

Advancing a Complete Streets Agenda

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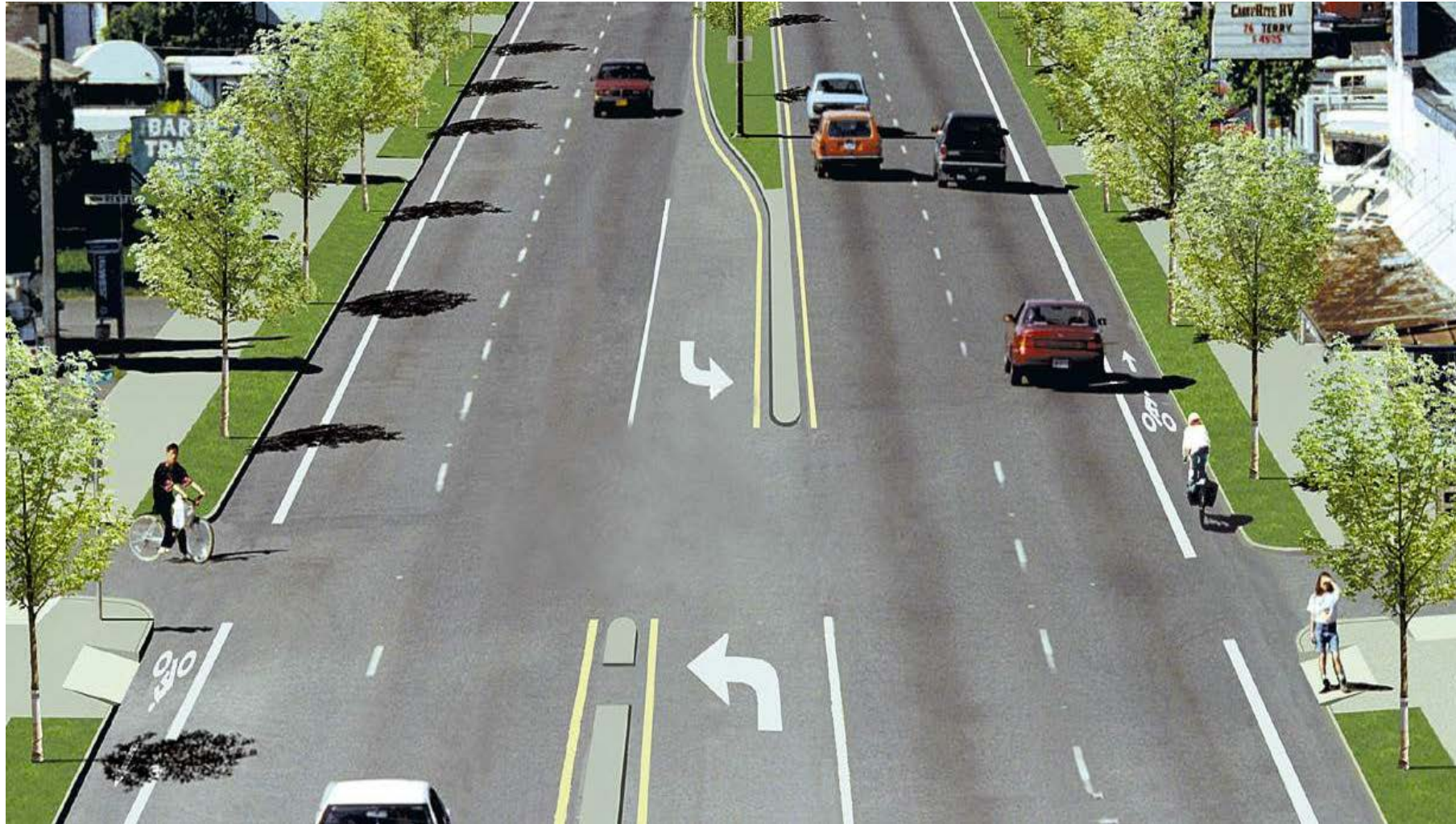


Why build a Complete Street?

Complete Streets are streets that are safe for all modes of transportation and people of all ages and abilities.



Elements of a Complete Street



Consistent with the Lancaster County Transect



T-1
NATURAL AREAS

T-2
AGRICULTURE

T-3
RURAL CENTERS

T-4
SUBURBAN

T-5
URBAN

T-6
URBAN CENTER

T-7
URBAN CORE

Context Determines The Appropriate Complete Street Elements: Harrisburg Pike

Harrisburg Pike, Urban



Near the intersection with Prince Street, Harrisburg Pike is two lanes with a center turning lane. There are sidewalks but no shoulders or on-street parking. Traffic is heavy on this section of roadway, with an average of 28,000 vehicles/day.

Harrisburg Pike, Suburban



At the intersection with Good Drive, Harrisburg Pike consists of four wide lanes. Traffic volumes are lower than in the City. The wide lanes signal to drivers that they can travel at higher speeds.

