

9TH STREET

M-43 (West Main) to Stadium Drive (2.81 miles) - *Kalamazoo County Road Commission*

9th Street is a 2-lane north-south minor arterial from West Main Street (M-43) to Stadium Drive. The northern portion from M-43 to KL Avenue is a recently constructed extension through agricultural and low density, residentially zoned land. The facility serves an area of increasing commercial and residential development activity. 9th Street provides access to the growing commercial corridor, which includes the new Meijer's store and a variety of commercial and office developments located along West Main (M-43). Walmart is reviewing a store site off of 9th Street south of West Main (M-43).

The southern portion of the project (from KL Avenue to Stadium Drive) serves a mixed land use area of single family to high density residential areas and a commercial/retail area along Stadium Drive. The facility provides access to Stadium Drive and I-94.

Future land use plans indicate increased residential development of currently vacant areas along 9th Street, including medium density housing south of KL Avenue, a commercial/retail area south of M-43, and an industrial development-zoned area along the southside of KL Avenue. There is the potential for a new soccer complex by Western Michigan University and AYSO between 8th Street and 9th Street which could increase traffic on this facility further. Current traffic averages over 7,500 vehicles per day. 2025 traffic is projected to be 11,700. Future traffic volumes on the 9th Street corridor would increase more than projected commensurate with development activity and through traffic movements to the M-43 commercial corridor.

The Plan has identified one transportation improvement project for this section of the 9th Street corridor:

2006-2025 9th Street, M-43 to Stadium Drive (2.81 miles): Widen existing 2 lanes to 5 lanes with shoulders, widen or replace the existing bridge over the Amtrak rail line within the existing 100' right-of-way. The estimated project cost in 2000 dollars is \$5,300,000.

Depending upon engineering design and road alignments, some right-of-way acquisition may be required. Current right-of-way varies from 66' to 100'.

Environmental impacts will be limited to minor impacts to residential and commercial areas and the possible removal of some trees to widen the road surface. The Kalamazoo County Road Commission offers tree replacements for trees removed during road construction.

35TH STREET.

Battle Creek Street to I-94 (0.5 miles) - *Kalamazoo County Road Commission*

35th Street is a 2 lane north-south rural major collector from MN Avenue to M-96. The land uses along this segment include agricultural north of MN Avenue, commercial in the area of I-94, and to residential north of the Kalamazoo River to M-96. Galesburg High School is also located in the project segment at Battle Creek Street. Future land use changes are not anticipated here.

I-94 has an interchange at 35th Street which has induced some of the recent commercial development near the interchange. 35th Street connects to M-96 and Galesburg and to Comstock by way of M-96. There are some interchange sight distance limitations when entering 35th Street. 35th Street also has a grade issue northbound across the interchange.

There are capacity deficiencies and congestion during the a.m. and p.m. peak periods. There are no bypass lanes to get around traffic waiting to get onto I-94.

With the continued growth in residential uses in the Galesburg area and north into Richland Township, traffic volumes are expected to grow from the 18,000 vehicles a day currently to an estimated 23,000 in 2025.

The Plan identified one transportation improvement project for this section of the 35th Street corridor:

2006-2025 35th Street, south of I-94 to Battle Creek Street (0.5 miles): Widening 35th Street from 2 lanes to 4 lanes from south of I-94 to the existing 4 lane section south of Battle Creek Street. Adequate engineering design and road alignment details need to be completed to determine how much to widen the Kalamazoo River Bridge and the bridge over I-94. Work would have to be coordinated with Michigan Department of Transportation for interchange work at I-94.

Aside from the coordination with the Michigan Department of Transportation, there are some potential environmental impacts that would need to be addressed during the design and construction phases of the project. The Kalamazoo River Bridge may need to be widened. Grading would also be needed near I-94, resulting in soil erosion and sedimentation control measures being necessary. Social impacts to abutting land uses would be minimal. The Kalamazoo County Road Commission offers replacement trees for those removed by road construction.

ARBORETUM "CONNECTOR"

Drake Road to Kendall Avenue (1.23 miles approximate) - *Private Developer*

Located in the City of Kalamazoo, this project would construct a new east-west urban collector within the former proposed Arboretum Planned Unit development to provide access to Drake Road and Kendall Avenue as this area develops. At this time, it is not known when development will occur. The western portion along Drake Road is zoned for commercial use with the majority of the site being zoned for medium and low density residential use.

Access to the facility would be provided by local roads internal to the residential project. While traffic volumes on the facility will be primarily generated by the local residents of the complex, it is likely that additional through traffic volumes will occur because of its proximity to the WMU campus area and direct access to the Drake Road/West Main retail areas.

2006-2025 Arboretum "Connector", Drake Road to Kendall Avenue (1.23 miles):
Construct new 3-lane road with curb, gutter, bicycle lanes, and sidewalk on a 66' right-of-way. Cost of the project would be borne by the developer.

Social impacts will be minimal because the project will be constructed on land as part of the Arboretum development project. Environmental impacts due to possible tree removal and construction will be minimized by adequate engineering design and construction practices. The cost estimate for this project in 2000 dollars is \$1.5 million.

BURDICK STREET/JOHN STREET CONNECTOR

Burdick Street at Vine Street to John Street at Walnut Street (.63 miles) - *City of Kalamazoo*

Burdick Street is a north-south minor arterial from the central business district of the City of Kalamazoo at Lovell Street to Kilgore Road at the south city limits.

The facility serves a mix of low to medium density residential, commercial/retail and industrial areas through the center of the city. Major east-west corridors bisecting the road include Vine Street, Crosstown Parkway, and Cork Street. Future land use plans indicate that residential, commercial, and industrial uses will continue with increasing intensity.

Burdick Street from Lovell Street south to Burr Oak currently operates as a 2-way street. North of Crosstown Parkway, traffic on Burdick averages over 10,000 vehicles a day. 2025 traffic is projected to be approximately 13,000.

The Plan has identified the following transportation improvement projects:

2006-2025 Burdick Street/John Street Connector, from Burdick Street at Vine Street to John Street at Walnut (.23 miles): Widen the existing 2-lane street to 4 lanes and improve the curve at the intersection of Dutton Street and John Street. Completion of this project will improve access directly to the downtown parking ramps located on Lovell Street and on South Street. Right-of-way acquisition would be required to improve the curve alignment from Dutton Street to the Walnut Street/John Street connection point. Total project cost estimate in 2000 dollars is \$350,000.

Identified environmental impacts are associated with the acquisition of right-of-way for the Burdick/John Connector and potential removal of residential units along the proposed alignment. Final engineering design will seek to ameliorate these unavoidable dislocations. Minimal impacts on the natural environment are related to possible tree removal along the new roadway.

CENTRE AVENUE

Portage Road to South Sprinkle Road (1.01 miles) - *City of Portage*

Located in the center of the City of Portage, this east-west facility is a principal arterial extending from Q Avenue in Texas Township to South Sprinkle Road in Pavilion Township. Centre Avenue serves a mix of intensive residential, commercial/retail, and industrial land use areas. The road is the southern most continuous east-west facility in the urban area. Traffic movement along this corridor is distributed to major commercial/retail and industrial areas by way of Oakland Drive, Westnedge Avenue, Shaver Road, Lovers Lane, Portage Road, and South Sprinkle Road.

The Angling Road/US-131 area has experienced extensive residential and commercial/office growth including the Borgess Medical Complex and Moorsbridge Office Complex. Portage Central High School and Administration complex and the Portage City Hall complex are located near the Westnedge Avenue/Centre Avenue intersection. Residential properties along Centre Avenue between Oakland Drive and Westnedge Avenue are transitioning to commercial uses. Residential and industrial park development activity is occurring south of Centre Avenue along Oakland Drive and Shaver Road. Current land use in the project area is industrial/commercial.

Traffic volumes currently average 10,000 vehicles a day between South Sprinkle Road and Portage Road. Future traffic projections for 2025 estimate traffic to be 18,000 per day in this section. Current peak hour deficiencies and congestion will increase between South Sprinkle Road and Portage Road commensurate with future plans for industrial growth north and south of Centre Avenue and the associated through trip movements on this facility.

Transportation improvements identified in the Plan include:

2002 Centre Avenue between Portage Road and South Sprinkle Road (1.01 miles): Widen existing 2 lanes to 4 lane boulevard with wide outside lanes and a sidepath, with turn lanes at the Portage Road and South Sprinkle Road intersections. Current right-of-way varies from 66' to 76'. Final engineering design and roadway alignment will

determine if additional right-of-way is required. Estimated project cost in 2000 dollars is \$2.75 million.

Associated impacts on the social environment will vary depending on right-of-way needs. Final engineering design will seek to minimize residential/commercial dislocation and construction impacts. Any impacts on the natural environment will be mitigated through adequate considerations of design and construction. The boulevard section was selected to minimize the impact on mature trees. The City of Portage landscapes road projects including tree and other plantings.

CITY OF KALAMAZOO CENTRAL BUSINESS DISTRICT

Traffic Operations Change - *City of Kalamazoo, Michigan Department of Transportation*

The City of Kalamazoo and its central businesses have been concerned with transportation access, ease of navigation, and the transportation system's impact on retention and recruitment of businesses in the central business district. The current one-way system that was built in the 1960's is seen by many as an impediment to a vital business and pedestrian friendly area. The appropriate balance between capacity and ease of traveling to and through the area with the desire for less speed and wider curb lawn areas is being debated.

