



Legistar: 140091

April 4, 2014

TO: Public Works Committee

FROM: Carl S. Goldsmith, Director of Public Works *CS*

SUBJECT: Village Board Policy – Complete Streets (6.J.)

At the March 11, 2014 Public Works Committee meeting, the Committee reviewed a draft “Complete Streets” policy. The purpose of the policy is to provide guidance to the Village in designing roadway improvements. The policy, as drafted, seeks to provide for the safe and convenient travel for all users of the roadway and associated sidewalk infrastructure. The intent is to ensure that the Village examines the impact that the roadway configuration has on the public. This level of review currently exists through the Village’s various planning mechanisms; however, the “Complete Streets” policy will codify the review process.

At the March 11, 2014 meeting, the Committee was supportive of the concepts established in the policy, but requested two changes/modifications to the policy and guidelines:

1. More clearly indicate that the policy is meant to serve as guidelines for roadway improvements. There was a concern that the policy would establish a mandate for all future roadway improvements. While the Village will make efforts to include amenities for all users, factors such as budget, right-of-way and existing utilities will be used in determining which, if any, complete streets features will be included in design phases. Language has been added to the Village Board Policy to articulate the Committee’s position.
2. Incorporation of a shared off-street path for pedestrians and bicyclists was requested as part of the policy. Staff has included a forth-potential configuration that allows for a shared path for bicyclists and pedestrians.

A copy of the revised Village Board policy (6.J.) and the Complete Streets Policy has been attached for your consideration. Staff will be available to answer specific questions on the proposed policy.

Recommendation

Staff respectfully requests that the Public Works Committee recommend that the Village Board of Trustees adopt of the Village of Lombard Complete Streets Policy (6.J).



VILLAGE OF LOMBARD

VILLAGE BOARD POLICY MEMORANDUM

Subject: Complete Streets Policy **Section:** 6.J.
Dept.: PW
Date:
Updated:

I. Purpose

This policy summarizes Village policy on the incorporation of a complete streets philosophy for roadways within the corporate limits of the Village of Lombard. The policy shall be used as a tool to assist staff, appointed and elected officials on improvements to the Village's roadways to accommodate all modes of transportation. The terms of this policy shall not be construed as a mandate for improvements, rather the policy shall provide a means to determine the benefit of complete streets elements to a project. Fiscal resources, available right-of-way and other factors will be included as part of the determination on the incorporation of complete streets components into any roadway improvements.

II. Procedures/Guidelines

The following procedures shall be used in order to ensure that the various projects within the Village advance the goals of the Complete Streets Policy:

- a) **Village of Lombard projects** – During the planning/design phase of any public transportation improvement project, the Director of Public Works, or his designee, shall conduct a review of the project relating to the incorporation of complete streets elements into the project. The review shall be made with reference to current best practices, as detailed in the reference materials and the Village of Lombard Complete Streets Policy.

The Complete Streets project checklist shall be used to assist with and to document the Complete Streets review process.

- b) **Other Public Agency projects** – The Village shall coordinate with external agencies, including but not limited to, the Illinois Department of Transportation and the DuPage County Division of Transportation, to ensure that all roadways and intersections within the corporate limits of the Village of Lombard meet the Village of Lombard Complete Streets Policy.

As with the review process for Village of Lombard projects, outside agency projects will be reviewed by the Director of Public Works or his

designee for comments and the Complete Streets project checklist will be used to document the review.

- c) **Private Development projects** – The Village shall review all private development proposals that come before the Interdepartmental Review Committee (IDRC) with reference to the incorporation of complete streets elements and general consistency with the Village of Lombard Complete Streets Policy. The Complete Streets project checklist shall be used to assist with and document the Complete Streets review.

III. Legislation/Documentation

Minutes of March 10, 2014 Transportation and Safety Committee
Minutes of March 11, 2014 Public Works Committee meeting.



Village of Lombard Complete Streets Policy

I. Purpose and Background

Complete Streets provide streets that have facilities for all users, including pedestrians, bicyclists, mass transit users and motorists to the extent appropriate for the land use or the context of the street. Under the Complete Streets framework, minimizing traffic delay for private motor vehicle transportation should not be the only goal of the roadway and could be undesirable depending on the surrounding land use and needs of other intended roadway users.

Providing Complete Streets includes improvements in compliance with the Americans with Disabilities Act accessibility guidelines, such as handicapped accessible ramps at intersections with detectable warning surfaces for the visually impaired. Other characteristics of Complete Streets are features that create a multimodal-friendly environment, such as narrowing or removing traffic lanes (“lane diets” and “road diets”), adding median refuges, providing road re-striping to include bicycle lanes, reconfiguring parking, installing curb extensions (“bulb-outs”), and adding accessible pedestrian signals and countdown pedestrian signals.

Like many suburbs, roadways in Lombard were primarily designed for automobile transportation and in some cases lack facilities such as sidewalks, bus shelters and bicycle lanes. As demand for walking, bicycling, and transit facilities grows, safe and accessible transportation accommodations for all modes becomes even more necessary. Additional modal choices can also help in improving air quality and reducing greenhouse gas emissions by reducing private motor vehicle trips and miles traveled. In addition, Lombard is committed to serving its residents – children, elderly and persons with disabilities – by providing safe and accessible transportation facilities in the public right-of-way.

