

White Pine Trail Connections and Safety Improvements



Michigan
Field Office

Safe Routes to School
Belmont Elementary School
Pilot Project
September, 2004

Introduction

Belmont Elementary School, located in Plainfield Township in Kent County, Michigan was one of 5 pilot schools selected in 2002 to participate in a statewide Safe Routes to School project in Michigan. The school serves 355 students, kindergarten through fifth grade.

Rails-to-Trails Conservancy Michigan Field Office participated in the Belmont Elementary School Safe Routes to School pilot project because of the proximity of the White Pine Trail, a multi-use rail-trail owned by the State of Michigan Department of Natural Resources. The White Pine Trail passes just 1 block northwest of the school and runs close to at least 8 neighborhoods within a 2 mile radius, an optimal range of feasibility for walking and/or bicycling to school.

The overall plan of action for the pilot school project was to:

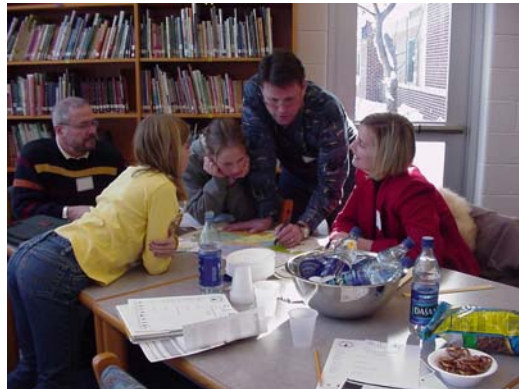
1. Assess student and parent attitudes and behaviors related to walking and biking to school;
2. Develop maps of the area for potential pedestrian traffic;
3. Complete “walkability” checklists, including safety and facilities issues;
4. Analyze findings and develop recommendations for improvements to routes;
5. Identify highest priority, feasible improvements to a route to school and a timeline to make recommended improvements;
6. Participate in a Walk-to-School Day event in May, 2004;
7. Create a campaign promoting safe routes to school;
8. Assist the statewide sponsors in developing a Safe Routes to School toolkit for future participating schools.

Action items 7 and 8 were to be carried out in Year Two of the pilot school program.

The Belmont Pilot School Team

The Belmont pilot school project was carried out by a diverse team of stakeholders:

Bill Armitage, Principal, Belmont Elementary School
Tim Farrell, Physical Education Teacher, Rockford Public Schools
Bill Lang, Kent County Sheriff’s Dept. – Community Policing Dept.
Amy Kowalk, Kent County Health Dept.
Susan Morrow, Plainfield Township Clerk
Gary Oliver, Michigan State Police
Spencer Halliday, parent
Deb Davis, parent
Emily Halliday, student
Alysha Stacey, student
Dick Granse, Friends of the White Pine Trail
Lee Kokinakas, Michigan Fitness Foundation
Risa Wilkerson, Michigan Fitness Foundation
Nancy Krupiarz, Rails-to-Trails Conservancy



The pilot school team expressed great enthusiasm for the White Pine Trail and wanted to encourage its use as a safe route to school. According to the student survey, 8 percent currently walk and 16 percent currently bicycle to school. Although not a specific question on the survey, team members related that of those that currently bike or walk to school, most use the trail.

Student Attitudes

If given their choice of mode of transportation, 80 percent of the students would like to bike, 55 percent would rollerblade, and 50 percent would walk. When asked about the likelihood of being able to get to school in a non-motorized fashion, 64 percent responded that they would walk or bike if their route to school was improved and 29 percent said they might walk or bike, and only 7 percent said they would not walk or bike to school even if their route was improved.

The students at Belmont Elementary School felt that bicycling would be:

- More fun (94 percent)
- More healthy (99 percent)
- Cool (94 percent)

They also felt walking would be:

- More fun (82 percent)
- More healthy (99 percent)
- Cool (78 percent)

In order to walk or bike to school, students perceived they:

- Needed more friends to walk or bike to school with them (80 percent)
- Needed more sidewalks along the route (80 percent)
- Safer crossings (76 percent)

Parent Attitudes

Parents registered similar comments about their children walking or biking to school. Their top two concerns were:

- Children being alone (68 percent)
- Inadequate sidewalk infrastructure to make a safe route (61 percent)

Almost half of the respondents felt that their children walking/biking to school would:

- Encourage a healthy lifestyle (45 percent) and
- Allow them to enjoy the outdoors (45 percent)

Walkability Assessment

The trail's close proximity within a 2-mile radius to the school and neighborhoods assured that it would figure prominently in the walkability assessment. A team of pilot school committee members and a few additional parents divided into three groups to cover the area:

- One group bicycled to the north neighborhoods and assessed potential connections to the trail
- One group bicycled to the south neighborhoods and assessed potential connections to the trail, and
- One group walked to the neighborhoods directly to the east of the school and assessed the sidewalk infrastructure to the school.



INFRASTRUCTURE IMPROVEMENT RECOMMENDATIONS

Trail Connections at the School

The sidewalk running directly from the trail to the school along Belmont Ave. was found to be covered with gravel and debris, making it impassable for rollerblades and difficult for other non-motorized modes. A regular sweeping of the sidewalk would remedy this problem.

