

## SECTION 4 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section identifies the social, economic, and environmental factors that exist in the project area and reviews the potential impacts. Those impacts with a reasonable possibility for individual or cumulative significant impacts were analyzed further. The results of this analysis are discussed below.

### 4.1 Relocations

To construct the proposed project, permanent fee right-of-way and grading permits will be required at the time of right-of-way acquisition.<sup>11</sup> Some sections of M-15 now held by permanent easement will be converted to fee-simple ownership. New right-of-way that MDOT will likely need to acquire is identified in the Engineering Report<sup>12</sup> prepared for this project (see Appendix B). Relocation information is summarized in Table 4-1. The acquisition of these parcels will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. A “Relocation Plan – Conceptual Stage” (Appendix D) was developed based on a review of real estate available in the corridor. It was determined that there is an adequate number of residences for sale and commercial space for lease or vacant commercial land available for development that will allow relocation without hardship. Many of the lots along M-15 are deep. Homeowners may be able to relocate/rebuild their homes to the rear of their lots. The same will hold true for some businesses.

**Table 4-1  
Relocation Information**

Type	Township					Total
	Independence	Brandon	Groveland	Atlas	Davison	
Single Family Dwellings	10	4	5	13	6	38
Multiple-Family Dwellings	0	0	0	0	0	0
Apartments	0	0	0	0	0	0
Businesses	1	23	2	12	2	40
Employees	2	133	18	43	4	200
Institutions	0	0	0	0	0	0

Source: The Corradino Group and MDOT

<sup>11</sup> Grading permits give MDOT the right to temporarily enter private property to make minor grading changes - those that will not alter the permanent nature of the ground significantly or negatively. Basically, MDOT would pay a fee for "renting" the property for a short period of time to make these minor changes. Often the result is an improved driveway grade. If a large grade change is made, mitigation may be necessary, i.e. timber retaining walls, vegetation, etc. Decisions on grading permits are made during the design phase.

<sup>12</sup> "Engineering Report, M-15—I-75 to I-69," The Corradino Group and Orchard Hiltz and McCliment, November 2001.

Much housing is available in the corridor. To give some perspective on the availability of new housing, it is noted that the number of building permits for new single-family housing in the townships and villages in the corridor in 1998, 1999, and 2000 totaled 1317. A windshield survey performed in March 2001 found 40 homes for sale on or within one-quarter mile of M-15.

Businesses in the corridor are primarily service oriented with a local client base. They are likely to relocate within the corridor, minimizing job loss. Commercial space for lease and vacant commercial land available for development will allow relocation without hardship. Additionally, many of the lots along M-15 are deep so some business property owners may be able to rebuild/relocate the business structures to the rear of the lots. A considerable number of lots zoned commercial are for sale and commercial space is available for lease at a number of locations.

## **4.2 Social Impacts / Community Cohesion**

M-15 bisects Goodrich. Older residential development is to the west of M-15 around the original town center and millpond. A new subdivision of 100 dwellings is 800 feet east of M-15. M-15 separates these two areas today and would continue to do so as a five-lane road under the Preferred Alternative. Some residents of Goodrich and the Village Council have expressed opposition to any improvements, which they view as changing the rural character of the area. However, Goodrich's population grew by 48 percent in the last decade, and the forecast of future travel demand reflects locally projected growth. Growth would have to be virtually stopped in Goodrich and north and south of it to reduce the need for the project.

The project will have no significant long-term negative impacts on area schools, churches, recreational areas, or police and fire protection services. Although there may be some temporary disruptions during construction, access for emergency vehicles will be provided for during the construction of the roadway. Meetings have been held with school officials and emergency service providers throughout the length of the corridor. Considerations related to emergency services are:

- All vehicles will experience improved travel times.
- In five-lane sections there will be full access to all properties.
- In boulevard sections access will be somewhat restricted by the median. U-turn slots will be available at regular intervals to allow emergency access to all properties. Loops will be provided, if necessary, to improve the turning radius for fire trucks where the width of the median is inadequate to provide such a radius. MDOT has and will work cooperatively with local emergency service providers to review U-turn locations.

### **4.2.1 Community Facilities**

A number of schools, medical centers and other community facilities are present in the corridor. These are described from south to north (Figure 4-1).

