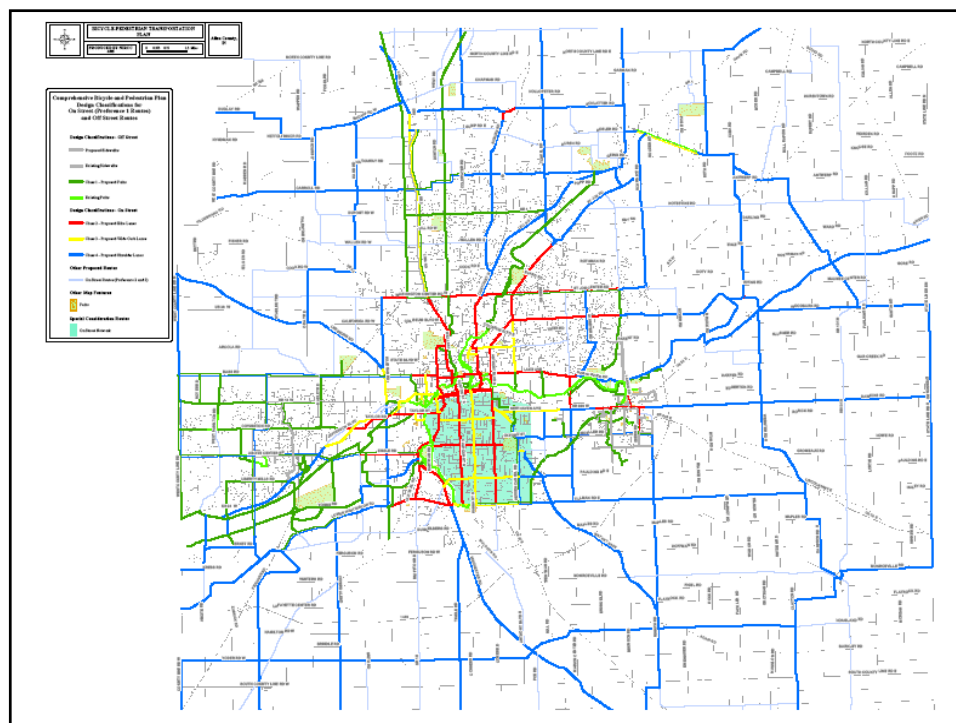


Greenways and Trails

- Currently have 23-mile greenway network
- Plans for another 100+ miles of multi-use trails in Fort Wayne/New Haven/Allen County
- Non-profit, grass-root groups are leading the effort

What We've Done So Far

- NIRCC Bicycle and Pedestrian Forum
- NIRCC Design Standards & Classifications
- Green City Energy & Environment Action Plan from Green Ribbon Commission
 - 25 miles of bike lanes by 12/31/09
 - 50 more miles of bike lanes by 12/31/12
- Design Guidelines



Pedestrian & Bicycle Facility Planning Manual

- Draft form
- Review Committee
- Chapters
 - Pedestrian Facilities
 - On-road Bicycle Facilities
 - Shared Use Paths
 - Traffic Calming
 - Signs, Pavement Markings & Signals

On-Road Bicycle Facilities

- Design based on the assumption that bicyclists will be operating under the same rules of the road as motorists
- Retrofitting existing roads with bicycle facilities that require 1) sharing; 2) shifting; or 3) creating new road space
- On-road facilities include bike lanes, wide curb lanes, paved shoulders and shared lanes
- Special design consideration paid to areas where motorists and bicyclists will be in conflict with each other like driveways, intersections, etc.

Bicycle Lanes

- One way facilities not physically separated from travel lanes
- Urban areas/towns: both sides of most highways, arterial streets and collector streets
- Rural areas: paved shoulders or shared lanes preferred
- Bridges: bike lane preferably on roadway but may be in sidewalk area

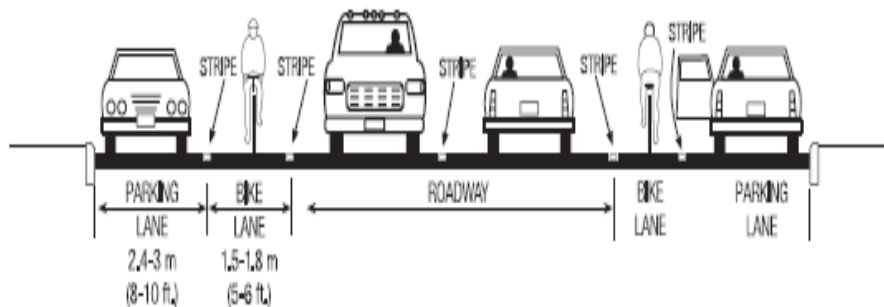


Example of a Bicycle Lane

Curbed Streets

- Without on-street parking
 - 5 ft minimum
 - 6 ft preferred
 - 6 ft where use is high and/or grades exceed 5%
- With on-street parking
 - 5 ft minimum
 - 6 ft preferred
 - 6 ft where use is high and/or grades exceed 5%

