

Fitchburg, Wisconsin Bicycle Summit

Mike Lydon, CNU-A
The Street **Plans** Collaborative

June 7, 2011



Let's Break The Ice!

- Your Name
- Where You Live
- Reason(s) Why You Bicycle



About Us

THE STREET PLANS COLLABORATIVE PROJECT MAP

Completed:

- Miami Bicycle Master Plan
- Miami Bicycle Action Plan
- Miami Health District Bicycle and Pedestrian Study
- El Paso, TX Comprehensive Plan
- Westminster Bicycle Master Plan
- DenisPort Master Plan Charrette
- Damariscotta Heart and Soul Charrette
- Oyster Bay 48x48x48
- Brunswick Downtown and Corridor Master Plan

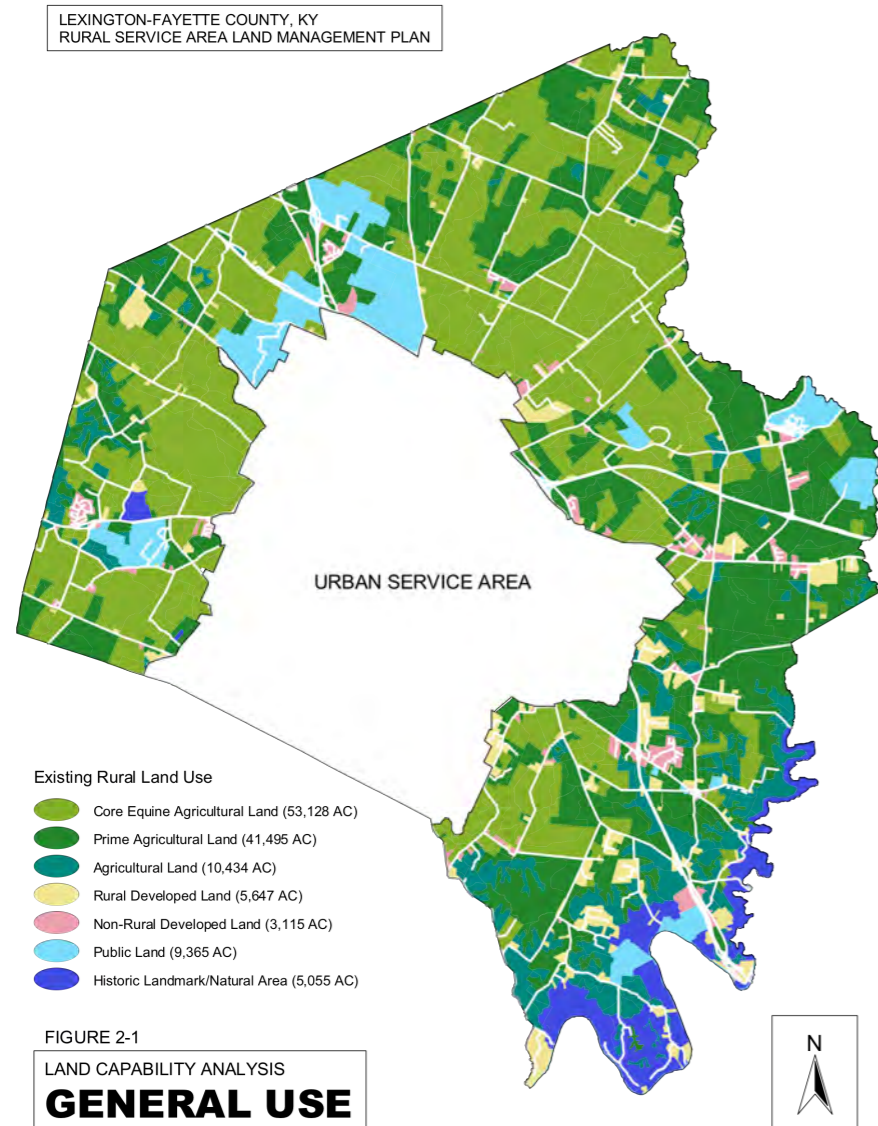
Ongoing/Upcoming:

- Bicycle City, SC
- Allentown Bicycle and Pedestrian Improvement Plan
- GrowSmart Rhode Island Bicycle and Pedestrian Workshop Series
- Brighton Boulevard Context-sensitive design technical assistance
- Fitchburg SmartCode Bicycle Module
- New York City Bicycle Share???