Complete Streets concepts have already been articulated in some of Lombard’s plans and policies. For instance, the Lilac Bikeway Plan provides guidance for bicycle routes throughout the Village and the Sidewalk Policy provides priority for sidewalk installation. The intent of Lombard’s Complete Streets policy is to bring all of these policies together and address their mutual concerns. It accomplishes this by both applying the transportation policies in prioritizing Complete Streets projects and by using the guidelines of these policies during the design and construction of projects.

II. Policy Statement

The Complete Streets policy of the Village of Lombard is established to provide guidance for its residents, decision makers, planners and designers to ensure that multimodal elements are incorporated into transportation improvement projects.

- Where feasible and determined to be in the best interest of the public, new construction and roadway re-construction projects in the Village shall accommodate users of all ages

and abilities including pedestrians, bicyclists, transit users, motorists and adjacent land users.

- Roadway projects shall adhere to the most recent Village approved policies:
 - Comprehensive Plan;
 - Standard Specifications for Road and Bridge Construction
 - Lilac Bikeway Plan;
 - Subdivision and Development Code;
 - Sidewalk Policy; and
 - Other applicable transportation policies.
- Roadway projects shall respect the character of the community and preserve the environmental, scenic, aesthetic and historic resources of the area.
- Roadway projects shall include a project description that provides information about the Village right-of-way, public support for the improvement, and the potential environmental impacts of improvements.
- Roadway projects shall follow an open and transparent public engagement process during the planning, design and development of complete street projects.
- Roadway projects shall be funded through the Village's Capital Improvements Program, through Motor Fuel Tax Funds, Tax Increment Financing Funds, Capital Projects Fund, Developer/Resident Contributions and through Federal and State grants.
- Exceptions to the policy or exemptions from the policy shall be approved by the Director of Public Works and must be documented with supporting data that indicates the basis for the decision.

The following pictures are representative of the type of alterations/modifications to roadway configuration that are being sought through the Complete Street Policy. The pictures are examples of best management practices in the incorporation of multi-modal designs.

III. Potential Complete Streets Outcomes



Example 1: Modifications include widening a shared pedestrian and bicycle path, widening the sidewalk, adding landscaped buffers, and narrowing and landscaping the median.



Example 2: Modifications include adding bicycle lanes and markings, a sidewalk with buffer, and pavement markings.



Example 3: Modifications include adding sidewalks with buffers, “Share the Road” signs, “sharrow” markings, and landscaping the median.

IV. Implementation

To ensure that Complete Streets are successfully implemented in Lombard, roadway projects shall be prioritized by gauging the latent multimodal demand and the following criteria:

Priority A Streets

- Arterial streets
- Streets included in the Lilac Bikeway Plan
- Street segments or intersections with pedestrian/bicycle accidents
- Streets adjacent to schools

Priority B Streets

- Streets containing a high proportion of bus ridership
- Streets adjacent to high density residential areas zones

Priority C Streets

- Streets linking neighborhoods to schools
- Streets adjacent to the Prairie Path and the Great Western Trail
- Streets linking neighborhoods to parks
- Streets linking neighborhoods to community facilities (i.e. Library and historically significant facilities)

When balancing competing interests, design decisions should be made to provide the safe, convenient and comfortable choices for all users. The objectives while making these design decisions are (1) to develop a transportation infrastructure that provides access for all appropriate modes of transportation and safety in equal measure for each mode of travel and (2) to ensure that transportation facilities fit their physical setting and preserve scenic, historic, aesthetic, community and environmental resources to the extent possible.

In some cases, these design objectives can be achieved within the available right-of-way. In other cases, the cost-benefit of acquiring additional right-of-way needs to be analyzed. Sometimes, tradeoffs in user accommodation need to be made to preserve environmental or community resources located within or adjacent to the right-of-way. In these situations, the challenge is to provide access and safety for each mode of travel. In other situations, it will be necessary to modify environmental characteristics in order to provide a safe and accommodating facility.

V. Design Guidance

Once the purpose and need for a project is defined, a determination should be made to provide the safe, convenient and comfortable accommodation of all users within the context of the project. This process should be aided by the input from the various stakeholders involved to achieve the goals of a "Complete Street". There are several different scenarios for providing Complete Streets within the Village.

The three cases below depict roadway sections bounded by curb and sidewalk. These cases are representative of the vast majority of roadways found in Lombard. Case three (3) is for residential areas where pedestrians and bicycle activity may be infrequent or purely recreational. All three descriptive cases are not intended to be “typical sections” applied to roadways without regard for travel speeds, vehicle mix, adjacent land use, traffic volumes, and other factors since application of “typical sections” can lead to inadequate user accommodation (underdesign) or superfluous width (overdesign). Typical sections also leave little room for judgment reflecting the purpose and context of individual projects and can oversimplify the range of values that may be selected for each element of the cross-section.

