

CITY OF LARAMIE
PARKS & RECREATION DEPARTMENT
P.O. Box C
Laramie, WY 82073

Parks: (307) 721-5264
Fax (307) 721-5256
Recreation: (307) 721-5269
Fax: (307) 721-5284
TDD (307) 721-5295

CITY OF LARAMIE
PARKS, TRAILS & RECREATION MASTER PLAN AD HOC ADVISORY COMMITTEE
AGENDA

MEETING DATE: May 23, 2012

TIME: 11:30 AM

LOCATION: Recreation Center large conference room – 920 Boulder Drive

Consent Agenda

1. Approval of the minutes from the May 9, 2012 meeting.

Motion by _____, seconded by _____, that the consent agenda be approved and that each specific action on the consent agenda be approved as indicated. (Items listed on the consent agenda are considered to be routine and will be enacted by one motion in the form listed above. There will be no separate discussion of these items unless a Committee Member or citizen so requests, in which case the item will be removed from the consent agenda and will be considered on the regular agenda.)

Regular Agenda:

1. Clarification request concerning the Commuter Bike Lane pilot program on Ivinson Ave from the May 9, 2012 meeting.
2. Part two of bike/trail design standards and classifications. Presentation of the Cheyenne Bikeway Design Workshop.
3. Future meeting schedule:
 - June 13th - North Laramie Drainage Master Plan impacts on LaBonte Park
 - June 26th - Census data in relation to park service areas
 - June 27th - review of survey questions
4. Other business

New business:

Public Comments

Next Meeting Date: Wednesday June 13, 2012 @ 11:30am

CITY OF LARAMIE
PARKS, TRAILS & RECREATION MASTER PLAN AD HOC ADVISORY COMMITTEE
May 9, 2012
Minutes of Meeting

MEMBERS PRESENT: Amber Travsky, Amy Williamson, Dan McCoy, Dave Hammond, Evan O'Toole, Joe Lord, Mike Moeller,

MEMBERS NOT PRESENT: Bill Gribb, Peggy McCrackin, Scott Mullner

GUESTS: Mary Alice Snyder

CITY OF LARAMIE STAFF PRESENT: Paul Harrison, Parks & Recreation Director; Mike Zook, Parks Manager; Michael Peters, Recreation Manager; Mel Owen, Administrative Assistant; Derek Teini, Senior Planner

The regular meeting was called to order by chair Dave Hammond at 11:35 a.m.

Consent Agenda:

- 1) **To approve the minutes from the April 28, 2012 regular meeting of the Parks, Trails and Recreation Master Plan Ad Hoc Advisory Committee.**

Motion by Williamson, second by Moeller, that the consent agenda be approved. Motion carried 7-0.

Regular Agenda:

- 1) **Presentation on the Commuter Bike Lane Pilot Program on Ivinson Avenue.**

Harrison presented staff's work on a potential pilot program that would create a Commuter Bike Lane. Harrison noted this effort was prompted by a citizen request and the belief that the community would be well served by such an amenity. The Committee inquired if any traffic studies or data was available that could be utilized to examine the proposed bike lane. Staff informed the Committee a holistic Laramie traffic study is not scheduled to occur until fiscal year 2013. The Committee noted that further work on the Commuter Bike Lane should include attempts to reduce traffic along the route through a variety of devices such as: reconfiguring stop signs, reducing or eliminating the ability to make vehicular turns along the route, lowering the speed limit et cetera.

After discussion the Committee noted that Garfield Street appears to pose less potential traffic conflicts than the proposed Ivinson Avenue; particularly due to UW congestion and problematic intersections along Ivinson. The Committee also believed that Garfield Street would offer greater access to the downtown area to a greater number of citizens.

Motion by Travsky, second by Williamson, to request staff further explore designating a potential Commuter Bike Lane along Garfield Street from 1st Street to 9th Street and then 9th to 15th Street. Motion carried 7-0.

- 2) **Consideration of preliminary Laramie Census Data.**

Teini distributed the new map of park service areas complete with population breakdowns based on preliminary Census Data. Several maps were distributed showing population distributions throughout Laramie at large and then broken down by Park Service Areas. An accounting of current amenities and acreages by Park Service Areas was also distributed to the Committee. Teini stated that a further analysis showing park service area deficiencies would be forthcoming. The Committee was encouraged to review the maps and be prepared to discuss them further at a future meeting.