Several studies of the components of the one-way system have been completed over recent years. The most recent study looked at the entire one-way system, excepting the north/south one-way pair of Westnedge Avenue and Park Street. After reviewing the comprehensive transportation and economic impact study, the City of Kalamazoo, with the encouragement of the Downtown Kalamazoo Incorporated Business Association is converting most of the one-way streets to two-way operations. Final designs have yet to be selected and agreement between the Michigan Department of Transportation and the City of Kalamazoo on the cross section and operations of M-43 needs to be arrived at.

The Plan has identified 9 transportation operations changes for downtown Kalamazoo:

- 2004-2025 Douglas Avenue, West Main Street to Kalamazoo Avenue (0.17 miles): Convert 3-lane one-way section to a 4-lane two-way section of road from West Main Street to Douglas Avenue, north of Kalamazoo Avenue. Parking would continue to be prohibited. The free flow operations at Kalamazoo Avenue and at West Main Street would be changed to traffic signal control. Estimated project cost in 2000 dollars is \$130,000.
- 2004-2025 Edwards Street, South Street to North Street (0.45 miles): Convert two-lane one-way traffic to a two-lane two-way operation. Add turn lanes at signalized intersections. Parking would be allowed where possible. Traffic

signals would be modified, as would the railroad crossing. Total project estimated cost in 2000 dollars is \$550,000.

- 2004-2025 Kalamazoo Avenue, Douglas Avenue to Michikal Avenue (0.45 miles): Convert 3-lane one-way to 3-lane two-way operation. The third lane would be for left turns. Parking would continue to be prohibited. Kalamazoo Avenue would be relocated to 'T' into Michikal Avenue. M-43 would be removed from this section. A new signal would be needed at Kalamazoo Avenue's intersection with both Douglas Avenue and Michikal Avenue. The existing railroad crossing would be removed and relocated. Right-of-way would be required for relocating Kalamazoo Avenue. Total project cost is estimated in 2000 dollars to be \$650,000.
- 2004-2025 Kalamazoo Avenue, Westnedge Avenue to Michigan Avenue (0.87 miles): Convert 3 and 4-lane one-way to 5-lane minimum two way operation. Additional lanes may be required at specific locations. Parking would be prohibited. This section would carry both directions of M-43. Traffic signals would be modified as would the two railroad crossings east of Pitcher. Total project cost is estimated in 2000 dollars to be \$1,761,000.
- 2004-2025 Lovell Street, Michigan Avenue to Portage Street (1.17 miles): Convert 2-lane one-way road to 2-lane two-way operation with turn lanes at signalized intersections. Modify traffic signals. Maintain as much on-street parking as possible. Total project cost is estimated in 2000 dollars to be \$570,000.
- 2004-2025 Michigan Avenue, West Main Street to Harrison Street (1.15 miles): Convert 3 to 6-lane one-way road to 5-lane two-way operation. Maintain as much on-street parking as possible. This cross section may be reduced if final design diverts most traffic onto Kalamazoo Avenue and if Kalamazoo Avenue can have sufficient capacity to handle the diverted traffic. Modify traffic signals and the railroad crossings east of Pitcher Street. Total estimated project cost in 2000 dollars in \$1,220,000.

- 2004-2025 Michikal Avenue, West Main Street to Kalamazoo Avenue (0.33 miles): Convert 3-lane one-way to 5-lane minimum two-way operation. Parking would continue to be prohibited. Additional turn lanes might be required. Both directions of M-43 would be on Michikal Avenue. Total project cost is estimated in 2000 dollars to be \$300,000.
- 2004-2025 South Street, Michigan Avenue to Portage Street (0.90 miles): Convert 2-lane one-way to 2-lane two-way operation. Add turn lanes where needed (traffic signals and parking ramps). Retain as much on-street parking as possible. Modify traffic signals. Total estimated project cost in 2000 dollars is \$710,000.
- 2004-2025 West Main Street, Douglas Avenue to Michigan Avenue (0.30 miles): Convert 3-lane one-way road to 4-lane minimum two-way operation. Turn lanes will be needed at Douglas and at Michigan. Both directions of M-43 will be on this segment. Traffic signals and the railroad crossing will be modified. Parking will be prohibited. Total project cost is estimated in 2000 dollars to be \$500,000.

Social and environmental impacts will vary from project to project depending on final design and alignment. Some projects like Kalamazoo Avenue from Douglas Avenue to Michikal Avenue should see a reduction in traffic volumes with the relocation of M-43. Other segments, such as Kalamazoo Avenue between Westnedge Avenue and Michigan Avenue, will lose on-street parking and may lose curb lawn width depending on final design. Residents on South and Lovell Streets will be impacted by possible loss of on-street parking. There may be problems during the transition period as drivers and pedestrians learn the new road system. It is anticipated that congestion and emissions will increase with the conversions depending upon final design.

CROSTOWN PARKWAY

Vine Street to King Highway (0.74 miles) - *City of Kalamazoo*

Crosstown Parkway is a minor arterial from Bronson Boulevard to Portage Street. Crosstown Parkway is a collector from Portage Street to King Highway. In the segment from Vine Street to King Highway, adjacent land uses are primarily commercial and industrial. From Vine to King Highway, Crosstown Parkway changes from a 4-lane to a 2-lane road with a center turn lane at the traffic signal at Portage. Parking is allowed from east of Portage Street to King Highway. Crosstown Parkway connects the southwest portion of the City of Kalamazoo to the center core. It crosses four of the major north-south roads.

Traffic on this segment of road averages over 7,700 vehicles a day. Future traffic is estimated to be 9,400 by 2025.

While this segment does not experience significant congestion or deficiencies at this point, there are efforts under way to encourage infill development along Portage Street and the east Crosstown Parkway segment. If successful, traffic volumes will increase commensurate with the increased development.

The Plan has identified a transportation improvement project for this section of the Crosstown Parkway corridor:

2006 Crosstown Parkway, Vine Street to King Highway (0.74 miles): Remove on-street parking, widening to allow markings for four traffic lanes on this segment. The total project cost estimate in 2000 dollars is \$1,363,000.

Social impacts should be minimal since no additional right-of-way is necessary. Environmental impacts should be minimal since widening would be minor and adequate engineering design should minimize the potential adverse impacts. The City of Kalamazoo plants new trees in conjunction with their road projects following the tree planting guidelines.

DRAKE ROAD

Grand Prairie Road to Canterbury Avenue (1.67 miles) - *City of Kalamazoo*

Drake Road is a north-south urban minor arterial forming the boundary between the City of Kalamazoo and Oshtemo Township from Ravine Road to West Main (M-43). The facility continues south as a principal arterial connecting to KL Avenue, Michigan Avenue, and Stadium Drive.

The road serves a residential growth area to the north, the Maple Hill Mall, and the extensively developed retail/commercial West Main (M-43) corridor. Adjacent land use includes the Mount Ever-Rest Memorial Gardens Cemetery and the Kalamazoo High School complex north of the project limits. Future land use plans propose development of medium to high density residential, retail growth in Oshtemo Township north and west of Maple Hill Mall, and continued residential growth in the H Avenue and 10th Street areas.

Traffic volumes on the 2-lane facility between West Main (M-43) and Grand Prairie currently average over 12,000 vehicles a day over the project length, resulting in periods of deficiency during peak hours. Proposed development activities along this section will increase the periods of congestion and delay on this road. 2025 projected traffic is 13,476.

Transportation improvements identified by the Plan include:

2006-2025 Drake Road, Canterbury to Grand Prairie (.73 miles): Expand the 2-lane facility to 3 lanes with shoulders within the existing 66' right-of-way. Estimated project cost in 2000 dollars is \$1,149,000.

The proposed project will cause minimal environmental impact to residences along the project area because no additional right-of-way is required. Impacts on the natural environment will be limited to the possible need to remove trees to accommodate the additional lanes. The City of Kalamazoo plants new trees following the tree planting guidelines.

I-94

12th Street to South Sprinkle Road (6.5 miles) - *Michigan Department of Transportation*

I-94 is an interstate freeway running from Chicago to Detroit through Kalamazoo County. Heavy volumes of personal motor vehicles and truck traffic use this corridor. Volumes and congestion are particularly high from 12th Street (or the beginning of the US-131 interchange with I-94) and South Sprinkle Road. Many local residents use I-94 and US-131 instead of surface streets to move from one part of the urban area to another. A recent planning study of I-94 in Kalamazoo County identified this section from 12th Street to South Sprinkle Road as the most deficient. High Priority Project funding was provided to complete early preliminary and preliminary engineering to widen I-94 to 6 lanes in the 6.5 mile segment. A contract has been entered to complete engineering through preliminary engineering, to add through lanes, and to improve interchange deficiencies at US-131, Oakland Drive, and Westnedge Avenue.

Traffic on I-94 between 12th Street and South Sprinkle Road averages over 60,000 vehicles per day. Traffic volumes in 2025 are projected to reach 90,000. There are periods of significant delay and congestion on I-94 currently in the a.m. and p.m. peak periods. There are several occasions that congestion forces traffic off of I-94 onto surface streets adding to congestion on the local street network.

The Plan has identified three transportation improvement projects for this segment:

2002-2004 12th Street to South Sprinkle Road (6.5 miles): Finish early preliminary engineering and complete preliminary engineering to add one through lane in each direction on I-94 in this segment and to improve the interchanges at US-131, Oakland Drive, and Westnedge Avenue. This work will move toward engineering design and construction to widen I-94. It will identify social and environmental issues as well as identifying areas where right-of-way may need to be acquired. Early and preliminary engineering costs are estimated in 2000 dollars to be \$10,394,500.