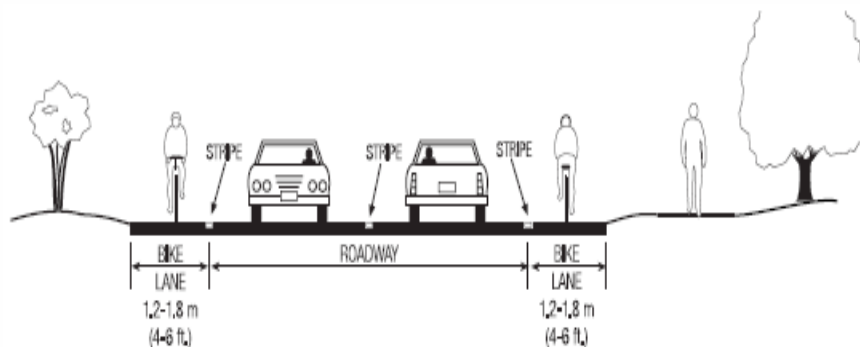
Bicycle Lane, Curbed Street, with Parking



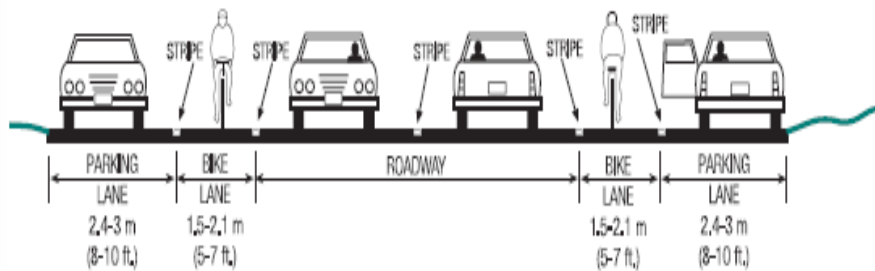
Uncurbed Streets

- Streets without parking
 - 4 ft minimum
 - 5 ft where speeds are 35 mph or less
 - 6 ft where use is high and/or grades exceed 5%
 - 6 ft where speeds exceed 35 mph
- Streets with parking
 - 5 ft minimum
 - 6 ft where speeds are 35 mph or less
 - 7 ft where use is high and/or grades exceed 5%
 - 7 ft where speeds exceed 35 mph

Bicycle Lane, Street or Highway, No Curb, No Parking



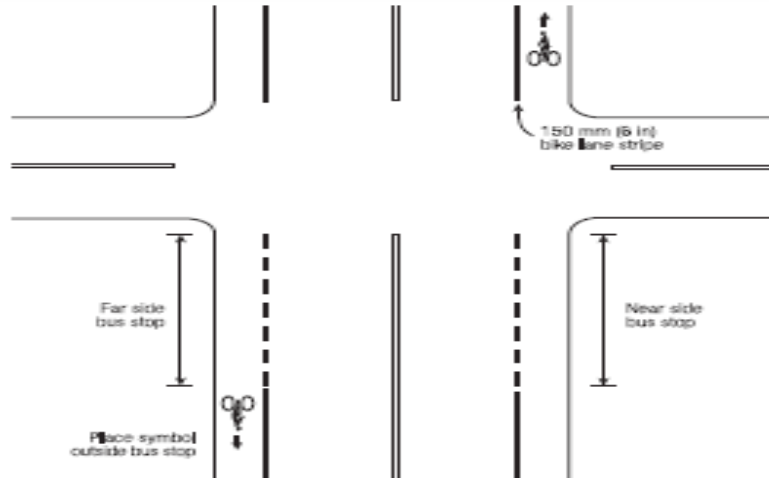
Bicycle Lane, Street or Highway, No Curb, with Parking



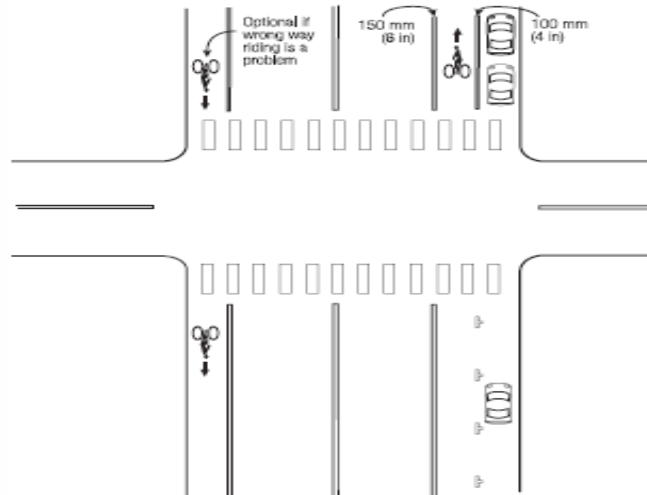
Striping

- 6 inch solid white stripe standard
- On street parking (right side of lane) marked with 4 inch solid white stripe or tick marks
- Do not extend striping through intersections (except at T-intersections) and crosswalks
- Dotted guidelines (2 ft dots and 6 ft spaces) may be extended through complex intersections