- 3) **Future meeting schedule.**

The Committee and staff discussed setting a future work session with the City Council in order to provide a status report on the Committee's work. All agreed that the attendance of the entire Committee would be ideal. The majority of members favored setting the work session for July 10, 2012.

Other Business:

None.

New Business

None

Public Comments:

None

Meeting adjourned at 1:05 pm.

Respectfully submitted,

A handwritten signature in blue ink that reads "Mel Owen". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Mel Owen
Administrative Assistant
Parks and Recreation
City of Laramie

BASICS OF BIKEWAY DESIGN

Designing Streets for Bicyclists – Basics of Bikeway Design 3-1

- ## Types of Bikeways *
- **Shared Roadways**
 - Wide outside lanes
 - Bike boulevards
 - **Paved Shoulders**
 - **Bike Lanes**
 - **Shared-Use Paths**
- * In increasing order of complexity, not preference – not all are intentionally created as bicycle facilities.*
- Designing Streets for Bicyclists – Basics of Bikeway Design 3-2

- ## Older Bikeway Types
- “Bike Route”
 - “Bike Path”
 - Neither term is very clear
- Designing Streets for Bicyclists – Basics of Bikeway Design 3-3

SHARED ROADWAY



The diagram shows a top-down view of a road with a cyclist in the center, flanked by two cars. The cyclist is wearing a green shirt and a red helmet. The cars are white with blue windows. The road is marked with a dashed line on the left and a solid line on the right.

Most common type of bikeway:

- Roads as they are - *no specific dimensions*
- Appropriate on low-volume or low-speed streets
 - 85% or more of streets in a well-connected grid

Designing Streets for Bicyclists – Basics of Bikeway Design 3-4

Shared Roadway

- Work well on local streets in a *well-connected grid*
- Great for getting around neighborhoods
- Not as practical for longer distances
- Intersections stop controlled the "wrong way"



Designing Streets for Bicyclists – Basics of Bikeway Design 3-5



Appropriate on low-volume/low-speed streets

Corvallis OR Designing Streets for Bicyclists – Basics of Bikeway Design 3-6



Shared roadway common and appropriate on rural back roads

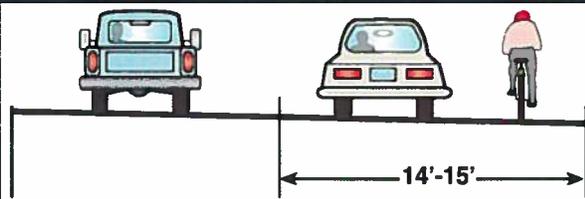
Bristol Co. OR Designing Streets for Bicyclists – Basics of Bikeway Design 3-7



As traffic speeds or volumes increase, shared roadways become less acceptable

Salem OR Designing Streets for Bicyclists – Basics of Bikeway Design 3-8

**Shared Roadway Special Case #1:
Wide Outside Lane**



14'-15'

- Used on retrofits of busy streets with insufficient room for bike lanes
- 14' allows cars & bikes to share the lane side-by-side
- Any wider should be striped - wide lanes don't improve safety: *anti-traffic-calming?*

Designing Streets for Bicyclists – Basics of Bikeway Design 3-9



WIDE OUTSIDE LANE
Drivers can pass cyclists in same lane

Boyd OR Designing Streets for Bicyclists – Basics of Bikeway Design 3-10



Experienced cyclists are comfortable with wide lanes

Spartanburg SC Designing Streets for Bicyclists – Basics of Bikeway Design 3-11



Less experienced cyclists prefer bike lanes

Spartanburg SC Designing Streets for Bicyclists – Basics of Bikeway Design 3-12



Shared Roadway Signing and Marking

- Generic "Bike Route" signs not recommended
- Routes should be designated with a name or number.
- Directional and destination signs are useful for cyclists
- Bike warning signs have little value
- Shared lane markings and/or signs can encourage better behavior

Designing Streets for Bicyclists – Basics of Bikeway Design | 3-14

Use numbered, lettered or named routes instead of generic "bike route" signs

Designing Streets for Bicyclists – Basics of Bikeway Design | 3-15

Directional and destination signs are being added to the MUTCD

Designing Streets for Bicyclists – Basics of Bikeway Design | 3-16

Shared Lane Markings



- Primarily for narrow shared roadways
- Encourages bicyclists to ride away from parked cars and take the lane as allowed by law
- Encourages drivers not to pass cyclists too closely
- Useful to provide continuity on constrained blocks
- *Inclusion in the draft MUTCD for 2009*

