

## WALKABLE NOVI COMMITTEE January 12, 2012 at 6:00 p.m. Novi Civic Center Conference Room C 45175 W. Ten Mile, Novi, MI 48375 (248) 347-0475

Members:	Tony Anthony, David Baratta, Linda Blair, David Greco, Andrew Mutch, Paul Policicchio, Charles Staab, David Staudt and Harry Torimoto
Staff Support:	Mark Spencer, Planner, Community Development Jason Mangum, Director, Parks, Recreation and Cultural Services Barbara McBeth, Deputy Director Community Development

- 1) Roll Call
- 2) Approval of Agenda
- 3) Audience Participation
- 4) Communications
- 5) Staff Report

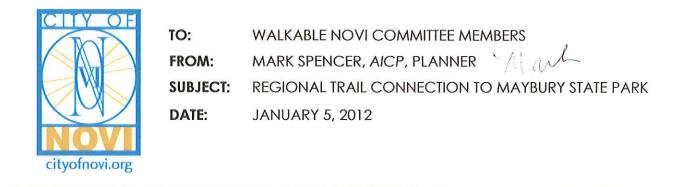
## 6) Matters for Discussion

#### <u>ltem 1</u>

Discussion with DNR regarding a regional trail connection to Maybury State Park and to determine whether a connection to the park might be a candidate for a DNR-sponsored grant with support from Novi that would be funded through state funds for trail connections to state parks.

7) Adjourn

# MEMORANDUM



At the request of Maybury State Park Supervisor Nikki Van Bloem, through City Council Member Andrew Mutch, the Walkable Novi Committee has been scheduled to meet with her and the DNR's Regional Field Planner Kristen Bennett at its regular January 12, 2012 meeting to discuss the City of Novi's ideas for a connection between our planned regional trail system and Maybury State Park. One of the goals of the meeting will be to determine whether a connection to the Park could be a candidate for a DNRsponsored grant with support from Novi. The potential grant would be funded through State funds for trail connections to State Parks.

To help facilitate this discussion, I have attached pertaining excerpts from the Non-Motorized Master Plan 2011, the Community Recreation Plan, the 2011 Pathway and Sidewalk Prioritization Analysis and Process update and I have included two air photographs.

c: Nikki Van Bloem, Park Supervisor, Maybury State Park Kristen Bennett, Regional Field Planner, DNR



EXCERPTS PERTAINING TO REGIONAL TRAILS

# City of Novi Non-Motorized Master Plan 2011



Prepared by:







ACTIVE TRANSPORTATION ALLIANCE

February 28, 2011

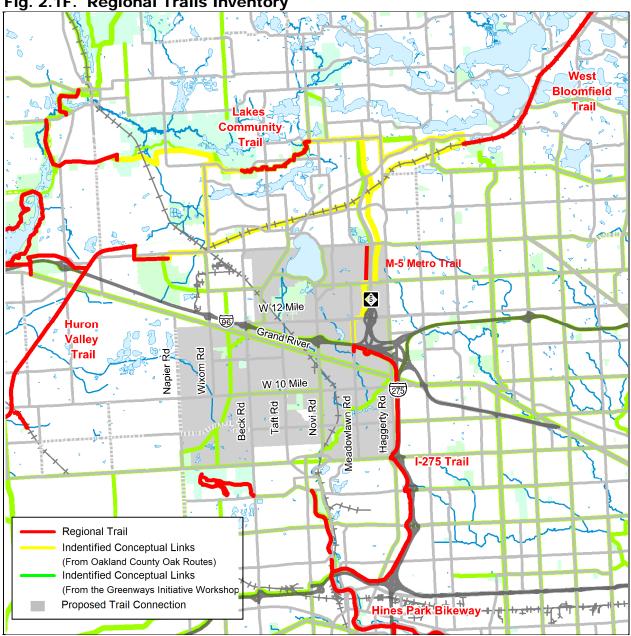
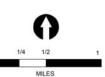


Fig. 2.1F. Regional Trails Inventory

The existing I-275 Metro Trail and under development M-5 Metro Trail runs up the eastern border of the city. When completed it will provide a key link between the extensive regional trail system to the south and the proposed cross state trail to the north. The ITC corridor that generally runs north-south between Wixom Road and Beck Road between Maybury State Park and just east of Lyon Oaks County Park has the potential to link key regional parks to the residents.



