



3 MASTER PLAN VISION

THE PRIMARY VISION FOR A CONNECTED NON-MOTORIZED SYSTEM WITHIN OAKLAND COUNTY HAS BEEN CAPTURED OVER THE YEARS IN THE OAK ROUTES MAPS AND BROCHURES THAT HAVE BEEN PRODUCED BY OAKLAND COUNTY WITH ASSISTANCE AND INPUT FROM OTAC AND A VARIETY OF AGENCIES AND LOCAL COMMUNITIES.

The Oak Routes map has continually evolved as more and more non-motorized systems are being planned or implemented and more stakeholders, special interest groups, and communities have provided input regarding existing and potential connections. The Oak Routes Vision not only communicates the existing network for trail users, it is also intended to serve as a guide to non-motorized system planning, funding, design and construction into the future. The Master Plan represents a long-term vision for non-motorized facilities. Non-motorized systems and potential connections are at varying stages of planning or implementation. In many cases, significant amounts of work, further planning, public involvement, design, and implementation efforts are needed for the connections to come to fruition.

While Oakland County and OTAC anticipate continuing to serve in a leadership role in the

development of a connected non-motorized system, in many cases, the actual implementation of non-motorized systems and routes remains under the purview and responsibility of the various local agencies, property owners, trail commissions, etc. As work and efforts continue, additional information is collected, and the network evolves, it is highly likely that the networks and corridors will continue to change or move due to a variety of potential issues such as public opinion, funding, land use, and property ownership. The Oak Routes Master Plan Vision (map/brochure in pocket at back of this document) is a tool intended to serve as a guide and foundation for non-motorized connections within Oakland County. The Oak Routes Map will be in its third printing in 2008. To date, 33,000 copies have been distributed to local communities and trail enthusiasts.



Oakland County, the Oakland Trails Advisory Council, as well as numerous agencies and Friends Groups have worked together to implement a network of non-motorized systems that will crisscross Oakland County and connect into adjacent counties and regions. There are 95 miles of completed trails; 13 miles in the planning, design and development stage, and 146 miles under consideration.

--April '08

3.1 NON-MOTORIZED NETWORK TYPES

The County pathways system is comprised of a vision to link pathways and greenways throughout Oakland County and southeast Michigan. The County concept envisions a hierarchy of pathways. The primary corridors

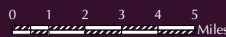
OKLAHOMA COUNTY PATHWAY CONCEPT



- Trail
- Municipal Boundary
- County Trail Concept*
- Complete
- Design/Development
- Under Consideration
- Under Review
- County Parks
- HCMA Recreation Land
- State Recreation Land

*The county pathways system is comprised of a vision to link pathways and greenways throughout Oklahoma County and Southeastern Michigan. The county concept envisions a hierarchy of pathways consisting of primary and secondary pathways.

June 2008



Sources
 Roads: Oklahoma County GIS, 2008
 Trail Network: Oklahoma County GIS, 2008
 Recreation Lands: Oklahoma County GIS, 2008



OKLAHOMA COUNTY TRAILS MASTER PLAN

in the pathways system include a Cross County Trail and a North County Trail Loop. Secondary pathways will provide links to features and resources at the local community level. The County concept seen on the Oak Routes map depicts not actual planned trail routes, but rather connections that have been identified as important or critical for linking the natural, cultural, historic and community amenities in Oakland County.

The hierarchical pathway system is comprised of a variety of path types, with each type exhibiting a unique purpose and design. This hierarchical pathway system will continue to be utilized by the County to support the development of a connected network. Each non-motorized pathway type is described in greater detail on the following pages along with a focus map of the City of Rochester Hills that graphically illustrates a community that utilizes a majority of the different non-motorized types to create a connected system.

1. TRAIL

Multi-use or shared use trails that are generally separate from roadways and range from 8' – 14' wide. Many times located in former railroad corridors, along streams and rivers, or within utility easements.

2. SAFETY/SIDE PATH

Safety/Side Paths are typically wider than sidewalks (6' – 8' on average). They include multi-use pathways which are generally located within a road right-of-way but separate from the roadway surface. It should be noted that a safety/side path is not a standard bicycle facility type as classified by the AASHTO Guide for the Development of Bicycle Facilities. The AASHTO guide states that the development of



SAFETY/SIDE PATHS

Several communities in Oakland County have programs to construct safety/side paths, such as this one in Highland Township, in order to provide non-motorized connections.

wide sidewalks does not necessarily add to the safety of bicycle travel, since wide sidewalks encourage higher bicycle speeds and increase potential for conflicts with motor vehicles at intersections.

3. SIDEWALK

Pedestrian pathways that are generally located within a road right-of-way, but separate from the roadway surface and are typically not as wide as safety/side paths. Multi-use is not recommended on sidewalks as they are typically found in areas with a high number of curb cuts and are 4' – 5' wide. Additionally, two-way bicycle traffic is typically not supported on sidewalks due to their reduced width.

4. BIKE LANE

An on-street bike lane is a portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. Motor vehicles are not permitted to drive or park in the bike



BIKE LANES

On-street bike lanes have been implemented along several roads in the City of Ferndale.

lane. However, right turning vehicles can enter the bike lane at intersections to complete their turn.

5. BIKE ROUTE

Bike Routes are bicycle facilities located on or directly connected to the roadway surface, however, they have no treatment other than route signage. Bicycle routes are usually identified with a “Bicycle Route” sign and are designated as such in order to provide connectivity. Designation as a bike route indicates that there are particular advantages to using the route rather than an alternative.



6. PARK PATH

Pathways within an existing County, State, Municipal, or Metropark recreation area are referred to as Park Paths in the context of the Oakland County Trails Master Plan. These pathways may be designed and designated for specific user groups or seasonal activity.

7. WATER TRAIL

Waterways that will support established kayaking and canoeing trails. There are currently three designated water trails in Oakland County:

- Clinton River Water Trail
- Shiawassee River Water Trail
- Huron River Water Trail

Designating a water trail can assist in broadening awareness and education of navigated areas and natural resources. Completed water trails many times also include access points and signage.

BIKELIST EXPERIENCE LEVELS

Although their physical dimensions may be relatively consistent, the skills, confidence and preferences of bicyclists vary dramatically. The following three bicycle user types are presented to assist in determining the impact of different facility types and roadway conditions on bicyclists. These varying user types demonstrate the need to provide a variety of non-motorized facilities to serve all potential users.

Advanced

Use their bicycles as they would a motor vehicle, riding for convenience and speed with a minimum of detours or delays. They are typically comfortable riding with motor vehicle traffic but need sufficient operating space on the roadway.

Basic or less confident

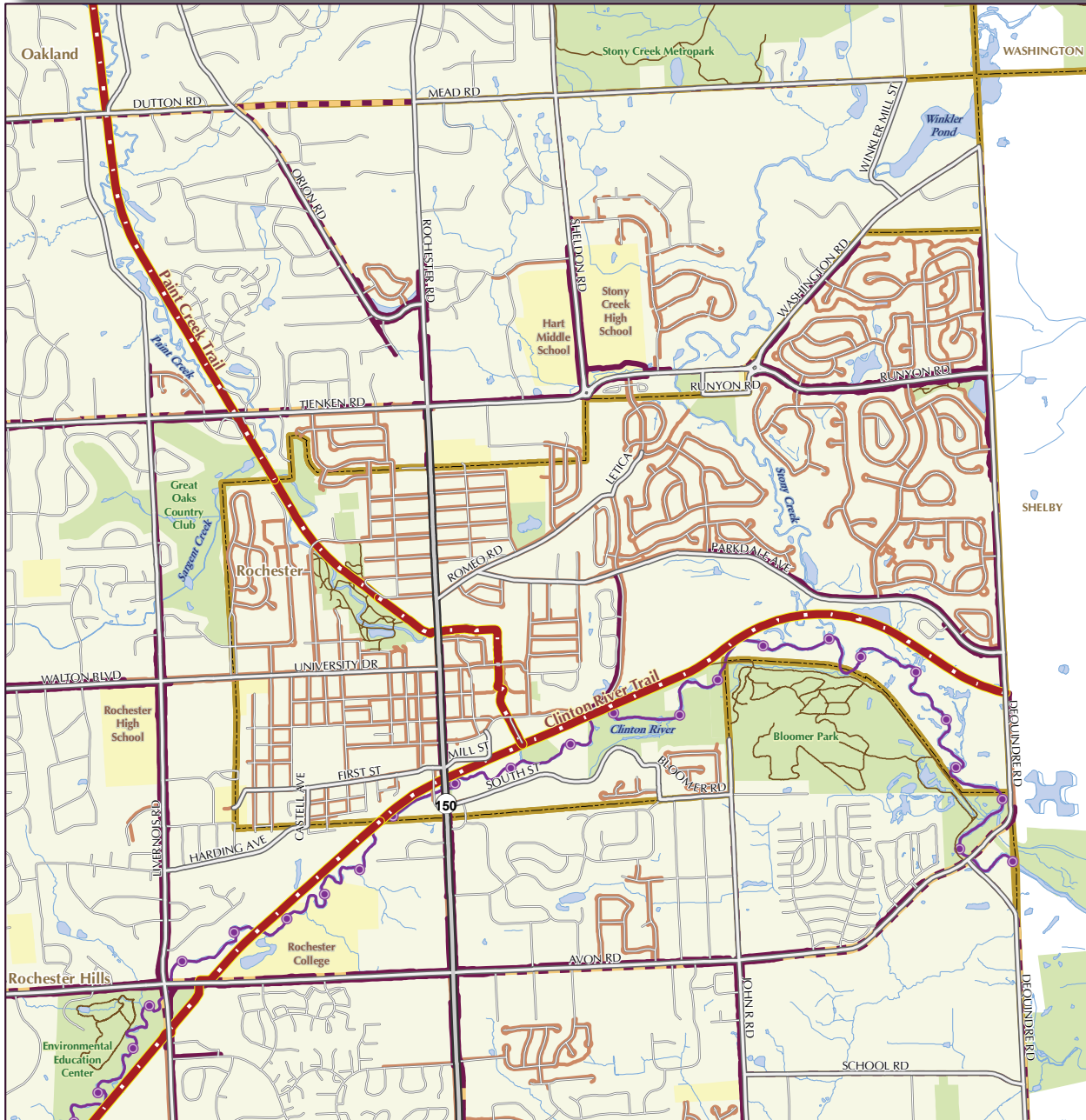
Prefer to avoid roads with fast and busy motor vehicle traffic without ample roadway width. These riders are comfortable riding on neighborhood streets and shared use paths and prefer designated facilities such as bike lanes or wide shoulders.

Children

Require access to key destinations such as schools and recreation facilities. Prefer residential streets with low motor vehicle speeds linked with shared use paths. Busier streets with well-defined pavement markings between bicycles and motor vehicles can accommodate children without encouraging them to ride in the travel lane of major arterials.

--- Guide for the Development of Bicycle Facilities, American Association of State Highway and Transportation Officials, 1999.