No social or environmental impacts are expected with this engineering effort. The proper process of preliminary engineering will help identify and minimize potential negative impacts.

2006-2025 I-94, 12th Street to east of US-131 (0.75 miles): Partial improvement to the I-94 and US-131 interchange. Funding projected to be available for the life of the Plan is insufficient to do more than a partial improvement to this deficient interchange. Peak period backups on the ramps are a common occurrence. The Michigan Department of Transportation will determine how best to begin to improve this interchange. Project estimated cost in 2000 dollars is \$27,580,000.

Social and environmental impacts should be minimal. All work will be within the existing right-of-way.

2006-2025 I-94 Bridge under Lovers Lane: In coordination with the City of Portage's Lovers Lane widening project and in anticipation of widening I-94, reconstruct, lengthen, and widen the Lovers Lane bridge over I-94. Total project cost is estimated to be \$5,000,000 in 2000 dollars.

There should be minimal social impact with this project other than possible construction disruption. There are potential environmental issues that adequate engineering design and alignment would minimize adverse impacts. With the grading, excavating, closeness of Loy Norrix High School and Portage Northern High School, care in construction, soil erosion, and sedimentation controls will be necessary.

KILGORE ROAD

Oakland Drive to Westnedge Avenue (1.22 miles) - *City of Kalamazoo*

Kilgore Road is an east-west minor arterial from Oakland Drive to Sprinkle Road. The facility forms the boundary between the cities of Kalamazoo and Portage.

The road serves a mix of low to medium density residential areas located along the project length, from Oakland Drive to Westnedge Avenue, and provides access to the Westnedge Avenue commercial corridor, Hackett High School, and St. Monica's Elementary School. Current traffic volumes on the predominantly 2-lane facility average over 14,700 vehicles a day. Most of the traffic on the facility is generated by through traffic movements to other destination points by way of Oakland Drive, Westnedge Avenue, or east Kilgore Road. Deficiencies occur at peak a.m. and p.m. hours along the segment.

Future land use plans indicate continued residential use and some additional infill of residential areas to the west of Bronson Boulevard. The corner area of Kilgore near Westnedge remains commercial with an entrance to the new Lowes Store south of Kilgore. 1998 traffic averages above 10,000 vehicles per day. 2025 traffic volumes are estimated at 13,000 vehicles a day.

The following transportation improvement project was identified by the Plan:

2003 Kilgore Road, Oakland Drive to west of Westnedge Avenue (1.22 miles): Widen existing 2 lanes to a 3-lane cross section, where possible, with curb and gutter within the existing right-of-way to provide a turn lane. Consider inclusion of non-motorized facilities. Right-of-way varies from 66' to 83'. Total project cost estimate in 2000 dollars is \$1,550,000.

Social impacts to residential areas will be minimized by engineering design and proper construction practices. Project meetings have begun between the City of Kalamazoo, residents, and non-motorized interested parties to work on design features of this project.

KILGORE ROAD

Old Kilgore Road to west of Portage Road (1.45 miles) - *City of Portage*

Kilgore Road is an east-west minor arterial continuing from Westnedge Avenue to Sprinkle Road in the City of Portage. It establishes the boundary between the City of Kalamazoo and the City of Portage. Land use in the project area covers a mix of activities ranging from Milham Park, Loy Norrix High School, commercial/retail/office, and low to medium density residential areas.

This 2-lane segment predominantly serves through traffic movements from major commercial/retail areas at Westnedge Avenue and Portage Street, industrial employment areas east of Portage Street, and residential locations at the Kilgore/Burdick/Woodmont intersection area. Current traffic volumes on the facility average over 13,500 vehicles a day. Future land use along the segment will remain unchanged. 2025 traffic volume on this segment of the facility is estimated to be over 16,500 vehicles a day. Safety project funding has been applied for the improvement of the Kilgore Road at Lovers Lane intersection.

Deficiencies occur during peak a.m. and p.m. hours, resulting in congestion and traffic delay along the segment.

The Plan has identified the following transportation improvement projects:

2006-2025 Kilgore Road, Lovers Lane to west of Portage Road (.70 miles): Widen existing 2-lane road to 3 lanes with bicycle lanes within existing 66' of right-of-way with a turn lane at the Lovers Lane intersection. Total project cost estimate in 2000 dollars is \$1.0 million.

Assessments indicate that any potential social and natural impacts will be minor because additional right-of-way is not required. Care must be exercised to avoid any impacts on Milham Park and Milham Golf Course. Proper engineering design and construction procedures will minimize or eliminate any potential environmental impacts. The City of Portage landscapes its road projects including tree and other plantings.

2006-2025 Kilgore Road, Old Kilgore Road to Lovers Lane (.75 miles): Widen existing 4-lane cross section to 5 lanes. The existing railroad crossing and the structure over Portage Creek will both need to be widened. Additional right-of-way may be needed. The total project estimate in 2000 dollars is \$775,000.

Potential social impacts should be minor. Existing residential properties are set back from the road. Potential environmental impacts are associated with this project. Widening to 5 lanes across Portage Creek will require widening of the culvert across Portage Creek. The adjacent railroad crossing will have to be widened as well. Coordination with other potential work on I-94 that would use this section of Kilgore Road as a detour route will be required. At this point, the only work identified in the Transportation Plan in this area is reconstruction of the Lovers Lane bridge over I-94. Care must be exercised to avoid impacts on the Blanche Hull Preserve. Adequate engineering design and construction procedures will minimize any potential adverse environmental impacts. The City of Portage landscapes its road construction projects including trees and other plantings.

KL AVENUE**Drake Road to 9th Street (1.6 miles) - *Kalamazoo County Road Commission***

KL Avenue is a 2-lane east-west roadway in Oshtemo Township which ranges in functional classification from a rural minor collector (4th Street to 8th Street), an urban collector (8th Street to 9th Street), and an urban minor arterial (9th Street to Drake Road). These changes reflect the changing land use and increasing development densities occurring along the road as it approaches the City of Kalamazoo.

The road serves rural, low density residential areas at the western portion of Oshtemo Township. A mix of medium density residential and industrial areas are located near the 9th Street intersection. At the eastern end, KL Avenue serves a large trailer park and several apartment complexes located near US-131 and Drake Road. Current traffic on this segment averages over 11,000 vehicles a day. Future traffic is projected to be 11,700. This projection may be low given the increasing development of student apartments in this area. KL Avenue provides access to M-43, Stadium Drive, I-94 by way of 9th Street, Western Michigan University by way of Michigan, and direct access to Drake Road.

Future land use plans for the area focus on increasing residential density and expansion of industrial and commercial sites in the 9th Street area. While the roadway does not currently show significant deficiencies, future development will add traffic increases commensurate with this development.

Transportation improvements identified in the Plan include:

2006-2010 KL Avenue, Drake Road to 9th Street (1.6 miles): Widen the existing 2-lane facility to 5 lanes from 9th Street to Drake Road. Final project design will determine whether additional right-of-way over the existing 66' will be required at specific locations. Estimated project cost in 2000 dollars is \$2.5 million.

Assessment of environmental impacts include the need for engineering design to direct road surface runoff to catch basins in the environmentally sensitive area near the US-131 overpass

and potential removal of some trees to provide for the additional lanes. Coordination with other construction projects will be necessary to avoid unnecessary conflicts. Social impacts on existing residential and commercial areas will be minimal. The Kalamazoo County Road Commission offers tree replacements for trees removed by road construction.

LOVERS LANE

Kilgore Road to Centre Avenue (2.7 mile) - *City of Portage*

Lovers Lane is a north-south minor arterial from Portage Street in the City of Kalamazoo to Forest Drive in the City of Portage. One project area, from Milham Avenue to Kilgore Road, is within the northeast quadrant of the City of Portage. South of I-94, adjacent land use is primarily low density single family residential. North of I-94, the Loy Norrix High School complex occupies the east side. The area to the west is occupied by office sites. Commercial and retail developments are present at the Milham Avenue intersection. The other project area from Centre Avenue to Milham Avenue has a mix of commercial and residential land uses.

Traffic volumes on the 2-lane facility average over 14,000 vehicles a day with severe deficiencies occurring during a.m. and p.m. peak hours. The corridor has become a major alternate route, bypassing Westnedge Avenue, to the Southland and Crossroads Malls retail areas by way of Milham Avenue and Romence Road Parkway. The facility also serves traffic to the Pharmacia Company facilities located on Milham Avenue between Lovers Lane and Westnedge Avenue. Westbound traffic from Winters Drive encounters frequent delays due to the traffic volume and limited sight distance of oncoming traffic over the 2-lane I-94 bridge overpass on Lovers Lane.

Future land use plans indicate a potential for commercial and office areas in the vicinity of the Milham Road/Lovers Lane intersection. Although the land is zoned for medium density residences, recent development indicates a trend to office and commercial development. Traffic increase is estimated at over 26,000 vehicles a day by 2025.

The Plan has identified two transportation improvement projects:

2006-2025 Lovers Lane, Kilgore Road to Milham Avenue (0.8 miles): Widen existing 2-lane and 4-lane road to a 4-lane boulevard section with wide outside lanes and a sidepath. Coordinate with Michigan Department of Transportation to replace the bridge over I-94. Existing right-of-way varies from 66' to 83'. Additional

right-of-way will be required at specific locations pending final engineering design. The City of Portage is in the process of acquiring properties along the section of Lovers Lane south of I-94. Project cost estimate in 2000 dollars is \$2,750,000.