Designing Streets for Bicyclists – Basics of Bikeway Design 3-17

Shared Lane Marking Placement



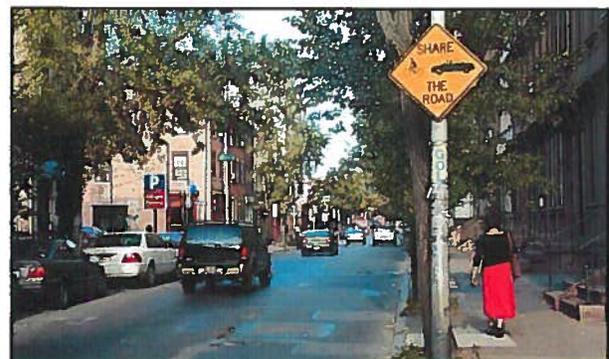
- If parallel parking, 11' minimum from the curb
- If no parking, 4' minimum from the curb or pavement edge
- Place immediately after each intersection and not more than 250 feet apart
- Not recommended on roads with speed limits of 40 mph and above

Portland, OR Designing Streets for Bicyclists – Basics of Bikeway Design 3-18



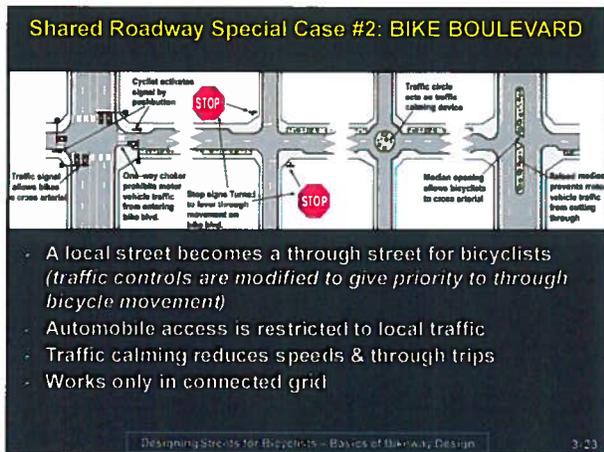
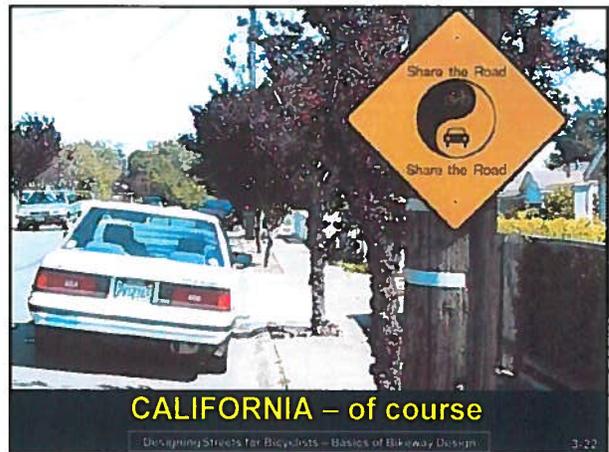
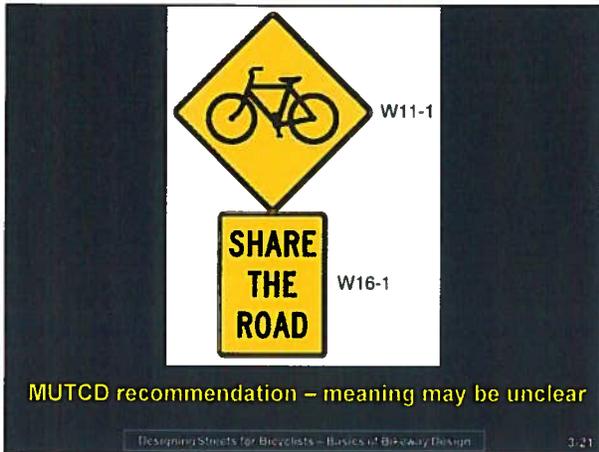
Share the road signs don't send a clear, consistent message: Ride side-by-side?