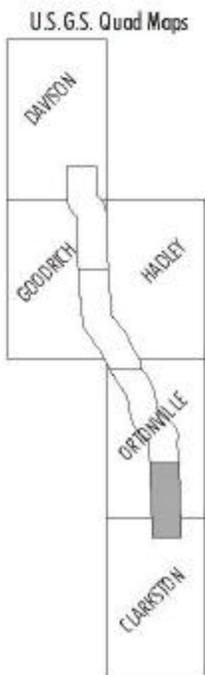
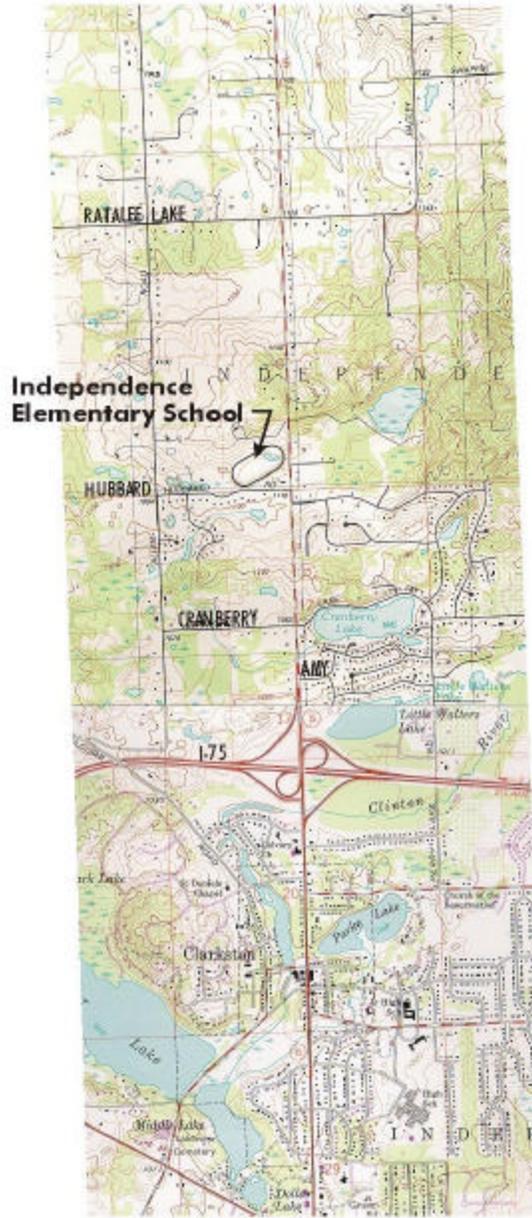