★ Project Locations

The Transportation/Land Use Connection

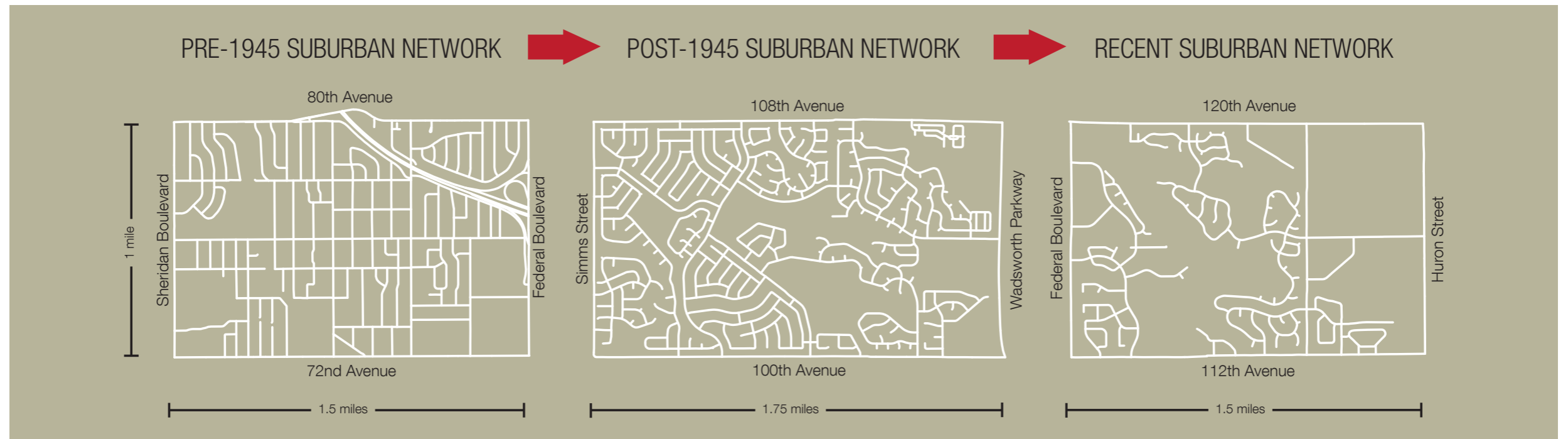


Lexington, KY: 1959

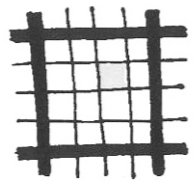


Lexington, KY: 2009

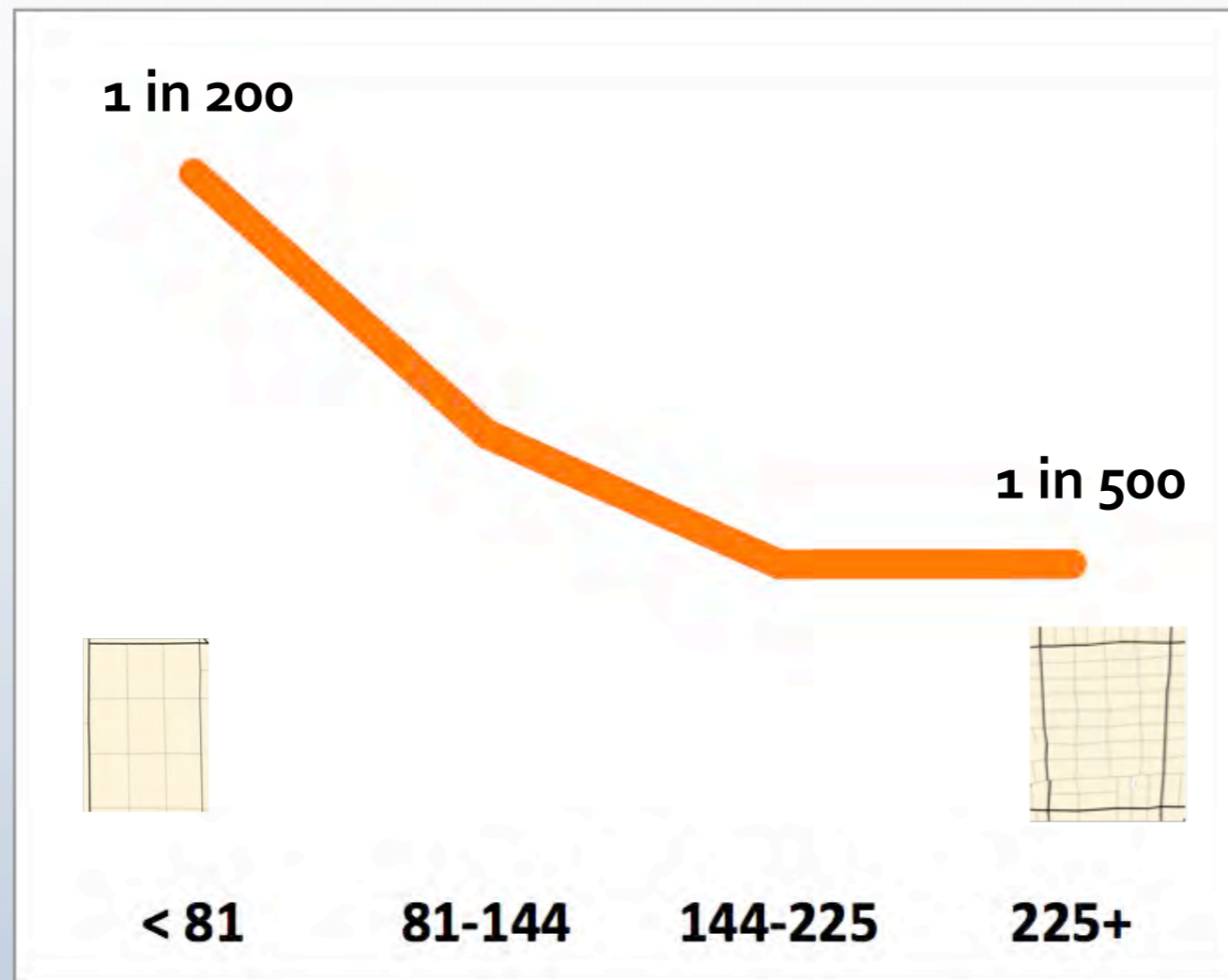
Street Networks



Garrick's Research

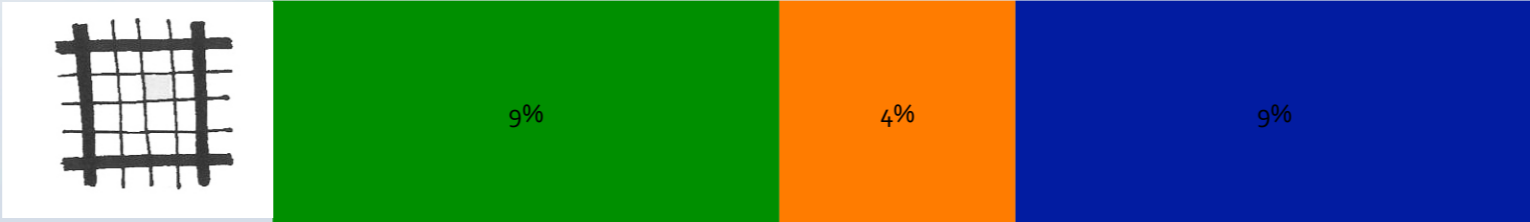
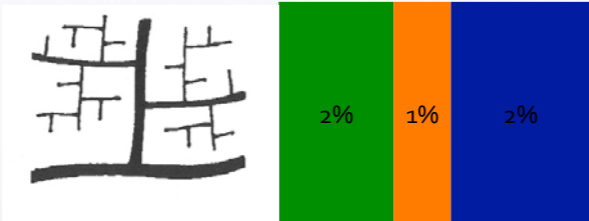