2006-2025 Lovers Lane, Milham Avenue to Centre Avenue (1.9 miles): Widen the existing 4 lane road to 5 lanes. Extend Zylman drain structure if needed. Right-of-way should not be required. Total project cost estimate in 2000 dollars is \$2,625,000.

There will be some social impacts on current residential areas due to right-of-way acquisition and displacement of homes adjacent to the I-94 overpass bridge approach. Environmental impacts will be limited to the removal of trees in some areas to accommodate widening the facility to 4 and 5 lanes and potential tree work on the structure over the Zylman drain. The boulevard section minimizes the impact to mature trees. Adequate engineering design and soil erosion and sedimentation control will minimize adverse impacts. The City of Portage landscapes its road projects including trees and other plantings.

MALL DRIVE

Constitution Boulevard to J.C. Penney Drive (.38 miles) - *City of Portage*

Mall Drive is an east-west urban collector located between Constitution Boulevard and Westnedge Avenue in the City of Portage. The road serves the area of Southland Mall, Crossroads Mall, several large retail stores, and low to medium density residential areas. Land use along Constitution Boulevard is primarily high density residential. Future land use plans in the project area indicate increasing intensive retail/commercial and medium density residential uses.

The facility provides access to Oakland Drive from Milham Avenue or Romence Road by way of Constitution Boulevard. It serves as an alternate route to the heavily traveled Westnedge corridor for mall-bound traffic from the northwest and western urban areas. Existing Mall Drive is configured with 3 lanes west of J.C. Penney Drive on 66' of right-of-way. From J.C. Penney Drive to Westnedge Avenue, Mall Drive is 5 lanes wide.

Current traffic volumes on this road range from over 7,500 vehicles at the west end to over 11,500 vehicles a day near the Westnedge Avenue intersection. Frequent periods of congestion and delay occur during peak hours due to turning movement delay at parking lot driveways. Future year 2025 traffic projections estimate over 15,500 vehicles a day will use this facility.

The Plan has identified the following transportation improvement project:

2006-2025 Mall Drive, Constitution Boulevard to J.C. Penney Drive (.38 miles): Reconstruct and widen the existing 3-lane facility to 5 lanes on an 80' right-of-way. Additional right-of-way will be required. Total project cost estimate in 2000 dollars is \$1,200,000.

There will be some minor social impacts to residential and business locations related to acquisition of the required right-of-way. Adequate engineering design and final roadway

alignment will consider measures to ameliorate these potential impacts. The City of Portage landscapes its road construction projects including trees and other plantings.

MICHIGAN AVENUE/KL AVENUE

Drake Road to Knollwood Street (1.5 miles) - *City of Kalamazoo*

Michigan Avenue/KL Avenue is a 4-lane minor arterial with added turn lanes at the Drake Road, Eldridge/Kenbrooke, and Howard Street signalized intersections. East of Howard Street, Michigan Avenue is a 4-lane collector street. Michigan/KL is a major access route between Oshtemo Township and Western Michigan University and the City of Kalamazoo downtown. Fronting land uses are commercial near Drake and near Howard, with low to medium density residential along the rest of its length. Significant student housing is located along Michigan Avenue and in Oshtemo Township. Right-of-way varies from 66' to 100' along Michigan Avenue.

Michigan Avenue currently has traffic volumes averaging over 22,000 vehicles per day. There is significant congestion occurring during several periods during the day. Western Michigan University class change periods cause particularly heavy traffic volumes. As more student housing is developed west of Michigan Avenue and KL Avenue, and with the development of Western Michigan University's engineering campus off of Drake and Parkview, traffic volumes will continue to increase despite Metro Transit's bus service available to students. 2025 traffic volumes are estimated to reach 27,000.

The Plan has identified two transportation improvement projects for this segment:

2002 Howard Street at Michigan Avenue intersection improvement: This project will add capacity to the two most congested movements. The northbound to westbound left turn lane will have a second left turn lane added and increased storage. The east bound through movement will have a second through lane added. The intersection work will coordinate and complement road changes on Michigan Avenue east of Howard. Pedestrian crossings at this intersection has been cited as sometimes difficult due to high traffic and the width of the street. Provision of a wider refuge of land may be possible with this project to help improve pedestrian crossings. Total project cost in 2000 dollars is estimated to be \$860,000.

Social and environmental impacts of this project should be minimal (see Section C for environmental justice discussion). There are no impacted residences in the project area. Potential tree removal is limited. The City of Kalamazoo plants new trees in conjunction with their road projects following their tree planting guidelines.

2006-2025 Michigan Avenue/KL Avenue, Drake Road to Howard Street (1.27 miles): Widen from 4 lanes to 5 lanes and if possible provide for non-motorized facilities. Right-of-way may be required. Tree removal and replacement will be required. Due to the size of this project, it may be constructed in stages. Total project cost is estimated to be in 2000 dollars \$1,391,000.

Social impacts of this project have been discussed in Section C. They are primarily related to tree removal and the extent of right-of-way purchase. Trees will be replaced following the City of Kalamazoo tree planting guidelines. Proper engineering and design will minimize right-of-way purchase and tree removal while considering the needs for non-motorized, transit, and private vehicle uses.

MILHAM AVENUE

12th Street to Portage Road (4.63 miles) - *City of Portage*

Milham Avenue is an east-west minor arterial located in the northern portion of the City of Portage from 12th Street to Portage Road. The facility serves low to high density residential areas between 12th Street to the east of Westnedge Avenue; major commercial/retail areas by way of Westnedge Avenue, and major employment areas (Pharmacia Company) by way of Lovers Lane and Portage Road. The Kalamazoo/Battle Creek International Airport is located at the eastern terminus of Milham Avenue. Portage Northern elementary, middle, and high school facilities are located north of Milham Avenue between Oakland Drive and Westnedge Avenue. Property along Milham Avenue from Oakland Drive to Portage Road is transitioning from residential to commercial/retail and professional office use.

Traffic volumes on the western segment of Milham Avenue will increase to over 16,000 vehicles a day as residential development continues in eastern Texas Township and the 12th Street and Angling Road areas. The facility is a 2-lane roadway with 66' to 83' of right-of-way from 12th Street to Oakland Drive. Current traffic volumes average over 12,000 vehicles a day. From Oakland Drive to Constitution Boulevard, Milham Avenue is primarily a 4-lane facility on 66' to 83' of right-of-way with turn lanes at the major intersection at Constitution Boulevard. From Constitution to Lovers Lane, Milham is primarily a 5 lane facility on 66' to 83' right-of-way. Current traffic volumes average over 22,000 vehicles a day on this segment. Future traffic projections are estimated to be over 28,000 vehicles a day. The segment from Lovers Lane to Portage Road is 2 lanes on 66' of right-of-way with a turn lane at the Portage Road intersection. Traffic volumes on this section average over 3,500 vehicles a day. Future traffic is expected to be 7,000 vehicles per day. Significant deficiencies occur along the facility during peak a.m. and p.m. travel times and throughout the day. Congestion and travel delay will continue to increase on Milham Avenue as traffic accesses retail areas along Westnedge Avenue, destinations in the City of Kalamazoo by way of Oakland Drive, Lovers Lane and Portage Road, access to I-94, and east-west travel across the city.

The Plan has identified three transportation improvement projects:

2002 East Milham Avenue, Lovers Lane to Portage Road (.73 miles): Widen existing 2 lanes to a 4-lane (boulevard) cross section with curb and gutter, wide outside lanes and a sidepath on 80' right-of-way with intersection improvements at Portage Road. Additional right-of-way will be required. Total project cost estimate in 2000 dollars is \$2,837,000.

2002 West Milham Avenue, Oakland Drive to Westnedge Avenue (1.25 miles): Widen existing 4-lane section between Oakland Drive and Constitution Boulevard to 5 lanes with curb and gutter on 80' right-of-way. Current right-of-way varies from 66' to 83'. Additional right-of-way will be required at specific locations. Total project cost estimate in 2000 dollars is \$3,775,600.

There are potential social impacts related to the acquisition of right-of-way for the project. The locations of the Indian Fields Cemetery, situated on the northside of Milham Avenue between Lovers Lane and Portage Road, and the Dry Prairie Cemetery, located south of Milham Avenue between Oakland Drive and Constitution Boulevard, will need to be addressed by adequate design and final roadway alignment. Social impacts to businesses and residential areas due to right-of-way acquisition will be minor. Potential impacts on the natural environment at Portage Creek, due to the reconstruction work, have been addressed by a previous project which widened the box culvert at the creek. A boulevard section is used to minimize the impact on mature trees. The City of Portage landscapes its road projects including trees and other plantings.

2006-2025 Milham Avenue, Oakland Drive to 12th Street (1.88 miles): Widen existing 2 lanes to 3 lanes with curb and gutter and bicycle lanes on 80' right-of-way. Current right-of-way varies from 66' to 83'. Additional right-of-way may be required at specific locations. Total project cost estimate in 2000 dollars is \$3,150,000.

There may be minor social impacts on residential areas associated with acquisition of the additional right-of-way required at specific locations. Proper engineering design and final roadway alignment should mitigate these impacts. The City of Portage landscapes its road projects including trees and other plantings.