Designing Streets for Bicyclists – Basics of Bikeway Design 3-19

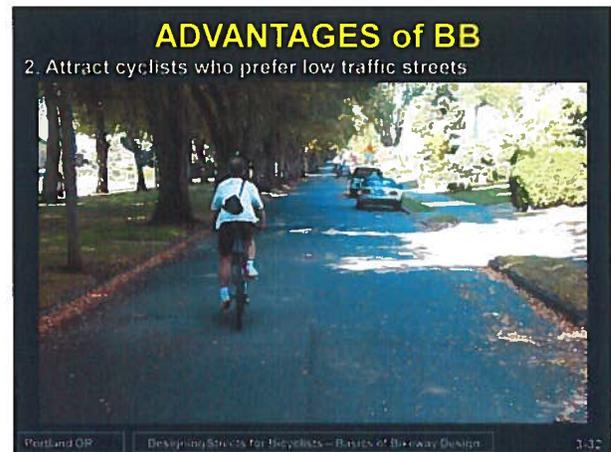
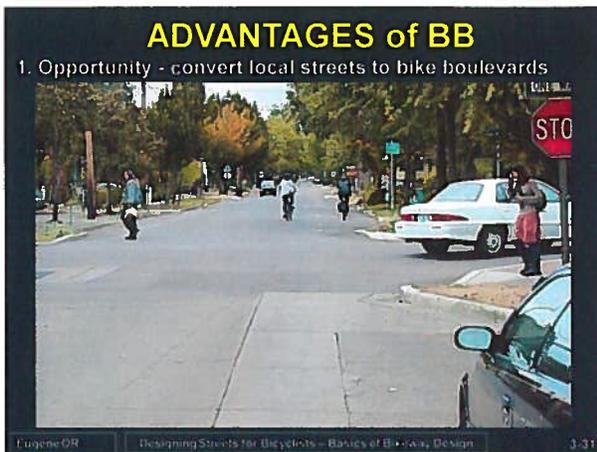


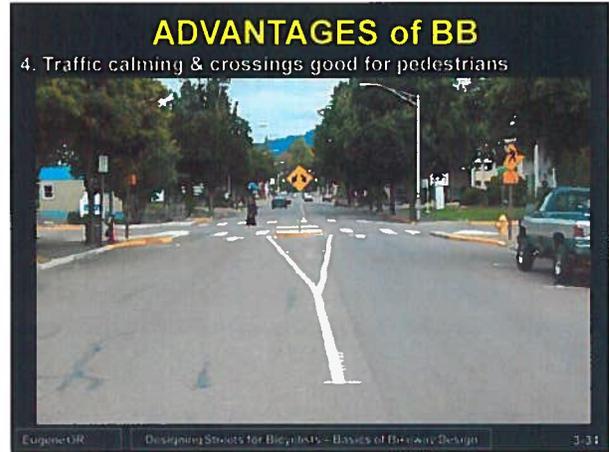
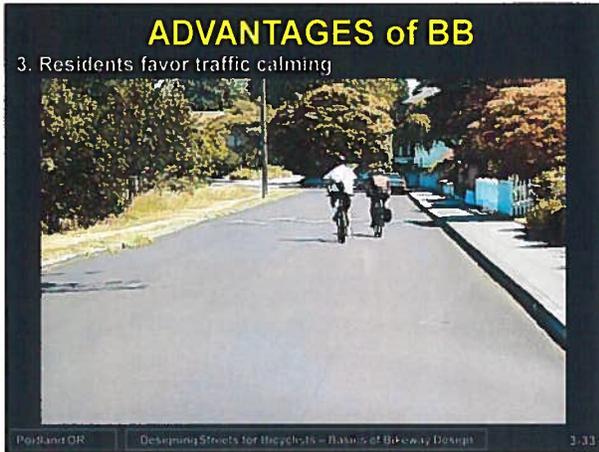
Share the road signs don't send a clear, consistent message: Car chases cyclist?

Philadelphia, PA Designing Streets for Bicyclists – Basics of Bikeway Design 3-20