Harrisburg Pike, Suburban



This section of Harrisburg Pike is also in a suburban setting, but further west of downtown. The road has two lanes, trees line the sides of the road and there is a wide shoulder to improve safety for bicycles. Traffic volumes average 10,000 vehicles/day, about one-third the volume along urban road sections.

Harrisburg Pike, Suburban Neighborhood



This section of Harrisburg Pike is in Landisville, once a rural village and now a suburban neighborhood. The two-lane road has on street parking and fits into a neighborhood context. It has lower traffic volumes.

Complete Streets Program Actions

Lancaster County

Resolutions

LCTCC CS Policy Statement	June 2014
LCPC CS Policy Statement	July 2014
City of Lancaster	May 2014
Elizabethtown Borough	August 2014
Lancaster Township	September 2014

Workshops

Introduction to Complete Streets	June 5 and 6, 2014
Implementing Complete Streets	September 16 and 17, 2014
Successes of the SGT and Complete Streets Programs	April 9, 2015

Lancaster County Complete Streets Guidebook

Lancaster County Planning Commission
Lancaster County, Pennsylvania

In partnership with
Lancaster General Health
Lancaster County Coalition for Smart Growth



T6: Urban Center

<i>Road Type</i>	<i>Lane Width¹</i>	<i>Paved Shoulder Width²</i>	<i>Parking Lane³</i>	<i>Bike Lane</i>	<i>Curb Return⁵</i>	<i>Travel Lanes</i>	<i>Desired Operating Speed</i>	<i>Clear Sidewalk Width</i>	<i>Buffer/Green Zone⁴</i>	<i>Shy Distance</i>	<i>Total Sidewalk</i>	<i>Median Width</i>
Regional Arterial	10'-12' 14' outside lane if no shoulder or bike lane	4'-6' If no parking or bike lane	8' parallel	5'-6'	15'-40'	2-8	30-35 mph	6'-12'	4'-6'	2'	12'-20'	6'-8' pedestrian only 16'-18' LT lane + pedestrian
Community Arterial PennDOT recommended	10'-12' 14' outside lane if no shoulder, bike	4'-6' If no parking or bike lane	7'-8' parallel	5'-6'	15'-40'	2-4	25-30 mph	8'-14'	4'-6'	2'	14'-22'	6'-8' pedestrian only 12'-18' LT lane + pedestrian
Community Collector PennDOT recommended	10'-11' with bike lane; 14' outside lane if no bike lane or shoulder	4' if no parking or bike lane	7'-8' parallel See Notes for angled	5'-6'	10'-30'	2-4	25-30 mph	6'-10'	4'-6'	2'	12'-18'	6' pedestrian only 12'-16' LT lane + pedestrian
Neighborhood Collector PennDOT recommended	9'-11' with bike lane; w/o bike lane or shoulder; 14' for bike route	N/A	7'-8' parallel See Notes for angled	5'	10'-25'	2	25-30 mph	6'-8'	4'-6'	2'	12'-16'	6'-8' pedestrian only 8'-10' landscaping
Main Street PennDOT recommended	10'-12'; 14' curb lane possible for bike route	N/A	7'-8' parallel See Notes for angled	5'-6'		2	20-25 mph	6'-14' (gen. not over 10')	4'-6'	2'	12'-22'	
Local Road PennDOT recommended	9'-11' with bike lane 12'-14' w/o lane or shoulder for bike route	See Notes on lane & parking width	7'-8'	N/A	5'-25'	2	20-25 mph	6'-8'	3'-5'	2'	11'-15'	N/A

Do Complete Streets Cost More than Non-Complete Streets?

The city of Charlotte, NC found that adding bike lanes and sidewalks increased the total cost of a project only slightly. Fluctuations in construction costs are much more important factors in a project's cost than adding complete street elements. Typical complete streets costs can be minimized by savings on pavement costs when lane width is reduced.

Costs of a 3-4 Lane Divided Street

<i>Complete Street Elements</i>	<i>Construction Cost Per Mile</i>	<i>Sidewalk (%)</i>	<i>Bike Lanes (%)</i>	<i>Street Options</i>	<i>Total Cost Difference (%)</i>
12' Lanes (baseline project) (40' F-F)	\$4,800,000	-	-	-	-
12' Lanes + Bike Lanes (50' F-F)	\$5,100,000	-	+5.4%	-	+5.5%
12' Lanes + Bike Lanes + 5' Sidewalk (50' F-F)	\$5,350,000	+3.4%	+5.1%	-	+8.5%
Reduced pavement width : 11' Lanes (36' F-F)	\$4,700,000	-	-	-2.1%	-2.0%
Reduced pavement width: 11' Lanes + Bike Lanes (46' F-F)	\$5,000,000	-	+5.5%	-2.1%	+3.5%
Reduced pavement width: 11' Lanes + Bike Lanes + 6' Sidewalk (46' F-F)	\$5,250,000	+3.4%	+5.2%	-2.1%	+6.5%

Model Complete Streets Language

Definition of Complete Streets infrastructure

- Definition of elements such as sidewalks, bicycle lanes, landscaping and other infrastructure.
- Include features in the municipality's Pedestrian/Bicycle Master Plan.

