


A few thoughts on community trail planning
Right Trail, Right Place



The Greenway Collaborative, Inc's 2009 Webinar Series

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Norman Cox, ASLA
Licensed Landscape Architect
The Greenway Collaborative, Inc.

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**Right Trail, Right Place
Trail Planning Today**



- ❖ New Challenges
- ❖ What Differentiates a Trail Plan From Related Plans
- ❖ Things to Look For

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Mostly Done with the Obvious Trails

- Much of Trail Development to Date Has Been Opportunity Based
- Now Looking at Linking Existing Trails and Key Destinations
- These "Links" May Stretch the Conventional Definition of a Trail
- Often the Trails are Comprised of Both:
 - Off-road Independent Trails
 - Trails within the Road ROW



Some new trails are dependent on modifying or reconstructing public roads. Others are tied to new or redevelopment projects. This adds greatly to the complexity of planning and implementing the projects.

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New Set of Challenges

- No Longer Have to "Sell" Trails – They Are in Great Demand
- The Challenge Is Now That People Want A Trail System But Not Sure What That Means in Their Community
- At The Same Time, Communities Are Preparing Open Space, Greenway and Non-motorized Transportation Plans
- Lots of Overlap and Blurred Definitions



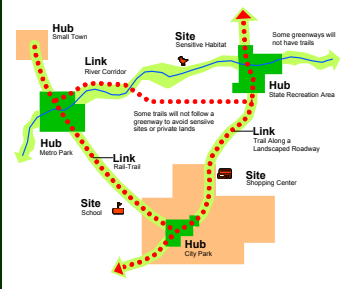
The reality is that off-road independent trails are challenging to create out of nothing.

The other reality is of course is the current economic situation – but there are opportunities there as well.

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Greenway vs. Trail Systems

- The Terms are Not Necessarily Interchangeable
- Still, Same Concept of Hubs, Sites and Links
- Ideally, There is Coordination Between Greenway and Trail Systems
- Greenway and Trail Characters Change Dramatically Depending on Context



A trail should be viewed as a link rather than a specific facility type

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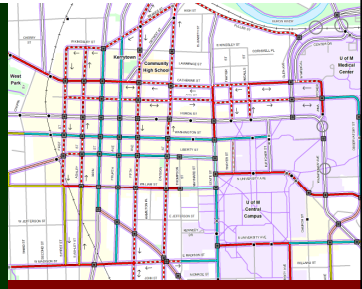
Non-motorized Plan vs. Trail Plan

Non-motorized Plan

- Every Street and Trail
- Focus on Daily Transportation Needs
- Higher Exposure to Motorized Traffic

Trail Plan

- Key "Named" Links
- Generally Enjoyable Pleasant Routes
- Generally Lower Exposure to Motorized Traffic



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A Tighter Adherence to Laws, Standards and Guidelines

- Historically, Trails Were Not Seen As "Real" Transportation Facilities
- Thus, Many Were Rather Loose in Following the Applicable Laws, Standards and Guidelines
- Funding and Regulatory Agencies Are Taking A Greater Interest in How Trails Are Built
- ADA Compliance Is Critical

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The Importance of Context

- One Community's Trail is Another's Sidewalk
- Coordination Across Jurisdictional Boundaries Can Be Tricky
- New Research Has Found That Practices That Where Fine 10 Years Ago Are No Longer Acceptable

Need to look beyond community borders.

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So What is the Essence of a Trail Plan?

- Identifying a Network Key Links
- Defining the Character of Those Links – What Type of Trail
- Providing the "Extras" and Amenities that Sets the Trail Apart
- Providing Maps and the Appropriate Identification and Wayfinding Signage
- Making The Trail System Safe, Comfortable and Convenient to Use
- Implementation Plan

A trail plan may be expanded to identify connecting bike routes that feed into the trail system.

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Potential Trail Plan Pitfalls

- Pushing Trails Away From the Key Corridors Due to Traffic Concerns
 - Fix the road
- Calling Everything A Trail
 - A trail should be noticeably different
- Developing the Trail Plan in a Vacuum
 - Coordinate with greenway, non-motorized and neighboring plans
- Having the Plan Hinge on an Unsecured Corridor
 - Be flexible and identify alternatives routes

Judge a trail on both the character of the link and what the link connects.

Work within the framework of trails of statewide, regional, county and local significance.

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Right Trail, Right Place Trail Types

- Independent Off-Road Trails
- Trails With-in Road Corridors
- Trail / Road Intersections

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Shared Use Paths

- The "Typical" Trail
- Best Used in Suburban and Rural Areas with Low to Moderate Bicycle and Pedestrian Volumes
- Surfacing Choice Influence Users

Particularly more important as the shoulder is paved and/or paved with a different surface.

Protruding elements must be back-sloped away from the path.

Complement, but do not replace on-road facilities.

Great place for inexperienced bicyclists to build skills.

Think how the trail will be used socially. It is difficult for two riders to pass a third rider with a 10' width.