NON-MOTORIZED NETWORK TYPES



Trail	Sidewalk	Municipal Boundary
Safety/Side Path	Park Path	Lakes & Ponds
Route	Water Trail	Rivers & Streams
Bike Lane	Proposed Pathway	Recreation Land
		School

June 2008

0 0.25 0.5 Miles

Sources:
 Roads: Oakland County GIS, 2008
 Trail Network: Oakland County GIS, 2008
 Recreation Lands: Oakland County GIS, 2008



EXISTING MILES OF VARIOUS NON-MOTORIZED TYPES

Bike Lane	8 miles
Park Path	268 miles
Bike Route	148 miles
Safety/Side Path	468 miles
Trail	95 miles
Water Trail	31 miles
Sidewalk	2,260 miles

--- Oakland Co
GIS April '08

3.2 GAP ANALYSIS PROCESS & RESULTS

When developing the Oakland County Trails Master Plan, the County also focused on 4 primary “gaps”, or critical missing links that exist in the major regional trail systems that have emerged over the past several years. While other gaps in the system exist, and should remain a priority, these 4 were selected due to the difficulties associated with implementation and efforts completed to date by the local stakeholders. These gaps were evaluated and discussed in greater detail during the development of the Master Plan to assist in ensuring implementation efforts continue in the coming months and years. The 4 gaps evaluated in greater detail included:

- Clinton River Trail (through Pontiac)
- Paint Creek and Polly Ann Trails
- West Bloomfield, Lakes Community, and Huron Valley Trails
- Urban Trail Network (SE Oakland Co)

EVALUATION PROCESS

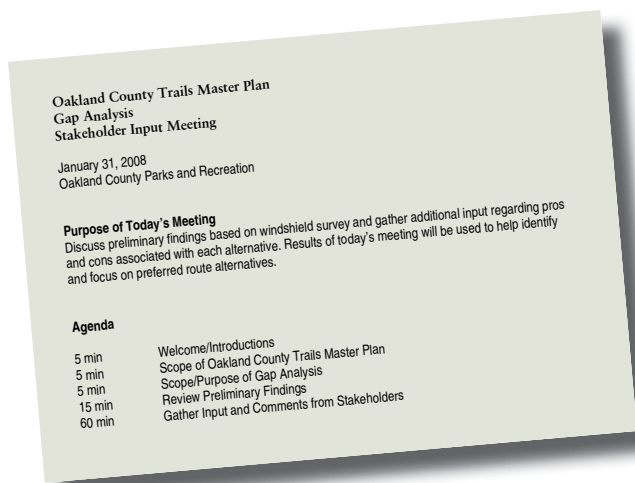
A windshield survey was conducted in November 2007 based on existing GIS data and information collected during previously held input sessions. The potential routes investigated were based on previously identified connections and/or discussions regarding possible connections. General items such as right-of-way conditions, accessibility issues, road crossings, user safety concerns, property issues, and general opportunities and constraints for construction were considered and noted during the windshield survey.



RELEVANT CRITERIA FOR ROUTE SELECTION

- Feasibility of Design, Construction, and Maintenance
- Directness for the Trail User
- User Safety
- Cost of Implementation
- Property Ownership
- Serves Multiple Destinations
- Surroundings

When reviewing the potential routes and connections, a qualitative evaluation was considered rather than a specific quantitative evaluation. Implementation of routes to connect the existing gaps remains under the purview and responsibility of the various local agencies, property owners, trail commissions, etc., all of whom have diverse and varying missions and concerns. While final decisions regarding route location, implementation, design, construction, maintenance, etc. will be in the hands of the



local stakeholders associated with each gap, this Master Plan identifies the wide range of decision-making criteria that will undoubtedly be important as implementation nears.

Once the windshield survey was completed and existing documents, studies, reports, and maps were reviewed, potential route alternatives to connect the gaps were graphically depicted on maps and the opportunities and constraints associated with each route were described in written text. These draft documents were then shared with the OTAC as well as targeted stakeholders associated with the implementation of connections between these major regional systems for review and further refinement.

A series of individual stakeholder meetings was held on January 31, 2008 with the targeted stakeholder groups associated with each Gap Analysis at the County Parks and Recreation office. Approximately 30 people attended the individual meetings including representatives from various County agencies, local communities, Friends groups, MDOT, MDNR, and Trail Commissions/Councils. The purpose of these meetings was to review the preliminary findings and gather any additional input regarding




GAP ANALYSIS PREFERRED ROUTES

This Master Plan recommends that each of the illustrated routes be studied in further detail by the local stakeholders with jurisdiction over implementation. It would be remiss to only implement one connection between the regional systems, when each of the illustrated routes would provide different benefits and experiences. Some routes will obviously be pursued and/or completed first, however, establishing multiple connector routes will only benefit the system users, owners, and communities.

the pros, cons, and preferences of each alternative. The results of the meetings were used to help identify and focus on preferred connector routes.

FINDINGS

The results of past efforts related to the various trail gaps, as well as the results from the windshield survey and input from OTAC and the stakeholder meetings were summarized and documented. For each Gap Analysis, multiple routes to connect the regional trail systems are highlighted. These should not necessarily be considered “alternatives” nor should it be interpreted to mean that only one of the routes is preferred. During the development of the Master Plan, it was clear that each of the gap areas includes a significant geographic area, various routes that could provide users with different trail experiences (i.e. urban vs. park-like), and routes that could provide connections to various destinations.



CLINTON RIVER TRAIL GAP

INITIAL EVALUATION

Three routes were initially evaluated and discussed with the local stakeholder group (see graphic below). These included:

- A northern route into downtown Pontiac, along the Clinton River, and former railroad corridor
- A central route within the former railroad corridor, and other public land
- A southern route primarily within the South Boulevard right-of-way

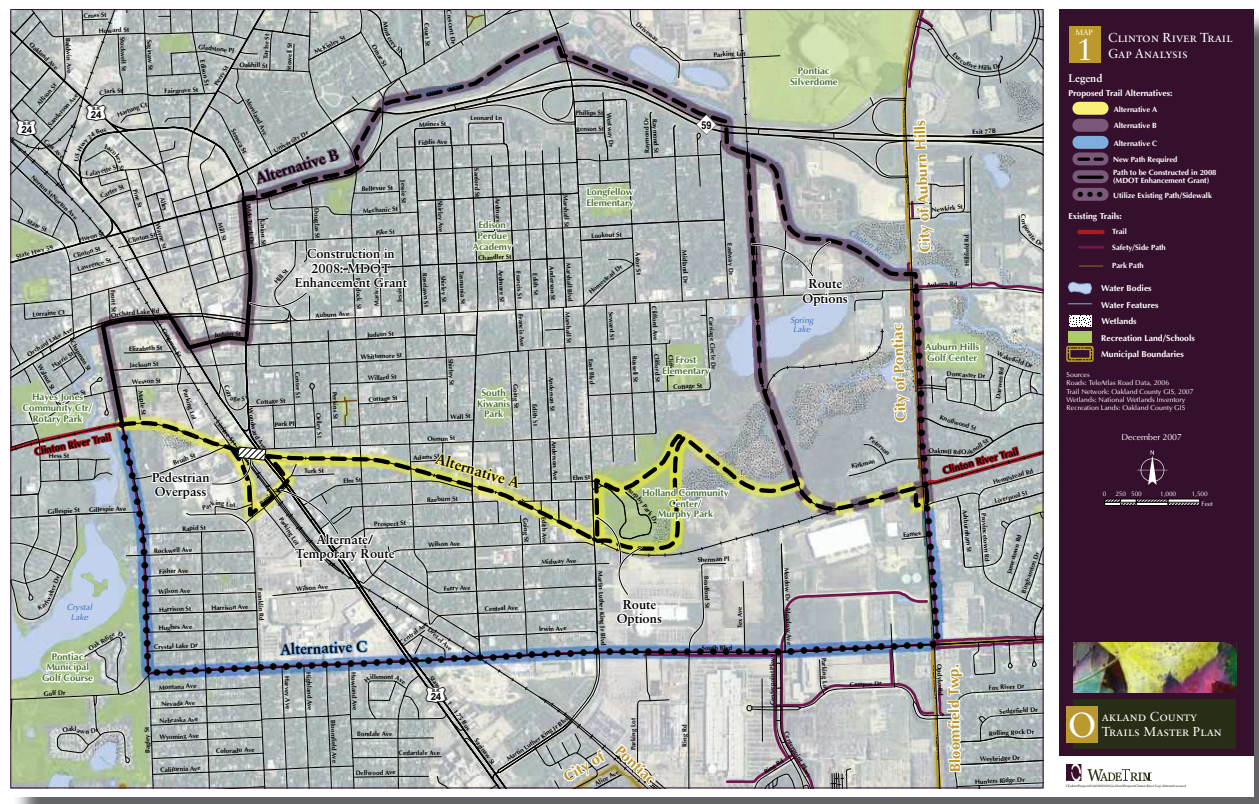
Based on discussions with the local stakeholder group, and particularly the City of Pontiac’s research regarding property ownership, the central route within the former railroad corridor was eliminated as a viable connector route.