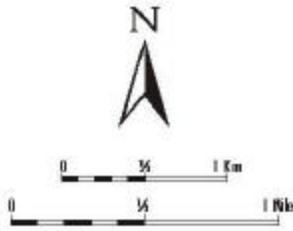
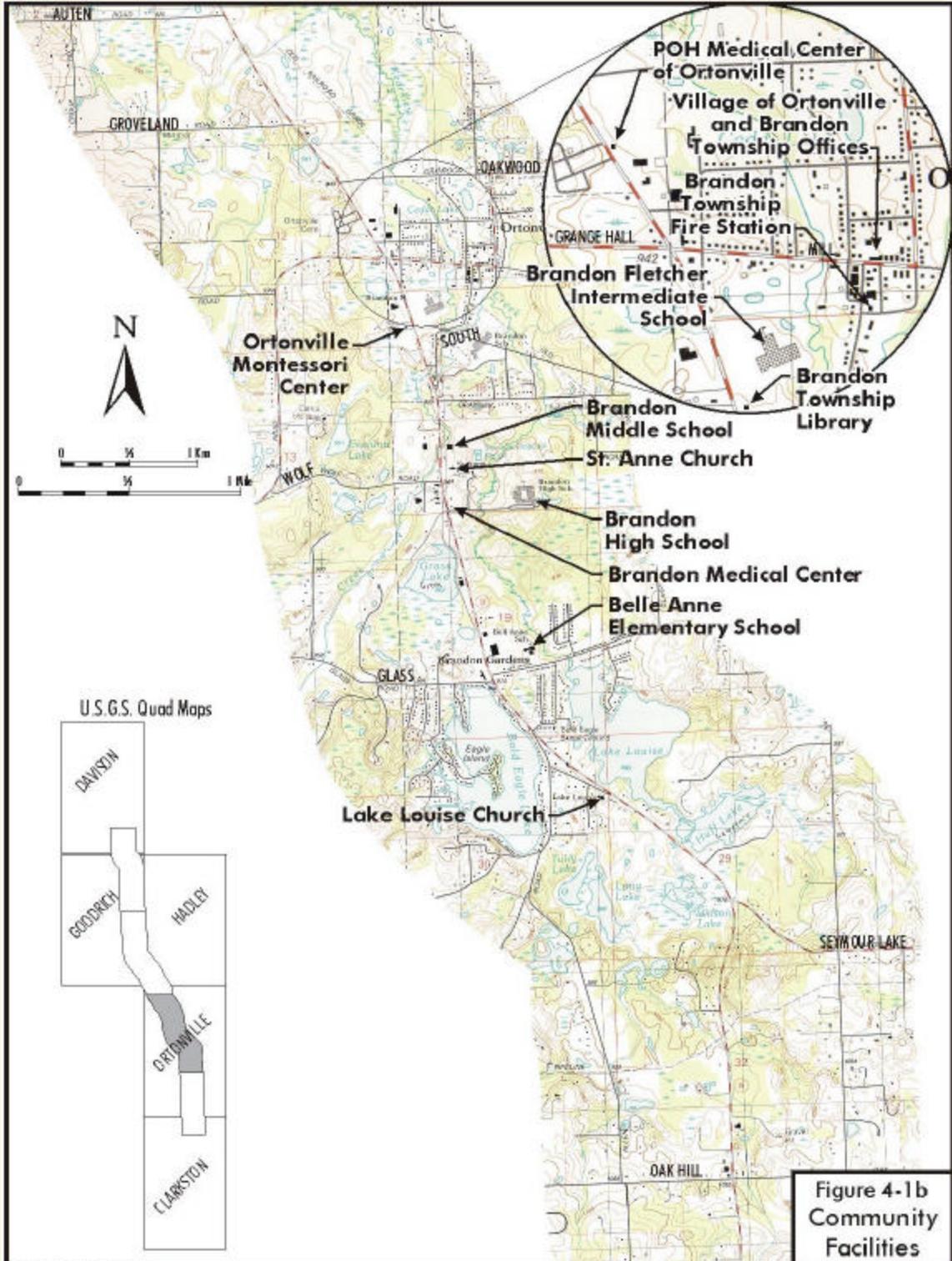
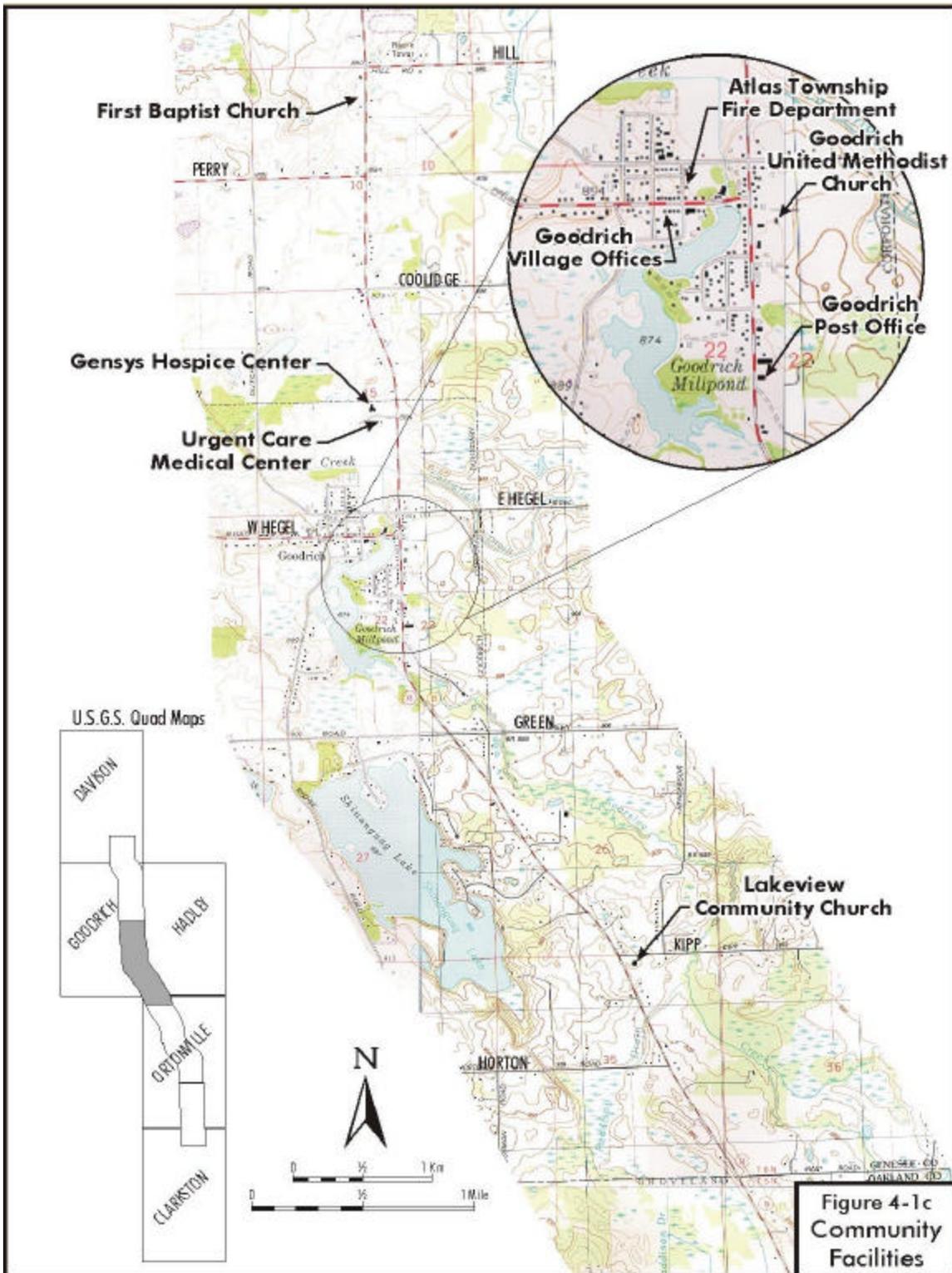