MOSEL AVENUE

Douglas Avenue to Westnedge Avenue (0.7 miles) - *Kalamazoo County Road Commission*

Mosel Avenue is a minor arterial from Douglas Avenue to Riverview Drive. From Westnedge Avenue east, it has 4 traffic lanes. From Douglas Avenue to Westnedge Avenue it is a 2 lane road. Adjacent land uses are commercial and industrial. The land uses are not expected to change. Mosel is an important access route to the industrial area in Kalamazoo Township and the cities of Parchment and Kalamazoo. All three agencies are pursuing redevelopment in this industrial area. Mosel provides access to US-131 using US-131BR and either Westnedge or Douglas. Riverview and Douglas connect to the City of Plainwell and points north.

Traffic volumes currently average over 7,000 vehicles per day. The Plan projects 10,000 vehicles per day in 2025. There are minor periods of congestion on Mosel at this time. With increased redevelopment, traffic accessing this area will grow.

The Plan has identified one transportation improvement project for this segment:

2006-2025 Mosel Avenue, Douglas Avenue to Westnedge Avenue (0.7 miles): Widen existing 2-lane road to 4 lanes with shoulders. This will provide the same number of lanes as the segment east of Westnedge Avenue. Total project cost in 2000 dollars is estimated to be \$988,000.

Social and environmental impacts of this project are expected to be minimal. Additional right-of-way should not be needed and street trees are infrequent here. There is a county drain paralleling Mosel Avenue so adequate soil erosion and sedimentation controls must be included in the project as well as properly engineering the project to minimize any adverse impacts.

N AVENUE

South Sprinkle Road to 29th Street (2.5 miles) - *Kalamazoo County Road Commission*

N Avenue is a continuation of Kilgore Road connecting the cities of Portage and Kalamazoo to Comstock and Pavilion Townships. I-94 can be reached from N Avenue using either South Sprinkle Road or 35th Street. N Avenue changes functional classifications from a minor arterial to urban collector to rural major collector in this segment. Adjacent land uses include commercial, industrial, and residential. New businesses and residential developments have been locating along this segment. Continued growth is expected. It is a 2 lane road with shoulders throughout its length.

Current traffic on N Avenue west of 26th Street averages over 7,000 vehicles a day. On Kilgore Road west of South Sprinkle Road the traffic averages over 8,900. The volume on N Avenue will vary and decrease when moving east from Sprinkle Road due to development density variations. The Plan estimates future traffic to be 9,000 in 2025.

The Plan identified one transportation improvement project for this segment:

2006-2025 N Avenue, Sprinkle Road to 29th Street (2.5 miles): Widen from 2 lanes to 4 lanes with paved shoulders. Regrading for new road width will relocate current drainage ditches. Two railroad crossings and their signals will be reconstructed. The total project cost in 2000 dollars is estimated to be \$4,300,000.

Expected social impacts to fronting properties is expected to be minimal. Residential uses are set back far from the existing right-of-way. Additional right-of-way is not anticipated to be needed. Environmental impacts are expected to be minimized through engineering and appropriate treatment of the county drain. Soil erosion and sedimentation controls and other appropriate design treatments will be required. Tree removals and grading for drainage will likely be required. The Kalamazoo County Road Commission offers new trees to replace those that are removed by road construction.

NEWPORT AVENUE EXTENSION

Gladys Street to Romence Road Parkway (0.70 miles) - *City of Portage*

Newport Avenue is a collector street that runs south from Milham Avenue and connects with Gladys Street, another collector. This area is east of Westnedge Avenue and south of Milham Avenue in the middle of the commercial corridor of Westnedge Avenue in Portage. The area is commercial with some residential uses. There are several retailers that can be accessed from Newport Avenue and Gladys Street without using South Westnedge Avenue which has heavy traffic volumes. The City of Portage has been working to upgrade alternate routes for Westnedge Avenue for people to reach commercial areas in order to reduce congestion on Westnedge Avenue, which averages more than 33,000 vehicles per day. The land uses are not expected to change from predominantly commercial.

The Plan identified one transportation improvement project for this area:

2006-2025 Newport Avenue Extension, Gladys Street to Romence Road Parkway, (0.70 miles): Construct new 4-lane boulevard with wide outside lanes and sidepath from the intersection of Newport Avenue and Gladys Street south, paralleling the railroad tracks to Romence Road Parkway. This project will require right-of-way. This project is intended to provide an alternate route other than Westnedge Avenue to Crossroads and Southland Malls, K-Mart and other commercial areas for traffic coming from the southeast. Total project cost is estimated in 2000 dollars to be \$1,850,000.

Social and environmental impacts of this project will depend on the route chosen and the engineering design that is ultimately used. Property will need to be acquired and grading will be necessary. The City of Portage will work to minimize adverse impacts of this project.

NICHOLS ROAD

Alamo Avenue to Barney Road (.74 miles) - *Kalamazoo County Road Commission*

Nichols Road is a north-south urban minor arterial in the northwest section of Kalamazoo Township from West Main (M-43) to Barney Road. The roadway provides a link from the West Main (M-43) and Solon-Kendall area to the northern urban area. It continues north of Barney Road to Cooper Township as a local road.

Land use in the immediate project area is primarily low density residential with some medium density units and scattered industrial locations. Future residential development is indicated in the areas along Nichols Road north of Barney Road and along Ravine Road. Traffic volumes on the facility are the result of residential destination points (home-based trips) and through traffic movements from the northwestern urban/rural areas to the West Main (M-43) commercial/retail corridor, the downtown Kalamazoo area, and the WMU campus area by way of Solon-Kendall/Howard Street.

Nichols Road is a 2-lane cross-section on 66' of right-of-way from Barney Road to Alamo Avenue. The roadway widens to 4 lanes south of Alamo Avenue to West Main (M-43). Existing traffic on the facility averages over 9,300 vehicles a day at the southern portion of Nichols Road to 6,000 vehicles south of Barney Road. While current deficiencies on the 2-lane facility are minor in nature, future residential growth is expected to generate additional traffic on the corridor. Future traffic is projected to be 11,600 south of Ravine Road and 12,300 between Ravine Road and Barney Road.

The Plan has identified the following transportation improvement project:

2006-2025 Nichols Road, Alamo Avenue to Barney Road (.74 miles): Widen existing 2 lanes to 4 lanes within the existing 66' of right-of-way. Estimated project cost in 2000 dollars is \$1,850,000.

Environmental impacts on residential areas will be minor because additional right-of-way is not required. Engineering design and roadway alignment will consider improvements to

the vertical grade at the approach to Ravine Road and control of road surface runoff in the steep slope areas of the project to minimize potential impacts on the natural environment. The Kalamazoo County Road Commission offers replacement trees for any removed by road construction.

OAKLAND DRIVE

Milham Avenue to Centre Avenue (2.01 miles) - *City of Portage*

Oakland Drive in the City of Portage extends southward from Kilgore Road I-94 to south city limits as a north-south minor arterial. Land use on either side of the facility is a mix of low to medium density residential areas with a commercial node at Centre Avenue. The road provides access to residential areas on the east and west and the Southland and Crossroads Malls/Westnedge Avenue commercial/retail corridor by way of Milham Avenue, Romence Road, and Centre Avenue.

Currently Oakland Drive is a 2-lane facility with 66' to 83' of right-of-way southwest of Milham Avenue to the south city limits. It is a 4-lane facility from Kilgore Road to Oakland Drive. Traffic volumes north of Romence Road average over 15,000 vehicles a day with increasing periods of congestion at intersections during peak a.m. and p.m. hours. Future land use plans indicate continued residential and commercial development to the south and west portions of the city as well as eastern Texas Township. Future traffic growth from these areas will increase the congestion on this segment. Traffic projection for the facility is estimated to be 25,000 vehicles a day by 2025.

The Plan has identified the following transportation improvement projects:

- 2004 Oakland Drive, Milham Avenue to Romence Road (1.01 miles): Widen the existing 2 lanes to a 3-lane cross section with curb and gutter and bicycle lanes. Existing right-of-way varies from 66' to 83' along this section. Additional right-of-way may be required at specific locations to be determined by final engineering design and roadway alignment. Intersection improvements will be made at Romence Road. Total project cost estimate in 2000 dollars is \$2.6 million.
- 2005 Oakland Drive, Romence Road to Centre Avenue (1.00 miles): Widen from 2 lanes to a 3-lane cross section with curb and gutter and bicycle lanes. Existing right-of-way varies from 66' to 83' along this section. Additional right-of-way may be

required at specific locations to be determined by final engineering design and roadway alignment. Total project cost estimate in 2000 dollars is \$2.6 million.

Impacts on the social environment due to right-of-way acquisition will be minor. Potential impacts on the natural environment will be negligible and mitigated by adequate engineering design and construction. The City of Portage landscapes their road construction projects which includes trees and other plantings.

OAKLAND DRIVE

Milham Avenue to Kilgore Road (0.83 miles) - *City of Portage*

Oakland Drive is a 4-lane principal arterial from Kilgore Road to I-94 and a 4-lane minor arterial from I-94 to Milham Avenue. It is part of a major access route connecting Portage and areas to the south to I-94. Fronting property land uses are residential north of I-94 and a combination of residential and institutional south of I-94. There are turning lanes at I-94 and at Milham Avenue. Traffic volumes average over 25,000 vehicles per day on this segment. 2025 traffic is projected to be 41,000 vehicles per day. Oakland Drive provides an alternate access route to Westnedge Avenue for the Southland and Crossroads Mall.

Significant congestion occurs on Oakland in the a.m. and p.m. periods. The left turn volumes entering I-94 often exceed the available storage in the center turn lane. This segment has also been identified as a major gap in the non-motorized system.