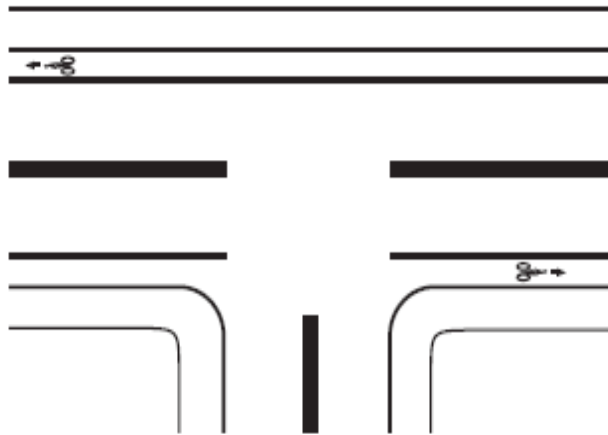
Pavement Markings with No Crosswalks



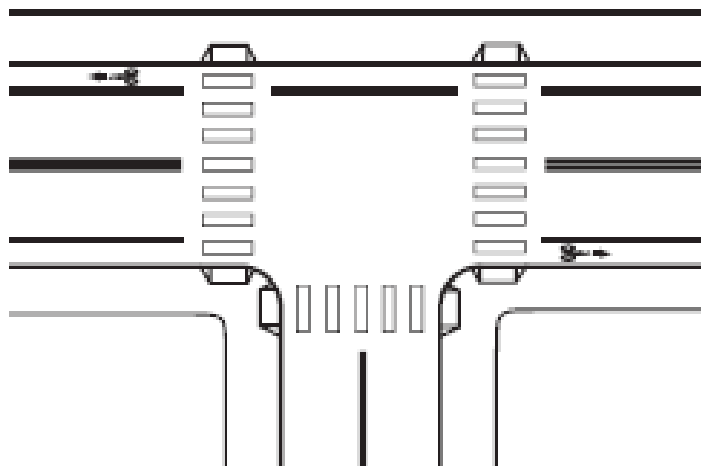
Pavement Markings with Crosswalks



At T-intersection w/ No Crosswalks



T-intersection with Crosswalks

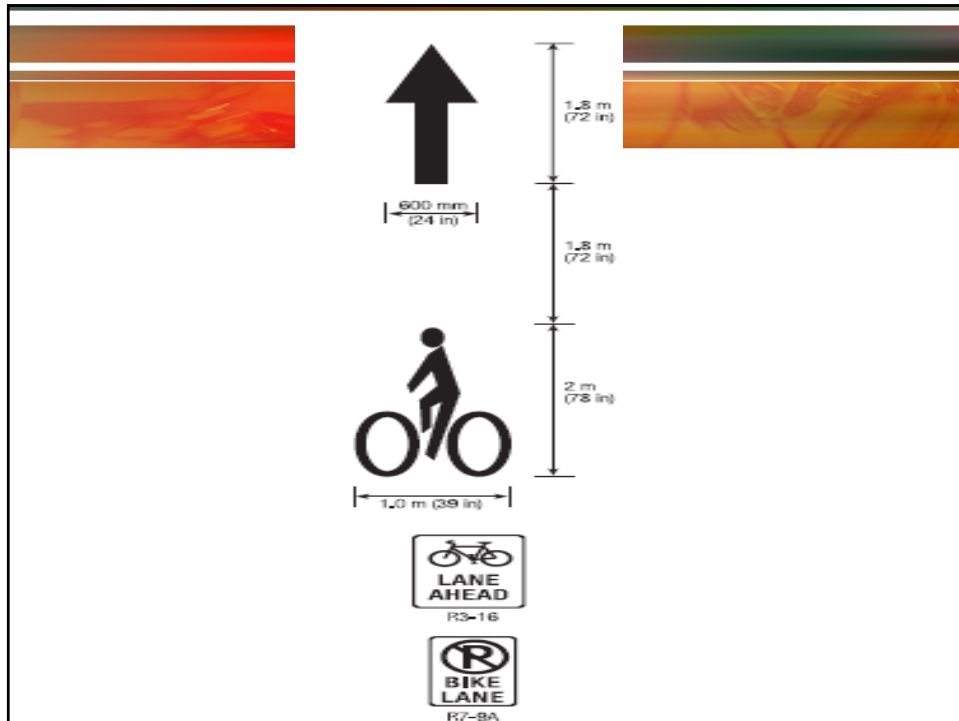


Striping continued

- At intersections controlled by signals or stop signs and where right-turn lanes exist, use a dotted line with 2 ft dots and 6 ft spaces for the approach in lieu of solid striping for 50 – 200 feet
- Where sufficient width exists, place a separate through bike lane between the right-turn lane and the through travel lane
- At ramps and dedicated right-turn slip lanes, use a minimal turning radius or a compound curve to reduce entry speed