Odds of Dying in a Road Accident based on Intersection Density



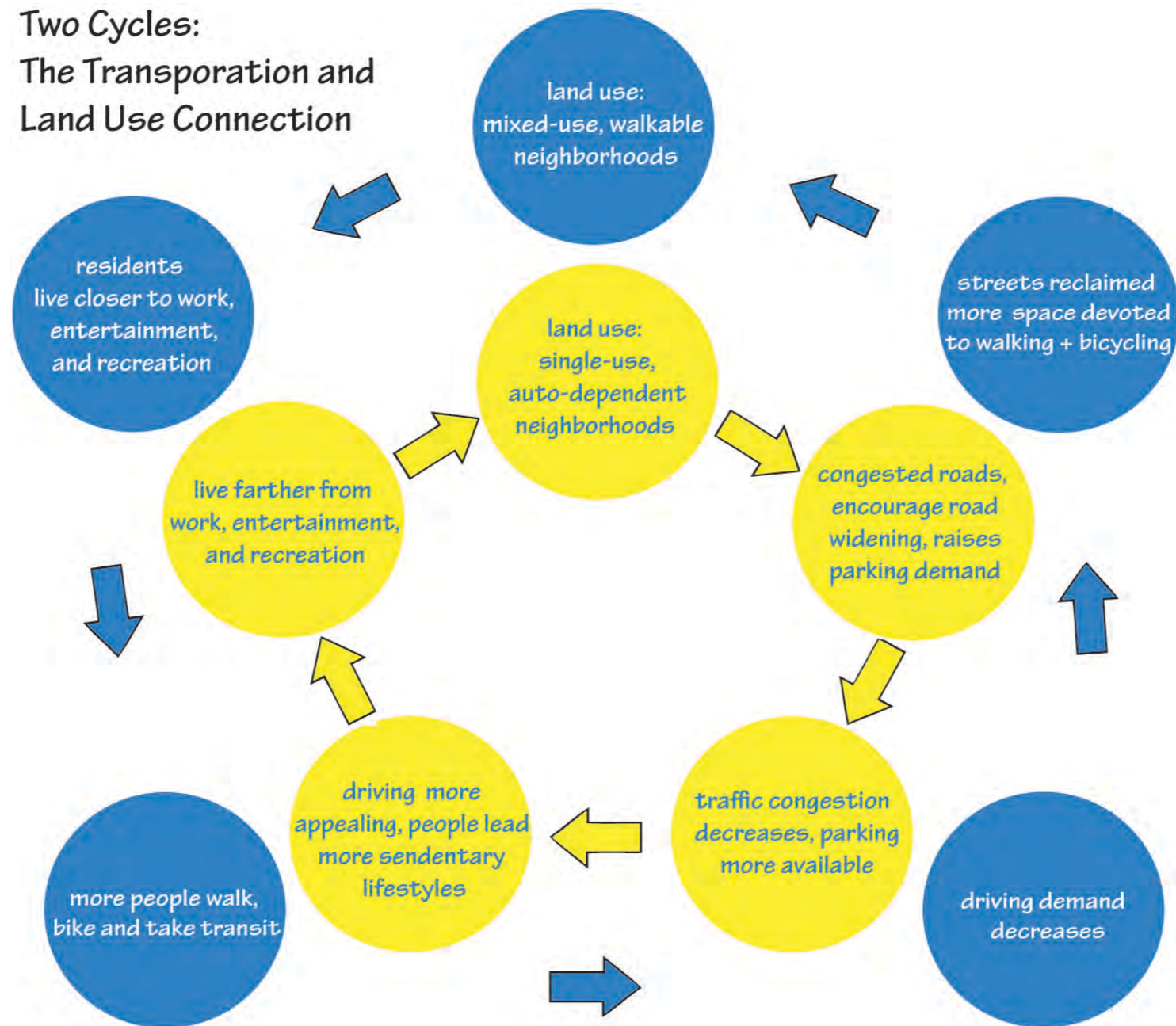
The Network Is Mode Share

Percentage of People **Walking**, **Biking** or **Taking Transit**



The Two Cycles

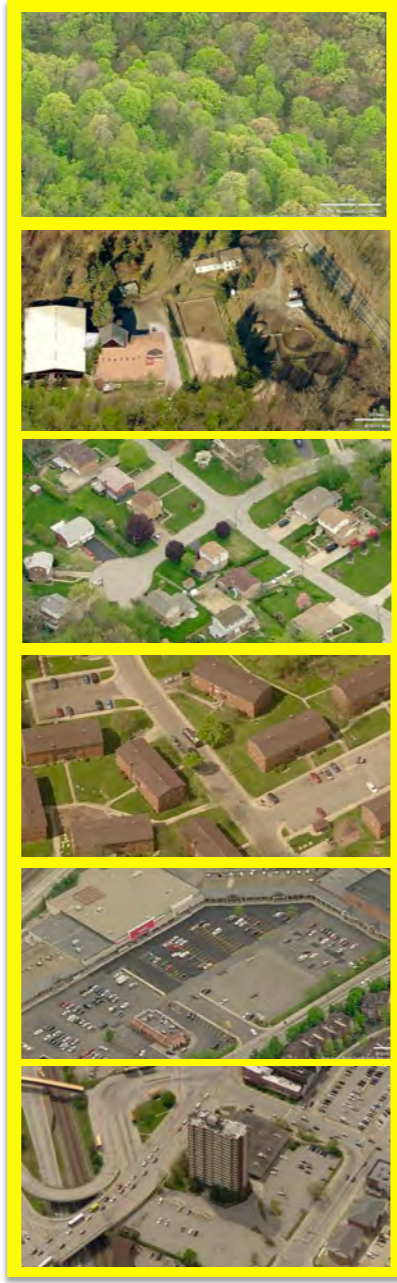
Two Cycles:
The Transportation and
Land Use Connection



Two Cycles in Three Dimensions

CONVENTIONAL ZONING

- 1. LAND USE
- 2. DENSITY
- 3. URBAN FORM



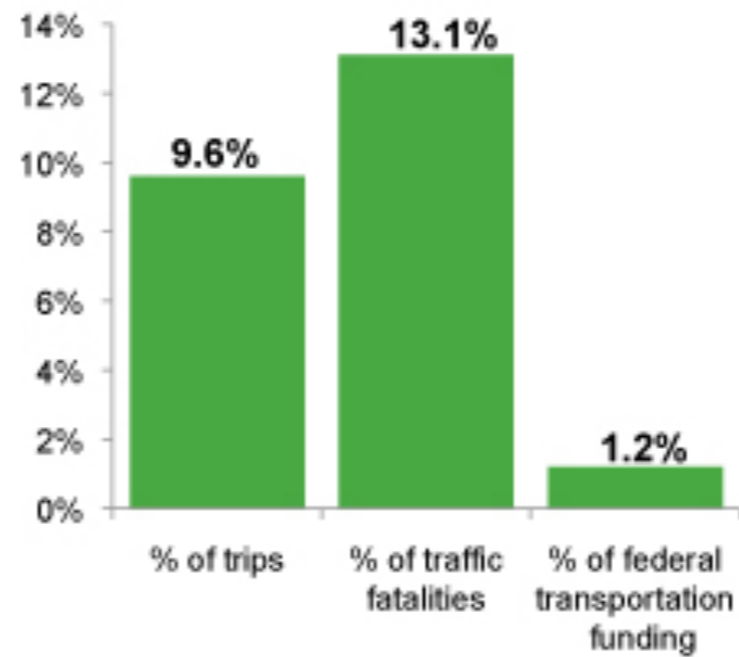
FORM-BASED ZONING

- 1. URBAN FORM
- 2. BUILDING TYPES
- 3. DENSITY
- 4. LAND USE



An American Story: We Get What We Pay For

Levels of Bicycling and Walking, Bike/Ped Fatalities, and Bike/Ped Funding in the U.S.



Establishing a Hierarchy



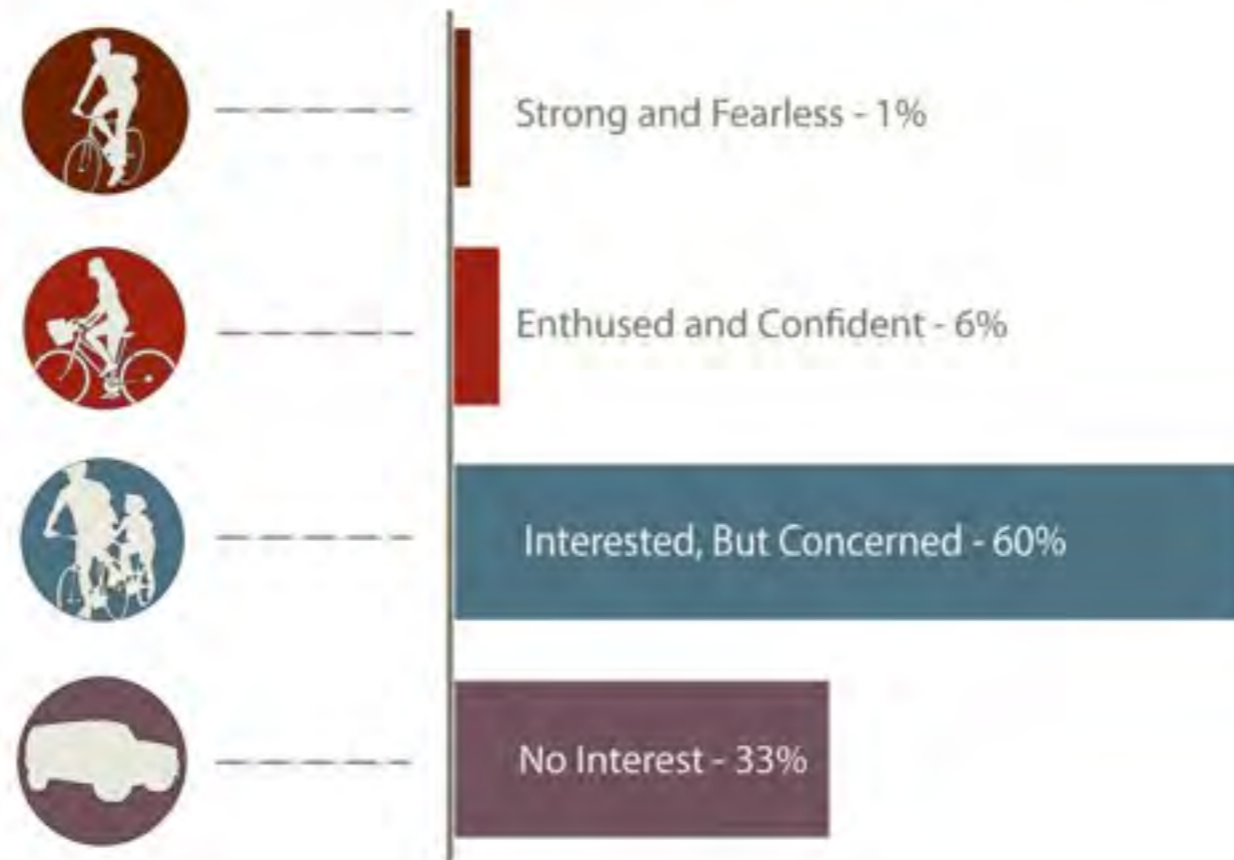
Golden Rule

- “ If cycling is to be universally adopted as a means of transportation, then the concerns of the majority must be addressed.” Roger Geller



Who Bicycles?