The Plan has identified two transportation improvement projects for this segment:

2003 Oakland Drive, I-94 to Milham Avenue (0.45 miles): Widen Oakland Drive from 4 lanes to 5 lanes with a center turn lane. Extend the southbound to westbound right turn lane at Milham Avenue. Additional right-of-way will be required for this project. Final engineering design and alignment will determine if provisions for non-motorized use can be included in this project. Total project cost is estimated in 2000 dollars to be \$1.3 million.

2006-2025 Oakland Drive, Kilgore Road to I-94 (0.38 miles): Widen from 4 lanes to 5 lanes. Depending on final plans and alignment additional right-of-way may be required. Final engineering and alignment will determine whether provisions for non-motorized use can be included in this project. Total project cost is estimated in 2000 dollars to be \$1.4 million.

Social and environmental impacts of these two projects will depend on final engineering plans and alignment decisions. The City of Portage will need to weigh the competing needs

of motor vehicles, non-motorized uses, and required additional right-of-way as they prepare final design plans for these projects. The Michigan Department of Transportation is working on preliminary engineering for widening I-94 in this area. The bridge over I-94 at Oakland Drive will be reconstructed with the I-94 widening project (presently an illustrative project). Provisions for non-motorized crossing of I-94 will be included in this project.

PORTAGE STREET

Vine Street to Washington Street (.42 miles) - *City of Kalamazoo*

Portage Street is a north-south principal arterial from Michigan Avenue in the Kalamazoo central business district to Centre Avenue in the City of Portage. The facility serves a broad mix of residential, commercial/retail, and industrial land uses, in addition to providing through traffic movements to major employment destination points in both cities.

One of the most heavily traveled corridors in the urban area, current traffic volumes in the project area average over 14,600 vehicles a day on the 4-lane segment. Frequent periods of congestion occur throughout the day due to vehicles attempting left turns to access commercial and residential areas. Future land use plans indicate no changes in land use along the project area. By 2025, estimated traffic volumes in the project area will average over 24,000 vehicles a day due to increases in trips generated by through traffic movements.

The Plan has identified a transportation improvement project to address operational deficiencies related to this segment:

2006-2025 Portage Street, Washington Avenue to Vine Street (.42 miles): Remove parking zones from the existing 4-lane facility, reconstruct and mark pavement as a 5-lane road within the existing 66' right-of-way. Total estimated project cost in 2000 dollars is \$500,000.

Social impacts on residential and business areas will be minor.

PORTAGE ROAD

Milham Avenue to Osterhout Avenue (4.65 miles) - *City of Portage*

Portage Road is a 4-lane principal arterial from I-94 to Centre Avenue and is a 4-lane minor arterial from Centre Avenue to Osterhout Avenue in the City of Portage. This road serves as a main access route from Vicksburg to downtown Kalamazoo. It passes the Kalamazoo-Battle Creek International Airport and connects with I-94. Current traffic averages over 19,900 vehicles a day north of Centre Avenue. Adjacent land uses on Portage Road between Milham Avenue and Centre Avenue are primarily commercial and industrial with small areas of residential. Pharmacia has its campus area centered along Portage Road at Romence Road. Much of the land owned by Pharmacia is undeveloped. 2025 traffic volumes are projected to be over 27,000 vehicles per day. Adjacent land use on Portage Road between Lakeview Drive and Osterhout Avenue is primarily commercial. Traffic volumes average over 12,600 vehicles per day on Portage Road between Lakeview Drive and Osterhout Avenue. There are periods of congestion in the a.m and p.m. peak periods. With the primarily commercial uses between Milham and Osterhout coupled with anticipated development of currently vacant land owned by Pharmacia, traffic volumes and left turning conflicts will increase. 2025 traffic volumes are projected to be 17,500 vehicles between Lakeview Drive and Osterhout Avenue.

The Plan identified two transportation improvement projects for this segment of Portage Road:

2006-2025 Portage Road, Milham Avenue to Centre Avenue, (2.01 miles): Widen from 4 lanes to 5 lanes to provide a center turn lane through this developing industrial and commercial area. Additional right-of-way may be required. Total project estimated cost in 2000 dollars is \$2,650,000.

2006-2025 Portage Road, Lakeview Drive to Osterhout Avenue, (1.21 miles): Widen from 4 lanes to 5 lanes to provide a center turn lane through the commercial segment and add bicycle lanes on both sides. Additional right-of-way may be required. Total project estimated cost in 2000 dollars is \$1,792,000.

Social and environmental impacts of these projects are expected to be minimized through adequate engineering design and route alignment. Street trees may be replaced during these projects. The City of Portage landscapes its road projects including trees and other plantings. Provision of non-motorized facilities in the segment from Osterhout Avenue to Lakeview Avenue will allow for non-motorized access to the West and Austin Lakes area from the south. Engineering, motor vehicle, non-motorized environmental, financial, and right-of-way issues will be assumed to see if non-motorized facilities can be included in the segment of Portage Road from Milham Avenue to Centre Avenue.

ROMENCE ROAD

Angling Road to South Sprinkle Road (5.00 miles) - *City of Portage*

The extension of the Romence Road Parkway from Lovers Lane to Portage Road provided the final link in creating an additional east-west corridor through the City of Portage. Operating as a minor arterial, the 4-lane facility serves as a limited access facility for through traffic movements from the Sprinkle Road, Portage Road (Pharmacia Company) areas to commercial/retail areas along Westnedge Avenue and residential areas located in the western portion of the city. The parkway also assists in distributing traffic among alternative north-south corridors.

Land use in the proposed project area is primarily industrial (Pharmacia Company). Land use in the other project area from Angling Road to Oakland Drive is low density residential zoning. Areas currently zoned as industrial will be retained. Current traffic averages over 5,000 vehicles per day between Angling Road and Oakland Drive and over 11,000 vehicles per day between Portage Road and Sprinkle Road. 2025 traffic is projected to be 7,000 and 13,000 in these same segments respectively.

The transportation improvements identified by the Plan are as follows:

2006-2025 Romence Road, Portage Road to South Sprinkle Road (1.00 miles): Widen from 2 and 3 lanes to a 4-lane boulevard with curb and gutter, wide outside lanes and a sidepath on 100' right-of-way from Portage Road to Sprinkle Road. The railroad crossing and it's signals will be reconstructed as a part of this project. A boulevard section is being used to save mature trees. Total cost of the project in 2000 dollars is \$2.3 million.

2006-2025 Romence Road from Angling Road to Oakland Drive (0.64 miles): Widen from 2 lanes to a 3-lane cross section. Add bicycle lanes within the existing right-of-way. Total project estimate in 2000 dollars is \$952,000.

Final determination of these impacts, if any, will depend upon engineering design and roadway alignment of the facility. The City of Portage landscapes its road projects including trees and other plantings.

SCHURING ROAD

Oakland Drive to Westnedge Avenue (1.25 miles) - *City of Portage*

Schuring Road is a 2-lane collector street that has primarily residential land use except near Westnedge Avenue, the land uses change to commercial. No changes to land uses are anticipated. Schuring Road is an important connection between Oakland Drive and Westnedge Avenue feeding a large residential area and acting as an alternate route to Romence Road and Centre Avenue. Conflicts with vehicles turning left onto side streets and driveways are expected to increase with increasing traffic over the life of the Plan. Motorists having to bypass vehicles waiting to complete a left turn on the right compromises non-motorized facility safety. Existing traffic volumes average 4,800 vehicles per day. 2025 traffic volumes are projected to be 5,000 vehicles per day.

The Plan identified one transportation improvement project for this segment:

2006-2025 Schuring Road, Oakland Drive to Westnedge Avenue (1.25 miles): Widen from 2 lanes to 3 lanes to provide a center turn lane. Add bicycle lanes on both sides. No additional right-of-way is anticipated to be needed for this project.

There are no expected social and environmental impacts for this project. Final engineering design and alignment will minimize the impact on existing trees. The addition of a center left turn lane should reduce conflicts and coupled with the bicycle lanes will provide for better non-motorized use. The City of Portage landscapes its road projects including trees and other plantings. Total project estimated cost in 2000 dollars is \$1,848,000.

SHAVER ROAD

Vanderbilt Avenue to South Portage City Limits (2.58 miles) - *City of Portage*

Located in the southern portion of the City of Portage, Shaver Road is a north-south minor arterial providing access into the City of Portage from US-131 to Centre Avenue and Westnedge Avenue.

The facility serves a mix of heavy and light industrial sites and residential areas with a commercial/retail office node at its northern terminus. The Portage City Hall complex is located at the Centre Avenue/Westnedge Avenue/Shaver Road intersections. Future land use plans indicate more intensive industrial development. Increasing residential and general commercial development will occur north of Melody Avenue and west of Shaver Road. Portage Central High School athletic field, elementary schools, and school administration buildings are also located in the northeast quadrant of the project area.

Shaver Road is a 2-lane facility with growing commercial traffic volumes. Traffic volumes of over 12,000 vehicles a day occur resulting in periods of deficiencies at peak hours. Future industrial development along the roadway, in addition to residential developments along the southern area, will increase traffic volumes generated by local and through traffic movements to over 18,600 vehicles a day.

The Plan has identified the following multi-component transportation improvement project:

2006-2025 Shaver Road, Vanderbilt Avenue to Portage south city limits (2.58 miles):
Widen the existing 2 lanes to a 3-lane cross section with curb and gutter and bicycle lanes within the existing right-of-way. Estimated project cost in 2000 dollars is \$5,100,000.