# 3. Proposed Facilities

## Master Plan vs. Corridor Planning

The recommendations in this Section represent a Master Plan level evaluation of the suitability of the proposed facilities for the existing conditions. Prior to proceeding with any of the recommendations, a corridor level assessment should be done in order to fully evaluate the feasibility and appropriateness of any roadway modification and/or proposed bicycle or pedestrian facility.

#### **Proposed Improvements Outside the City of Novi**

On some of the illustrations, improvements are proposed for areas outside of the limits of the City of Novi. These should not be construed as detailed recommendations as they have not received the same level of evaluation as those facilities within the City. Rather, they show diagrammatically how non-motorized facilities within the City may interact with non-motorized facilities in the surrounding communities.

Some illustrations also show recommendations for improvements on roadways that are not under the jurisdiction of the City of Novi. Any modifications to roads owned by the state and managed by the Michigan Department of Transportation (MDOT), roads owned by the county road commissions, or privately-owned roads, must be coordinated with and approved by the appropriate agency. See Fig 2.1H Road Jurisdiction Map for road ownership.

#### **Topics:**

- 3.1 Non-Motorized Transportation Network
- 3.2 Prioritization
- 3.3 Specific Area Concept Plans

# **3.1 Non-Motorized Transportation Network**

There is no such thing as a typical pedestrian or bicyclist. A single person's preferences for a walking or bicycle route may vary based on the type of trip. A person's daily commute route will likely favor directness of travel over a scenic route (but not always). An evening or weekend ride, walk or run for recreation and exercise will be based on an entirely different set of criteria. It will likely favor local roads and trails through parks and schools.

Individuals also vary greatly in their tolerance of traffic, hills, weather and numerous other factors. A child will likely choose to keep to local roadways on their way to school provided they have safe ways to cross busy streets. An adult who is just starting to bicycle again will likewise shy away from busy roadways, sticking to residential roads wherever possible. But an experienced bicyclist may choose the busy road for its directness of travel. The solution then is not one dimensional, but rather responds to the needs of the various users and trip types. By doing so the plan addresses the needs of the majority of the community's population, not simply a small interest group.

Bicycle and walking are not exclusive modes of travel either. Most bicycle trips will also include some time as pedestrian. Also, some bicycling and walking trips may be a part of a longer multi-modal journey. For example, someone may ride their bike to a bus and then walk from the bus to their final destination.

For all the reasons listed above, there needs to be a spectrum of non-motorized facilities available that gives the user the choice to choose the route that they feel most comfortable with. Off-road trails, neighborhood connector routes, sidewalks, roadside pathways and bike lanes are some of the most common facilities that make up the network.

The following illustrations demonstrate the different elements that go into creating a non-motorized network along with the proposed non-motorized transportation improvements:

- Overview Map (this is a large fold out map that may be found in the back cover of the report)
- Fig. 3.1A. Spectrum of Non-motorized Routes
- Fig. 3.1B. Proposed Non-Motorized Network
- Fig. 3.1C. Bicycle/Pedestrian Focused Corridors
- Fig. 3.1D. Auto Focused Corridors
- Fig. 3.1E. Balanced Corridors
- Fig. 3.1F. Neighborhood Connectors
- Fig. 3.1G. Off-Road Trails
- Fig. 3.1H. Proposed Neighborhood Connectors and Trails
- Fig. 3.1I. Proposed Road Crossing Improvements
- Fig. 3.1J. Proposed Regional Trail Connections
- Fig. 3.1K. Proposed Regional Trail Connections in The City of Novi)
- Fig. 3.1L. Proposed Sidewalk/Roadside Pathway Improvements

# Fig. 3.1G. Major Off-Road Trail

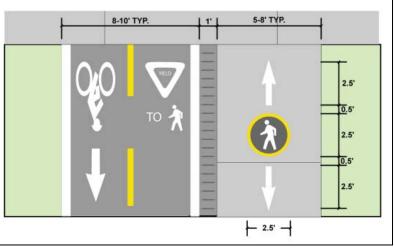
Off-road trails are generally very desirable because they are separated from motorized vehicle traffic. However, they are opportunity-based and unless there is an abandoned rail corridor, existing right-of-way or utility corridor they can be difficult to incorporate into a community.