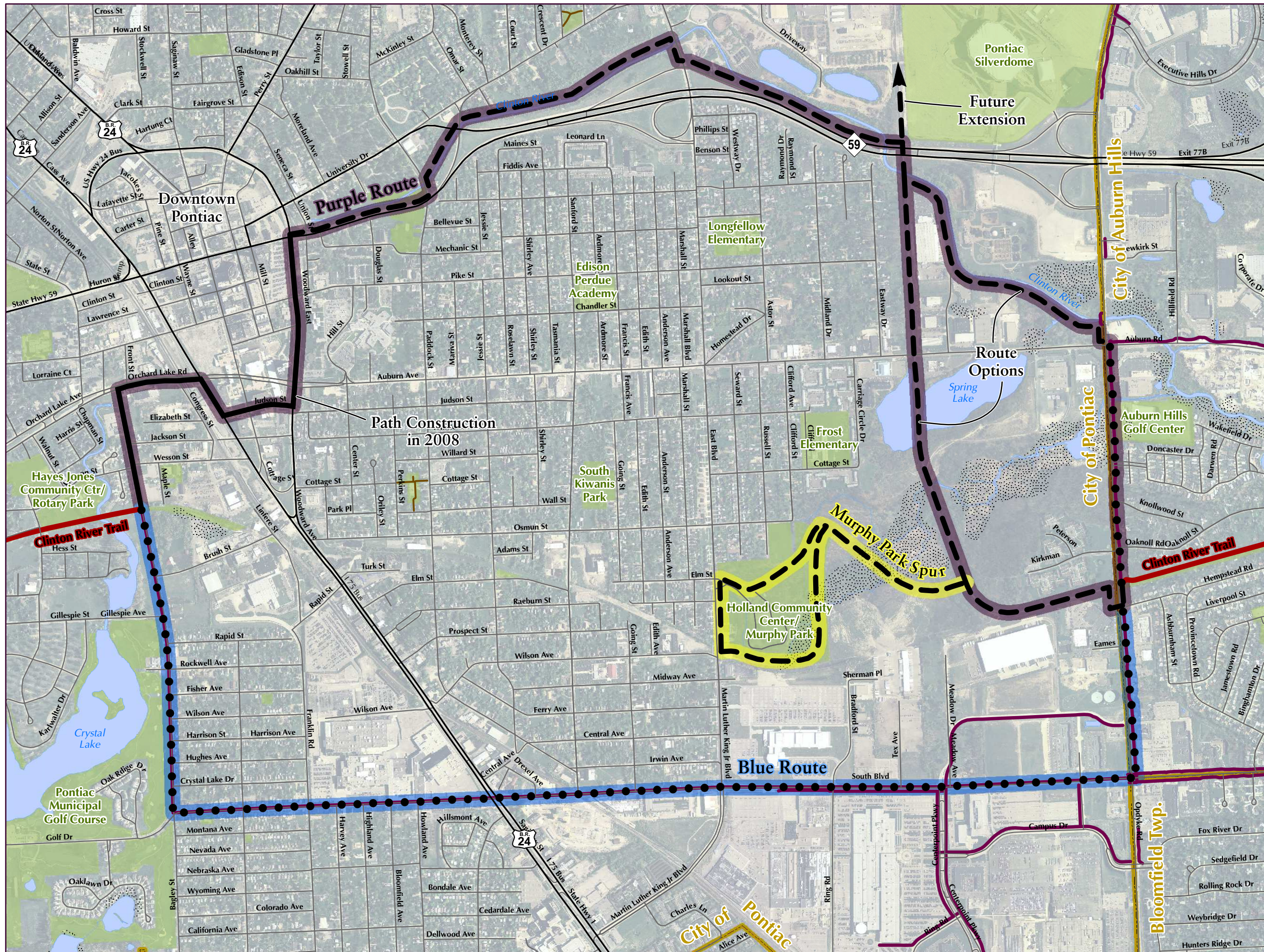
RECOMMENDATIONS

Based on the results of the initial evaluation and stakeholder input, two routes, and a trail spur, are proposed through the City of Pontiac as connector routes between the two existing sections of the Clinton River Trail. Each of these routes (identified as either the Purple Route or Blue Route on the following fold out map) has various opportunities and constraints associated with implementation as is further described below. See Chapter 5, Action Plan, for suggested next steps and timeline associated with this gap.

Purple Route – Approximate Length: 5.93 mi

This route would traverse to the north, through the downtown area, along the Clinton River, and Opdyke Road. A potential option for the eastern section of this route is to follow the currently vacant railroad between M-59 and the existing Clinton River Trail. *This route is identified in the Clinton River Trail Master Plan that*





MAP 1 CLINTON RIVER TRAIL GAP ANALYSIS

- Legend**
- Proposed Trail Routes:**
- Purple Route
 - Blue Route
 - Murphy Park Spur
 - New Path Required
 - Utilize Existing Path/Sidewalk
 - Path to be Constructed in 2008 (MDOT Enhancement Grant)

- Existing Trails:**
- Trail
 - Safety/Side Path
 - Park Path
 - Water Bodies
 - Water Features
 - Wetlands
 - Recreation Land/Schools
 - Municipal Boundaries

Sources
 Roads: TeleAtlas Road Data, 2006
 Trail Network: Oakland County GIS, 2008
 Wetlands: National Wetlands Inventory
 Recreation Lands: Oakland County GIS, 2008



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was completed in 2003 and is the preferred primary connector route.

Blue Route –

Approximate Length: 3.54 mi

This route traverses to the south, within road right-of-way along Bagley Street, South Boulevard, and Opdyke Roads. While not ideal in terms of environment and infrastructure, there are currently safety paths and/or sidewalks in place and can serve as a temporary connection and/or southern connection in the future with some improvements.

Murphy Park Spur –

Approximate Length: 1.47 mi

Murphy Park and the Holland Community Center are a significant community asset and destination within Pontiac. The desire is to develop a trail spur from the Clinton River Trail utilizing the vacant railroad corridor, and the vacated Osmun Street right-of-way to provide trail users access to this natural jewel and its associated amenities.

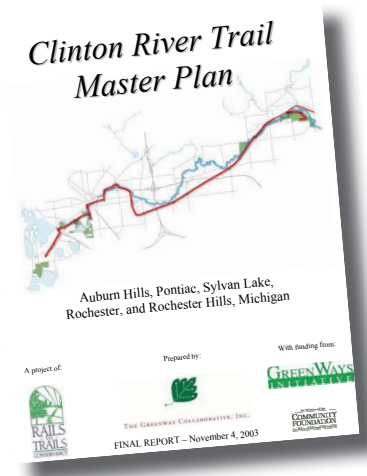
Opportunities and constraints associated with implementation of each Route have been documented as a tool for stakeholder agencies to consider, address and/or resolve as movement toward implementation continues. It is highly likely that progress on each of the routes will be worked on simultaneously as the various agencies proceed with implementation efforts.

Purple Route Opportunities and Constraints

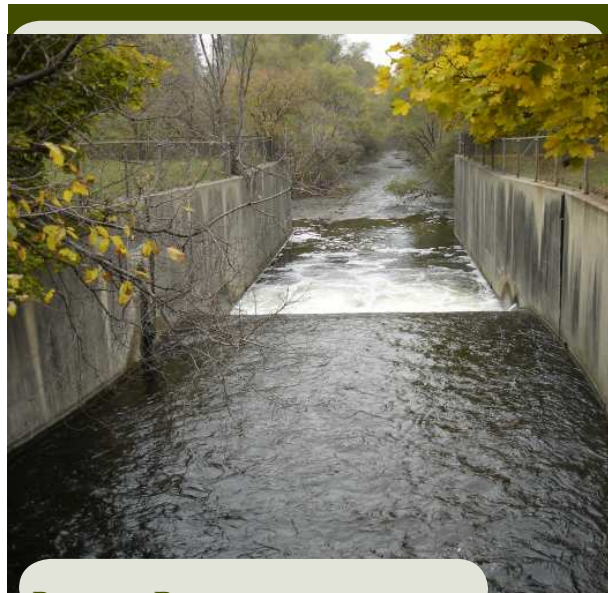
- The western segment of the northern route will be constructed in 2008 with funding from the MDOT Enhancement Program and the City of Pontiac. Design is complete and the 10' wide segment will traverse through

the downtown area from the Clinton River Trail north to Huron Street.

- For the most part, the property along the remainder of the proposed route is owned by either MDOT, the City of Pontiac, or the Oakland County Drain Commissioner's Office.
- Several sections could be constructed within the Clinton River riparian corridor, providing opportunities to be in "natural" settings within a highly urban context.
- The western section brings trail users into the downtown area for amenities and economic development opportunities.
- An opportunity may exist to utilize the vacated northern spur railroad corridor from approximately M-59 south to Opdyke Road.
- The scenic view along the route varies from the downtown built environment to a wooded river corridor with rolling terrain.
- This route is documented and detailed in the Clinton River Trail Master Plan which was completed in 2003 and is the preferred route of the stakeholders to connect the two existing sections of the Clinton River Trail.

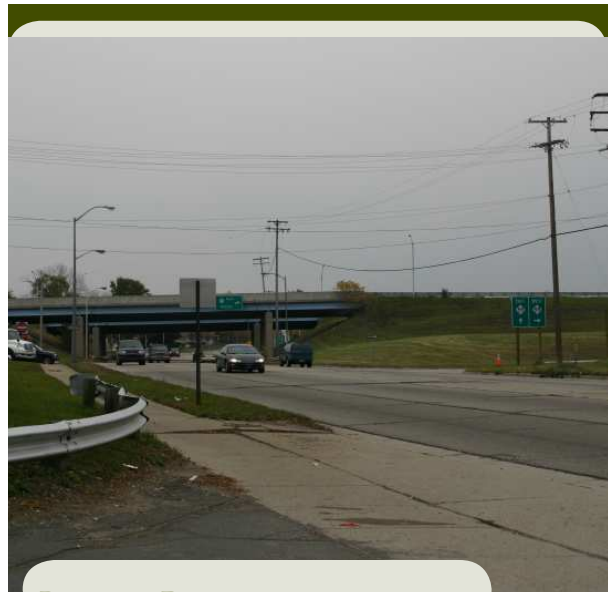


- Construction within the Clinton River riparian corridor may add environmental considerations and costs.
- The general rolling terrain of the route and some of the major cross streets have grade differentials which may add to construction costs.
- Several trail/road crossings exist with the majority being across high speed, high volume roads. In particular, the University Drive, M-59, Paddock Street area is of particular concern and difficulty.
- The route is proposed to include an underpass in the M-59/University Drive area. Underpasses may include design/construction challenges.
- A section of the proposed route traverses alongside the Waste Water Treatment Plant and close to M-59 creating odor and noise abatement issues/concerns.
- The vacated Northern Spur railroad corridor is elevated as it crosses M-59 and Auburn Avenue. Transitioning the trail from along the Clinton River onto the elevated vacant railroad may have design and construction challenges.
- The elevated Northern Spur railroad across M-59 is noted by the City of Pontiac to be in potentially poor condition. Rehabilitation and/or use of this structure may have design and construction challenges.
- Some remote sections of the trail along the river could provide a challenge for access by police and emergency services.



PURPLE ROUTE

The northern route is proposed to traverse alongside the Clinton River.

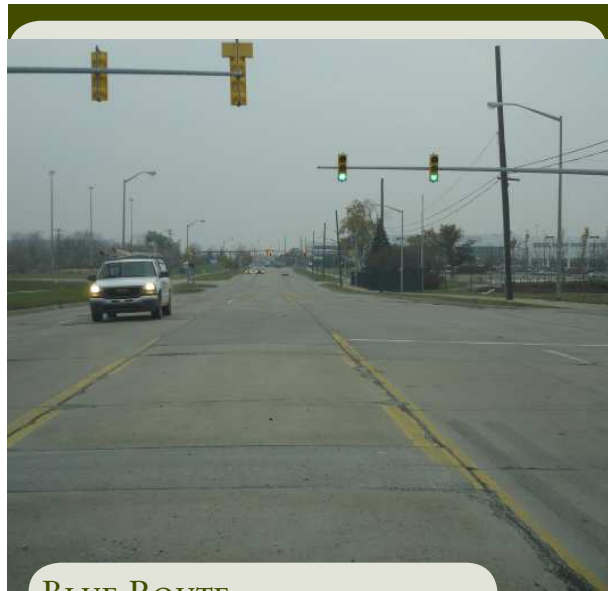


PURPLE ROUTE

Several road crossings are proposed at high volume, high speed intersections

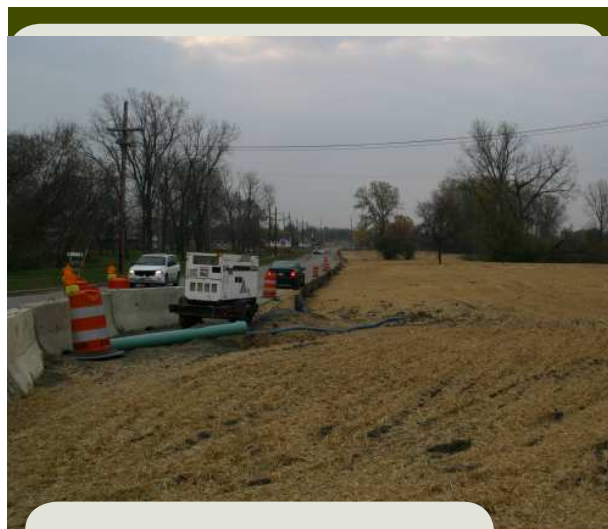
Blue Route Opportunities and Constraints

- The majority of the proposed route along Bagley, South Boulevard and Opdyke Road exists by using either safety paths and/or sidewalks.
- The route is entirely within road right-of-way, resulting in no major property ownership issues.
- Due to the proximity of the route to major streets, police and emergency services have easy access to all sections of the route.
- Trail users may feel their personal security is improved due to the large volume of traffic along the route and increased visibility.
- The setting for the southern route is very industrial feeling and looking. The large vehicle volumes along the route present a noisy urban environment. Personal safety concerns have also been noted by stakeholders.
- South Boulevard is a 5-lane, high volume, high speed thoroughfare including truck and industrial traffic.
- A number of trail/road crossings exist with several being across wide, high speed, high volume roads including B.R. 24, Martin Luther King Boulevard, and Opdyke Road.
- Some segments such as the three-lane section east of Bagley has little room for widening to accommodate the trail.