Environmental impacts associated with the right-of-way acquisition will be minimal. Any potential impacts on the social or natural environment will be mitigated by adequate engineering design and construction practices. The City of Portage landscapes its road projects including trees and other plantings.

SOUTH SPRINKLE ROAD

Centre Avenue to TU Avenue (3.82 miles) - *Kalamazoo County Road Commission*

This portion of South Sprinkle Road is a north-south urban minor arterial from Centre Avenue in the City of Portage to TU Avenue in Brady Township. The facility serves a mix of land uses ranging from industrial locations near Centre Avenue (Pharmacia, Stryker) and low to medium density residences in the Austin Lake and Long Lake areas, to rural low density housing and agriculture located in Brady Township. There are scattered nodes of commercial development along the facility. In addition to locally generated trips, the road also serves traffic generated by Vicksburg area manufacturers (Simpson Paper, Triple S Plastics), the Bronson-Vicksburg Rehabilitation Center, and the new industrial park located in Vicksburg.

Future land use in the project area will see increased medium density residential development near Long Lake and low density housing at Indian Lake and along Sprinkle Road in Brady Township. Additional commercial development is projected near Long Lake and north of the Village of Vicksburg. Zoning changes have been made to preserve additional recreational open space at Ramona Park south of Zylman Avenue. Sprinkle Road between Centre Avenue and Zylman is beginning to show deficiencies during peak hours. Additional development adjacent to the facility will contribute to the increasing frequency and duration of congestion and delay along the facility.

Current traffic volumes range from over 15,000 vehicles a day south of Centre Avenue. Future traffic volumes are projected to be 19,500 and will increase commensurate with the level of intensive development along this corridor.

The Plan has identified one transportation project to address these deficiencies:

2006-2025 South Sprinkle Road, Centre Avenue to TU Avenue (3.82 miles): Widen existing 2 lanes to 4 and 5 lanes to provide a center left turn lane in commercial/retail areas and turn lanes at designated intersections. The existing culvert crossing South Sprinkle Road will need to be extended. The existing

right-of-way varies from 66' to 100'. Additional right-of-way may be required at specific locations to meet design requirements. Estimated project cost in 2000 dollars is \$6,517,000.

There are a number of potential environmental impacts associated with the project. Impacts to the residential/commercial areas and the cemetery for right-of-way acquisition may be minimized by engineering design and final roadway alignment. The area between Austin Lake and Long Lake is a designated flood plain, containing environmentally sensitive areas. Road surface runoff, soil erosion, and sedimentation controls must be considered in the final design of the Centre Avenue to TU Avenue section. Potential impacts on the natural environment may require preparation of an environmental impact assessment.

SOUTH SPRINKLE ROAD

Miller Road to Cork Street (.25 miles) - *Kalamazoo County Road Commission*

South Sprinkle Road is a north-south principal arterial from Gull Road/M-43 in Comstock Township to Centre Avenue in the City of Portage. This section of Sprinkle Road is identified as a part of the National Highway System (NHS). Carrying some of the highest traffic volumes in the urban area, the facility serves areas of extensive residential, commercial, and industrial development. The road links several major road facilities including Michigan Avenue, East Main Street, I-94BL, Cork Street, I-94, Kilgore Road, Milham Avenue, Romence Road, and Centre Street on the eastern edge of the urban area.

Adjacent land use in the project area is extensively developed for commercial/retail and industrial park areas. Future growth will involve continued infill at the industrial park locations both in the immediate project area and at industrial/commercial areas adjacent to South Sprinkle Road in the City of Portage.

The traffic mix in this area includes a high percentage of commercial trucks accessing industrial sites, truck terminals, and truck stops. Significant safety and congestion deficiencies already occur during several periods of the day due to turning movement delays at industrial/commercial locations. Current traffic volumes average over 36,000 vehicles a day north of I-94. Future traffic projections indicate traffic will increase to over 46,000 vehicles a day.

The Plan has identified the following transportation improvement project:

2006-2025 South Sprinkle Road, Miller Road to Cork Street (.25 miles): Widen the existing 5-lane facility to 6 lanes by adding a southbound lane. Current right-of-way width varies from 73' to 85'. There is a probable need for additional right-of-way and major construction easements at several locations throughout the length of this project. Total estimated project cost in Year 2000 dollars is \$600,000.

Completion of this expansion project will probably require a one- to two-year period to accomplish. Acquisition of necessary right-of-way, easements, and the actual construction of the project may need to be phased to accommodate traffic flow through the area and minimize disruptions to local businesses. Details of the phasing of this project can not be determined until the final engineering designs are completed.

Assessment of environmental impacts indicate some disruption of commercial/retail locations due to construction of the added lane. Roadway alignment and engineering designs will need to address the Maple Grove Cemetery location due to its immediate proximity to Sprinkle Road.

STADIUM DRIVE

West County Line to 8th Street (4.18 miles) - *Kalamazoo County Road Commission*

Stadium Drive is an east-west minor arterial from northwestern Texas Township to US-131 in southeastern Oshtemo Township. The facility links to Red Arrow Highway in Van Buren County, providing a parallel corridor to I-94 for residential and employment destinations in western Kalamazoo County and eastern Van Buren County and an emergency route for I-94. Population increases along Stadium have occurred moving toward Mattawan. The proposed Stadium Drive project area lies within the urban area from 4th Street to 8th Street. From the west county limit to 4th Street, Stadium Drive is in the rural area.

Current land use along the project area is a mix of low and medium density residential, retail/commercial/office, and industrial locations. A large mobile home park is located at the southeast corner of Stadium Drive and 4th Street. Future land use plans show increasing low density residential development along Stadium Drive. Retail/commercial and light industry development will continue to fill in along the eastern end of the project area.

The proposed project is in an area of rolling and hilly terrain. Right-of-way along the 2-lane facility varies from 83' to 100' with turn lanes at the 4th Street and the signalized 6th Street intersections. East of 8th Street, the facility widens to five lanes. Current deficiencies occur on this segment during peak hours and are short in duration.

Traffic volumes on Stadium Drive currently average over 10,500 vehicles per day. Based on current and future residential development in eastern Antwerp Township (Van Buren County) and along the western portion of Stadium Drive in Texas and Oshtemo Township, traffic volumes will increase to over 16,600 vehicles a day by 2025.

The Plan has identified the following two transportation improvement projects:

2002 Stadium Drive, 8th Street to 6th Street (1.18 miles): Widen the existing 2 lanes to a 5-lane cross section with shoulders on existing 83' to 100' right-

of-way. Geometric improvements to 6th Street intersection. The project cost estimate in 2000 dollars is \$1.5 million.

2006-2025 Stadium Drive, 6th Street to West County Limit (3.0 miles): Widen existing 2-lane road to 5 lanes with paved shoulders. The existing railroad overpass west of 4th Street will have to be reconstructed and widened to allow for the additional lanes. This project may be completed in phases for construction. The project cost estimate in 2000 dollars is \$6,275,000.

There are several potential social and natural environmental impacts associated with the project. Although additional right-of-way is not contemplated, the additional lanes may require the reconfiguration of residential and commercial driveways, particularly in areas of the project with steep slopes above the roadway. The roadway cross-section in the hilly area will also need to control road surface runoff. These impacts are generally minor in nature and can be mitigated or eliminated through adequate consideration of engineering design and roadway alignment. The Kalamazoo County Road Commission offers replacement trees for any that are removed during road construction.

US-131/US-131BR CORRIDOR

US-131 to Riverview Drive (7.0 miles) - *Michigan Department of Transportation, Kalamazoo Area Transportation Study, Kalamazoo County Road Commission, Oshtemo Township, Kalamazoo Township, City of Parchment, City of Kalamazoo*

This corridor area connects US-131 to an older industrialized manufacturing area in portions of the cities of Parchment and Kalamazoo, and in Kalamazoo Township. Residential land uses are located to the south and west of this manufacturing area that are also fed by the US-131 Business Route. There has been interest for several years to improve access along this corridor to help redevelopment efforts, to retain existing businesses, and to possibly reroute commercial traffic so it is reduced in the residential areas. One missing link in the network is the lack of a connection from US-131BR to US-131 south of the business route. High Priority Project funding has been allocated for this project to study and design potential transportation improvement projects.

Traffic volumes on the business route currently are averaging more than 5,000 vehicles per day. 2025 traffic is projected to be 8,000.

The Plan has identified one project for this area:

2002-2004 US-131/US-131BR, US-131 to Riverview Drive (7.0 miles): Study and design transportation improvements to enhance access into the north industrial area from US-131. Evaluate potential transportation projects to determine which combination best improves access to this area. Projects to be evaluated include:

- US-131/US-131BR Interchange: Build new connections to the south.
- US-131/US-131BR Interchange: Build full interchange with connections to the local street system.
- Westnedge Avenue between US-131BR and Mosel: Improve connections and capacity.

- Pitcher/Porter corridor between Kalamazoo Avenue and Mosel Avenue: Improve alignment, connectivity.
- New Industrial Collector street from Mosel Avenue to G Avenue: Build a new street to access industrial area in the City of Parchment.
- Riverview from Mosel Avenue to Mills Street: Improve capacity and alignment with improved connection to Mills Street.

Total study cost in 2000 dollars is estimated to be \$1.5 million.