The City currently has two existing off-road trails, the M-5 Metro Trail and the I-275 Metro Trail. The City also may have a few opportunities to develop off-road trails within the city. They include the following:

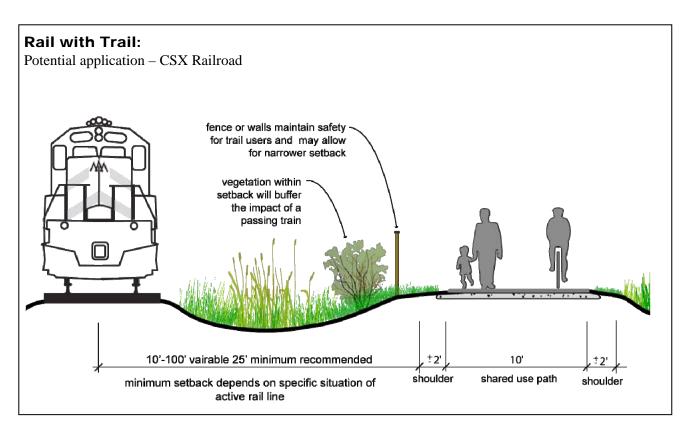
- ITC Corridor
- CSX Railroad Corridor
- I-96 Expressway Right-ofway
- City Owned Parks (e.g. Lakeshore Park, ITC Sports Center & Core Habitat Area)

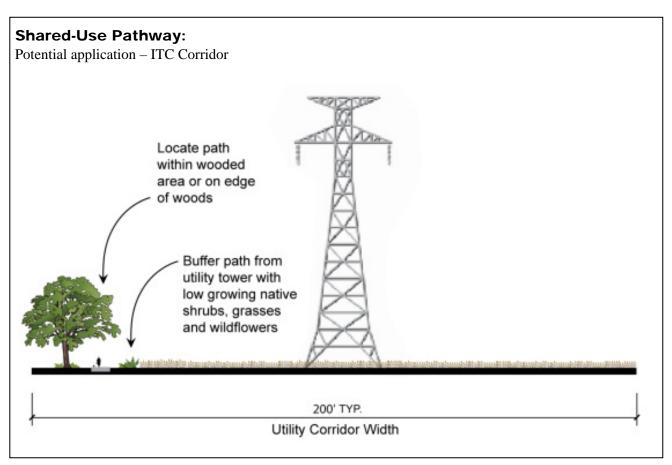
# Separated-Use Pathway:

Potential application – areas with high bicycle and pedestrian traffic

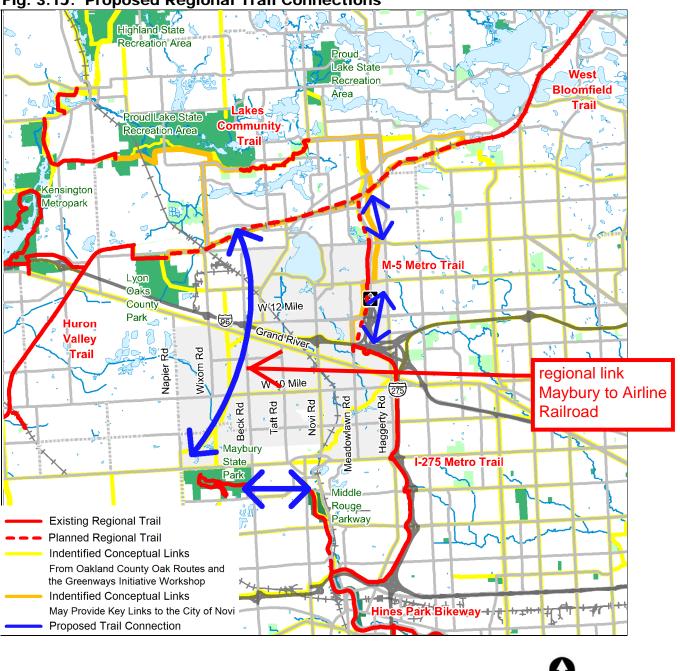


# Shared-Use Pathway: Potential application – Trail through Lakeshore Park 3' min 3" asphalt or fines surface 5" crushed aggregate base Provide drainage away from trail; Periodically mow vegetation on the shoulder to control avoid sheet drainage accross trail 10'-14' 2 2 encrochment into fines shoulder shared use path shoulder





MILES





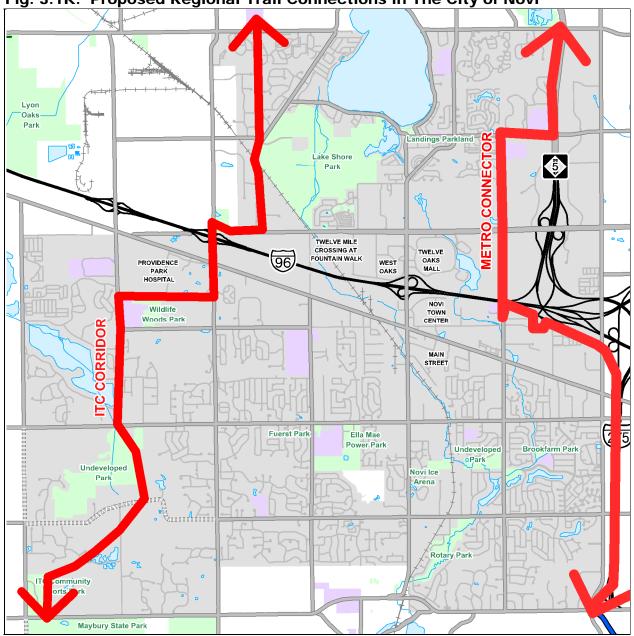


Fig. 3.1K. Proposed Regional Trail Connections in The City of Novi

The proposed ITC Corridor and Metro Connector provide two major regional connections across the City of Novi. The Metro Connector route would consist of a roadside pathway along Meadowbrook Road and 13 Mile. The ITC Corridor is a combination of off-road trails and roadside pathways.



#### Major Corridor Development

The following improvements are listed in order of implementation. The order of implementation was developed based on public input, near-term opportunities, demand and where the majority of the population would be served. These are large multi-year projects that may be implemented in pieces based on opportunities and funding. Overall, they will provide the framework for the non-motorized system. If opportunities arise for projects lower on the list those projects should be completed first.

#### 1) Metro Connector (See Figure 3.2C.)

Provide connection between the existing I-275 Metro Trail and existing M-5 Trail.

- Extend I-275 Metro Trail south (using 10' wide asphalt) to Bridge Street and provide crossing island on Meadowbrook Road
- Construct 10' wide asphalt path along the west side of Meadowbrook Road between 11 Mile Road and 13 Mile Road.
- Construct 10' wide asphalt path along the north side of 13 Mile Road between Meadowbrook and the M-5 Metro Trail
- Narrow the travel lanes to 11', pave 5-6' shoulder, and strip for bike lanes on Meadowbrook Road between 11 and 12 Mile Roads
- Add temporary shared lane markings and shared the road signs to Meadowbrook Road between 12 Mile Road and 13 Mile Road until road is reconstructed and bike lanes are added
- Improve pedestrian crossing at 12 Mile and Meadowbrook Road intersection
- Provide wayfinding signage to direct users from the M-5 Metro Trail to the I-275 Trail

#### 2) Taft Road Corridor (See Figure 3.2C.)

Provide connection along Taft Road Corridor connecting to Northville to the south and Walled Lake to the north.