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Separated Use Paths

- Urban and High Use Areas Like a College Campus
- Minimize Conflicts Between Pedestrians and Bicyclists
- Pedestrians Should be Accorded ROW At Intersections With Walkways

This type of trail is becoming more common as more conflicts are experienced between bicyclists and pedestrians. New signs for separated use trails coming out in the next version of the MUTCD.

Minimum width is 14' – the same width of many newer shared use paths

Waterfront Trails

- Variation of The Separated Use Trail
- Provide a Path for Strolling and Path for Moving
- Waterfronts Attract A Great Diversity of Users With Different Demands on the Space

One Trail Does Not Fit All!

Also Look at Providing Areas Beyond Railings for Fishing and Areas that Access the Water.

Visit the Windsor waterfront.

Rail-Trail

- Typically a Shared Use Path
- Path Width is Often Limited by the Railroad Grade
- Sometime Need to "Chop-off" Top of Grade to Achieve Desired Width

Railroad ballast is generally a poor base for trails.

Don't assume the base is compacted by the railroad activity.

Rail with Trail

- Many Successful Examples
- Have a Proven Safety Record
- May Be on RR Property or Property Adjacent to a RR Corridor

Negotiating with railroads can be challenging, as they hold most the cards.

Power Line Corridors

- Big Difference Between an Owned Corridor and an Easement
- Corridors Are Often Very Wide
- ITC, is Open to Trail Within Their Corridors

Best to locate the trail to the edge of the transmission corridor, ideally within a wooded strip, to minimize the visual impact of the corridor.

Transmission corridors can be challenging when they cross rivers and freeways.

Bike Lane and Sidewalk

- A Designated Lane for Bicycle Use
- Bicyclist Follows Rules of the Road
- Minimizes Conflicts at Intersecting Streets and Driveways
- Current Best Practice for Trails within Road ROW in Most Circumstances

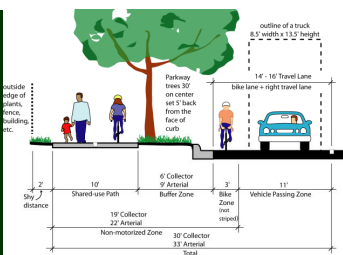
Bike lanes should be viewed as the default solution for most Arterial and busy Collector roadways.

A bicyclist's comfort is based on the width of the bike lane and the adjacent traffic conditions.



Sidepath

- A Shared Use Path Adjacent to a Roadway
 - 10' Min Width
 - 2' Clear Areas
 - Separated From Road
- Many Operational Difficulties Primarily Due to Conflicts At Intersecting Driveways and Roadways
- Many Bicyclists Will Still Prefer to Bike in the Road
- In Application, Often a Glorified Sidewalk



Only use where there are very infrequent intersecting driveways and roadways.

Even where a sidepath works, the transitions back to on-street bicycling are complex and can create dangerous situations.

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Sidewalks/Sidepaths vs. Bike Lanes

- Motorists Are Not Looking for Bicyclists on Sidewalks or Sidepaths Especially When They Are Bicycling Opposite the Flow of Traffic
- Bicycling on the Sidewalk is Generally Slower and More Inconvenient than Bicycling on the Roadway.
 - the presence of pedestrians
 - motorists that block the sidewalk or crosswalk.




Bicycles are vehicles!

There is a reason experienced bicyclists Travel on the road.

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Bicycle Boulevards

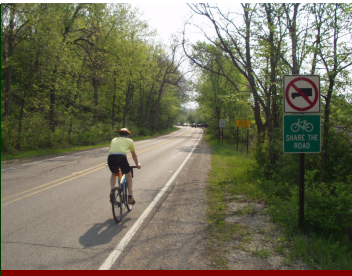
- Can Take Many Forms
- Discourage Through Motor Vehicle Traffic Through Diverter Islands
- Reduce Speed Through Traffic Calming Measures
- Provide for Through Bicycle Traffic Via Median Openings and Exceptions To One-Way Travel
- Residents Benefit from Reduced and Slowed Traffic



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Shared Roadways

- Not All Roads Require Special Facilities
- Most Local Residential Roads Can Provide Key Links Without Special Facilities
- Scenic Rural Routes With Moderate Traffic Volumes and Speeds May Be Candidates



Consider the distance being traveled in determining the appropriate facility type. Long-distance links while likely to be used by more experienced cyclists.

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Urban Greenways

- Complete and Sustainable Streets
- Streets that Work for All Modes of Travel
 - Pedestrians
 - Bicyclists
 - Motorists
 - Transit
- Incorporate Sustainable Design Elements
 - Permeable Pavement for On Street Parking
 - Curb Extensions that Incorporate "Rain Gardens"



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Urban Greenways

- May Be Local Roads
- Can Be Combined with a Bike Boulevard
- Can Be Avant-garde or Traditional in Appearance



Many design elements serve multiple functions; making the street more pedestrian and/or bicycle friendly while introducing sustainable elements.