An alternative connection to the school property just east of the Jupiter tunnel and across township hall property would allow students from at least 5 neighborhoods to the south direct access to the school, thereby avoiding any interface with Belmont Ave. The one obstacle to this recommendation is that this is also the location of the fire department. Fire trucks on occasion have used the driveway across this property as an emergency exit south to Jupiter Ave. The short connector trail could run across the property to the south side of the township hall parking lot and align with the sidewalk along the back side of the school.



Connection potential across township property to school.

Trail Connections from the Southern Neighborhoods

The number one recommendation that arose from the walkability assessment was to connect the new



Looking North at road right of way on the West Side of Jupiter Ave.

YMCA facility and the Belmont Farms and Rogue River Meadows subdivisions to the trail via a sidepath along the west side of Jupiter Avenue to the trail. There is ample right-of-way along the road to do this, although part of the path would need a culvert underneath to preserve the drainage on this property. Also, the path connection to the trail will require a switchback design because of the steep bank. The land at that point is trail right-of-way owned by the Department of Natural Resources, so a special agreement will have to be drafted to allow this connection to happen. The same type of agreement would have to be negotiated with the DNR for any proposed connection to the trail.

Another alternative for a connection to the trail for the 150 homes in this area and the YMCA would be a traffic signal and crosswalk on Jupiter Ave. for a crossing at Belmont Center Rd. The disadvantage to this option is that it interferes with traffic on Jupiter Rd. while the sidewalk connection to the trail at the tunnel would not.

The trail runs alongside three neighborhoods, Belmont Farms, Rogue River Meadows, and Alcove with entrances/exits along Rogue River Rd. Several dirt path connections to the trail from these neighborhoods were noted, which could become formal connections, but they are all on private property, so would need a special easement from the landowners. There are no sidewalks along either side of Rogue River Rd. which would provide a formal connection to the trail for approximately 175 homes. The sidewalk from Rogue River Meadows would only be about 30 feet, so would be relatively inexpensive. The one on the south side of Rogue River Rd. would need to be about 200 ft.

Traffic speeds along Rogue River Rd. do not permit safe travel on the road by foot or by bicycle. Also, because of the speed on this corridor, it is recommended that “Trail Crossing” warning signs and/or a striped crosswalk be placed on Rogue River Rd. on both sides of the this trail crossing, to alert motorists to potential trail users in the roadway. Another set of trail crossing signs and a crosswalk are needed at the second crossing of Rogue River Rd. after the 90 degree elbow turn. (There are solar-powered crosswalk indicators, which would provide even more safety at these intersections. They are inexpensive and easily installed.) While there are stop signs on the trail alerting trail users to the roadway, there is not the same precaution for motorists.



Only a short sidewalk is needed to connect Rogue River Meadows.

Jupiter Estates, located along the southeast side of the trail, is a subdivision undergoing a new phase of development. A connector path has been designed into the new phase so that the whole neighborhood of approximately 100 homes will be given easy access to the trail.

Another neighborhood, Carlton Woods, has a 3 foot easement given by a property owner for neighborhood access to the trail. The easement climbs a steep hump which separates the neighborhood from the trail. A more formal connection should be sought to allow easier access to the trail for those with disabilities or even moms with strollers. A drainage ditch intersecting with Woodbriar Court, which already has a public easement, may be an alternate connection. Within the subdivision, sidewalk connections, bike lanes, or even a signed bike route would facilitate safe passage to the trail.



Steep bank serves as trail connector



Drainage ditch corridor could be a connector.

Trail Connections from the Northern Neighborhoods

Residents in the neighborhoods to the northwest of the trail have expressed enthusiasm for a safe connection. The road right-of-ways in this area are narrow and contain many large trees, making a sidewalk connection to the trail almost impossible to develop. Therefore, it is recommended that Herrington, Pixley, Van Dam, and Packer all be retrofitted with bicycle lanes as roads come due for improvement projects. There is reportedly a speeding problem in this area so extra law enforcement efforts as well as education of motorists may also be indicated. A bicycle safety curriculum for the students would also be beneficial to educate them on how to maneuver on roads. The beautiful trees in this rural area cast large shadows, causing darkness early in the day, so it is recommended that bicyclists wear bright reflective clothing for visibility.

Improvement Priorities

Each of the three groups participating in the environmental assessment shared their suggestions for improvements with the larger group. Recommendations for priorities were discussed in terms of the ease of implementation, the cost, and which ones would have the most impact for improving the safety of routes to school. In addition to trail-related improvements, there were priorities identified for changing student drop-off and pick-up protocol, parking lot traffic control, installation of sidewalks in neighborhoods away from the trail and encouragement of parent involvement in the program.

The top *trail-related* improvements are ranked below, according to lowest cost, ease of implementation, and having the most significant impact for safety and encouraging walking/biking to school.