The Four Types of Bicyclists



Know Your Market!

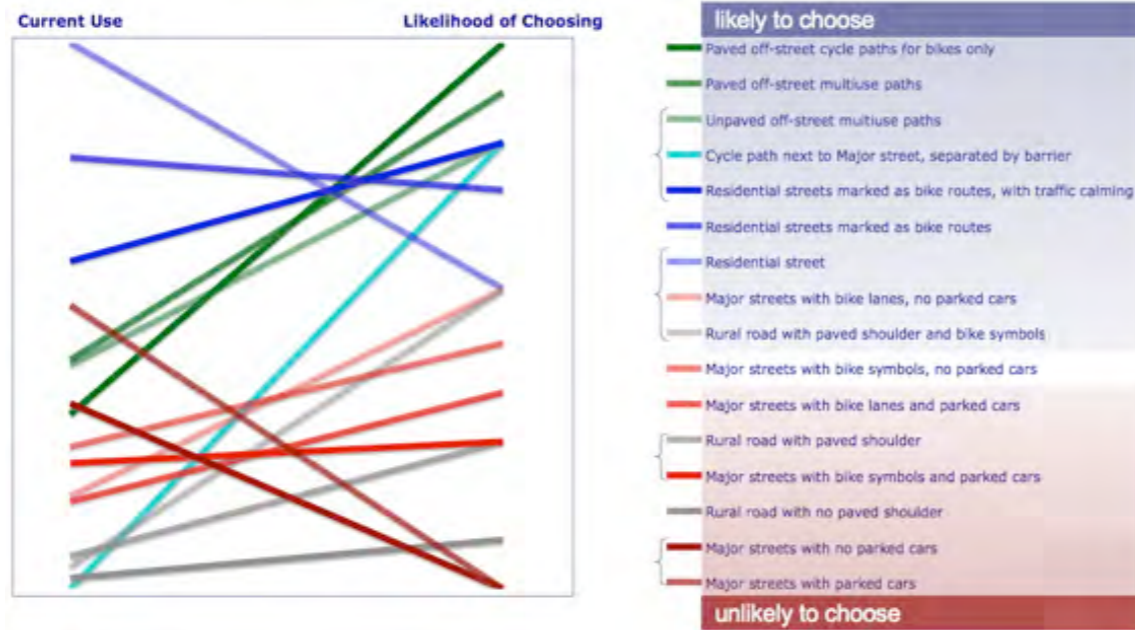
The Four Types of Bicyclists



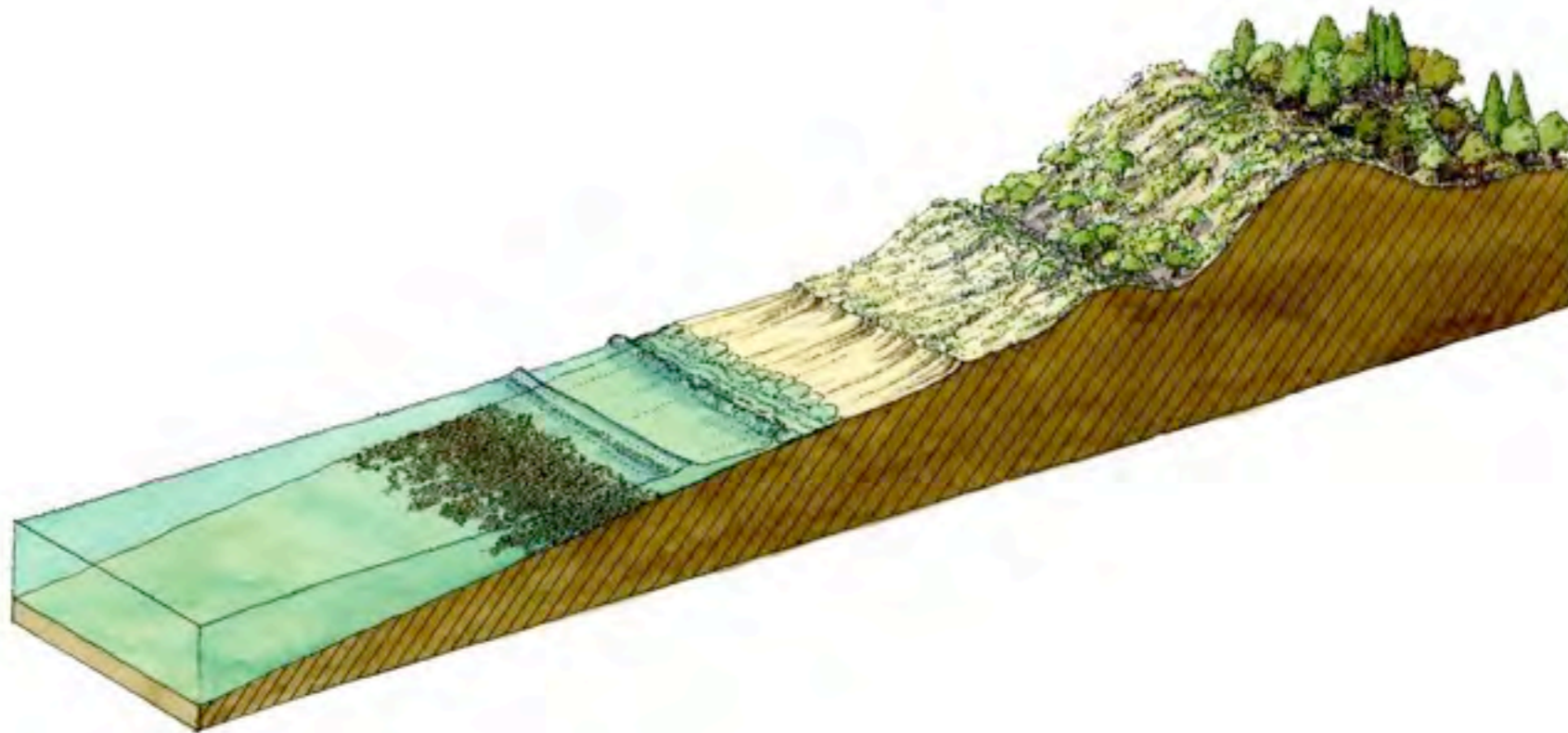
Indicator Species: Women, Children, Older Adults



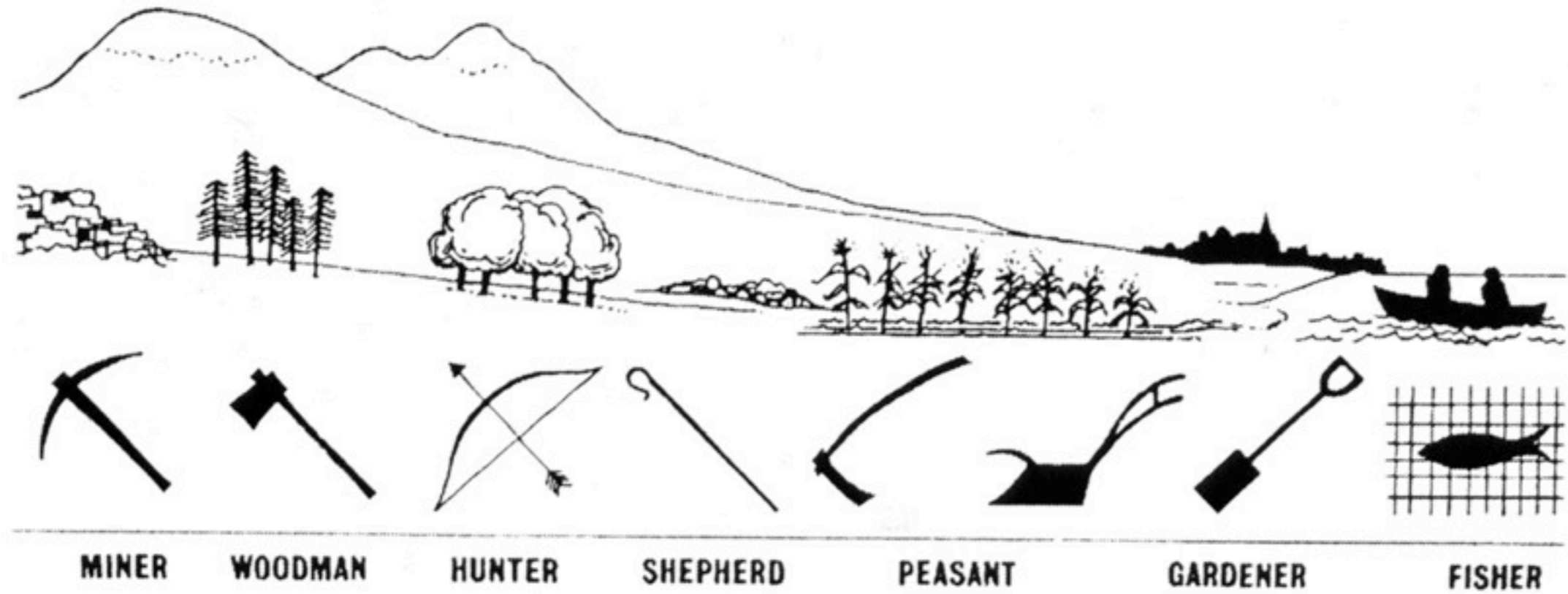
Recognize Diverse User Needs, And Plan for Them!