Build Complete Streets into a Municipality's Everyday Requirement

- Make Complete Streets part of the everyday operations of the Planning, Public Works and other depts.
- Require every public [and private] road project to include Complete Streets elements, where feasible.
- Consider road and bridge maintenance projects for opportunities to include Complete Street elements.
- Review and update SALDO, zoning ordinance, other ordinances to include Complete Streets language.
- Update street design guidelines to be consistent with Complete Streets recommended design.

Data Collection and Standard

- Collect data to determine the extent to which streets are meeting the needs of all users.
- Evaluate planning and design studies, health and other studies to determine and correct adverse impacts on all users.
- Establish performance standards to measure progress.
- Review and update procedures, as needed, for public participation in the design of road and street projects.

Resources for Municipalities on the LCPC Website

www.lancastercountyplanning.org

- Model Municipal Complete Streets Ordinance
- Complete Streets PowerPoint to educate policymakers
- Complete Streets Guidebook
- Factsheets and other information on the LCPC website
- Model Complete Streets language to include in municipal ordinances, zoning codes and Comprehensive Plans

Resource List

- LCPC: lancastercountypanning.org/177/Complete-Streets-for-Lancaster-County
- Lighten Up Lancaster: lightenuplancaster.org/In-The-Community/Active-Transportation.aspx
- CSG: coalitionforsmartgrowth.org/
- Smart Growth America, National Complete Streets Coalition: smartgrowthamerica.org/program/national-complete-streets-coalition
- National Assn. of City Transportation Officials: nacto.org
- American Planning Association: planning.org



American Planning Association

Making Great Communities Happen

Smart Growth Transportation Program

Four Core Criteria

- Consistency with the Lancaster County Comprehensive Plan
- In a Designated Growth Area
- Demonstrates an ability to pay the local share
- Viable implementation strategy

Five Weighted Criteria

- Supports economic development and quality of life
- Increases mobility options
- Preserves the environmental, historic and cultural integrity of the county
- Implements a current transportation plan
- Encourages public-private partnerships to fund projects

Smart Growth Transportation Program

FY 2013-2014 Projects

	<i>Municipality</i>	<i>LCTCC Funds</i>	<i>Total Project Costs (incl. LCTCC \$)</i>
Pedestrian & Bicycle Pathway Extension	Elizabethtown	\$444,743	\$1,075,615
Mulberry Street Conversion to two-way	City of Lancaster	\$675,000	\$2,000,000
Northwest Lancaster County River Trail Signage	East Donegal Township	\$59,000	\$65,000
TOTAL		\$1,163,743	\$3,140,615

Mulberry Street Conversion to Two-Way Traffic

Sponsor: City of Lancaster
Project Cost: LCTCC: \$ 675,000
City: \$ 1,325,000
Total Cost \$ 2,000,000



Elizabethtown Bicycle and Pedestrian Path, Phase 3

Sponsor: Elizabethtown Borough
Project Cost: LCTCC: \$ 444,743
Borough: \$ 630,872
Total Cost \$ 1,075,615



Northwest Lancaster County River Trail Signage Project

Lead Sponsor: East Donegal Township
Project Cost: LCTCC: \$ 59,000
Municipalities: \$ 6,000
Total Cost \$ 65,000



Smart Growth Transportation Projects

FY 2015-2016 Projects

	<i>Municipality</i>	<i>LCTCC Funds</i>	<i>Total Project Costs (incl. LCTCC \$)</i>
Comprehensive Bike Plan	Lancaster City	\$48,000	\$60,000
Non-Motorized Transportation Study	LIMC	\$48,000	\$60,000
Doe Run Rd. Pedestrian Enhancements	Penn Township	\$858,378	\$1,192,618
Bridgeport Area Transportation Study	East Lampeter Twp.	\$187,200	\$237,500
PA 741 Multimodal Safety Improvements	Strasburg Township	\$397,200	\$500,000
North & South Duke Street Connector	Millersville Borough	\$497,200	\$2,608,856
TOTAL		\$2,035,978	\$4,658,974

FY 2017-2018 Projects

	<i>Municipality</i>	<i>LCTCC Funds</i>	<i>Total Project Costs (incl. LCTCC \$)</i>
Willow Street Traditional Village Project	West Lampeter Twp.	\$1,214,652	\$1,574,652
Charlotte Street Conversion to 2-Way Traffic	City of Lancaster	\$977,500	\$1,500,000
PA 772 Pedestrian Safety Project	Mount Joy Borough	\$1,337,200	\$1,558,700
Downtown Connections Study	Manheim Borough	\$100,000	\$125,000
TOTAL		\$3,629,352	\$4,758,352

TOTAL OF ALL FUNDING CYCLES

\$6,829,073

\$12,557,941