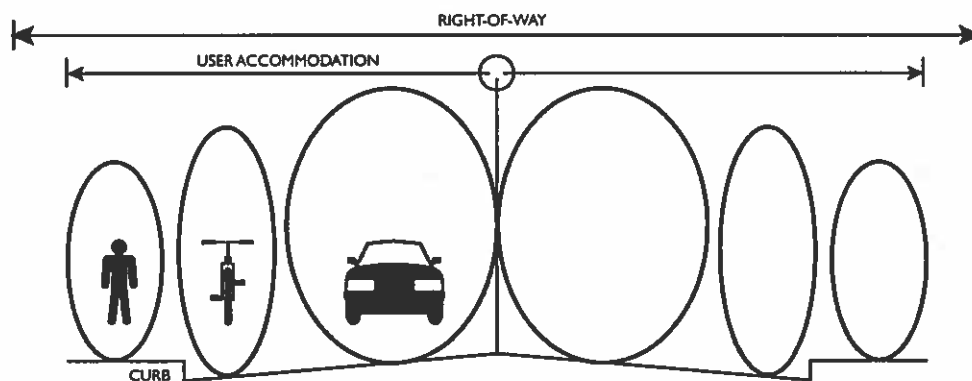
Case 1: Separate Accommodation for All Users

Case 1 provides the maximum separate accommodation for all modes of travel, as illustrated in Exhibit 1. This is often the preferred option in terms of providing safe, convenient, and comfortable travel for all users. It is usually found in areas of moderate to high density with curbed roadways.

Case 1 provides the highest level of safety and comfort for all users in areas with high levels of activity or where large speed differentials between the motorized and non-motorized modes are present. Case 1 usually requires the most width. In locations where the speed differential between different roadway users is small or overall activity is low, Case 1 may not be necessary to safely accommodate all users. However, in some instances, this case might be achieved by reallocating space within an existing roadway, thus eliminating potential impacts to the roadside environment.

This case might be considered in a wide variety of conditions including: areas with moderate to high pedestrian and bicycle volumes; areas with moderate to high motor vehicle speeds and traffic volumes; and areas without substantial environmental or right-of-way constraints.

Exhibit 1 - Case 1: Separate Accommodation for All Users



In Case One (1), pedestrians are provided with a sidewalk separated from the roadway by a raised curb and preferably a landscaped buffer. The clear width of the sidewalk should be sufficient to allow pedestrians or wheelchair users to pass without interfering with each other’s movement (preferred 5 feet sidewalk width excluding the curb and clear from items along the sidewalk such as fire hydrants, signs, trees and utility poles). It should be noted that the

Village's preferred width for sidewalks is 5 feet; however, in certain circumstances where 5 feet is not available, the Village will refer to the Americans with Disabilities Act guidelines. Sidewalks should be provided on both sides of the street unless there is a condition that suggests that a sidewalk is not needed on one side of the street. This might happen, for example, if there is physical impediment that would preclude development on one side of the street, such as a stream or mature old trees.

Provision of a striped bicycle lane or shoulder suitable for bicycle use (four (4) feet preferred) encourages cyclists to use the roadway. The bicycle lane/shoulder also provides for additional separation between motor vehicle traffic and pedestrians. If on-street parking is present, the bicycle lane should be at least four (4) feet wide so that the cyclist is provided with an additional buffer along the parked cars.

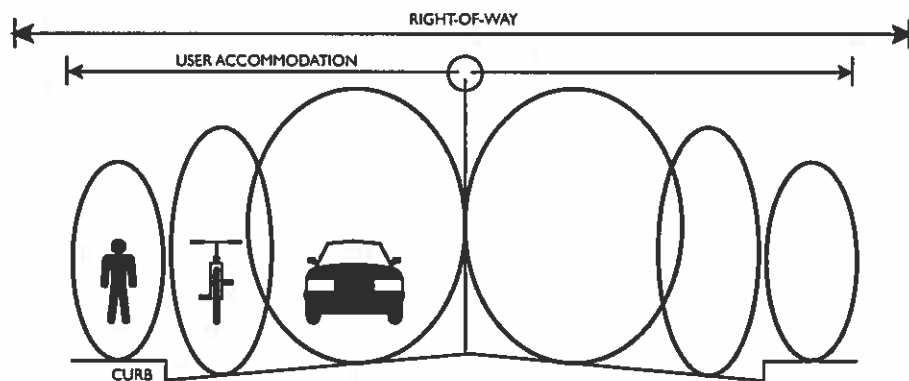
Motor vehicles are accommodated within travel lanes wide enough to eliminate encroachment by wider vehicles on either the adjacent bicycle lane or on the opposing motor vehicle travel lane. In addition to providing space for bicycles, shoulders also accommodate emergency stopping, maneuvering, and other functions. Where on-street parking is provided, shoulders or bicycle lanes should be maintained between on-street parking and the travel lane.

Case 2: Partial Sharing for Bicycles and Motor Vehicles

There are instances in which the width necessary to provide accommodation for Case 1 is not available. There are also instances where some sharing and overlap between bicyclists and motor vehicle traffic is acceptable to achieve other environmental or design objectives. Case 2 describes an approach to multimodal accommodation in these situations and is illustrated in Exhibit 2.

Case Two (2) is common in areas of moderate to high density, where curbed roadway sections and separate sidewalks are provided. Pedestrians are provided with a sidewalk separated from the roadway by a raised curb and preferably a landscaped buffer, increasing the safety and comfort of the pedestrian. The clear width of the sidewalk should be sufficient to allow pedestrians or wheelchair users to pass without interfering with each other's movement (5 feet preferred excluding the curb and clear of other roadside obstructions).