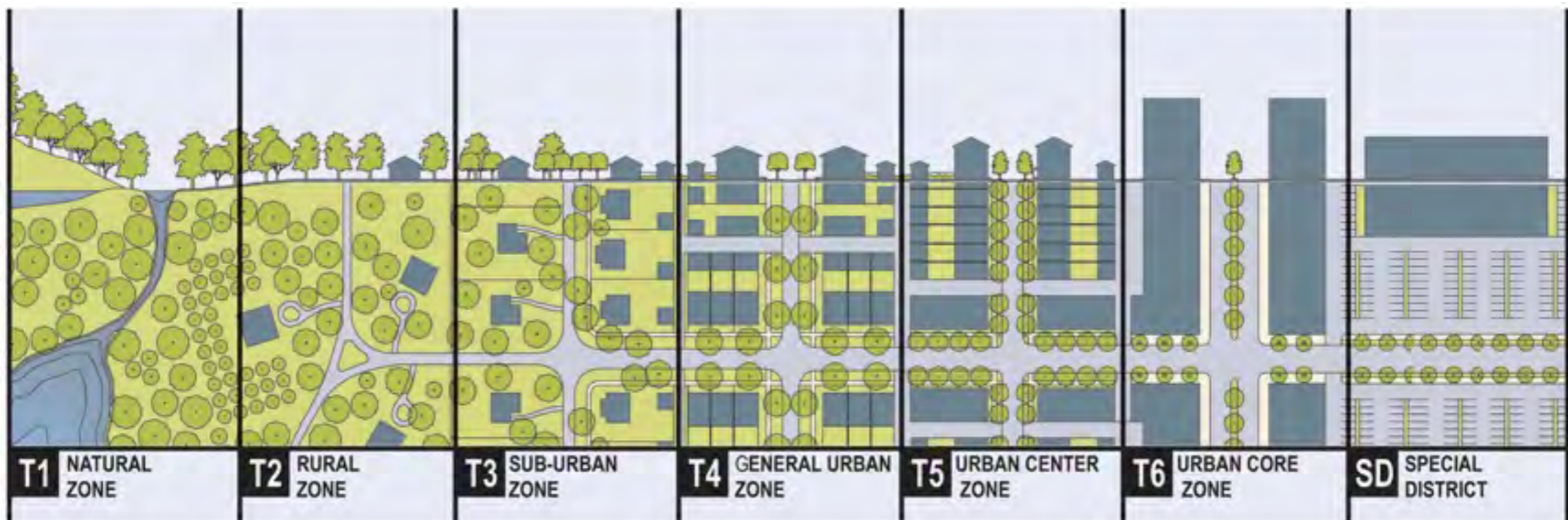
So, What Does This Got To Do With It?



Other Transects



The Urban-to-Rural Transect



Other Transects



SHOES

Other Transects



DOGS

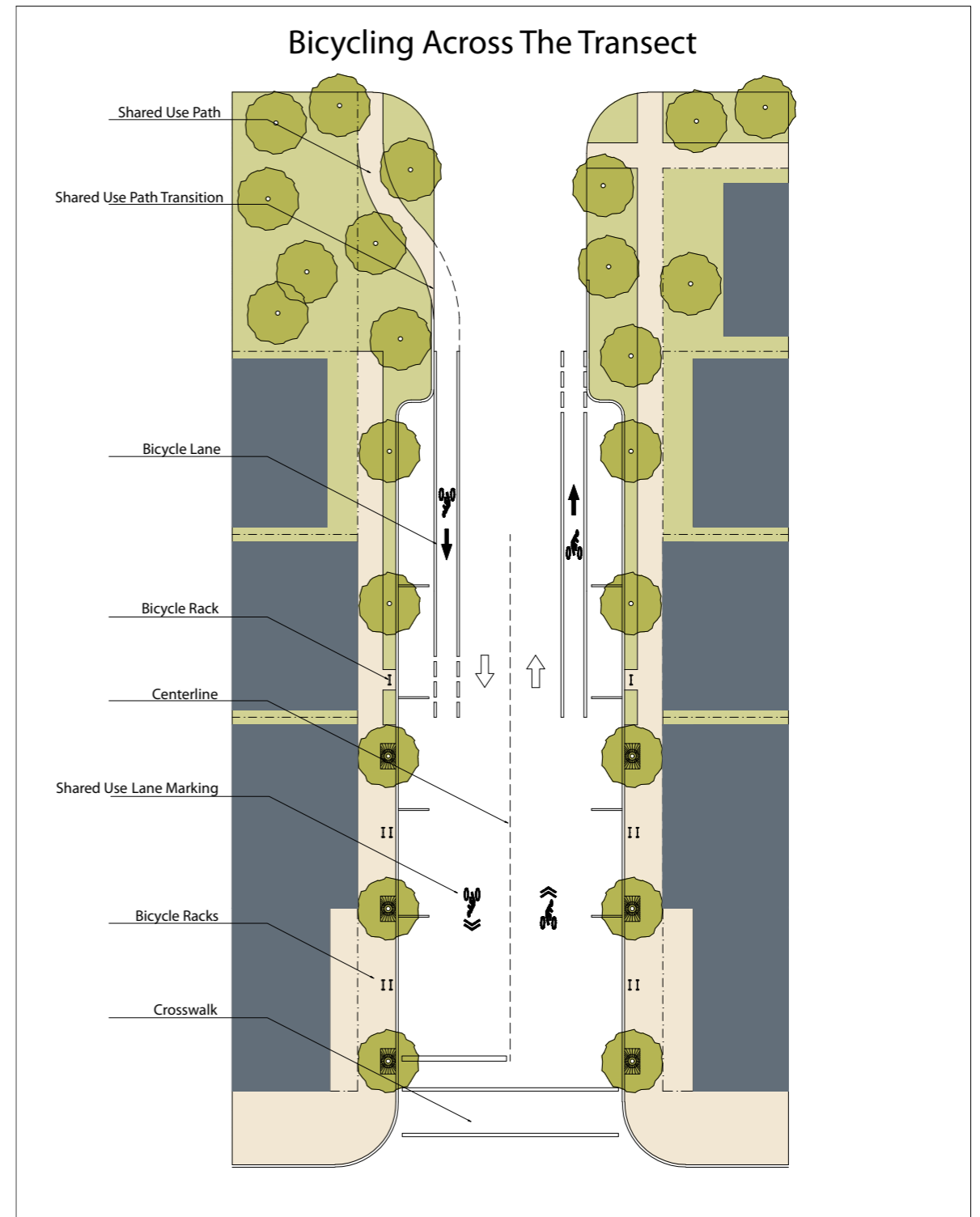
Where Does Bicycling Fit In?