BLUE ROUTE

South Boulevard is a 5-lane, heavily travelled corridor with several industrial uses.



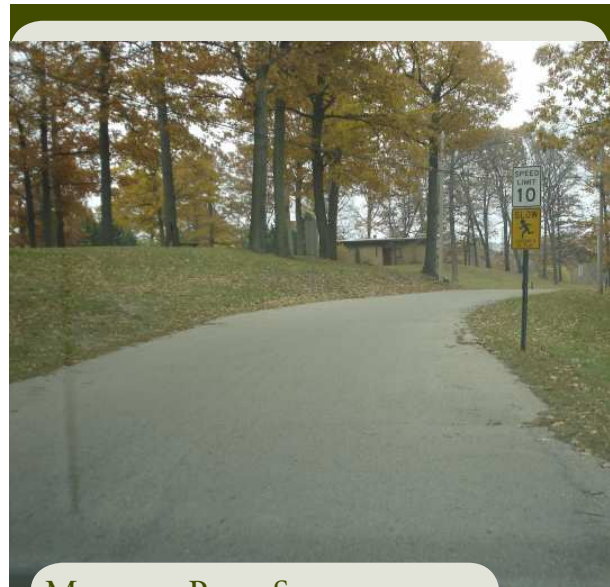
BLUE ROUTE

Sidewalk exists on the eastern side of Bagley Street, with right-of-way room on the western side for pedestrian facilities.

Murphy Park Spur

Opportunities and Constraints

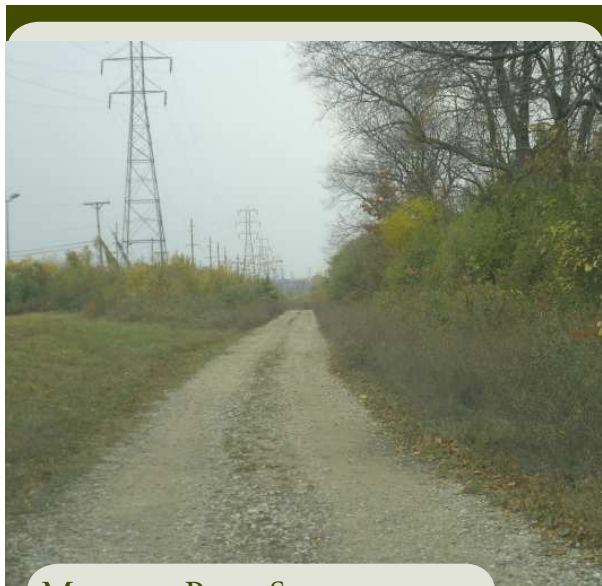
- Would connect users to Murphy Park and Holland Community Center providing additional recreation opportunities and amenities to trail users and affording greater use of the park.
- An 86' wide vacant road right-of-way (Osmun Street) exists between Murphy Park and the Grand Trunk Western Railroad (Northern Spur).
- From a scenic perspective, the route offers views and access to a rolling, wooded, and wetland area in an otherwise highly urbanized environment.
- The spur would provide direct access to the Clinton River Trail from nearby, densely populated, residential neighborhoods.
- Purchase of at least a portion of the Northern Railroad Spur is required for implementation.



MURPHY PARK SPUR

The Holland Community Center and Murphy Park is a primary destination.

- Construction of the trail within the vacant Osmun Street right-of-way includes environmental challenges with wetland and drain/creek crossings highly likely. This will increase the cost of design and construction.



MURPHY PARK SPUR

A portion of the Northern RR Spur would be necessary to connect to Murphy Park.



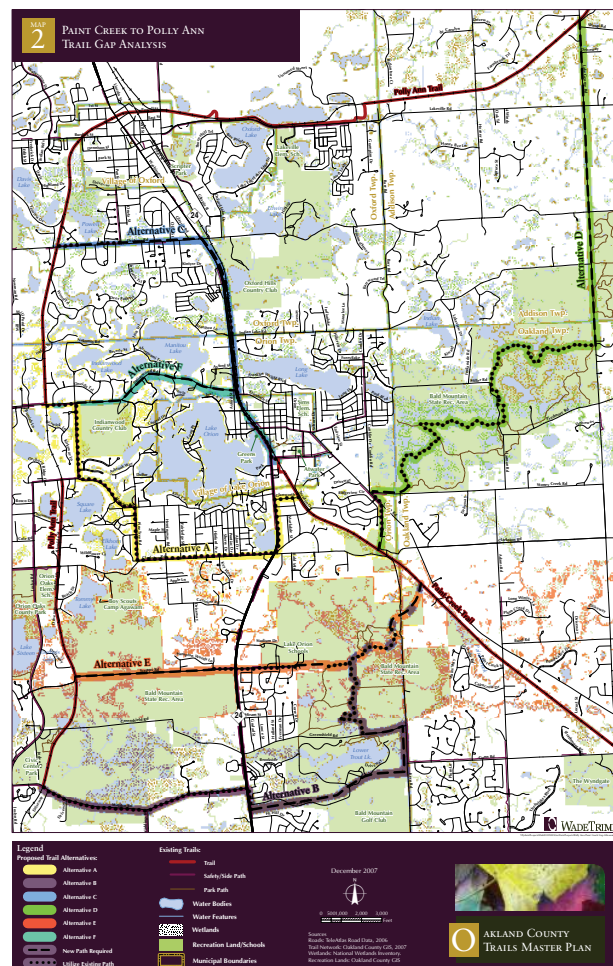
PAINT CREEK & POLLY ANN TRAILS GAP

INITIAL EVALUATION

Six routes were initially evaluated and discussed with the local stakeholder group (see adjacent graphic). These included:

- A route (depicted in yellow) that utilizes existing safety path from the Paint Creek Trail to Glanworth, M-24, along Clarkston Road, Pine Tree Road, Heights, and Joslyn Roads.
- A route (depicted in purple) that would traverse along existing unpaved trails in Bald Mountain State Recreation Area, to Greenshield Road, within the utility corridor, and along Waldon Road.
- A route (depicted in blue) that would traverse from the Paint Creek Trail, north along M-24 to Drahner Road and connect into the Polly Ann Trail.
- A route (depicted in green) traversing to the north from the Paint Creek Trail, Conklin Road, along existing unpaved trails within Bald Mountain State Recreation Area, to Lake George Road.
- A route (depicted in orange) that would lead from the Paint Creek Trail, utilize existing unpaved trails within Bald Mountain State Recreation Area, along the Lake Orion Schools property, and along Scripps Road.
- A route (depicted in teal) traversing to the north along M-24 and west along Indianwood Road.

Based on discussions with the local stakeholder group, several of the potential connector routes were modified and/or eliminated for designation as “primary” connectors due to feasibility and/or need.



RECOMMENDATIONS

Based on the results of the initial evaluation and stakeholder input, four routes are proposed as primary connector routes between the existing Paint Creek and Polly Ann Trails. Each of these routes (identified as either the Purple Route, Blue Route, Yellow Route, or Green Route on the following fold out map) has various opportunities and constraints associated with implementation as is further described below. See Chapter 5, Action Plan, for suggested next steps and timeline associated with this gap.

Purple Route –

Approximate Length: 6.00 mi

This route would traverse to the south, within and/or near Bald Mountain State Recreation Area, along Kern Road, Clear Creek Drive and utilize the existing safety path along Waldon Road.

Yellow Route –

Approximate Length: 4.33 mi

This route utilizes existing safety path from the Paint Creek Trail to Glanworth, M-24, along Clarkston Road, Pine Tree Road, Heights, and Joslyn Roads.

Blue Route –

Approximate Length: 3.65 mi

This route would traverse from the Paint Creek Trail, north along M-24 to Drahner Road and connect into the Polly Ann Trail.

Green Route –

Approximate Length: 6.81

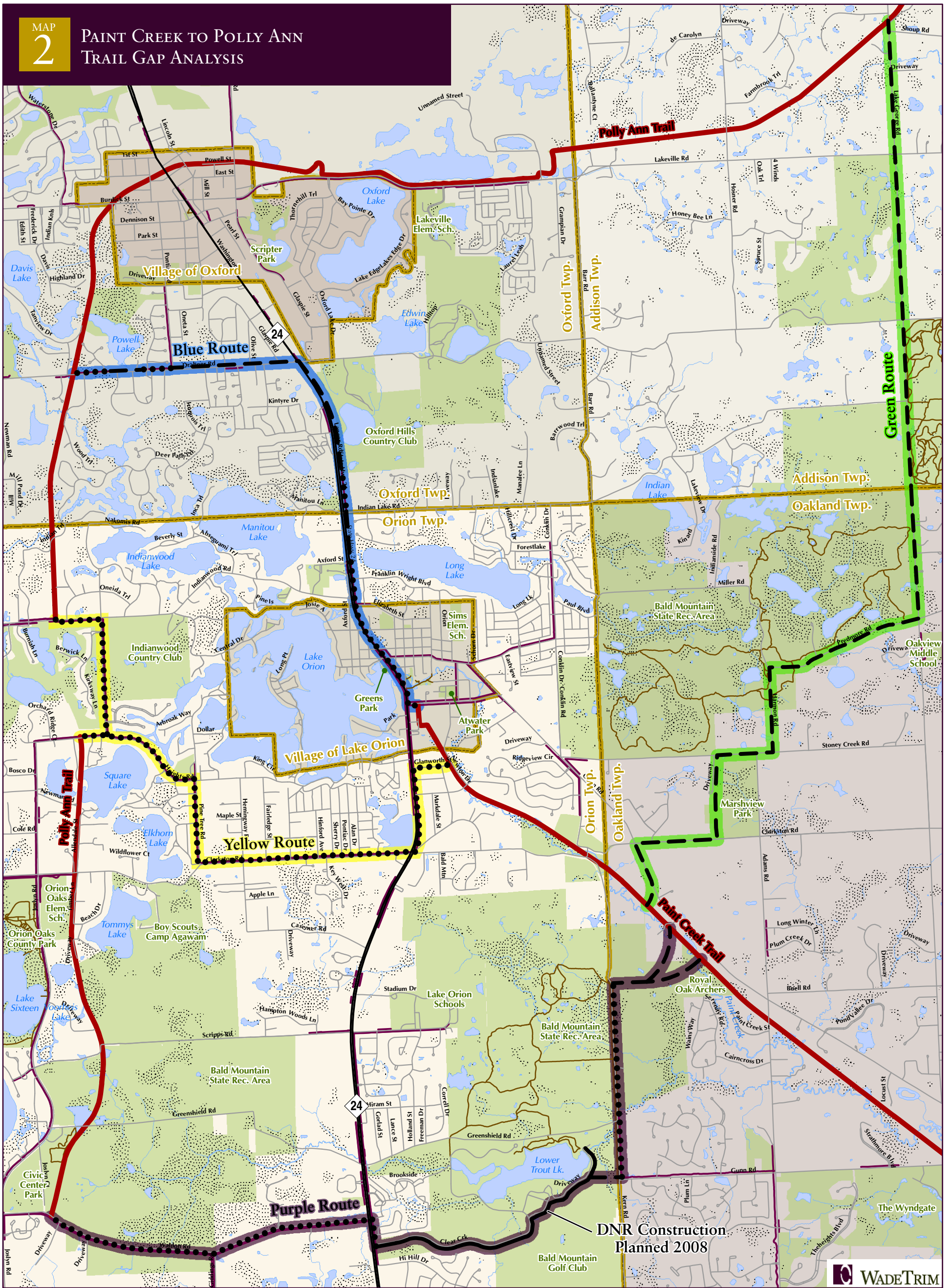
This route would traverse to the north from the Paint Creek Trail, along Orion Road and Clarkston Road, within Marshview Park, along