Figure 4-1a  
Community  
Facilities



**Figure 4-1b  
Community  
Facilities**



**Figure 4-1c  
Community  
Facilities**

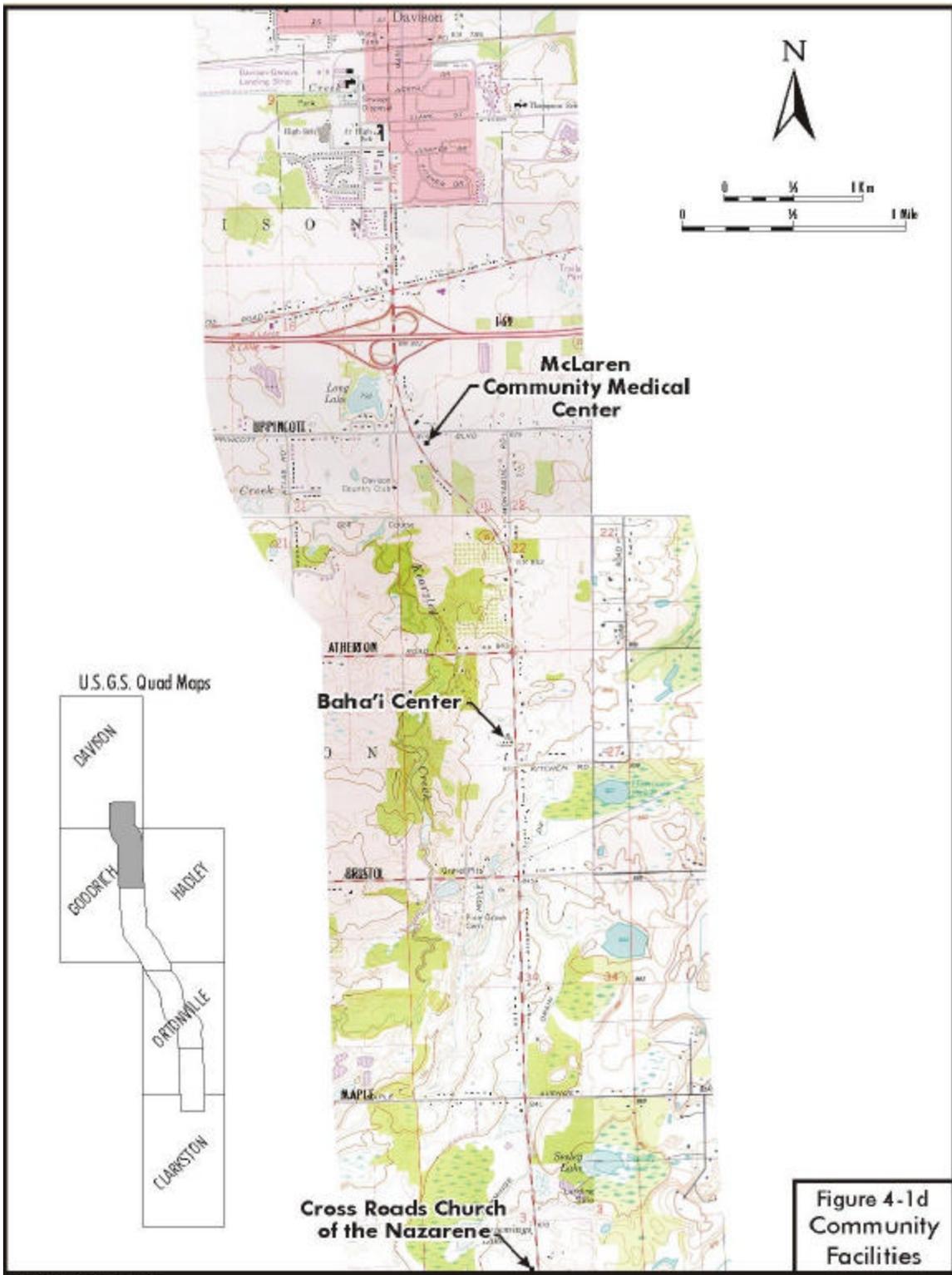


Figure 4-1d  
Community  
Facilities

## **Schools**

- Clarkston Independence Elementary School is at the northwest corner of M-15 and Hubbard Road. The grounds are extensive and the school is more than 500 feet from M-15. A 30-foot sliver of new right-of-way could be needed from the grounds, with no effect on school functions. The entrance to the school is off of Hubbard Road.
- Belle Anne Elementary School is two blocks east of M-15 on Glass Road. Traffic to and from the school passes through the Glass Road intersection. The school has been among those calling for improvement of the Glass Road intersection, which has an offset at its M-15 crossing. The proposed project will correct this offset and align Glass Road properly for safer operation. The school itself will not be directly affected by changes to M-15.
- Brandon High School, south of Ortonville, has a signalized access road connecting to M-15. The school is separated from M-15 by commercial frontages on M-15. A boulevard section is proposed for safety reasons through this area.
- Brandon Middle School is just north of the high school and has its own unsignalized driveway. The boulevard section continues through this area. A new safety path is planned along the school frontage as an independent project. The M-15 project would not affect the school, but could require a minor amount of right-of-way (less than 30').
- Brandon Fletcher Intermediate School is between South Street and Mill Street on the east side of M-15 and continues the Brandon school complex. Its access is via South Street. A sliver of land on the order of 30 feet could be required from the grounds, but no facilities or recreation areas would be affected.
- Ortonville Montessori Center is across M-15 from Brandon Intermediate School. Land could be required from its playground. The playground may be relocated to the rear or the business may be relocated.
- Goodrich and other schools are all well away from the M-15 corridor and would not be affected.
- Louhelen Baha'i Center between Bristol Road and Atherton Road on the west side of M-15 is a National Register eligible site and so is afforded protection under federal law. No land would be needed from the Center.