BICYCLING SMARTCODE MODULE

PREPARED BY MIKE LYDON, WITH ZACHARY ADELSON AND TONY GARCIA

*The bicycle is the most efficient machine ever created:
Converting calories into gas, a bicycle gets the equivalent
of three thousand miles per gallon.*

Bill Strickland



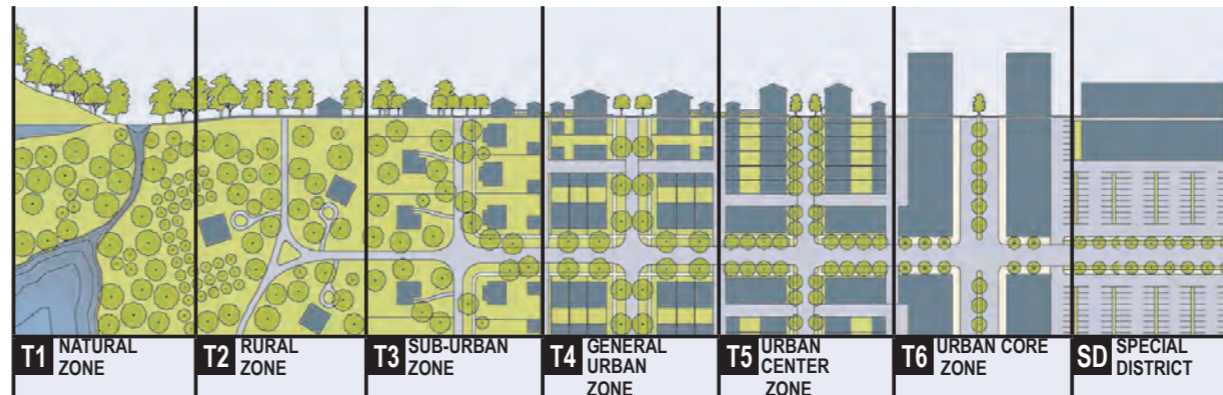
SMARTCODE MODULE

Municipality

BIKEWAY & FACILITY TYPE SUMMARY

Table B1: Bikeway & Facility Type Summary - This table prescribes opportunities for the placement of Bikeways, facilities, and Countermeasures across the Transect.

Note: All requirements in this Table are subject to calibration for local context.



a. Bikeway Types

	T1 NATURAL ZONE	T2 RURAL ZONE	T3 SUB-URBAN ZONE	T4 GENERAL URBAN ZONE	T5 URBAN CENTER ZONE	T6 URBAN CORE ZONE	SD SPECIAL DISTRICT
Shared Use Bicycle Trail	permitted	permitted	permitted				
Shared Use Bicycle Path			permitted	permitted	permitted	Warrant	Warrant
Bicycle Lane (Conventional)	permitted	permitted	permitted	retrofit by Warrant	retrofit by Warrant	retrofit by Warrant	Warrant
Shared Vehicular Lanes	permitted	permitted	permitted	permitted	permitted	permitted	Warrant

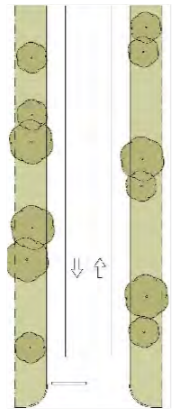
b. Bicycle Parking

Bicycle Rack (standard)	Warrant	permitted	permitted	permitted	permitted	permitted	Warrant
Bicycle Rack (decorative, public art)	Warrant	Warrant	Warrant	Warrant	permitted	permitted	Warrant
Bicycle Shelter	Warrant	permitted	permitted	permitted	permitted	permitted	Warrant
Bicycle Locker	Warrant	permitted	Warrant	Warrant	permitted	permitted	Warrant
Bicycle Station					Warrant	permitted	Warrant

c. Bikeway Countermeasures

Safety and Route Signing	permitted	permitted	permitted	permitted	permitted	permitted	Warrant
Peg-a-Track		Warrant	permitted	permitted	permitted	permitted	Warrant
Shared Vehicular Lane Marking (Sharrow)			permitted	permitted	permitted	permitted	Warrant
Bicycle Inductor Loop		Warrant	permitted	permitted	permitted	permitted	Warrant
Physically-Separated Bicycle Lane		Warrant	Warrant	retrofit by Warrant	retrofit by Warrant	retrofit by Warrant	Warrant
Contra-Flow Bicycle Lane			Warrant	retrofit by Warrant	retrofit by Warrant	retrofit by Warrant	Warrant
Buffered Bicycle Lane		Warrant	Warrant	retrofit by Warrant	retrofit by Warrant	retrofit by Warrant	Warrant
Bicycle Box			Warrant	retrofit by Warrant	retrofit by Warrant	retrofit by Warrant	Warrant
Shoulder	permitted	permitted	Warrant				Warrant