Bald Mountain State Recreation Area utilizing Stoney Creek, Harmon and Predmore Roads, to Lake George Road.

Opportunities and constraints associated with implementation of each Route have been documented as a tool for stakeholder agencies to consider, address and/or resolve as movement toward implementation continues. It is highly likely that progress on each of the routes will be worked on simultaneously as the various agencies proceed with implementation efforts.

Purple Route Opportunities and Constraints

- This route would take users along and through a portion of Bald Mountain State Recreation Area, providing a natural setting and experience.
- The MDNR is planning to construct a significant section of this route in 2008 between M-24 and Kern Road along the primary entrance to the Recreation Area providing the trail user with a route with few vehicular conflicts.
- Safety path is already constructed along the length of Waldon Road between M-24 and the Paint Creek Trail.
- This route would take trail users to the Orion Township offices and Civic Center Park complex, as well as Orion Oaks Elementary and Orion Oaks County Park.
- Continued discussions and/or negotiations are needed with the Royal Oak Archers and other private land owners to provide a connection to the Paint Creek Trail from Kern Road. This segment may include the need to cross the Paint Creek, adding potential design and construction challenges and costs.



Legend

Proposed Trail Routes:

- Yellow Route
- Purple Route
- Blue Route
- Green Route
- New Path Required
- Utilize Existing Path
- Path to be Constructed in 2008 (MDNR)

Existing Trails:

- Trail
- Safety/Side Path
- Park Path

Other Features:

- Water Bodies
- Water Features
- Wetlands
- Recreation Land/Schools
- Municipal Boundaries

September 2008

0 5001,000 2,000 3,000 Feet

Sources:
 Roads: TeleAtlas Road Data, 2006
 Trail Network: Oakland County GIS, 2008
 Wetlands: National Wetlands Inventory
 Recreation Lands: Oakland County GIS, 2008

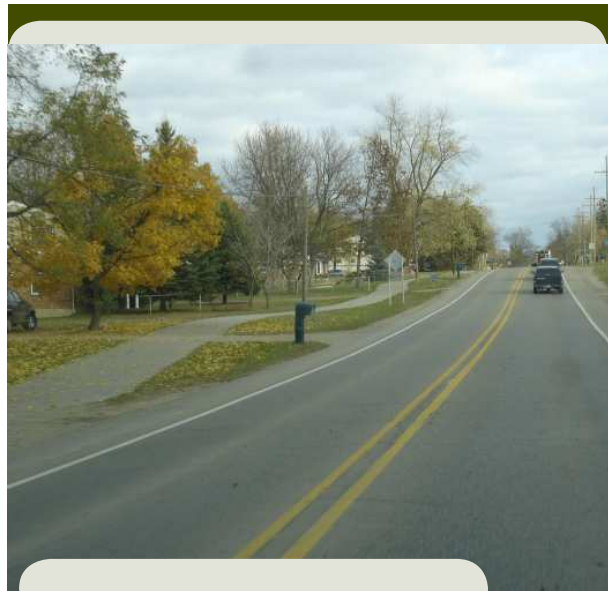
WADETRIM

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- The proposed route is lengthy and may seem/feel “out of the way” to trail users.
- Coordination and cooperation with the MDNR will be necessary. Issues may also arise regarding the various number of different user groups and needs within Bald Mountain State Recreation Area.
- The former railroad corridor south of Heights Road in Orion Township (Polly Ann Trail Extension) is owned by the Township, however, much of it remains an unimproved surface. Improvements to this corridor would need to be made in order to make this route a viable connection.
- Several “turns” would be required by the user, making the need for wayfinding and directional signs to ensure users can find their way between the Polly Ann and Paint Creek Trails.
- The remote segments of the trail may provide access challenges for police and emergency services.

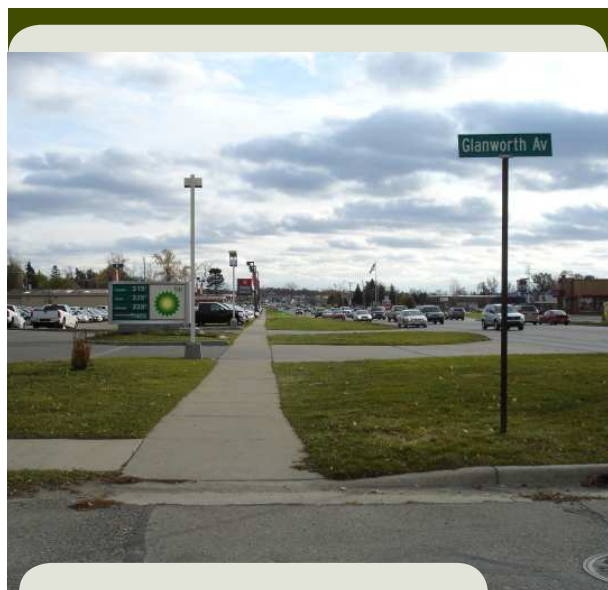
Yellow Route Opportunities and Constraints

- The route follows sidewalk and safety path that is already constructed. With the exception of narrow sidewalks along Glanworth, the remainder of the route would utilize 8’ wide safety path.
- This route is already useable. With signage, mapping, a short trail segment between Glanworth and the Paint Creek Trail, and minor road crossing treatment improvements, this route could be a desirable and heavily used connection.



YELLOW ROUTE

An 8’ wide Safety Path system is already constructed along the proposed route.



YELLOW ROUTE

M-24 between Glanworth and Clarkston Road would be utilized.

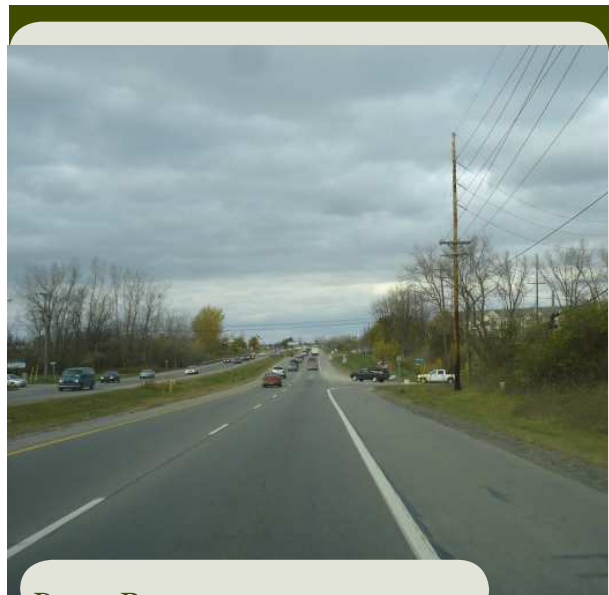
- The route length is relatively short and direct in comparison to the other alternatives.
- The road crossings are relatively safe and minor in terms of traffic volumes, speeds,

and crossing distance. The M-24 crossing at Clarkston Road is signalized with pedestrian push buttons and a median for refuge.

- The route passes through primarily residential areas and affords residents direct access to existing trails.
- Signage is necessary to indicate to users the direction, short distance, and opportunities available in nearby downtown Lake Orion.
- The route includes the need to cross multiple residential driveways, requiring the user to remain aware of vehicular traffic movements.
- A short connector segment is required between the existing Paint Creek Trail and the walkway along Glanworth Street.
- Several “turns” would be required by the user, making the need for wayfinding and directional signs to ensure users can find their way between the Polly Ann and Paint Creek Trails.
- Some horizontal and vertical alignment changes would be desirable to enhance bicycle travel.

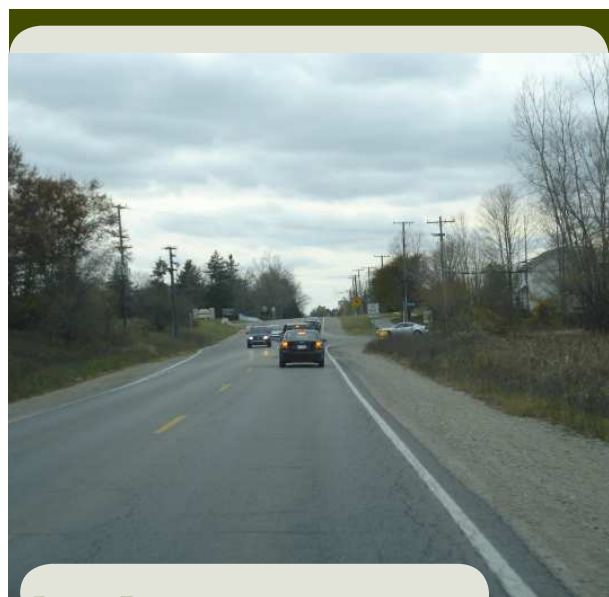
Blue Route Opportunities and Constraints

- This route would bring the trail users adjacent to downtown Lake Orion and along M-24, supporting economic activity in the area and providing access to amenities for trail users.
- This route would continue to generally follow the historic rail alignment where it remains intact.



BLUE ROUTE

M-24 right-of-way heading north toward Drahner Road.



BLUE ROUTE

Drahner Road right-of-way near Pontiac Road.

- Sections of sidewalk and safety path are in place along M-24 and Drahner Road.