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Urban Greenways

- People Have Come to View Most Streets as Having a Single Purpose – to Move Cars and Trucks
- Lost is the Historical Context of Streets as a Public Forum
- Streets Define A Community's Character
- People Spend More Recreation Time on Streets Than in Parks
- They Are Pervasive and Accessible



A street encompasses the road, the landscape, the sidewalks, the architecture and the people.

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Urban Greenways

- Streets As Social Space
- Design Roads So Traffic Moves at the Desired Speed – Shared Space
- Expect and Accommodate Mid-block Crossings
- Create Flexible Spaces




A community's streets are typically their most abundant, accessible and prominent public spaces. They define a community's character.

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Making Mid-Block Crossings Can Be Safe

- Do Not Ignore the Problem As People Will Cross Anyway
- Make the Crosswalk Obvious, Especially Where There are Few Pedestrians
- Make Sure Pedestrians and Motorists See Each Other
- Use Curb Extensions to Where On-Street Parking Exists
- Use Crossing Islands




Tune in on March 19th for our Design and Liability Issues of Mid-Block Crossings Webinar

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Right Trail, Right Place

Looking Beyond Walking & Bicycling

- ❖ Equestrian Trails
- ❖ Water Trails



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Implementation

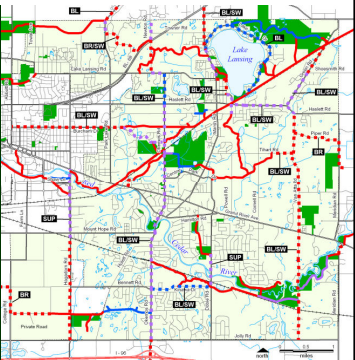


- ❖ Phasing
- ❖ Tailoring Implementation
- ❖ Conservation Design
- ❖ Demonstration Projects

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Implementing the Vision

- Take Advantage of Low Hanging Fruit If Possible
- Develop as A System – Try to Avoid Lots of Short Trails to Nowhere
- Be Realistic In Expectations from Outside Funding
 - Focus on Regional Trails with the System
- Create Designated Local Funding Source
 - Millage
 - Increase Act 51 Set Aside from 1 to 7%

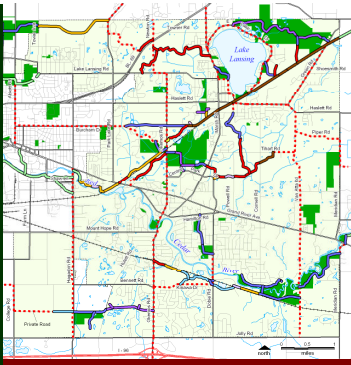


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Tailoring Implementation

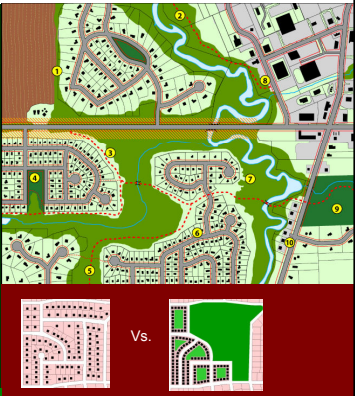
- Identify the Ownership and Development Status of the Trail Corridors
 - Public Lands
 - Institutional Lands
 - Quasi Public
 - Potential Development Areas
- Fit the Implementation Approach to the Corridor Status
- Future Developments May Be Encouraged to Incorporate Trails



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Implementing Trails Through Conservation Design


- Cluster Development to Establish Greenway System
- Suggest Off-Road Trail Linkages Along Greenway Corridors
- Require Non-motorized Links Between Developments
- Get Trails Developed Concurrent with Development – Not Later
- Establish Specific Trail Easements



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Trails As A Catalyst for Change

- Work with Related Efforts To Broaden Coalition
 - Traffic Calming
 - Complete Streets
 - Sustainable Design
 - Streetscape Project
 - Greenways/Open Space
- Coordinate with Major Projects Such as Road Reconstruction and Redevelopments




By coordinating with other efforts, a demonstration project may reach the critical mass to get noticed and help propel the rest of the plan forward.

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Promote, Sign and Map Your System

- Hold Events on Completed Segments and Promote Trail System Plan
- Use Identification Signage to Increase Awareness of Trail System to Both Trail Users and Motorists
- Incorporate Wayfinding Signs to Help Users Navigate Trails Comprised of May Different Trail Types



Please join us on May 19th for a webinar on planning and signing bike routes and November 19th for a webinar on bicycle maps.

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Questions or Comments



Please Contact:

Norman D. Cox, ASLA
The Greenway Collaborative, Inc.
214 Nickles Arcade
Ann Arbor, MI 48104
Phone 734-668-8848

norm@greenwaycollab.com
www.greenwaycollab.com

The Greenway Collaborative, Inc. www.greenwaycollab.com