Exhibit 1 - Case 2: Partial Sharing for Bicycles and Motor Vehicles



In Case 2, there is some overlap between the spaces provided for bicycle use and that provided for motor vehicle travel. Signs or pavement markings indicating that the roadway is shared between cyclists and motor vehicles are appropriate for Case 2 roadways.

This type of accommodation is often used in areas with low motor vehicle speeds, low to moderate motor vehicle traffic volumes, and areas of environmental or right-of-way constraint where a smaller cross-section is necessary.

The designer should carefully consider the allocation of width to travel lanes and bicycle lanes/shoulders to provide the best balance of accommodation between bicycles and motor vehicles. In many instances, on-street parking will also be provided and additional width may be needed to reduce conflicts between bicycles and the adjacent parking. There are different possible configurations of lanes and shoulders possible in Case Two (2), but all feature some overlap in the space needed by bicyclists and motor vehicles:

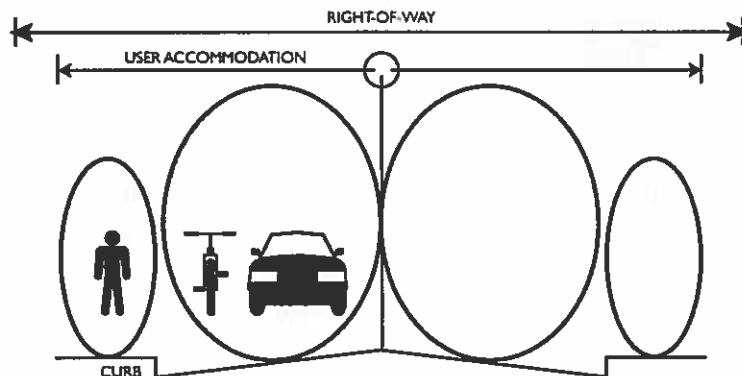
- Typical travel lanes combined with narrow shoulders (i.e. 11 to 12-foot lanes with 2 to 3-foot shoulders) provide maneuvering width for truck and bus traffic within the travel lane; however, bicyclists may be forced to ride along and over the pavement markings.
- Narrow travel lanes combined with wide shoulders (i.e. 10 to 11-foot lanes with 4 to 5-foot shoulders) provide greater separation between motor vehicle and bicycle traffic, but may result in motor vehicle traffic operating closer to the center line or occasionally encroaching into the opposing travel lane.

Wide curb lanes have also been used in Case 2; however, studies have shown that motorists and bicycles are less likely to conflict with each other and motorists are less likely to swerve into oncoming traffic as they pass a bicyclist when shoulder striping is provided.

Case 3: Shared Bicycle/Motor Vehicle Accommodation

In Case Three (3), the accommodation of bicycles and motor vehicles is shared and separate pedestrian accommodation is maintained as illustrated in Exhibit 3. Case Three (3) is most likely to be found in the most densely developed areas where right-of-way is most constrained. It is also applicable to most residential streets where speeds and traffic volumes are low.

Exhibit 1 - Case 3: Shared Bicycle/Motor Vehicle Accommodation



Pedestrians are provided with a sidewalk separated from the roadway by a raised curb and preferably a landscaped buffer, increasing the safety and comfort of walking along this roadway. The clear width of the sidewalk should be sufficient to allow pedestrians or wheelchair users to pass without interfering with each other's movement (5 feet preferred excluding the curb and sidewalk clear of other roadside obstructions).

In Case Three (3), one lane is provided for joint use by motor vehicles and bicycles. This type of accommodation is used in the following conditions: areas with low to moderate motor vehicle traffic volumes; low motor vehicle speeds; and areas of severe right of way constraint where only a minimum pavement section is feasible.

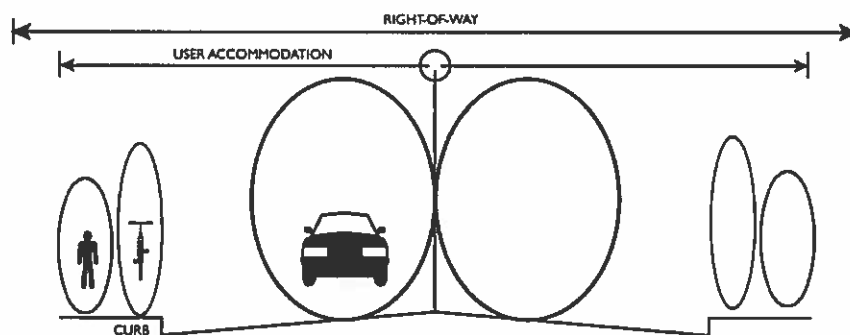
Signs and pavement markings indicating that the roadway is shared between cyclists and motor vehicles should be provided for Case Three (3) roadways. On-street parking may be provided on these roadways and separate shoulders or bicycle lanes are not available.

Case 4: Partial Sharing for Bicycles and Pedestrians

There are also instances where some sharing and overlap between bicyclists and pedestrians is acceptable to achieve environmental or design objectives. Case 4 describes an approach to multimodal accommodation in these situations and is illustrated in Exhibit 1-Case 4.