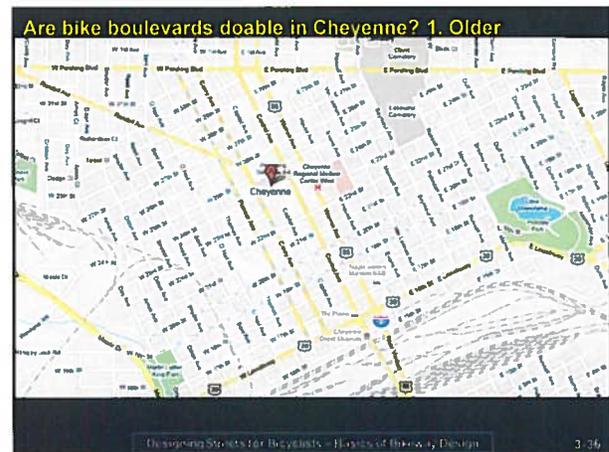


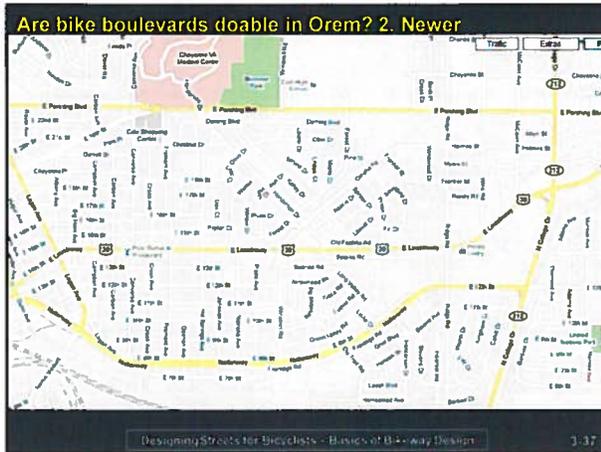


DISADVANTAGES of BB

- May be located on streets that don't provide direct access to destinations: *Cyclists may have to ride on a busy street to complete their trip*
- May be difficult to find local street long enough to provide continuity
- May cause traffic diversion onto other streets
- May not be acceptable to turn stop signs and/or add traffic signals
- May be difficult & expensive to retrofit arterial crossings to create safe bicycling conditions

Designing Streets for Bicyclists – Basics of Bikeway Design 3-35





Bike Boulevards:
Not "Diversionary Bike Routes"

- Thoroughfares offer most direct routes
- Destinations located on thoroughfares
- Local streets are slow & discontinuous
- Arterials can be difficult to cross
- Reentering thoroughfare can be difficult (especially left turns)
- Some cyclists choose thoroughfares anyway, even without treatment

Designing Streets for Bicyclists - Basics of Bikeway Design 3-38



Paved Shoulders

Min: 5' against curb, parking or guardrail, 4' open shoulder
Travel lane dimensions per relevant standards

Use AASHTO *shoulder* standards; 6' desirable for bicycles
No special markings

Designing Streets for Bicyclists – Basics of Bikeway Design 3-11

Shoulders common practice on rural highways

Benton Co. OR Designing Streets for Bicyclists – Basics of Bikeway Design 3-12

Shoulders a good practice on county roads

Benton Co. OR Designing Streets for Bicyclists – Basics of Bikeway Design 3-13

Why Shoulders?

SAFETY:

- Room to avoid crashes
- A place to pull over
- Room for pedestrians

Washington Co. OR

Benton Co. OR Designing Streets for Bicyclists – Basics of Bikeway Design 3-14

Why Shoulders?

SAFETY:

- Room to avoid crashes
- A place to pull over
- Room for pedestrians

MAINTENANCE:

- Better drainage
- Structural support to pavement



Designing Streets for Bicyclists – Basics of Bikeway Design 3-35

Adding shoulders – tip:
 - Add shoulders prior to overlay – *seamless!*



Benton Co. OR | Designing Streets for Bicyclists – Basics of Bikeway Design 3-36

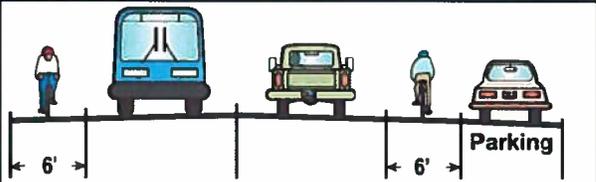
Adding shoulders – why it matters:



Rough joint makes shoulder unridable

Designing Streets for Bicyclists – Basics of Bikeway Design 3-37

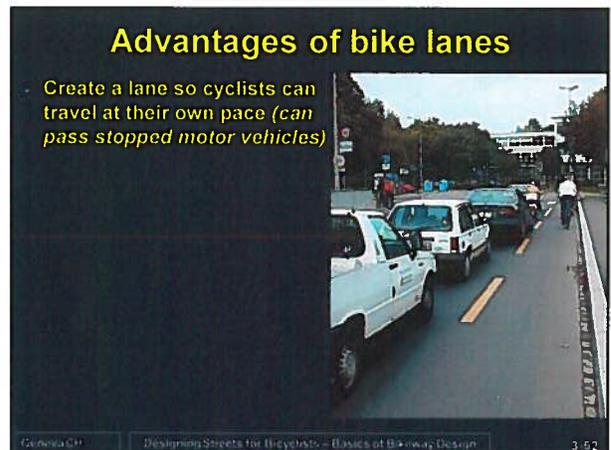
Bike Lanes: shoulders dedicated to bikes