- Completion of the sidewalk/path system
- Addition of bike lanes along Taft Road by paving 5-6' wide shoulders and striping/signing
- Improve the following intersections to provide for safe crossings and room for bike lanes. Refer to section 5.4 Subdivision Entrances for more details.
  - Galaway Drive Subdivision Intersection Design (Figure 5.4AB)
  - Princeton/Byrne Mid-Block Crossing and Rectangular Rapid Flash Beacon
  - o Dunbarton Dr Subdivision Intersection Design (Figure 5.4AB)
  - White Pine Dr Subdivision Compact Roundabout (Figure 5.4AD)
  - Addington Lane Subdivision T-Intersection Design (Figure 5.4AC)
  - o Novi High School Entrances Subdivision T-Intersection Design (Figure 5.4AC)
  - Emerald Forest Blvd Subdivision T-Intersection Design (Figure 5.4AC)
  - Between Jacob Drive and the entrances to Novi Woods Elementary, Meadows School, and Parkview Elementary Subdivision T-Intersection Design (Figure 5.4AC)
- Construct 10' wide asphalt trail along Taft Road north of Grand River Avenue

- Construct 10' wide asphalt trail along south side of I-96 corridor, utilize the existing CSX underpass to get under I-96, cross over the CSX railroad, and continue the trail along the north side of I-96 along the ITC property connecting to Fountain Walk Drive
- Extend sidewalk south along Cabaret Drive to connect into proposed trail
- Provide on-street bike route on Cabaret Drive and Dixon Road
- Include a Pedestrian Hybrid Beacon (HAWK) at 12 Mile Road/Cabaret Drive Intersection
- Construct 10' wide asphalt trail through Lakeshore Park to connect to Lakeshore Drive (remain on high ground and avoid existing mountain bike trails as much as possible)
- Include wayfinding signage along route to direct users

Crossing I-96 at the Railroad tunnel may present some challenges. If that is the case evaluate providing a separate non-motorized crossing at Taft Road and the I-96 expressway.

#### 3) 9<sup>1</sup>/<sub>2</sub> Mile Neighborhood Greenway (See Figure 3.2C.)

Provide a connection that parallels 9 and 10 Mile Road along the local roadways using short connecting pathways through schools, parks and undeveloped open space.

- Include road crossing improvements where the proposed route crosses a collector or arterial street including:
  - o Novi Road Compact Roundabout (Figure 5.4AD)
  - Meadowbrook Road Crossing Island
  - Taft Road Compact Roundabout (Figure 5.4AD) (also included in Taft Road Corridor Project)
  - Beck Road Subdivision T-Intersection Design (Figure 5.4AC)
- Provide crossing of railroad near Novi Ice Arena. If crossing is unattainable, provide alternate route on 10 Mile Road by completing sidewalk gaps and providing at-grade railroad crossing..
- Obtain easements and build short connector pathways (10' wide asphalt)
- Provide traffic calming techniques on local neighborhood streets
- Construct the south extension ITC Corridor Trail connecting 9 <sup>1</sup>/<sub>2</sub> Mile Neighborhood Greenway South to ITC Park and Maybury State Park
- Include wayfinding signage along route to direct users

#### 4) Meadowbrook Road South of I-96

Provide connection along Meadowbrook Road Corridor.

- Completion of the sidewalk/path system
- Addition of bike lanes along Meadowbrook Road by paving 5-6' wide shoulders and striping/signing
- Improve the following intersections to provide for safe crossings and room for bike lanes. Refer to section 5.4 Subdivision Entrances for more details.
  - Chattman Drive Subdivision T-Intersection Design (Figure 5.4AC)
- Marks Drive/Fawn Trail Midblock Crossing Island between both streets

• Implement neighborhood connector route and include wayfinding signage along route to direct users

#### 5) I-96 Corridor (See Figure 3.2C.)

Provide a connection that parallels the north side of the I-96 expressway and connectos Taft Road and Meadowbrook Road to the Regional Shopping Centers.

- Build trail along north side of I-96 Expressway utilizing MDOT and ITC property
- Provide trail crossing at Novi Road by improving existing intersection
- Work with the adjacent landowners to provide access from the trail to the shopping centers <u>Long-term:</u>
- Provide trail crossing on Meadowbrook Road when sidewalk gaps along the west side of the road are complete
- 6) **11 Mile/Beck Road/Providence Park Hospital/** Wild Woods Park (See Figure 3.2C.)