Markings

- Bicycle symbol with directional arrow on pavement
- Symbol with arrow on far side of each intersection no closer than 10-16 feet from intersection; additional symbols placed periodically along uninterrupted sections



Signing

- MUTCD signs R3-16 and R3-17 designate the presence of a bike lane
- Many other signs are available for special situations – refer to MUTCD Part 9

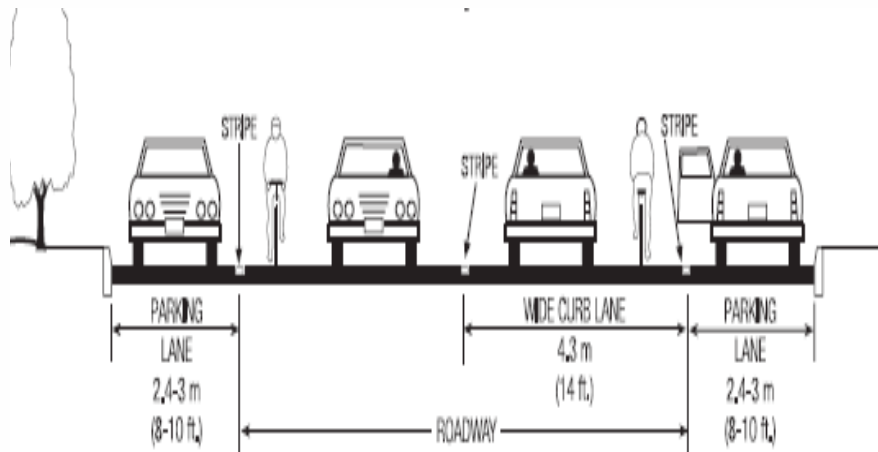
Wide Curb Lanes

- Town or urban streets with insufficient width for bike lanes
- 13 ft wide without on-street parking and 14 ft wide with on-street parking
- Where 15 ft or more width available, consider striping bike lanes or shoulders



Example of a Wide Curb Lane

Wide Curb Lane with Parking



Paved Shoulders

- Rural – most road and highways
- Urban areas and towns – both sides of lower volume major streets where bike lanes are not appropriate

Width for Paved Shoulders

- Recommended minimum value of at least 4 ft wide (six feet is ideal)
- When guardrail, bridge railing or other lateral obstructions are present, provide an additional 1 ft of width
- On steep up-grades where bicyclists require maneuvering room or where downgrades exceed 5% or 0.6 miles, 5 ft minimum
- Where there are 30 or more heavy vehicles per hour in the outside lane, 5 ft minimum
- Where motor vehicle posted speed exceeds 50 mph, 5 ft minimum

Striping for Paved Shoulders

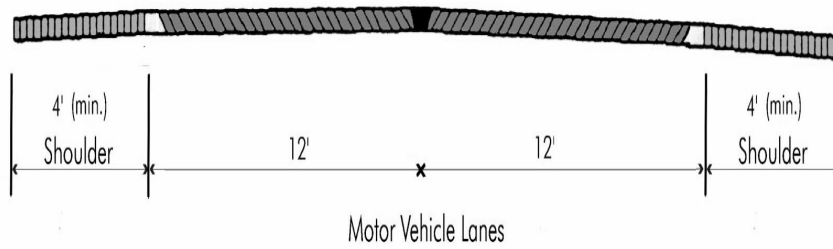
- 4 inch solid white edge line



Example of Shoulder Bike Lanes

Figure 13

Shoulder Bike Lanes on
Street or Highway Without Curb or Gutter



Shared Lanes

- Roads are as they exist with no special provisions for bicyclists.
- Common on neighborhood streets, low-volume (<500 ADT) rural roads and highways, and town or downtown centers with constrained right-of-way

Incremental Improvements

- Add usable riding surface to right of roadway edge by:
 - paving extra width – as little as 2 ft extra width is beneficial
 - reducing travel lane width
 - eliminating unneeded travel lanes
 - eliminating parking on one or both sides

Other Issues Addressed

- Bicycle-safe drainage grates
- Bicycle-friendly railroad crossings
- Bicycle-oriented signs and bicycle-sensitive traffic detection devices

Contact Information

- Dawn Ritchie
- (260) 427-6002
- Dawn.Ritchie@ci.ft-wayne.in.us