Case Four (4) is common in areas of moderate to high density, where curbed roadway sections and trails or side paths are provided for shared use by pedestrians and bicyclists. Path users are provided with a side path separated from the roadway by a raised curb and preferably a landscaped buffer, increasing the safety and comfort of the pedestrian. The clear width of the side path should be sufficient to allow pedestrians, bicyclists or wheelchair users to pass without interfering with each other's movement (10 feet preferred excluding the curb and clear of other roadside obstructions).

Exhibit 1 - Case 4: Partial Sharing for Bicycles and Pedestrians



In Case Four (4), pedestrians and bicyclists are provided with a side path separated from the roadway by a raised curb and preferably a landscaped buffer. The clear width of the side path should be sufficient to allow pedestrians or wheelchair users to pass without interfering with each other's movement (preferred 10 feet sidewalk width excluding the curb and clear from items along the sidewalk such as fire hydrants, signs, trees and utility poles). It should be noted that the Village's preferred width for side paths is 10 feet; however, in certain circumstances

where 10 feet is not available, the Village will refer to the Americans with Disabilities Act guidelines. Side paths should be provided on one sides of the street unless there is a condition that suggests that a side path is not needed on one side of the street. This might happen, for example, if there is physical impediment that would preclude development on one side of the street, such as a stream or mature old trees. The side path provides for additional separation between motor vehicle traffic and pedestrians/bicyclists.

VI. Design Elements

There is no one-design standard that achieves the complete streets outcome. Designs for particular projects will be context-sensitive, considering adjacent land uses and local needs, and incorporating the most up-to date, widely-accepted design standards for the particular setting, traffic volume and speed, and current and projected demand (see references at end of policy). Each project must be considered both separately and as part of a connected network to determine the level and type of treatment necessary for the street to be complete. The need for complete streets treatments is greatest along corridors that connect populous residential settings with popular and important destinations, including, but not limited to the following: medical, shopping, employment, educational and recreational destinations.

Sidewalks

Pedestrian accommodation should be consistent with the project context, including current or anticipated development density, roadway characteristics, right-of-way dimensions and availability, and community plans. The preferred width for sidewalks is 5 feet; however, in certain circumstances where 5 feet is not available, the Village will refer to the Americans with Disabilities Act guidelines. Wider sidewalks are desirable where there are high pedestrian volumes and where there is no buffer between high speed and high volume roadways. Sidewalks commonly accommodate street furniture, which includes items such as, trees, utilities, streetlights, parking meters, bicycle parking, benches, and refuse barrels. Additionally, sidewalks often abut fences, building edges, or vegetation along their outside edge. These elements influence the required width necessary to accommodate pedestrians, as pedestrians tend to "shy" from these obstructions. The designer should consider the desired location for these sidewalk features and, where they exist, the designer should provide appropriate offsets (or shy distances) to the pedestrian path.

Sidewalk widths of 6 to 10 feet are preferred and should be considered where higher pedestrian activity is anticipated. In the town center area and areas where very high pedestrian activity is anticipated, designers should try to provide wider sidewalks. If possible, a landscape buffer should also be provided between vehicular traffic and sidewalk to create a separation from motor vehicles and increase the comfort and safety of pedestrians. Landscape buffers are usually 4-8 feet wide. On-street parking, shoulders or bike lanes can also act as buffers. One way to achieve additional width for the sidewalk area is by paving the landscape area with tree vaults, especially where on-street parking is provided. Narrowing travel lanes or reducing the number of through lanes where possible can also provide additional width.

For streets with higher bus ridership and high-density residential areas where moderate pedestrian activity is anticipated, sidewalk widths of 5-8 feet are preferred to accommodate

group walking and also to provide waiting areas near bus stops. Landscape buffers of 4-6 feet should be provided in these areas.

Low to moderate pedestrian activity is anticipated in *Priority Areas C* and the preferred width for sidewalks is 5 feet.

Bicycles

Bicycle accommodation should also be consistent with the project's context, roadway characteristics, right-of-way, community plans, and the level of service provided for the bicyclist. The designer should ensure that bicycle accommodation is based on anticipated development and community plans.

In addition to determining the type of accommodation for bicyclists, the designer should include other design features that improve the safety and comfort of the roadway for bicyclists. For example, if motor vehicle speeds are too high, the designer should consider selecting a lower motor vehicle design speed to increase the comfort and safety of the facility for bicycles. Additionally, the designer could consider narrowing motor vehicle lanes to provide wider shoulders. Some bicyclists feel more comfortable riding on the roadway surface, while others feel more comfortable separated from traffic on a shared-use path. As a result, the designer should consider a variety of configurations, both on- and off-road so that different levels of bicyclists are accommodated.

Bicycle lanes are typically four (4) feet wide and are sufficient for most conditions. On roadways with higher speeds or higher volumes of trucks and buses (30 or more per hour), the desirable bicycle lane width is five (5) feet. Bicycle lanes wider than five (5) feet are generally not used since they may encourage inappropriate use by motor vehicles. Designers should avoid combining minimum travel lane widths and minimum bike lane widths.

Bicycle lanes should be provided consistent with the Lilac Bikeway Plan. In areas where right-of-way is constrained and high bicycle usage is anticipated, it is prudent to provide bicycle facilities by eliminating non-critical design elements. For example, it may be desirable to convert a four-lane undivided street to a three-lane street with left-turn lanes to provide bicycle lanes rather than narrowing all of the other design elements to retain four lanes, if traffic capacity allows.