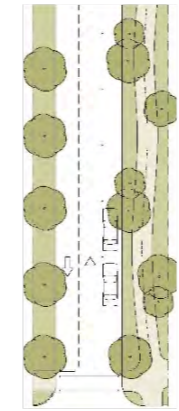
A Collection of Bikeway Types



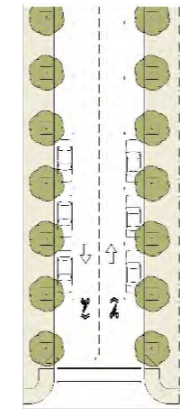
Shoulder



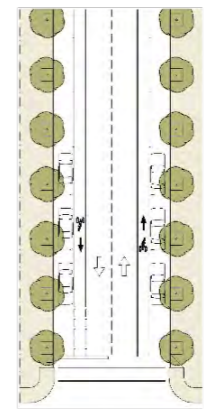
Shared Use Path - Rural



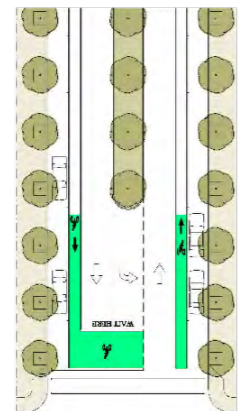
Shared Use Path - Urban



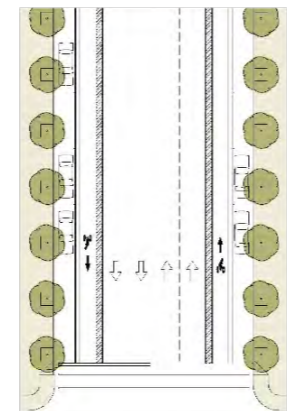
Shared Use Lane Marking



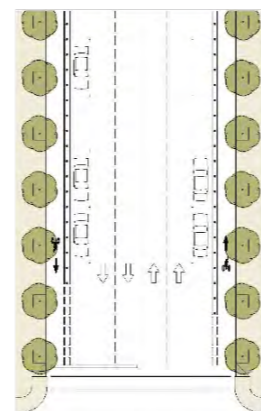
Bicycle Lane



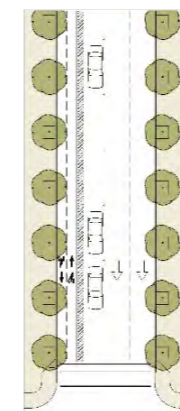
Bicycle Box



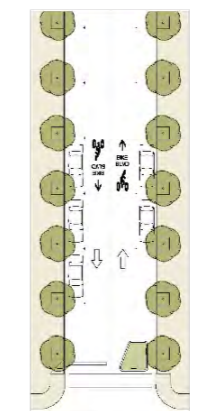
Buffered Bicycle Lane



Physically-Separated Bicycle Lane



Two-Way, Physically-Separated Bicycle Lane



Bicycle Boulevard

An Infrastructure of Convenience



Two Types, Many Sub-Types



The Details Matter

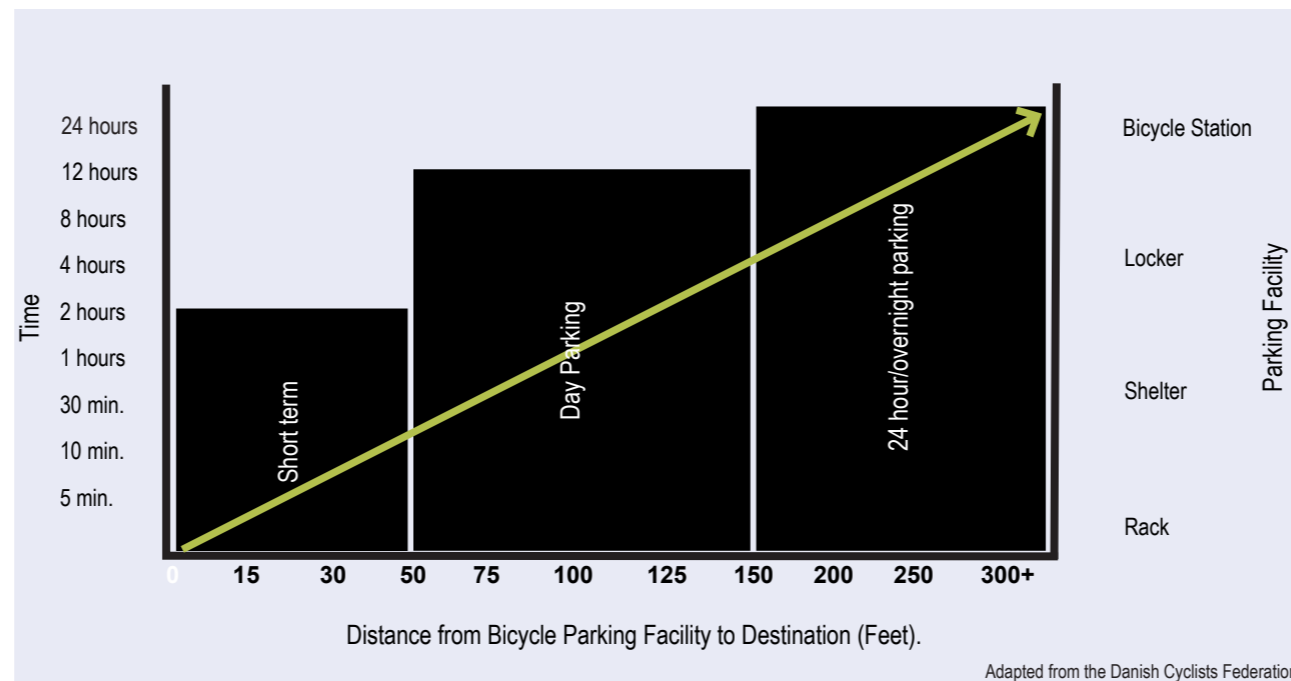


Bicycle Parking

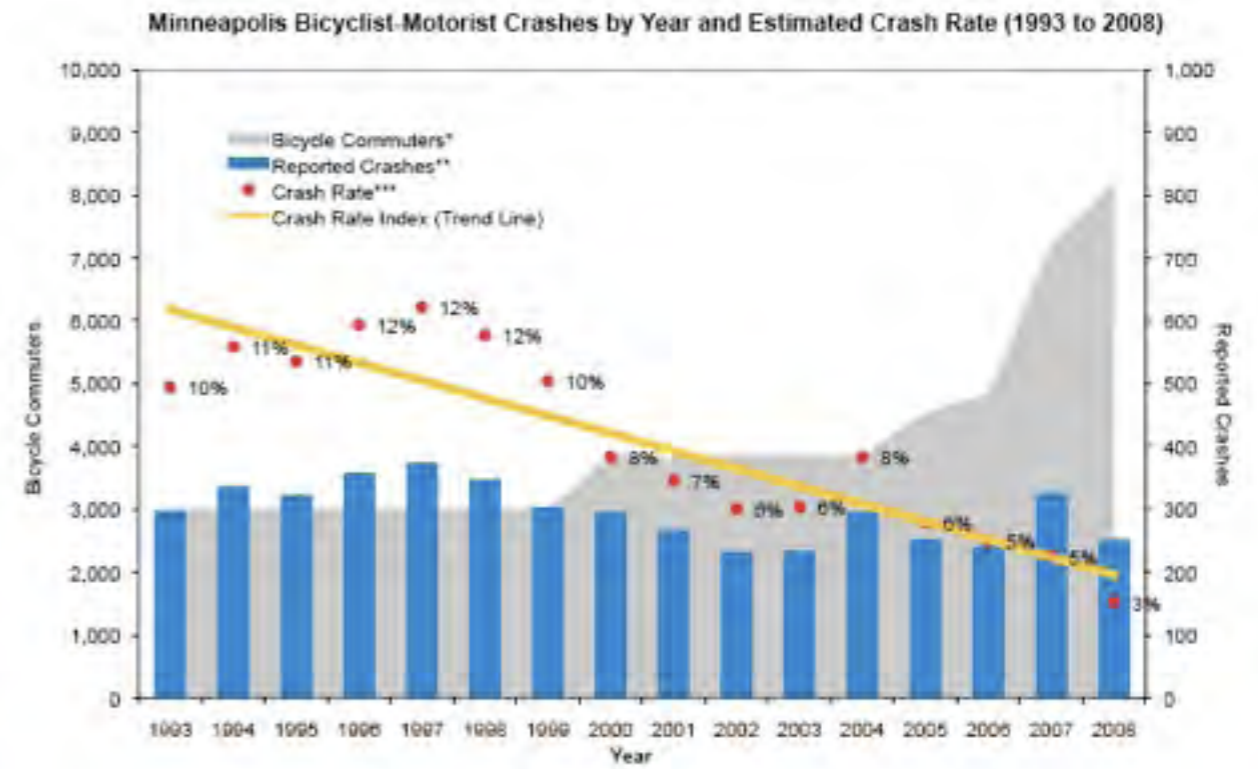
SMARTCODE MODULE BICYCLE PARKING - GENERAL LOCATION STANDARDS

Municipality

Table B5: Bicycle Parking - General Location Standards - This table prescribes the general relationship among the distance from parking facility to destination, the parking duration, and the parking facility type provided.