- Major road crossings are limited to the intersection of M-24 and Drahner (if the route remains on the east side of M-24).
- Once the route reaches Drahner Road, the opportunity may exist for users to also utilize Oxford Lake Drive and Lake Edge Drive to access the Polly Ann Trail.
- This route follows M-24 for several miles. In the majority of areas, M-24 is commercial in nature with multiple curb cuts requiring the trail user to remain alert to heavy vehicular turning movements, and likely “starting and stopping” due to vehicular activity.
- In some areas along M-24, the right-of-way width does not provide for significant space for a trail/safety path and therefore the users are placed in close proximity to the road.
- M-24 is a 4-lane divided highway with additional turning lanes throughout. M-24 carries high volumes of high speed traffic adding to noise, safety, and “user experience” concerns.
- The water body at the Oxford Hills Country Club is in close proximity to M-24 with the edge of the right-of-way sloping down toward the water. This area may require the design and construction of a structure such as a bridge or boardwalk, adding to the overall cost of implementation.
- The intersection of M-24 and Drahner, where the connector route would potentially cross, is signalized and includes pedestrian push buttons and crosswalk markings. However, this intersection is a particularly dangerous crossing due to the skewed angle

of the intersecting roads. This increases the distance trail users must cross, adding to their exposure to high-speed, high-volume traffic.

- Drahner Road is a two-lane paved road with gravel shoulders. Open swales provide drainage along sections of the roadway. To construct a trail connection within the right-of-way, swales may need to be replaced with enclosed storm sewers, adding to the design and construction costs.
- Oxford Township has put considerable effort into constructing safety path along Drahner Road, however, property ownership/easement issues must be resolved in order to complete this section of the Blue Route.

Green Route Opportunities and Constraints

- This route would take users through Oakland Township parkland, along the Bald Mountain State Recreation Area, and Addison Oaks County Park, providing a natural setting and experience as well as access to multiple destinations.
- The proposed route would not include many road crossings. Those roads that would be crossed are relatively low traffic, low speed, and rural in nature.
- The proposed route is lengthy and may feel like going “out of the way” to trail users.
- Coordination and cooperation with the MDNR will be necessary. Issues may also arise regarding the various user groups and needs.

- Lake George Road is a two-lane (paved and gravel) road with extensive, mature vegetation along the roadway edge in the majority of areas. Steep slopes at the road edge also exist in areas. This would likely add to the design and construction costs associated with implementation. The Road Commission for Oakland County has designated Lake George Road to have a 120' planned right-of-way.



GREEN ROUTE

Lake George Road right-of-way.

- Several “turns” would be required by the user, making the need for extensive wayfinding and directional signs to ensure users can find their way between the Polly Ann and Paint Creek Trails.



WEST BLOOMFIELD, LAKES COMMUNITY, & HURON VALLEY TRAILS GAP

INITIAL EVALUATION

Three routes were initially evaluated and discussed with the local stakeholder group (see graphic below). These included:

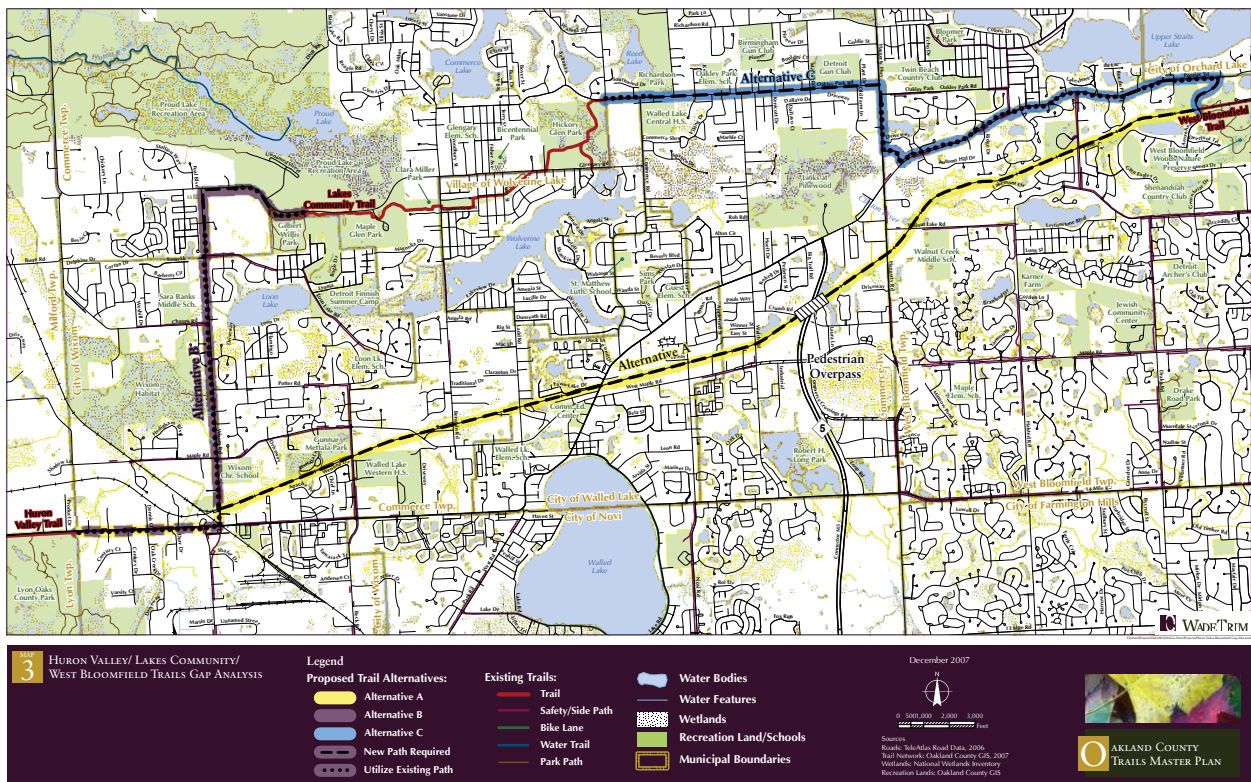
- A route (depicted in yellow) following the railroad corridor from the existing West Bloomfield Trail southwest to Wixom Road, along Wixom Road to Pontiac Trail and connecting to the existing Huron Valley Trail.
- A route (depicted in purple) connecting the existing Huron Valley Trail and continuing along Pontiac Trail Road, north along Wixom Road, and east on Glengary connecting to Proud Lake Recreation Area and the existing Lakes Community Trail.

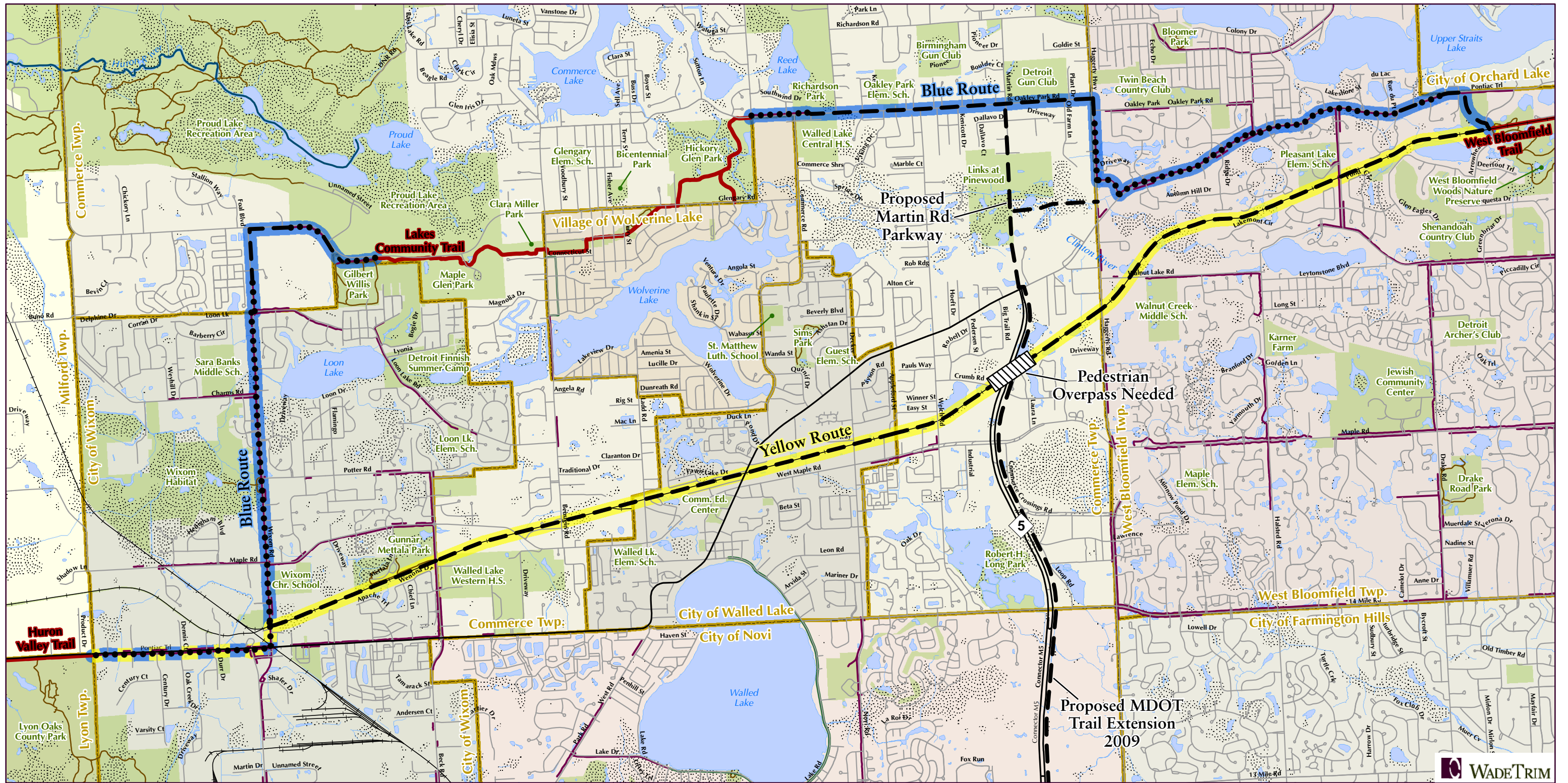
- A route (depicted in blue) connecting the existing Lakes Community Trail to the existing West Bloomfield Trail within the road right-of-way along Oakley Park Road to Haggerty and along Pontiac Trail Road.

Based on discussions with the local stakeholder group, the potential connector routes were modified and/or combined for designation as “primary” connectors between the existing regional systems.

RECOMMENDATIONS

Based on the results of the initial evaluation and stakeholder input, two routes are proposed as primary connector routes between the existing West Bloomfield, Lakes Community, and Huron Valley Trails. Each of these routes (identified as either the Blue Route or Yellow Route on the following fold out map) has various opportunities and constraints associated with implementation as is further described below.





MAP 3 HURON VALLEY/LAKES COMMUNITY/WEST BLOOMFIELD TRAILS GAP ANALYSIS

Legend

Proposed Trail Routes:

- Yellow Route
- Blue Route
- New Path Required
- Utilize Existing Path

Existing Trails:

- Trail
- Safety/Side Path
- Bike Lane
- Water Trail
- Park Path

- Water Bodies
- Water Features
- Wetlands
- Recreation Land/Schools
- Municipal Boundaries

September 2008



0 5001,000 2,000 3,000 Feet

Sources
 Roads: TeleAtlas Road Data, 2006
 Trail Network: Oakland County GIS, 2008
 Wetlands: National Wetlands Inventory
 Recreation Lands: Oakland County GIS, 2008



AKLAND COUNTY TRAILS MASTER PLAN



\\YData\Projects\Oak\2002\2008\GIS\Map\Projects\Huron Lakes Bloomfield Gap_Alt.mxd

See Chapter 5, Action Plan, for suggested next steps and timeline associated with this gap.