For streets where moderate to high speeds and volumes are expected, shared-use paths may be provided to accommodate both pedestrians and bicycles.

Streets in the *Priority Areas C* are typically in the residential areas. In cases of low speed, low to moderate traffic volumes, and low occurrence of trucks and buses, the shared lanes may be adequate to support bicycling. Before deciding to provide shared lanes as bicycle accommodation, the designer should be certain that the traffic volumes and motor vehicle speeds will be low enough so that all types of bicyclists can comfortably use the roadway.

Parking

On-street parking serves several critical needs of adjacent land uses especially in urban town center areas and typically supplements the off-street parking supply. On-street parking also acts as a buffer between the sidewalk and travel lanes and provides additional comfort to pedestrians.

Travel Lanes

Travel lanes are the component of the roadway cross-section that serves motor vehicle travel, or in some cases, joint use. In most cases, the travel lanes are the widest component of the roadway cross-section. The number of lanes in each direction should be determined based on the transportation demand estimates and appropriate level of service determined in the project planning process. In some instances, it may be possible to reduce the number of travel lanes to provide sidewalks, landscape buffers, bicycle lanes, and crossing islands.

The width of travel lanes is selected through consideration of the roadway context, approach to multimodal accommodation, and the physical dimensions of vehicles, speeds, and other traffic flow characteristics. The normal range of design lane width is between 10 and 12 feet. Travel lanes of 10 and 11 feet are generally preferred where additional width could be used to provide for wider sidewalks and bicycle lanes. Travel lanes between 11 and 12 feet in width are desirable for roadways where higher design speeds, higher traffic volumes, or higher truck and bus activity is anticipated.

Travel lanes narrower than 10 feet are generally not recommended. Lanes wider than 12 feet are sometimes used where shoulders are not provided, such as in suburban high-density areas, town centers, and urban areas. Another application of wide lanes is in areas with high driveway density. This application provides more maneuvering room for drivers entering or exiting driveways, or in areas of limited sight distance. In these cases wide lanes are typically 12 to 14 feet wide. However, if more than 12 feet is available, it is often preferable to stripe a shoulder.

Landscape Panel

Landscape panels provide for a defined roadway edge and acts as a buffer between the traveled way and pedestrians in the sidewalk. Landscape panels typically also accommodate street trees, utility poles, street lights, fire hydrants, traffic signs, holding areas for plowed snow, and other appurtenances. This area can also be used to achieve stormwater and air quality benefits and lower operating speeds in some cases. Landscape panels are usually 4-8 feet wide, however, when street trees are provided, a minimum of 6 feet is preferred from the edge of the traveled way. Designers should provide adequate clear zone dimensions, provided by AASHTO, to account for errant vehicles.

Intersections and Transitions

In order to achieve the objectives of the Complete Streets Policy, intersections must be designed to accommodate reasonable expectations and to provide easy transitions for all roadway users including pedestrians, bicycles, cars, transit users, buses, and trucks.

Pedestrians and walking bicyclists expect to cross the street safely with minimum delay. Drivers of large vehicles expect to maneuver turns with minimum difficulty. Riding bicyclists and drivers of motor vehicles expect to safely pass through an intersection with minimum delay. Well-designed, multimodal intersections accommodate all users and also meet the community's objectives and priorities.

Smooth roadway transitions and multimodal level of service methods must be used when reviewing intersection designs. Intersection widening for additional turn lanes should be balanced against potential impacts to pedestrians and bicyclists. In addition, as roadway users pass through an intersection, appropriate connections between transportation facilities, such as continuity of bicycle lanes and paths, should be provided. Intersection crossing features for pedestrians and bicyclists, such as pedestrian push buttons, should be designed to allow safe and convenient travel through the intersection, taking into consideration the design of the transportation facilities approaching the intersection. Proper sight triangles must be provided to minimize conflicts between different roadway users. Particular care should be given to ensure that intersections are fully accessible to the disabled and hearing and sight impaired.

VII. Benefits

By providing, where appropriate, features such as accessible sidewalks, designated bike facilities and accessible transit stops, complete streets encourage walking, transit use and biking, all of which have important health benefits.

By shifting a share of automobile traffic to walking, biking and transit, complete streets help reduce the demand for fossil fuels, ease automobile congestion, reduce wear on roadways, improve air quality and make streets more attractive for businesses and customers, increasing economic activity at the neighborhood level.

Well-designed complete streets improve safety by reducing collisions between automobiles, pedestrians and cyclists. Complete streets are a logical extension of the Americans with Disabilities Act and improve access for people with disabilities and older citizens, allowing them to participate more fully in community life.

VIII. Applicability

This policy applies to all roadway projects within the Village of Lombard, including:

1. Surface Transportation Program (STP),
2. Congestion Mitigation/Air Quality (CMAQ),
3. County and State projects within the village limits,
4. New Subdivisions (*pursuant to Section 154.304 Major Plat of Subdivision of the Lombard Code*), and
5. Projects located within any TIF District.

Some projects, especially those with rural cross sections (defined as 'uncurbed'), may require no additional complete streets treatments if it is determined during the application review phase that no current or projected need justifies such treatment.