## **Libraries**

- The only public library in the corridor is the Brandon Township Library adjacent to the Brandon Intermediate School, to the south of the school. Like the school, its access is via South Street. Like the school, about 30 feet of land could be needed, but no facilities or parking would be affected.

## **Government Offices and Services**

- The Village of Ortonville's and Brandon Township's offices are on Mill Street four blocks east of the proposed project. These would be unaffected.
- The Ortonville Fire Station is on South Street one block to the south of Mill Street and would be unaffected.
- The Ortonville Post Office is east of the Village offices and would be unaffected.
- The Goodrich village offices and fire station are one block west of M-15 on West Hegel Road and would be unaffected.
- A new Goodrich Post Office has been constructed on the east side of M-15 just north of Rhodes Road. The existing right-of-way line would be maintained in front of the new Post Office.

### **Medical Facilities**

- The Brandon Medical Center is north of the high school entrance on the east side. About 30 feet could be needed from the front of the lot. Access to these doctors' offices would be right-in, right-out, whereas today there is full access. This access change is in keeping with the access control to be exercised in the school area.
- The POH Medical Center of Ortonville is two blocks north of Mill Street on the east side of M-15. It would be relocated by the project.
- The Urgent Care Medical Center and Gensys Hospice Center are located on the west side of M-15 north of Goodrich off of Hufstader Drive. They are both several hundred feet west of the road and would be unaffected by the project.
- The McLaren Community Medical Center is on the southeast corner of M-15 and Lippincott Boulevard. A narrow strip of right-of-way could be needed for the project, but the center would not be affected. Its access is off of Lippincott Boulevard.

### **Churches**

- Lake Louise Church is on the west side of M-15 between Seymour Lake Road and Glass Road. No right-of-way acquisition is planned for this area.
- St. Anne Catholic Church is on the east side of M-15 north of Wolfe Road. About 20 feet of front yard could be needed. Access would change to right-in and right-out as the church entrance is in a boulevard section.
- Lakeview Community Church is on the southeast corner of M-15 and Kipp Road. About 20 feet of front yard could be needed. Access from Kipp Road would not change.
- Goodrich United Methodist Church is on the east side of Goodrich just south of West Hegel Road. It is set well back from M-15 and would not be affected.
- The First Baptist Church is on the west side of M-15 south of Hill Road. It would lose about 30 feet of front yard, but is set back approximately 150 from the road. Its access would change to right-in, right-out.
- The Crossroads Church of the Nazarene is on the west side of M-15 north of Hill Road. It would lose about 30 feet of front yard, but is set back approximately 150 from the road. Its access would change to right-in, right-out.

Each township has its own school district, with each providing bus services to its schools. Several routes use M-15. Conversations with school officials did not indicate any problems with the planned improvements related to bus use. The boulevard section was noted by some school officials as safer for school bus operations. In all cases students would embark or disembark on the right side of the road (relative to bus operation) as they do today, with no students crossing M-15 to reach the school once leaving the bus.

#### **4.2.2 Considerations Relating to Pedestrian Access and Bicycle Use**

As traffic volumes increase, pedestrians find it more difficult to cross M-15. There are few established pedestrian links across this predominantly rural, high-speed road. Mail is delivered to both sides of the road, so no one crosses to get their mail. Likewise, school bus routes are operated so that children do not cross M-15.

Independence Township calls for safety paths along M-15 in their Master Plan. Such paths are planned with the project. Safety paths (sidewalks) are also likely in Ortonville and Goodrich and in sections with curb and gutter design (a wide outside lane may be provided as an alternative in non-urban areas). In the remainder of the corridor paved shoulders will be provided. Funding has been secured for a safety path in Brandon Township along the east side of M-15 near the high school and middle school. The proposed project will take this path into account.

New sidewalks will be designed to accommodate people with disabilities and will be in compliance with the 1992 Americans with Disabilities Act (ADA). Walk/wait signalization locations will be determined during design.

The planned shoulders and safety paths will accommodate bicycles. M-15 is the first Heritage and Recreation Route in Michigan. Another goal of the organization that achieved this designation is to have M-15 become the first numbered bike route in the state.