Min: 5' against curb, parking or guardrail; 4' on open shoulder
 Travel and parking lane dimensions per context

Oregon standard: 6'
 AASHTO Guide for the development of bicycle facilities: 5'
 AASHTO Green Book: Shoulders are desirable on <...> urban arterials <...> the shoulder width should be <...> at least 6' wide

Benton Co. OR | Designing Streets for Bicyclists – Basics of Bikeway Design 3-38



Advantages of bike lanes

- Create a lane so cyclists can travel at their own pace (*can pass stopped motor vehicles*)
- Guide cyclists in a manner consistent with good operation (*close to traffic, where they're visible: drivers can predict their movements*)



Salem OR | Designing Streets for Bicyclists - Basics of Bikeway Design | 3-53

Advantages of bike lanes

- Create a lane so cyclists can travel at their own pace (*can pass stopped motor vehicles*)
- Guide cyclists in a manner consistent with good operation (*close to traffic, where they're visible: drivers can predict their movements*)
- Reduce bicycle/pedestrian conflicts (*cyclists no longer ride on sidewalks*)



Washington DC | Designing Streets for Bicyclists - Basics of Bikeway Design | 3-54

Before



Bike lanes encourage cyclists to ride on streets, not sidewalks

FT Lauderdale FL | Designing Streets for Bicyclists - Basics of Bikeway Design | 3-55

After



Bike lanes encourage cyclists to ride on streets, not sidewalks

FT Lauderdale FL | Designing Streets for Bicyclists - Basics of Bikeway Design | 3-55



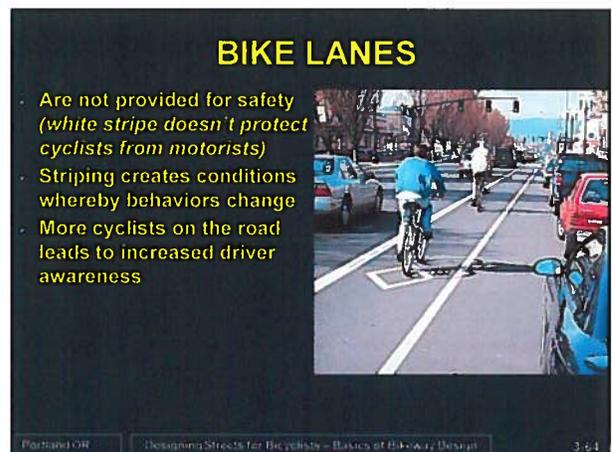
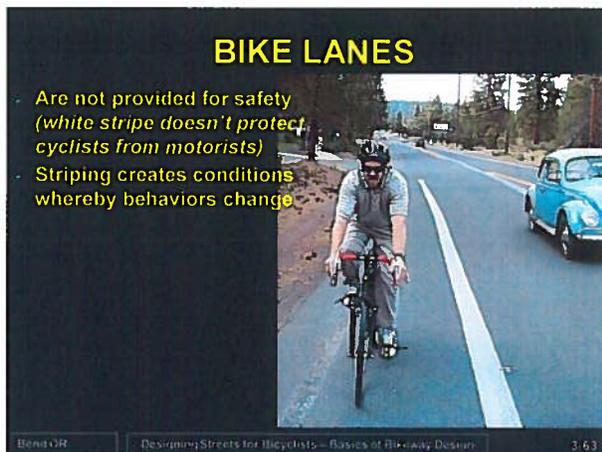
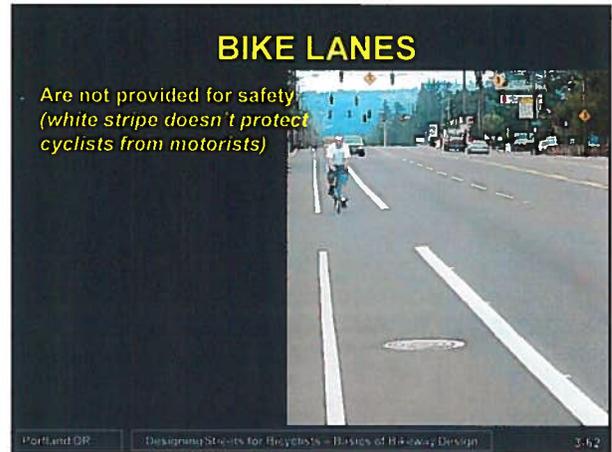
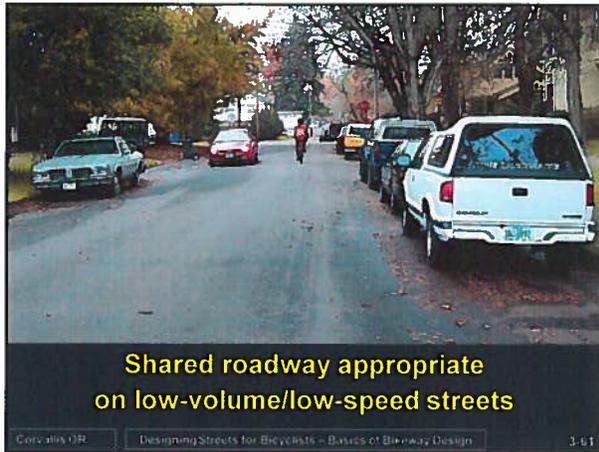
- Bike lanes most appropriate on urban thoroughfares
- They get you from one part of town to another efficiently
- Intersections stop or signal controlled – the “right way”
- *No point in striping minor streets with bike lanes*