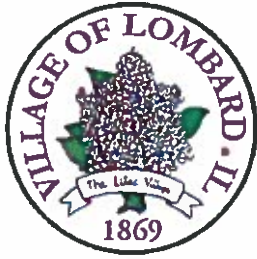
To the extent consistent with current federal law, all projects federally funded under this policy will be to enhance transportation choices in both the community and the Region. The Village of Lombard encourages county and state jurisdictions to review and revise their ordinances and policies to reflect complete street design guidelines and to apply these guidelines to projects as appropriate. In addition, the Village of Lombard encourages private developers to apply complete streets principles to their projects. We also encourage neighboring regions to utilize these principles in order to ensure connectivity across jurisdictions and regions.

Projects subject to the Village of Lombard Complete Streets Policy shall be reviewed utilizing the *Checklist for Compliance with the Village of Lombard Complete Streets Policy*. The checklist is attached as Exhibit 4.

Additional Information

In addition to the information provided above, all new construction and reconstruction roadway projects must be compliant to the information provided in:

- Comprehensive Master Plan;
- Standards and Details for Construction;
- Lilac Bikeway Plan;
- Sidewalk Policy; and
- Other applicable transportation policies and ordinances.



Checklist for Compliance with the Village of Lombard Complete Streets Policy

Village Project #: _____ Project Manager: _____

Reviewing Department: _____

Project Limits: _____

Project Funding Type: Federal Aid State Aid Local Funds Other Design

Phase: Preliminary Design Detail Design

Completed By: _____ Date Completed: _____

Existing Corridor Characteristics Review		
Average Daily Traffic (ADT):		Posted Speed:
Critical crash rate history within the project corridor?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If yes, describe locations and crash rates</i>
Roadway Functional Class		
Road Use Classification		
Trip Generators: <input type="checkbox"/> School <input type="checkbox"/> Retail <input type="checkbox"/> Hospital <input type="checkbox"/> Fire station <input type="checkbox"/> Park <input type="checkbox"/> Church <input type="checkbox"/> Industry <input type="checkbox"/> Historic Site <input type="checkbox"/> Sports facility <input type="checkbox"/> Other		
Existing corridor ROW width:		
Typical Roadway Section/Lane Configuration:	<i>Describe here (# lanes & width, curb type, etc.)</i>	
Intersection Configurations:	<i>Describe here (traffic signals, geometry, side street stops, turn lanes, etc.)</i>	
Side Street skewed <70° or existing sight distance issue	<i>Identify the intersecting streets and specify the problematic leg.</i>	
Any roadway or pedestrian (underpass/overpass) bridges?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If yes, list type, location, number, and over/under roadways.</i>
Any railroad crossings?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If yes, describe.</i>

Complete Streets Features: <input type="checkbox"/> Pedestrians List elements, i.e. sidewalk, trail, tunnel, etc. <input type="checkbox"/> Bicycles List elements, i.e. bike lanes, trails, bike boxes, etc. <input type="checkbox"/> Autos List elements, i.e. parking lanes, etc. <input type="checkbox"/> Trucks List elements, i.e. no lane encroachment, etc. <input type="checkbox"/> Buses List elements, i.e. bus stops, etc. <input type="checkbox"/> Other		
What is the average daily bicycle traffic?		
On Village/County Bike Plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, indicate which plans.
Roadway Restrictions	<input type="checkbox"/> Reduced Speed Zone <input type="checkbox"/> Advisory Signage <input type="checkbox"/> Clearance Restriction <input type="checkbox"/> Weight Restriction <input type="checkbox"/> Other	
Existing drainage problems or deficiencies?	List flooding/ponding and treatment/rate issues here.	

Proposed Corridor Characteristics Review				
Average Daily Traffic (ADT) Forecasted Year:	<i>Enter forecast year.</i>	<i>Enter ADT</i>	Posted Speed:	Design Speed:
Proposed Corridor ROW width:				
Easements Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Typical Roadway Section/Lane Configuration:				
Variances or Exceptions?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>List and describe each variance/exception.</i>		
Design Vehicle	<input type="checkbox"/> Passenger Car <input type="checkbox"/> Single-unit Truck <input type="checkbox"/> Bus List type. <input type="checkbox"/> Other			
Traffic Lane Information	Through _____ # of lanes Lane Width: _____ feet Roadway Surface Material: <input type="checkbox"/> Left <input type="checkbox"/> Double left <input type="checkbox"/> Right <input type="checkbox"/> Double right <input type="checkbox"/> CTWLTL			
Shoulders?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Width: _____ feet Shoulder Surface Material:		
Curb or Curb & Gutter?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Type: <i>If yes, list type.</i>		
Medians?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Minimum Width: _____ feet Type: <i>Choose an item.</i>		