Blue Route –

Approximate Length: 9.75 mi

This route would traverse to the north extending the West Bloomfield Trail west within Township property to Pontiac Trail, and utilizing existing and proposed safety path along Haggerty and Oakley Park Road to connect to the Lakes Community Trail at Hickory Glen Park. The Blue Route would utilize existing and planned safety path along Glengary, Wixom, and Pontiac Trail Roads to bring the trail into downtown Wixom and connect to the existing Huron Valley Trail at Lyon Oaks County Park.

Yellow Route –

Approximate Length: 9.19

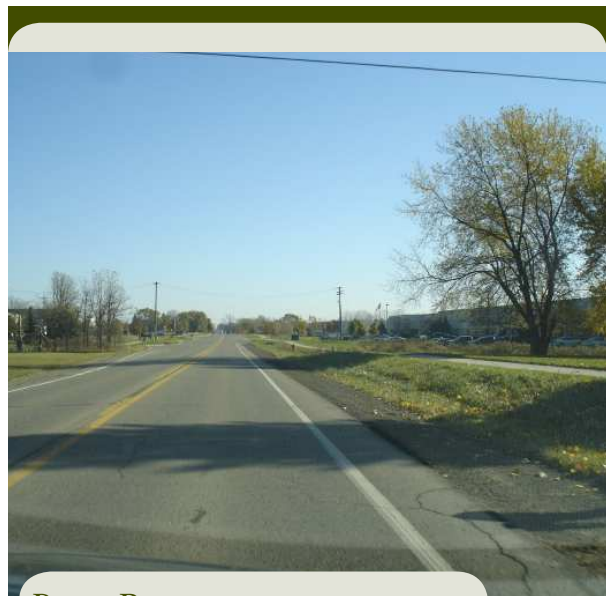
The Yellow Route would follow within the railroad corridor from the existing West Bloomfield Trail southwest to Wixom Road, and utilize existing and planned safety path along Wixom Road and 14 Mile to connect to the existing Huron Valley Trail.

Opportunities and constraints associated with implementation of each Route have been documented as a tool for stakeholder agencies to consider, address and/or resolve as movement toward implementation continues. It is highly likely that progress on each of the routes will be worked on simultaneously as the various agencies proceed with implementation efforts.

Blue Route Opportunities and Constraints

- Significant segments of the proposed route are already in place as safety paths have been constructed along 14 Mile, Glengary, Oakley Park, Haggerty, and Pontiac Trail.

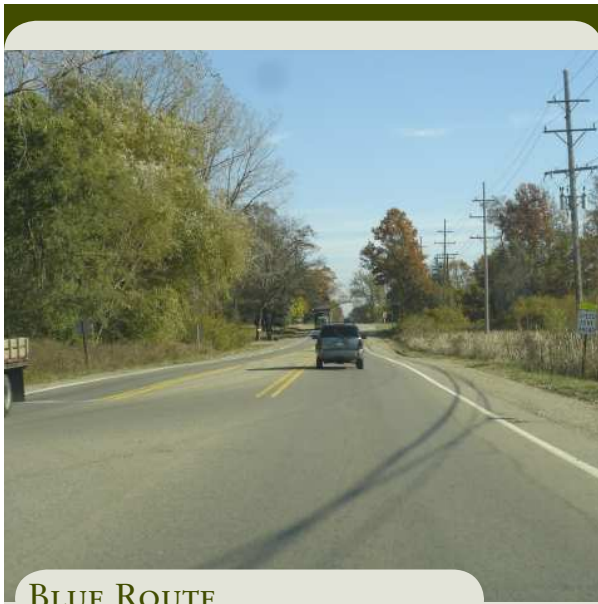
- The proposed route would provide a fairly direct connection between the Huron Valley Trail, Lakes Community Trail, and West Bloomfield Trail.
- The proposed route brings users through downtown Wixom and also provides connections to the Wixom Habitat, Sara Banks Middle School, Proud Lake State Recreation Area, the numerous parks and greenspaces connected by the Lakes Community Trail, Walled Lake Central High School, Oakley Park Elementary School, the Detroit Gun Club, and West Bloomfield Nature Preserve.



BLUE ROUTE

Existing Safety Path along 14 Mile Road, west of Wixom Road.

- Due to the proximity of the trail to the roadway system, there is direct access to the trail by police and emergency services.
- The route would intersect with the proposed Martin Parkway and associated development, providing a direct link to the M-5 and I-275 Trail systems.



BLUE ROUTE

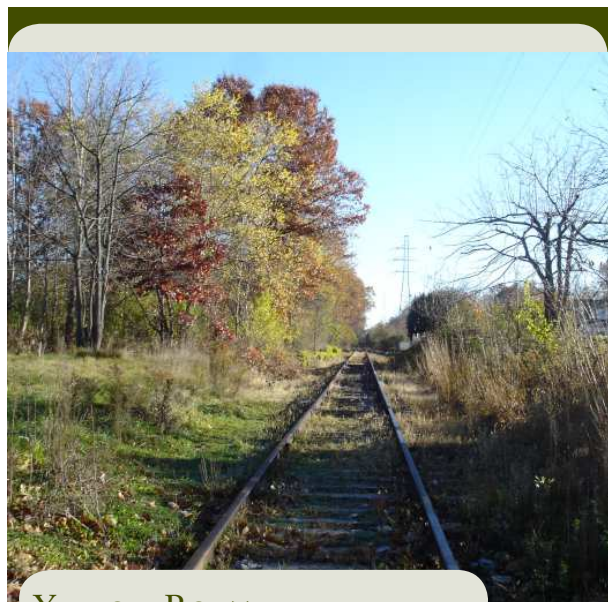
Oakley Park Road includes areas where wetlands are in close proximity.

- The route passes through downtown Wixom and the Pontiac Trail/Wixom Road intersection. This intersection is narrow and in close proximity to traffic in some areas.
- A few “gaps” in the route exist where safety path has not yet been constructed.
- The proximity of vehicular routes may diminish the experience of those users seeking a more natural setting.
- Some wetland areas and open swales exist in close proximity to Oakley Park Road that will likely increase design and construction costs.

Yellow Route Opportunities and Constraints

- Provides a “direct”, off-road link between the West Bloomfield and Huron Valley Trails primarily utilizing a railroad corridor.

- Segments of the railroad corridor are no longer in use and/or are used periodically for low speed rail activities. The Michigan Star Clipper Dinner Train utilizes portions of the rail on a periodic basis and 2-3 businesses utilize a short segment for occasional shipping operations. Although not ideal, an opportunity may exist for a “rail with trail” situation.
- The trail is environmentally compatible with and similar to the features along the existing West Bloomfield and Huron Valley Trails.
- Trails within a rail corridor can prove to be a more enjoyable experience and setting in comparison to road rights-of-way. In general, users will be away from high volume vehicular corridors.
- The route would connect a variety of destinations including the West Bloomfield



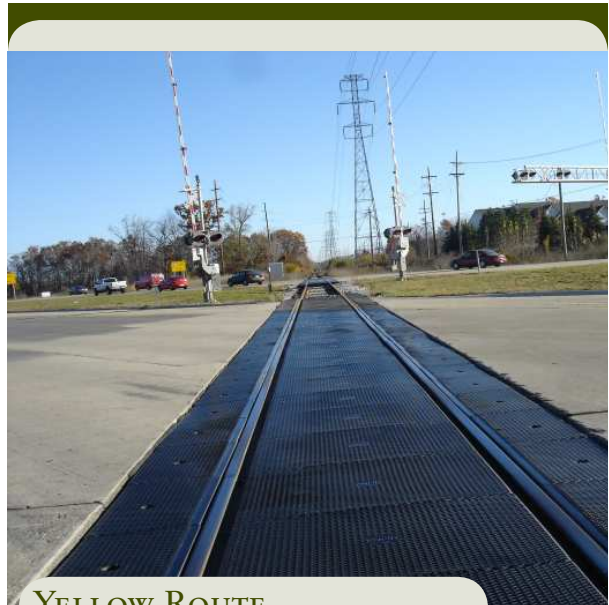
YELLOW ROUTE

Existing semi-active railroad corridor.

Nature Preserve, Pleasant Lake Elementary School, Walnut Creek Middle School, Walled Lake Western High School, Gunnar Mettala Park, and downtown Wixom.

- The route would intersect with the MDOT proposed trail extension along M-5 which is slated for construction by 2009 and will traverse from Pontiac Trail south to the I-275 Bike Path.
- North of Pontiac Trail Road is a proposed development that will include the Martin Parkway and is planned to include multiple non-motorized trail systems and public amenities.
- Purchase of the corridor, and/or easement/use agreements would be needed for design and implementation to occur.
- Wetlands and a narrow railroad corridor along portions of the route may increase design and construction challenges and costs if the “rail with trail” alternative is pursued.
- Due to various procedures related to how railroads are taxed and deeds are registered, it may prove difficult to fully understand current ownership, parcel boundaries and descriptions.
- Adjustments in trail alignment may be necessary where the rail corridor crosses roads in order to provide a safe crossing for non-motorized users.
- A significant grade separated pedestrian overpass would likely be necessary where the corridor crosses M-5. This may present challenges.

- A high transmission electrical corridor also exists along much of the railroad corridor. Easements and property ownership research will likely be necessary.
- Some segments of the trail are in more remote areas and direct access by police and emergency services may be challenging.



YELLOW ROUTE

Crossing M-5 would likely require a grade separated pedestrian overpass for continuity and safety.



URBAN TRAILS NETWORK (SE OAKLAND COUNTY)

WOODWARD CORRIDOR GREENWAY MASTER PLAN

In 2002, the Woodward Corridor Greenway Coordinating Committee (WCGCC) began a process aiming to develop an urban greenway trail linking the cities of Ferndale, Pleasant Ridge, Huntington Woods, Royal Oak, Berkeley and Birmingham in the densely populated Southeastern portion of Oakland County. Contributing to the need was the lack of any non-motorized link between the cities that, in combination, total more than 125,000 residents.

Woodward Avenue, which extends from Downtown Detroit to Downtown Pontiac, runs through the heart of these six cities and thus, was chosen as the logical corridor to study the feasibility of an urban greenway. Additionally, the Woodward Corridor possesses significant historical and cultural benefits and was recently designated as a Michigan Heritage Route and National Scenic Byway.