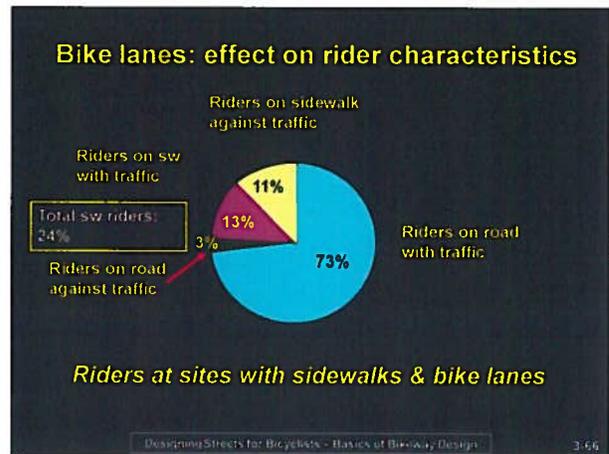
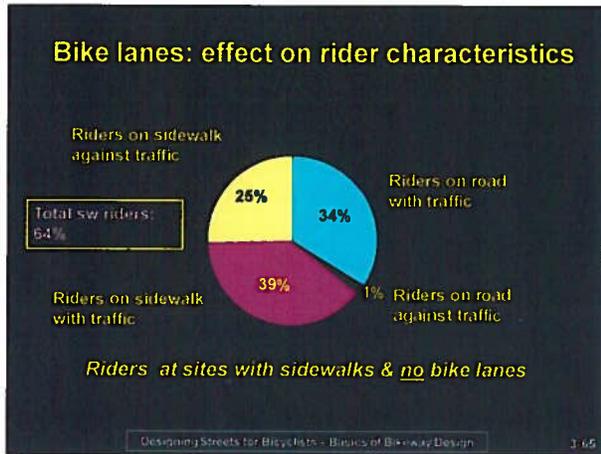
Designing Streets for Bicyclists - Basics of Bikeway Design | 3-58

- *No point in striping minor streets with bike lanes*

Designing Streets for Bicyclists - Basics of Bikeway Design | 3-59







RELATIVE DANGER INDEX Of various types of facilities

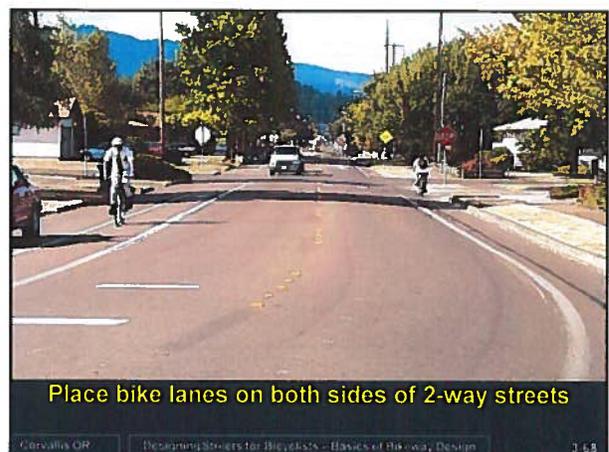
Major Streets w/o bike lanes	1.28
Minor Streets w/o bike lanes	1.04
Streets with bike lanes	0.5
Mixed-use paths	0.67
Sidewalks	5.32

(* = shared roadway)