On Street Parking?	<input type="checkbox"/> Both sides <input type="checkbox"/> One side <input type="checkbox"/> None		Width: ___ feet
Sidewalk/Trail Separation from Cars			Width: ___ feet
Streetscape/Landscape	<i>List components, not including bike/bus features which are noted later.</i>		
Any roadway or pedestrian (underpass/overpass) bridges?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Type: <i>If yes, list type, location, number, and over/under roadways.</i>	
Retaining Walls	Choose type.	<input type="checkbox"/> Fencing proposed <input type="checkbox"/> Building Permit Required	
Safety Barrier/Guardrail	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> With 6" curb <input type="checkbox"/> Crashworthy End Treatment(s) <input type="checkbox"/> Pedestrian Friendly End Treatment(s)	
Mailboxes	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Intersection Configurations:	<i>Describe here (traffic signals, geometry, side street stops, turn lanes, etc.)</i>		
Traffic Signals Proposed	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>List intersections.</i>	
Traffic Signals Warranted	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If yes, warrant information</i>	<input type="checkbox"/> SJR <input type="checkbox"/> ICE Report
Traffic signal components included in design: <input type="checkbox"/> All pedestrian phase <input type="checkbox"/> Pedestrian actuated <input type="checkbox"/> Countdown timers <input type="checkbox"/> Accessible pedestrian signals <input type="checkbox"/> Bus preemption <input type="checkbox"/> Railroad preemption <input type="checkbox"/> Emergency Vehicle Preemption <input type="checkbox"/> Street lights <input type="checkbox"/> Interconnect <input type="checkbox"/> Video detection <input type="checkbox"/> Protected left turn <input type="checkbox"/> Permissive left turn with green globe <input type="checkbox"/> Permissive left turn with flashing yellow arrow			
Roundabouts Proposed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>List locations.</i>	<input type="checkbox"/> ICE report
4-Way Stop Proposed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>List intersections.</i>	
Intersection Components	<input type="checkbox"/> Crosswalks at all crossings <input type="checkbox"/> Crosswalks at some crossings <input type="checkbox"/> School crosswalks <input type="checkbox"/> Refuge islands <input type="checkbox"/> Pedestrian bump-outs Crosswalk Type: <i>List crosswalk striping type(s)</i>		
Side Street skewed <70° or sight distance issue	<i>Identify the intersecting streets and specify the</i>		

		<i>problematic leg.</i>
Complete Streets Features: <input type="checkbox"/> Pedestrians <i>List elements, i.e. sidewalk, trail, tunnel, etc.</i> <input type="checkbox"/> Bicycles <i>List elements, i.e. bike lanes, trails, bike boxes, etc.</i> <input type="checkbox"/> Autos <i>List elements, i.e. parking lanes, etc.</i> <input type="checkbox"/> Trucks <i>List elements, i.e. no lane encroachment, etc.</i> <input type="checkbox"/> Buses <i>List elements, i.e. bus stops, etc..</i> <input type="checkbox"/> Other <i>List other here.</i>		
Sidewalk	<input type="checkbox"/> Both sides <input type="checkbox"/> One side <i>Location.</i> <input type="checkbox"/> None	Width: ___feet
Sidewalks ADA Compliant?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If no, explain why not.</i>
Street Lighting	<input type="checkbox"/> Street Level <input type="checkbox"/> Pedestrian Level <input type="checkbox"/> Combined <input type="checkbox"/> None	
Stairways Proposed	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Handrails Included <input type="checkbox"/> Building Permit Required
On-Road Bike Lanes	<input type="checkbox"/> Both sides <input type="checkbox"/> One side <i>Location.</i> <input type="checkbox"/> None	Width: ___feet
	<input type="checkbox"/> Follows Right Turn Lane <input type="checkbox"/> Follows Thru Lane	
Off-Road Multi-Use Trail	<input type="checkbox"/> Both sides <input type="checkbox"/> One side <i>Location.</i> <input type="checkbox"/> None	Width: ___feet
Trails ADA Compliant?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<i>If yes, describe stops, location, etc.</i>
Bike Amenities	<input type="checkbox"/> Bike lane/path signage <input type="checkbox"/> Bike racks <input type="checkbox"/> Bike lockers	
Bus Elements	<input type="checkbox"/> Diamond Lanes <input type="checkbox"/> Bus Bays <input type="checkbox"/> Far Side Stops <input type="checkbox"/> Near Side Stops <input type="checkbox"/> Bus stop benches <input type="checkbox"/> Shelters <input type="checkbox"/> ADA landing <i>If not checked, explain why not.</i>	

Comparison Summary of Pedestrian/Bicycle Improvements

Miles of sidewalk	Existing: <i>Number</i>	Proposed: <i>Number</i>
Miles of trails or bike lanes	Existing: <i>Number</i>	Proposed: <i>Number</i>
Number of striped crosswalks	Existing: <i>Number</i>	Proposed: <i>Number</i>
Number of ADA compliant ramps <i>(Note: Each crossing counts as 1 ramp; 2-way directional and diagonal ramps count as 2 ramps)</i>	Existing: <i>Number</i>	Proposed: <i>Number</i>
Number of pedestrian bump-outs	Existing: <i>Number</i>	Proposed: <i>Number</i>
Number of signals with countdown timers	Existing: <i>Number</i>	Proposed: <i>Number</i>
Miles of pedestrian lighting	Existing: <i>Number</i>	Proposed: <i>Number</i>

I, _____ (Director of Public Works/designee) for the Village of Lombard have reviewed this **Checklist for Compliance with the Village of Lombard Complete Streets Policy** for Project #_____, and approve of the recommended improvements under the Proposed Characteristics section.

Signature

Date