11 Mile Road:

- Complete Sidewalk and Pathway Gaps along 11 Mile Road
- Provide Mid-block Crossings on 11 Mile Road where proposed neighborhood connector route intersection with 11 Mile Road
- Add Shared-use arrows on 11 Mile Road in the near-term until the shoulders are paved and bike lanes can be included

Beck Road:

- Complete Sidewalk and Pathway Gaps along roadway
- Provide Mid-block Crossings

#### Providence Park Hospital

• Obtain easements to construct pathway between Wixom Road and Beck Road

#### 7) Wixom Road/Undeveloped Park (See Figure 3.2C.)

Wixom Road:

- Complete Sidewalk and Pathway Gaps along roadway
- Provide Mid-block Crossings

#### 8) **Beck Road/West 12 Mile Road/West Park Dr/Off-road Trail** (See Figure 3.2C.)

#### Beck Road

- Complete Sidewalk and Pathway Gaps on west side of road
- Add sidewalks to both sides of I-96 overpass (see Figure 3.3C.)
- Improve road crossing at Beck Road and W 12 Mile

12 Mile Road

• Complete Sidewalk and Pathway Gaps along north side of W 12 Mile Road

#### W Park Dr Off-road Trail Extension

- Improve road crossing at West Park Drive and West Road
- Building 10' shared use path along city owned property north of West Road
- Provide bike route along Portside Drive to connect trail to South Pontiac Trail

#### 9) Lakeshore Park/13 Mile Road (See Figure 3.2C.)

#### Lakeshore Park

• Add 10' shared use path through north side of Lakeshore Park paralleling South Lake Road

#### W 13 Mile Road Corridor

- Complete Sidewalk and Pathway Gaps
- Add Bike Lanes to West 13 Mile Road through road conversions and paving the shoulders

#### **10) ITC Corridor– North Extension (See Figure 3.2C.)**

- Obtain easement and construct off-road trail along ITC corridor
- Obtain easement to construct off-road trail along the west edge of Providence Park Hospital where ITC property stops
- Improve road crossing on Grand River Avenue
- Work with Wixom to continue trail extension northwest through the Beck Road/I-96 Interchange and over to Lyon Oaks Park (See Figure 3.3D.)

#### **Major Corridor Development Cost Estimates**

A number of projects were identified and categorized as a "Major Corridor Development". However, 3 are considered top priority projects (Figure 3.2D.) based on input during the planning process, connecting regional systems, and potential for outside funding assistance.

- 1. Metro Connector
- 2. Taft Road Corridor
- 3. 9 1/2 Mile Neighborhood Connector

The following describes the routes and proposed improvements in more detail and provides a planning level cost estimate. More detail of the planning level cost estimate can be found in the Appendix.

# 5.11 Off-Road Trails

There are many types of Off-road Trails, each with unique issues. One type of Off-road Trail is the independent pathway that is separate from the road system. Independent pathways include rail-to-trail corridors, paths through parks and other trail systems. Independent pathways can be important and beneficial links to the non-motorized transportation system provided they have direct connections to the existing network of bike lanes and sidewalks. If designed and maintained properly, they can be the "jewels" of a City's non-motorized transportation system.

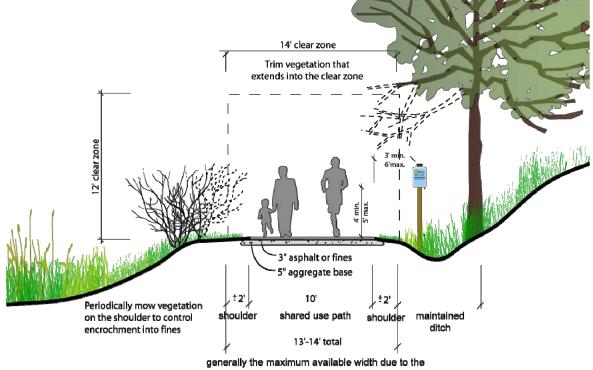
Independent pathways should be designed to accommodate shared uses including cyclists, walkers, strollers, in-line skaters, and people in wheelchairs. For the safety of all users, the pathway should be built wide enough to accommodate these shared uses. AASHTO guidelines indicate that a 10' wide path is the minimum width for a Shared-Use path. The preferred minimum width is 12' in most cases in urban areas with 14' to 16' being common widths.