Safety in Numbers



Fitchburg By The Numbers

Population:
22,000

Total Street Miles (local):
- 118

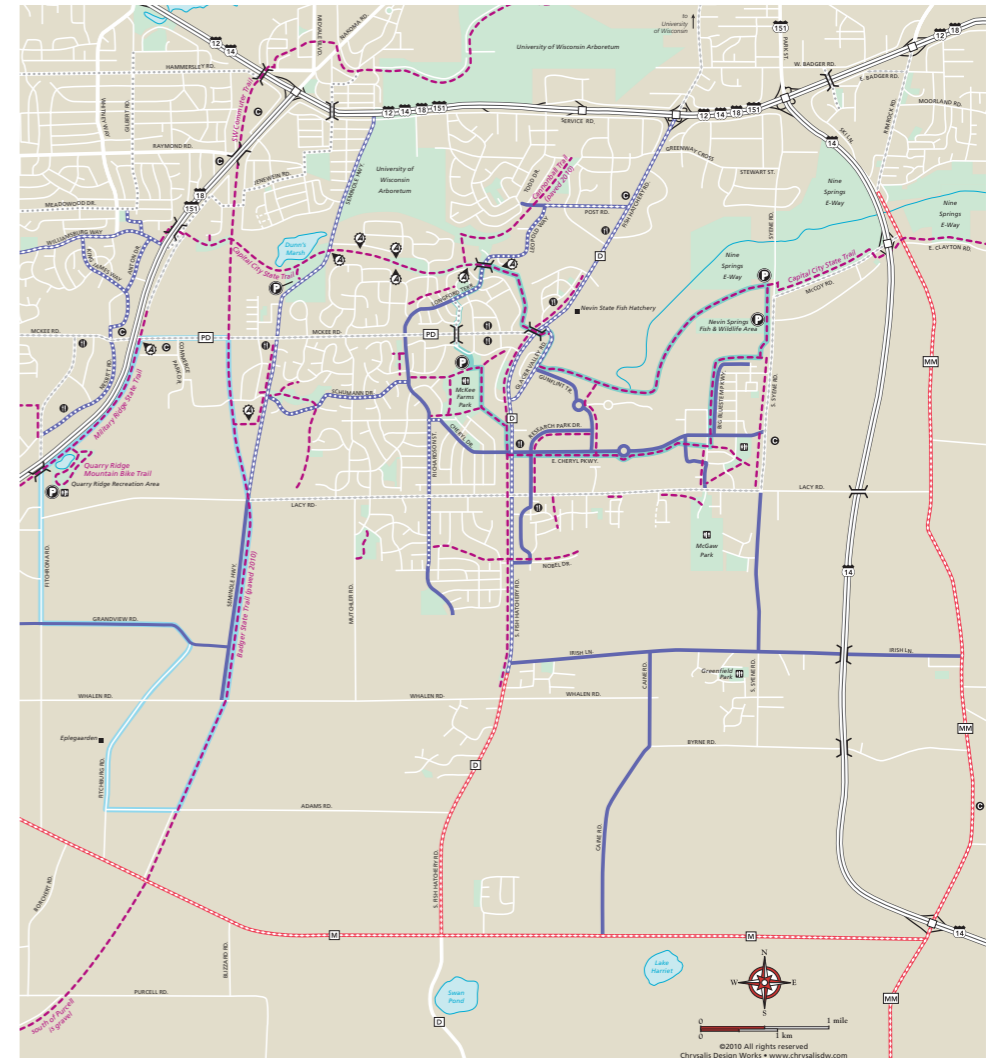
Bikeway Network Miles:

Bike Lanes: 14 miles

Signed Bike Routes: 8 miles

Shared Use Paths: 35 miles

Paved Shoulders: ??



LEGEND	SUGGESTED RIDES	ANNUAL EVENTS
<ul style="list-style-type: none"> Bike Path Access Point Bridge/Underpass Convenience Store Parking Area Restaurant Bike Lane/Paved Shoulder On major streets, bus and right turn lane shared with bicycles. Bike Path (Shared-use) Usually a paved path, separated from the street. Watch for pedestrians and dogs. Suitable for slower speeds. Bike Route On major and minor streets, popular recreational and commuting bicycle routes, shared with vehicles. Least Suitable Streets that are least suitable for shared bicycle/motor vehicle use. Most Suitable Streets that are most suitable for shared bicycle/motor vehicle use. 	<p>OVER & UNDER FAMILY RIDE 7 miles</p>  <p>A family friendly ride in which you'll experience two architectural points of interest—a tunnel and the award-winning Capital City Bridge.</p> <p>THE ORCHARD RIDE 9.5 miles</p>  <p>A longer ride with Eplegaard as its midway point. Stop and relax at the old fashioned orchard and enjoy some fresh produce before you begin the ride back.</p> <p><i>(see back for route details)</i></p>	<p>APRIL Capital City Jazz Fest Mad City Velo Club Fitchburg Criterium</p> <p>MAY-OCTOBER Fitchburg Farmers' Market</p> <p>MAY Fitchburg Days Festival</p> <p>JUNE-AUGUST Concerts at McKee Park</p> <p>JUNE Festa Italia Jodi Lou Lung Cancer 5K Run/Walk</p> <p>JULY Hickory Knoll Carriage Competition</p> <p>AUGUST Agora Art Fair Du Run Run</p> <p>SEPTEMBER-OCTOBER Harold Potterson's Haunted Barn</p> <p>OCTOBER Great Halloween Hunt</p> <p>NOVEMBER Berbee Derby</p> <p><small>for more information visit FitchburgChamber.com</small></p> 

Changing the Perspective: The Handlebar Survey




Vs.



The Handlebar Survey

Existing Conditions 	Yes	No	N/A	Notes
LAND USE				
Commercial (retail, offices, etc.) Uses?				
Residential Uses?				
Industrial Uses?				
Vertical Mixed-Use?				
Horizontal Mixed Use?				
Bicycle Trip Generator (Parks, Paths, Bike Shop etc.)?				
PUBLIC REALM				
Are There Sidewalks?				
If Yes, On Both Sides Of Brighton Boulevard?				
Are There Street Trees or Plantings?				
Are The Sidewalks An Adequate Width and Condition?				
Do Adjacent Buildings Form A Consistent Street Wall?				
Are There Exposed Parking Lots And/Or Curb Cuts?				
Are There Quality Street Furnishings And Amenities?				
Is There Direct Access toRegional Open Space?				
Are There Plazas, Pocket Parks, Playgrounds, etc.?				
THE STREET				
Is On-Street Parking Available?				
Are There More Than Two Lanes For Through Traffic?				
If Yes, Are The Rightmost Travel Lanes Wider?				
Are There Signalized Intersections?				
Are There Turn Lanes?				
Is the Speed Limit Posted Consistently?				
Is There Vehicular Congestion?				
Are there Curbs and Gutter?				
Are there Well-Marked, Visible Crosswalks?				
Is The Pavement In A Good State of Repair?				
Are There Well Known/Consistent Conflict Points?				
Is Transit Available?				
If Yes, Does The Service Accommodate Bicyclists?				
BICYCLE INFRASTRUCTURE				
Bike Lanes (conventional, buffered, contra-flow, etc.)?				
Shared Use Lane Marking (Sharrows)?				
Bicycle Boulevard?				
Cycle Track/Physically-Separated Lanes?				
Shared Use Paths?				
Are There Any B-Cycle Stations?				
Quality Bicycle Racks (U-racks, Covered, Lockers, etc.				
Are There Bicycle Route/Wayfinding Signs?				
Is Access To The Platte River Trail Signed and Inviting?				

Cycling Experience 	PLEASE INDICATE HOW YOU FEEL ABOUT THE FOLLOWING QUESTIONS: 1 = I Disagree 2 = I Somewhat Disagree 3 = I Somewhat Agree 4 = I Agree			
	1	2	3	4
I Felt Visible, Safe, And Comfortable While Cycling Along Brighton Boulevard: Notes:				
The Roadway And Land Use Conditions Are Amernable To Cycling: Notes:				
Motorists Consistently Gave Me At Least 3 ft. When Passing: Notes:				
RTD Bus Drivers Consistently Gave Me At Least 3 ft. When Overtaking Me: Notes:				
The Speed Differential Between Myself and Passing Motorists Was Acceptable: Notes:				
I was able to locate high quality bicycle parking easily: Notes:				
There Are Numerous Destinations Along The Corridor To Which People Like Me Often Bicycle: Notes:				
Brighton Boulevard Should Become Much More Friendly To Cyclists Of All Abilities: Notes:				

The Fitchburg Handlebar Survey



Questions?



Visual Preference Survey



1.



A.



B.

2.



A.



B.

3.



A.



B.

4.



A.



B.

5.



A.



B.

6.



A.



B.

7.



A.



B.

8.



A.



B.

9.



A.



B.

10.



A.



B.

Thanks! Contact Us!



Mike Lydon
mike@streetplans.org
www.streetplans.org

Mapping Instructions

- **Green** Dot For Facilities, Areas, or Intersections That You Like (Notate)
- **Red** Dot For Facilities, Areas, or Intersections That You Feel Are Unsafe (Notate)
- **Blue** Dot If You Live In Fitchburg (Place it on Your Home)
- **Yellow** Dot if You Live Outside of Fitchburg (Place on Edge of Map in the General Direction of Your House)