#### **4.2.3 Considerations Relating to Mass Transit Service**

There is no regular bus route service on M-15. The Suburban Mobility Authority for Regional Transportation (SMART) provides bus services in Oakland County but not in Independence and Brandon Townships, as these townships have not contracted for SMART Services. The Flint Metropolitan Transit Authority provides “Your Ride” dial-a-ride service daily from 6:30 am to 11:00 pm in Genesee County.

At the Illustrative Alternatives stage of this project, the ability of transit to reduce the need for roadway improvements was tested. In the rural, low-density environments of M-15, a five percent mode split was considered to be the largest that could be achieved. Even with such a high mode split, travel demand indicates the need for four lanes through the length of the corridor.

#### **4.2.4 Maintaining Traffic**

During the construction of the proposed improvements, traffic will be maintained on M-15. Even though the Preferred Alternative is characterized by two roadway types, five-lane and boulevard, the same basic concept of staged construction will be employed. For most of the corridor, part-width construction techniques will be used. This means maintaining traffic on one half of the road, while the other half is being reconstructed.

To construct the five-lane roadway, traffic will be initially moved to the shoulder and the far lane, while two lanes of the new road are constructed. Traffic will then be switched to the two new lanes while the remaining three lanes are completed. For the boulevard, the separation provided by the median will allow traffic to be maintained on the existing roadway while one side of the boulevard is built. Then traffic will be placed on the newly constructed pavement and the remaining half of the boulevard will be constructed.

Part-width construction will also be used on the approaches of cross streets. Temporary traffic signals will be employed to maintain traffic control throughout construction. Access to all residential and commercial driveways will be maintained during the project.

Construction phasing involves a number of factors, such as: funding availability; length of a segment; type of proposed facility (five-lane and boulevard); changes in surrounding character (large wetland complex, dense residential area, commercial area, and the like); and, jurisdictional boundaries, such as the Oakland/Genesee County line, which also forms the boundary between

two MDOT regional offices. Drainage patterns could also influence the final segments. Potential construction segments could be as follows:

1. I-75 to Oak Hill Road (five-lane/very narrow boulevard/boulevard, approximately 3.5 miles) - The most-developed residential area with the greatest amount of vertical relief in the corridor;
2. Oak Hill Road to Granger Road (boulevard/five-lane, approximately 3.8 miles) – A major wetland/lake area;
3. Granger Road to County Line (boulevard/very narrow boulevard, approximately 3.1 miles) - Ortonville and the wetland up to the county line;
4. County Line to Green Road (boulevard, approximately 2.2 miles) - Similar terrain and impacts;
5. Green to North of Hegel Road (five-lane, approximately 1.2 miles) – Goodrich and its developed limits;
6. North of Hegel Road to Maple Road (boulevard, approximately 3.2 miles) - Similar terrain and impacts; and,
7. Maple Road to I-69 (five-lane, approximately 3.3 miles) - Similar terrain and impacts.

Widening M-15 will likely take four years to complete. More than one segment would likely be worked on at once.

#### 4.2.5 Population Trends

Population in the corridor has grown rapidly over the last decade. In the five townships in which the corridor is located the population has grown from 60,709 in 1990 to 78,475 in 2000 for a 29 percent increase. Some areas have grown extremely rapidly. The Village of Goodrich grew 48 percent over the last ten years. Even the township that experienced the smallest amount of growth, Davison Township, had a population increase of 21 percent (Table 4-2).

**Table 4-2  
Corridor Population Growth**

<b>Townships</b>	<b>1990</b>	<b>2000</b>	<b>% Growth</b>
Independence	23717	32581	37%
Brandon	12051	14765	23%
Groveland	4705	6150	31%
Atlas	5551	7257	31%
Davison	14685	17722	21%
<b>TOTAL</b>	<b>60709</b>	<b>78475</b>	<b>29%</b>
Villages			
Ortonville	1252	1535	23%
Goodrich	916	1353	48%

Source: US Census

Note: Ortonville and Goodrich are included in the township totals.

#### 4.2.6 Other Population Characteristics

An examination of census tracts adjacent to M-15 (1990 tracts in Figure 4-2a and 2000 tracts in Figure 4-2b) finds the median age of the population (2000 data) in the corridor ranges from 30.8