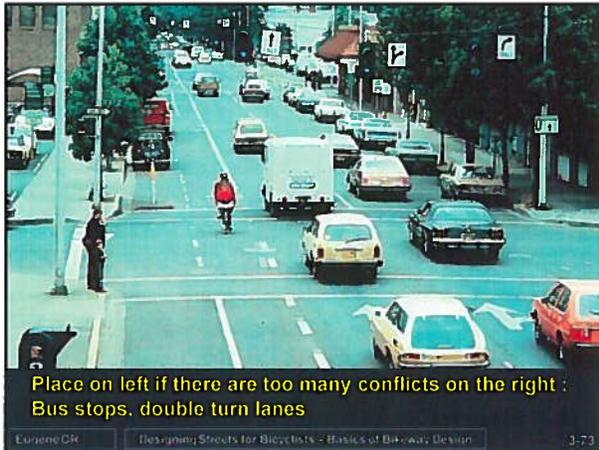
1.00 = median

Source: William Moritz, U.W. - "Accident Rates for Various Bicycle Facilities" - based on 2374 riders, 4.4 million miles

Designing Streets for Bicyclists - Basics of Bikeway Design 3-67







Bike Lane Signing and Marking

- Pavement markings (line and symbol) are required
- Signs should supplement pavement markings
- Solid white line between bike lane and motor vehicle lanes
- Line encouraged between bike lane and parking lane

•Forthcoming change to MUTCD



Designing Streets for Bicyclists - Basics of Bikeway Design 3-75

R3-17 Standard Bike Lane Sign

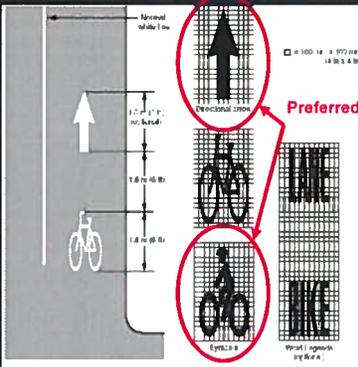
		
1988	2000	

•Bicycle Lane signs ... should be used in advance of the beginning of a marked bicycle lane, at the end of the bicycle lane, and at periodic intervals."
Proposed 2009? MUTCD

Designing Streets for Bicyclists - Basics of Bikeway Design 3-76

Bike Lane Markings

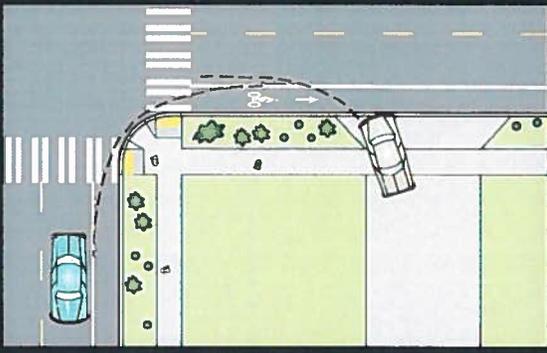
- 6" solid white line
- The bicycle lane symbol marking should be placed immediately after an intersection and at other locations as needed.
- Either of the bike symbols shown or the words BIKE LANE may be used
- Diamond symbol no longer used



The diagram illustrates the placement of bike lane markings. It shows a 6-inch solid white line on the left side of the lane. The distance from the line to the center of the lane is 1.7 feet (630 mm). The distance from the line to the center of the lane is 1.8 feet (690 mm). The distance from the line to the center of the lane is 1.8 feet (690 mm). The diagram also shows two preferred symbols: a bicycle symbol and the words "BIKE LANE". A red circle highlights the bicycle symbol, and a red arrow points to it with the word "Preferred".

Designing Streets for Bicyclists – Basics of Bikeway Design 3-77

Keep symbols out of swept path



The diagram shows a car's swept path over a bike lane symbol. The car is shown in a turning position, and its path is indicated by a dashed line. The bike lane symbol is shown in the path of the car's wheels, indicating that it is in the swept path and should be avoided.

Designing Streets for Bicyclists – Basics of Bikeway Design 3-78

Example of poor symbol placement



The photograph shows a bike lane with the word "BIKE" painted in the middle of the lane. The text is placed in the middle of the lane, which is not the correct placement for the symbol.

Designing Streets for Bicyclists – Basics of Bikeway Design 3-79

Example of good symbol placement



The photograph shows a bike lane with a bicycle symbol placed at the edge of the lane. The symbol is placed at the edge of the lane, which is the correct placement for the symbol.

Designing Streets for Bicyclists – Basics of Bikeway Design 3-80