Studies done by the Rails-to-Trails Conservancy have shown that off-road pathways in general are quite safe from a personal safety standpoint. But in urban areas it is important that pathways follow the principles of Crime Prevention Through Environmental Design (CPTED).

## **Trail Cross Section Design Guidelines**

Figure 5.8A below illustrates several key points about the design and maintenance of Shared-Use paths. Whether the surface of the path is asphalt, fines or other material, it should have a solid base and positive drainage as the path may have maintenance vehicles on it at all times of the year. The vegetation along the trail should be regularly trimmed and mowed to maintain a clear zone around the trail.





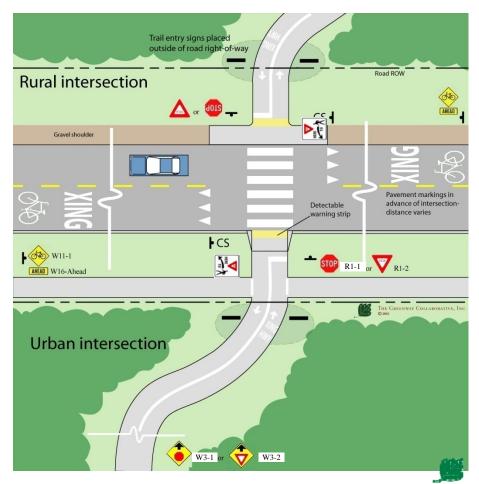
existing conditions of the raised railroad grade

#### Independent Pathway / Road Intersection Design Guidelines

Independent pathways often intersect roadways at unsignalized mid-block crossings. Many of the design guidelines for a typical mid-block crosswalk apply but because of the unique nature of independent pathways, several additional safety points must be considered. The following plan illustrates the key points needed for a safe design of the intersection of an independent pathway with a roadway:

- Clear signage that identifies user rights-of-way and notifies both the users of the pathway and the motorists that an intersection is approaching.
- Pavement markings at the beginning of the trail intersection notify users of direction of travel and rights-of-way. Pavement markings further along the trail should be minimized to avoid visual clutter.
- The pathway should meet the roadway at as close to a 90-degree angle as possible for maximum visibility of users.
- Supplemental trail signage is often set back outside the road right-of-way.
- Regardless of the surfacing material of the trail, asphalt or concrete should be used for the portion of the trail that intersects the road. The hard surface increases traction for bicycle users and cuts down on debris from the shoulder of the road accumulating in the pathway. The change in materials can also help to notify users of the upcoming intersection. At rural intersections, gravel shoulders should also be paved adjacent to the trail to minimize debris in the stopping zone.

## Fig. 5.11B. Typical Pathway/Roadway Intersection



# **Fig. 5.11C.** Trail Signs at Road Intersections Trail View



#### **Road View**



#### **Key Recommendations:**

- Two sign posts form a gateway to the trail at road intersections.
- On the right above a Stop or Yield sign, a standard street name sign is used to identify the cross street.
- All parts of the signs should be set back 3' from the trail.
- On the left side, an optional plaque identifies the local agency in charge of the trail, trail rules, and emergency and maintenance contact numbers.

#### **Key Recommendations:**

- On the right side, a No-Motor-Vehicle Sign and a Bicycle Yield-to-Pedestrian Sign should be posted to address the key rules of the trail.
- On the left side, a Bike Route Destination sign listing the direction and distance to the next major destination may be placed.
- On the left side, the Bike Route Identification Sign with a custom logo, direction of travel and route name may be used to identify the route.
- A detectable warning strip should be placed across the entire trail.
- Pavement markings should be used for the first 100' to 150' of trail.