic, cultural, and environmental resources.

This policy is therefore not intended to be a detailed design manual that could supersede the need for the application of sound principles by the knowledgeable design professional.

Sufficient flexibility is permitted to encourage independent designs tailored to particular situations.

PENNDOT Engineering / Policy

2007 Bicycle and
Pedestrian Master
Plan

2016 Transportation
Advisory Committee's
Bicycle and Pedestrian
Policy Study

Design Manual 1

Design Manual 2

Publication 111 –
Pavement Markings
and Signing Standards

Publication
236M Sign Index

Publication 383

Traffic Calming
Handbook

Roundabouts

PennDOT Connects

PennDOT and its Metropolitan Planning Organization (MPO) and Rural Planning Organization (RPO) jointly prepare transportation studies, plans, and programs

Through the PennDOT Connects process other community stakeholders (e.g., transit operators, economic development agencies, etc.) are actively involved to improve transportation system performance and achieve more livable communities.

PennDOT Connects

PennDOT meets with local governments to discuss transportation needs.

Larger, more complicated and expensive projects like roadway widening or intersection reconfiguration

PENNDOT Engineering / Policy

PennDOT Connects

The Department dedicates approximately \$3 million a year in Statewide Planning and Research funds to transportation planning studies.

- Corridor congestion
- Land use continuity with existing transportation infrastructure
- Freight accessibility/ compatibility with surrounding land use
- Limited pedestrian and/or bicycle accommodations
- Stormwater management problems
- Lack of transit access

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PENNDOT Restriping and Resurfacing

Get Your Foot in the Door

Each District has a list of corridors prioritized for restriping and resurfacing

- These change after a review of winter's impacts
- Short turn-around time at District for decisions
- Have your plans ready – identify priority locations
- Have your elected officials on-board with your plan
- Know your point of contact and keep discussions going

PENNDOT Restriping and Resurfacing

Get Your Foot in the Door

Decision-Making with PennDOT

- Some locations will not work for bike lanes
- Wider shoulders are a workable option
- Signing and markings can be fairly simple in rural areas

Mapping Ideas

Low Stress Network

- Mapping does not need to be complicated in a small community
- Local roads inside a community are usually lower speed and lower volume
- But gaps – larger roads with faster traffic – limit the use of the network
- Bike lanes and other improvements can address this

Mapping Ideas

DVRPC – Level of Traffic Stress Connectivity and Analysis

DVRPC Bicycle LTS and Connectivity Analysis

Level of Traffic Stress (LTS) is a road classification scheme based on the comfort of bicyclists in the traffic stream. DVRPC's LTS assignment is based on the number of lanes, effective vehicle speed, and presence/type of bicycle facility. The table below outlines the characteristics of each LTS level.

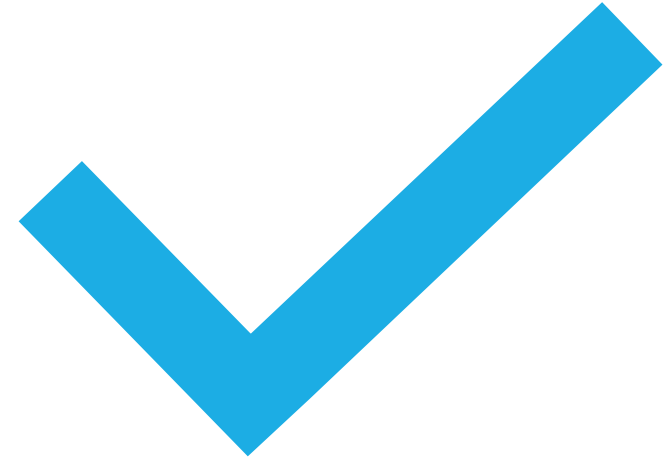
LTS	Comfortable Enough For (Cyclist Type)	Characteristics
1	Most People	<ul style="list-style-type: none">• Relaxing• Suitable for children
2	Interested, but Concerned	<ul style="list-style-type: none">• Suitable for most adults• Presenting little traffic stress
3	Enthused and Confident	<ul style="list-style-type: none">• Moderate traffic stress• Comfortable for those already riding bikes in American cities
4	Strong and Fearless	<ul style="list-style-type: none">• High traffic stress• Multilane, fast moving traffic

Sources: Mekuria, M., Furth, P. and Nixon, H. "Low-stress bicycling and network connectivity", Mineta Transportation Institute, No. Report 11-19, 2012.;
Geller, R. "Four Types of Cyclists," Portland Bureau of Transportation, Portland, OR, 2006.
www.portlandoregon.gov/transportation/article/264746. Accessed Aug, 11, 2016.

Funding Resources

Funding Resources: PennDOT TAP

- Bicycle and pedestrian facilities are eligible for TAP funding.
- Eligibility TAP project sponsor can be a municipality or an authority; it cannot be registered as a 501(c).
- Eligible agencies include local governments, regional transportation authorities school districts and local education agencies or schools.
- Amount Construction projects must have a construction cost of at least \$50,000.
- Applicants pay all pre-construction costs. TAP funds all construction phase costs at 100%,
- No match required.



Funding Resources: PennDOT TAP (MPO)

- Description Bicycle and pedestrian facilities are eligible for TAP funding.
- Eligibility Funding is only available to partners in these MPO areas. Check the websites of: DVRPC
- (Philadelphia area), SPC (Pittsburgh area), Lehigh Valley, HATS (Harrisburg area),
- Lancaster, Scranton/Wilkes-Barre, Reading, York and Shenango Valley.



Funding Resources: DCED Community Block Grant

- Description Grants and technical assistance are made available for federal designated municipalities for eligible types of community development in low-moderate income communities.
- This can be used for housing rehabilitation, public services, community facilities, infrastructure improvement, development and planning.
- **Eligibility** There are two tiers: an entitlement program, providing annual funding to designated municipalities;
- A competitive program available to non-federal entitlement municipalities and Act 179 entitlement municipalities with a population less than 10,000.
- Proposed projects must meet HUD established eligibility requirements and benefit low moderate income individuals or communities or assist in the elimination of slums and blight.
- Entitlement funding is set by formula. Competitive program is \$750,000 maximum.



Funding Resources: DOT Multimodal

- Projects eligible for MTF funding include:
- Work to enhance bus stops, park and ride facilities, sidewalk/crosswalk safety improvements, bicycle lanes/route designations, etc.;
- Sidewalk connections, crosswalks, pedestrian and traffic signals, pedestrian signs and lighting;
- Improving signage, access roads, port upgrades, bicycle/shared lane markings and bicycle parking at transit stops; and
- Neighborhood scale transit-oriented development.
- *NOTE: This Multimodal Transportation Fund differs from that of the DCED*
- Eligibility: Municipalities, councils of governments, business/non-profits, economic development organizations and public transportation agencies are eligible for funding.
- This is for projects of total cost of at least \$100,000 to no more than \$3,000,000. A minimum match of 30% is required.



Questions?