◆ **Lowest Cost:**

WHAT: 30 foot connector sidepath

WHERE: Rogue River Meadows subdivision entrance northward to the trail

BENEFIT: Links up approximately 150 homes in Belmont Farms and Rogue River Meadows to the trail

NOTE: Most students would have to travel in reverse away from the school before accessing the trail, thus adding to travel time.

NEXT STEPS: Evaluate the right-of-way for construction; Determine Cost and Funding Source

◆ **Ease of Implementation**

WHAT: Connector path from the trail directly across township property to the school playground

WHERE: Across the back of the township property parking lot to align directly with sidewalk at the back of the school

BENEFIT: Students living in the many neighborhoods west of the school would avoid interfacing with traffic on Belmont altogether and cut their travel time with a shortcut directly to the school.

NOTE: Fire trucks occasionally use the driveway across this property as an emergency exit onto Jupiter Avenue. Some fill would be needed at the entrance of the connector path to bridge a shallow ditch.

NEXT STEPS: Determine exact trail alignment and cost; Determine funding source.

◆ **Most Potential for Significant Improvement for Safe Routes to School**

WHAT: A sidepath on the west side of Jupiter from Belmont Farms subdivision entrance to the trail

WHERE: The sidepath would be in the road right-of-way until reaching the trail right-of-way which is owned by the State of Michigan Parks Division.

BENEFIT: The sidewalk would not only directly link the 150 homes in Belmont Farms and Rogue River Meadows to the trail but would expand facilities for YMCA members who wish to travel to and from their homes via the trail and/or use it for an outdoor workout. The sidewalk would maximize the use of the tunnel as a safe crossing under Jupiter Ave., and avoid a more costly and traffic-impeding alternative of installing a traffic light and crosswalk at Belmont Center Ave.

NOTE: Although there is ample road right-of-way within which to construct a sidepath, engineers may need to include drainage alternatives in certain areas. The steep bank (approximately a 15 ft. drop) will necessitate a long and/or switchbacked ramp for the trail descent to allow for accessibility for the disabled. Also, a permit from the Department of Natural Resources will be needed to construct the ramp on trail property (preliminary indications are that the DNR will be favorable to this request.) Care should also be taken to check for location of drainage pipes within the bank itself before construction.

NEXT STEPS: Seek construction authorization with the Kent County Road Commission, the DNR Parks Division, and the Drain Commission; Determine cost; Seek grant

NOTE FOR ALL TRAIL-RELATED IMPROVEMENTS:

Federal and state grant funds can be sought for connector paths to the trail, which usually cover 75% of the cost, as long as they are built according to AASHTO (American Assoc. of State Highway Transportation Officials) standards. The applicant must then contribute a 25% match to the project. Contact the Michigan Department of Transportation for more information on these grants (www.michigan.gov/mdot).

Encouragement of Trail Use

Since one of the main concerns listed by parents and students alike was they needed more companions for biking and/or walking to school, it is recommended that one or more encouragement programs be instituted. Belmont Elementary has and will continue to participate in the annual “Walk to School Day” event in October, but perhaps a weekly “Walking Wednesday” or “Fitness Friday” event would get more students to try it on a regular basis and therefore, adopt it as part of their lifestyle. Suggested safe routes could be promoted on a map and parent volunteers could be recruited to help.

If there are willing parents with a flexible time schedule, a “walking school bus” program could also help. In this program, volunteers in a particular neighborhood agree to escort a group of students on foot or by bike to school on a regular basis. School administrators and/or teachers might also volunteer, thereby demonstrating a commitment to the program and to a healthy lifestyle change. Elementary school children usually respect and admire these personnel and usually seek to emulate them.



A “walking school bus” provides companionship and an extra measure of security for walking to school.

Incentive programs, such as “Walk a Thousand Miles for Health” could award points to students for walking and biking and accumulating towards a prize. Those not able to walk could also participate by earning the miles at home or in a physical education class. A few gathering sites could be identified as well for those commuting from farther than a mile away.

The brochure that is currently under development at Belmont Elementary School, which explains the Safe Routes to School program and lays out “preferred routes”, will also promote more participation in the program.

CONCLUSION

The Village of Belmont is fortunate to have a ready-made facility away from traffic, the White Pine Trail, which sits in alignment to the school and many of the neighborhoods where its students live. There are only a few infrastructure improvements needed to safely and officially link the trail to the neighborhoods to promote its use as a “safe route” and part of a healthy lifestyle. The improvements will not only help children on their way to school, but safely connect the trail for general use by all Belmont residents for recreation and transportation.

The enthusiasm to encourage use of the trail in a safe routes to school program is high among school personnel and supporters of the program. Encouragement programs, as listed above, so kids learn that it is a fun and safe activity and to convince parents to allow their kids to try walking/biking to school is critical to achieving success.

Rails-to-Trails Conservancy stands ready to assist in whatever way possible to establish the necessary trail links. Thus far, discussions have been held with the Department of Natural Resources Parks Division and Plainfield Township Manager, Bob Holman, toward that end. They have both indicated their willingness to continue to study these recommendations with us and help wherever possible. It is our hope that the White Pine Trail will become the “preferred” route to school for neighborhoods in the area.