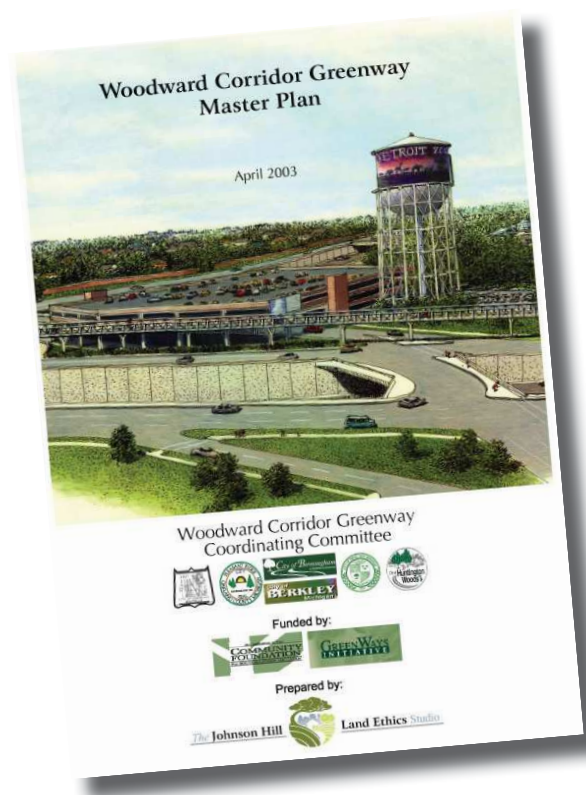
With funding secured by the Community Foundation for Southeastern Michigan, the WCGCC hired a consultant team to develop the Woodward Corridor Greenway Master Plan. The initial planning effort consisted of a detailed feasibility analysis of the study area to identify potential routes, opportunities and constraints. Several route options were evaluated including within the CN Railroad Right-of-Way, along Woodward Avenue and through adjacent neighborhoods. Ultimately, constructing a trail along Woodward Avenue was selected as the

most feasible and advantageous option. A series of four public design workshops were then facilitated to assess how pedestrians and bikes navigated the Woodward Corridor, to identify key destinations and to outline potential trail route alignments and design alternatives.

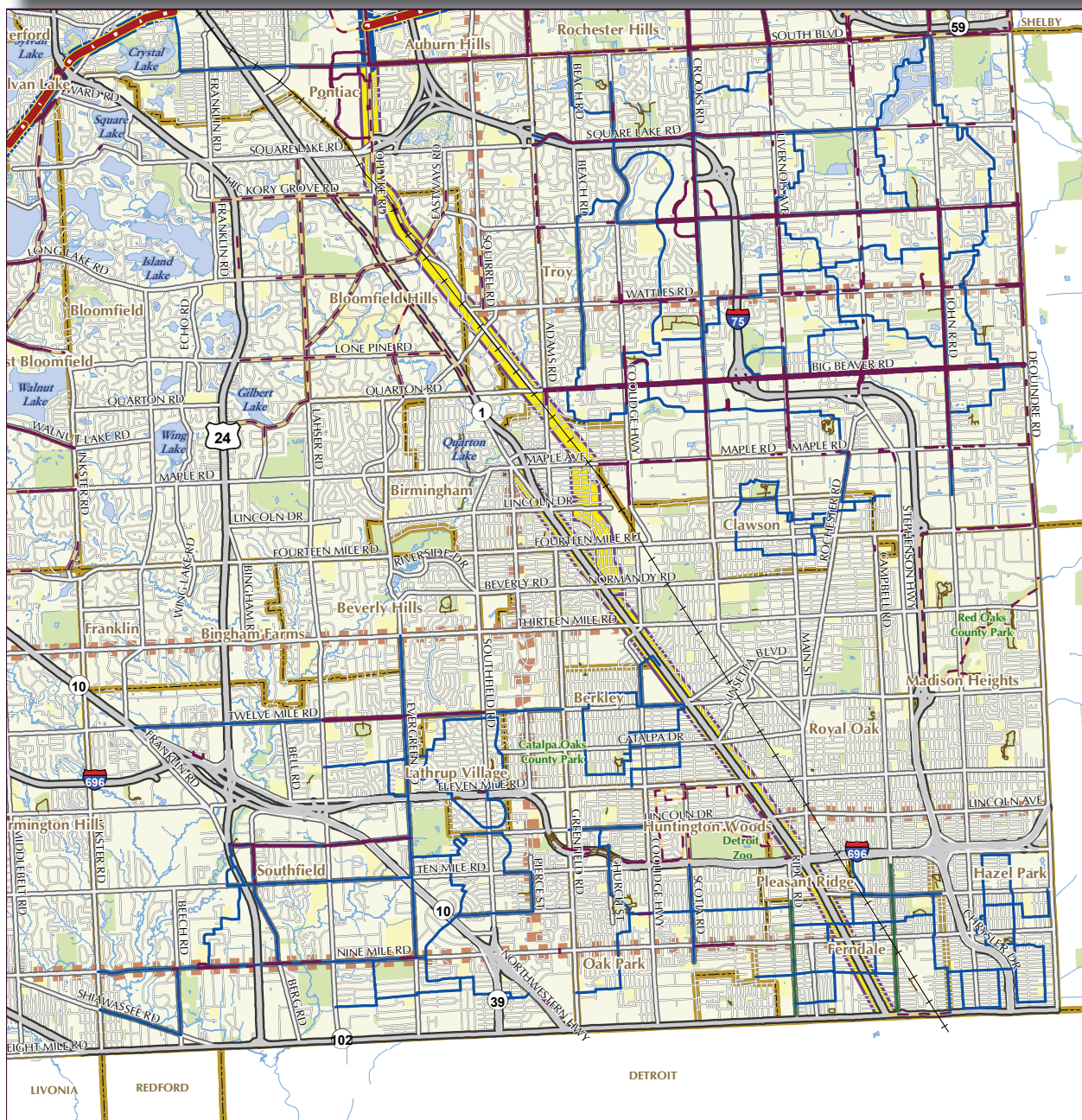
Plan Recommendations

The planning process culminated in the preparation of preferred trail alignments, design concepts and facility improvements along Woodward Avenue. Along the corridor, a combination of four trail designs are proposed to form a continuous trail system, based upon space constraints, the character of the particular road segment, and other considerations:

- Trail Alternative 1 - Where no parking exists within the right-of-way and where ample right-of-way width is available. Recommendation for multi-use trail separate from sidewalk and featuring a wide landscape buffer from the principal traffic lanes.



WOODWARD CORRIDOR



Legend

- | | | |
|----------------------------|---------------------|--------------------|
| County Trail Concept | Clinton River Trail | Municipal Boundary |
| Proposed Woodward Corridor | Trail | Lakes & Ponds |
| Complete | Safety/Side Path | Rivers & Streams |
| Design/Development | Route | Recreation Land |
| Under Review | Bike Lane | School |
| | Water Trail | |
| | Park Path | |
| | Proposed Pathway | |

June 2008



Sources
 Roads: Oakland County GIS, 2008
 Trail Network: Oakland County GIS, 2008
 Recreation Lands: Oakland County GIS, 2008



OAKLAND COUNTY
TRAILS MASTER PLAN

- Trail Alternative 2 - Where parking exists within the right-of-way but ample right-of-way width is available. Recommendation for multi-use trail in combination with a new parallel parking lane and service drive, all separated by a small vegetated strip from the principal traffic lanes.
- Trail Alternative 3 - Where on-street parking is necessary but minimal right-of-way width is available. Recommendation for multi-use trail separated by a wide landscape buffer from a new parallel parking lane that will be adjacent to the principal traffic lanes.
- Trail Alternative 4 - Where corridor conditions prevent the incorporation of a multi-use trail. Recommendation for an “airway” or elevated trail located predominantly within the Woodward Avenue boulevard median.

The Plan recommendations were approved by the WCGCC and presented to the councils of all six participating communities. The Woodward Corridor Greenway Master Plan was finalized in April of 2003. Since the adoption of the Plan, implementation efforts have been ongoing, but the project has not gone beyond the conceptual design phase.

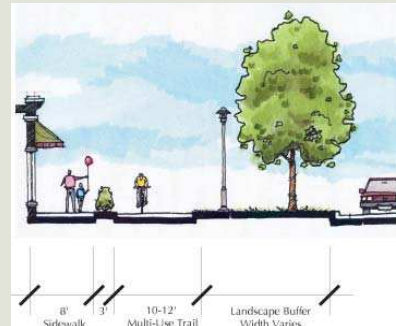
URBAN TRAIL INITIATIVE

In March 2008, Oakland County Parks & Recreation and Oakland County Planning & Economic Development Services hosted a meeting for communities in the southeast quadrant of Oakland County to discuss the concept of an Urban Trail Network. The southeast quadrant of Oakland County is arguably the most developed area within the county and is also heavily used by bikers and pedestrians for travel and recreation, demonstrating the desire for non-motorized facilities that are safe and con-

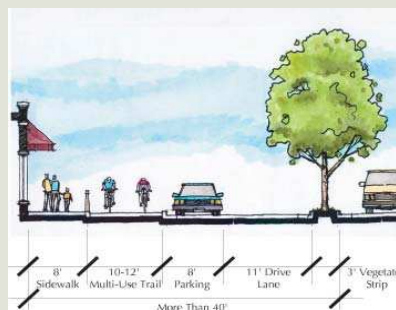


WOODWARD CORRIDOR TRAIL ALTERNATIVES

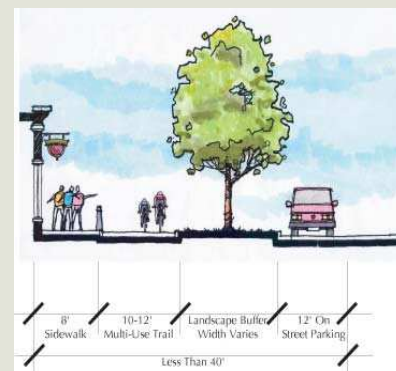
ALTERNATIVE 1



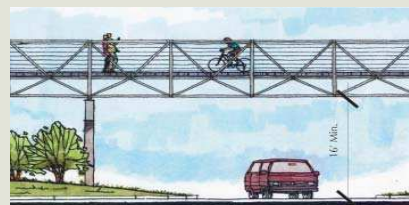
ALTERNATIVE 2



ALTERNATIVE 3



ALTERNATIVE 4



Source: Woodward Corridor Greenway Master Plan

nected. The goal of the meeting was to highlight some of the ways that this quadrant of the county could build upon the existing infrastructure and work together to promote the area as a hub for bicycle and pedestrian activity.

Most of those in attendance expressed similar concerns and interests regarding trails and pathways in this area, including: safety, cost, improving the roads for pedestrians and bicycles, road crossings, hosting community events, signage and public outreach and education.

It was determined that further assistance would be desired from Oakland County Parks & Recreation and Oakland County Planning & Economic Development Services in order to accomplish some of the goals and ideas outlined at the meeting. A service grant program (or similar assistance program) is being planned by Oakland County staff.



URBAN TRAILS NETWORK MEETING PARTICIPANTS

- Berkley
- Beverly Hills
- Bingham Farms
- Birmingham
- Bloomfield Hills
- Bloomfield Township
- Clawson
- Ferndale
- Franklin Village
- Hazel Park
- Huntington Woods
- Lathrup Village
- Madison Heights
- Oak Park
- Pleasant Ridge
- Royal Oak
- Royal Oak Township
- Southfield
- Troy