This project is for study and design activities. No major construction is anticipated. Without major construction, social and environmental impacts will be minimal. The Northside Association for Community Development is interested in this project because they believe it will help reduce commercial traffic in the residential areas and because they feel it will help retain and increase business development in the area. The Northside Business Association, Kalamazoo Township, City of Kalamazoo, and the City of Parchment are all interested in this project to assist with business retention and development in this area.

WESTNEDGE AVENUE/SHAVER ROAD
 Parkwood Avenue to Centre Avenue (5.11 miles) - *City of Portage, Michigan Department of Transportation*

Westnedge Avenue is a principal arterial and part of the National Highway system from US-131BR at the Kalamazoo North City Limit to Centre Avenue in the City of Portage. In the City of Kalamazoo, Westnedge is operated and maintained by the Michigan Department of Transportation. Westnedge Avenue, in the City of Portage, is under the city's jurisdiction. Westnedge Avenue, with the one-way partner Park Street in Kalamazoo, and Shaver Road provides continuous access through the center of Portage and Kalamazoo, connecting to US-131 north of Kalamazoo and south of Portage. Connections to major east west roads, including Centre Avenue, Romence Road, Milham Avenue, I-94, Kilgore Road, Whites Road, Cork Street, Howard Street, Michigan Avenue, and Kalamazoo Avenue, creates a large and critical transportation network connecting the core urban and commercial areas to the region.

Westnedge Avenue from the south city limit of Portage to Parkwood carries traffic volumes averaging from over 12,000 vehicles a day south of Vanderbilt, 33,000 north of Centre Avenue, 46,800 near I-94, and 30,000 north of Kilgore Road. 2025 Projections of traffic range from 26,000 to 50,000. This road is heavily used and experiences periods of significant congestion. Capacity deficiencies exist and are projected in 2025 for Westnedge Avenue and Shaver Road from Parkwood in Kalamazoo to south of Centre Avenue in Portage. Adjacent land uses range from residential north of Whites Road and Cork Streets in Kalamazoo to commercial from Cork Street to south of Centre Avenue on Shaver Road in the cities of Kalamazoo and Portage. No transportation improvement projects are identified by the Plan for Westnedge Avenue north of Kilgore Road in the City of Kalamazoo because right-of-way is restricted and existing development is close to the right-of-way. Any widening would significantly alter the character of adjacent land uses. Operational and systems management projects will have to be used to attempt to reduce congestion on the segment of Westnedge Avenue in the City of Kalamazoo.

The Plan identified four transportation improvement projects for Westnedge Avenue and Shaver Road between Centre Avenue and Kilgore Road in the City of Portage:

2006-2025 Westnedge Avenue/Shaver Road, Centre Avenue to Romence Road (1.00 miles): Widen from 5 lanes to 7 lanes. Additional right-of-way will be required. This project would increase the number of through lanes from two to three in each direction to increase capacity. Total project cost in 2000 dollars is estimated to be \$16,940,000.

This project has potential environmental impacts. One branch of the Portage Creek crosses Westnedge Avenue just north of Shaver Road. The culvert will need to be extended for the additional number of lanes. Soil erosion and sedimentation controls will need to be included in the contract documents. Existing small street trees will be removed and at least partially replaced by the landscaping that the City of Portage does with their road projects. Final engineering design and alignment should minimize adverse social and environmental impacts.

2006-2025 Westnedge Avenue, Romence Road to Idaho Avenue and from Andy Avenue to Kilgore Road (1.55 miles): Widen to add one traffic lane for northbound Westnedge Avenue only. Additional right-of-way will need to be acquired. This project would add capacity to this congested roadway. Total project cost is estimated to be \$11,371,000 in 2000 dollars.

Social and environmental impacts of this project should be minimized through adequate engineering design and alignment. Any plantings removed would be replaced by the landscaping that the City of Portage does with road construction projects. The culvert over Portage Creek will need to be extended.

2006-2025 Westnedge Avenue, Kilgore Road to Marketplace (0.30 miles): Widen to add one southbound through lane. This will provide 3 through traffic lanes for southbound Westnedge Avenue. Additional right-of-way will be required. Total project cost is estimated in 2000 dollars to be \$2,219,000.

Social and environmental impacts should be minimal with adequate final engineering design and alignment. The culvert over Portage Creek has already been extended with the Lowe's Home Improvement Store project in 2001, so further disruption of the creek should not occur. Depending on final design, some business parking areas might need to be reconfigured. Trees and plantings removed will be replaced with the City of Portage's practice to landscape their road construction projects.

2006-2025 Westnedge Avenue, Andy Avenue to Idaho Avenue (0.49 miles): This project will add lanes to the existing 5 and 6 lanes making a 7- and 8-lane road, completing the 3 through lanes in each direction in the section of Westnedge Avenue and Shaver Road from Centre Avenue to Kilgore Road. The eight lane section is under I-94 which will allow two left turn lanes for greater storage. This project will be coordinated with the reconfiguration of I-94 at Westnedge Avenue interchange when I-94 between US-131 and Sprinkle Road is widened from 4 lanes to 6 lanes. Total project cost for Westnedge Avenue is estimated in 2000 dollars to be \$7,211,000.

Social and environmental impacts should be able to be minimized through engineering design and alignment. Coordination with the Michigan Department of Transportation's project to widen I-94 will be required. Soil erosion and sedimentation controls must be included. The City of Portage landscapes its road construction projects including tree and other plantings.

WHITES ROAD

Oakland Drive to Westnedge Avenue (1.21 miles) - *City of Kalamazoo*

Whites Road is an east-west minor arterial located in the City of Kalamazoo between Oakland Drive and Westnedge Avenue. The facility is part of the corridor formed by the linkage of Parkview Avenue, Whites Road, and Cork Street which provides the only continuous east-west route across the southern portion of the City of Kalamazoo.

The project area serves low to medium density residential areas with commercial nodes located at both ends of the segment at Oakland Drive and Westnedge Avenue. Future land use indicates continued residential usage of adjacent land.

Whites Road provides access to adjacent residential areas and through traffic movements from residential areas west and north of the road by way of Oakland, Parkview, and Bronson Boulevard to the major retail/commercial areas along Westnedge and industrial locations along Cork Street near Sprinkle Road.

Whites Road is a 2-lane facility with parking allowed on both sides of the segment from the Bronson Boulevard intersection east to Westnedge Avenue. Traffic volumes on the facility currently average over 16,000 vehicles a day. While the facility is not deficient in meeting traffic demand, there are safety and operational issues related to the parking zones, which restrict full use of the curbside lanes. Future traffic on Whites Road is projected to reach volumes averaging over 24,000 vehicles a day on the segment from Oakland Drive to Bronson Boulevard and over 20,000 vehicles a day on the segment from Bronson Boulevard to Westnedge Avenue.

The Plan has identified one transportation improvement project.

2002 Whites Road, Oakland Drive to Westnedge Avenue (1.21 miles): Remove parking zones and reconstruct 4 lane pavement. Total project cost estimate in 2000 dollars is \$480,000.

Social impacts on residential areas will be minimal and related primarily to the removal of the parking.

ZYLMAN AVENUE

Portage Road to South Sprinkle Road (1.16 miles) - *City of Portage*

Zylman Avenue is a 2-lane collector that runs between two major arterials: Portage Road and South Sprinkle Road. It is the last connection between Portage Road and Sprinkle Road until Mandigo Avenue, south of Austin Lake. Zylman Avenue provides access to Ramona Park and the Long Lake area east of Sprinkle Road. Zylman Avenue is not heavily developed at this time. It is zoned residential along the south side and industrial on the north side. Future zoning may create a multifamily residential buffer strip along the north side of Zylman Avenue with the remainder of the industrial zoning continuing to be in place.

Current traffic is averaging 3,700 vehicles per day. 2025 traffic is projected to be 7,900 vehicles per day. As this area develops and Zylman Avenue continues to connect two minor arterials, demand will increase.

The Plan identifies a transportation improvement project for this area:

2006-2025 Zylman Avenue, Portage Road to South Sprinkle Road (1.16 miles): Widen existing 2-lane road to a 4 lane boulevard with wide outside lanes and a separate bike path. Additional right-of-way will not be required.

Social and environmental impacts of this project should be minimal. Final design should minimize any adverse impacts. Some additional right-of-way should be required. The boulevard section will help control driveway access as this area develops. The non-motorized provisions will connect to the City of Portage's non-motorized system.

Table K-21
Map Key for Improve/Expand Projects

Map Key	Improve/Expand Project Index	Map Key	Improve/Expand Project Index
1	9th Street: West Main Street to Stadium Drive	25	Nichols Road: Alamo Avenue to Barney Road
2	35th Street: I-94 to Battle Creek Road	26	Oakland Drive: I-94 to Milham Avenue
3	Arboretum Connector: Drake Road to Kendall Avenue	27	Oakland Drive: Kilgore Road to I-94
4	Burdick/John Street Connector from Burdick Street at Vine Street to John Street at Walnut Street	28	Oakland Drive: Milham Avenue to Romence Road
5	Centre Avenue: Portage Road to Sprinkle Road	29	Oakland Drive: Romence Road to Centre Avenue
6	City of Kalamazoo Central Business District Conversion to Two Way Traffic Projects	30	Portage Road: Lakeview Drive to Osterhout Road
	<i>Douglas Avenue: West Main Street to Kalamazoo Avenue</i>	31	Portage Road: Milham Avenue to Centre Avenue
	<i>Edwards Street: South Street to North Street</i>	32	Portage Street: Washington Avenue to Vine Street
	<i>Kalamazoo Avenue: Douglas Avenue to Westnedge Avenue</i>	33	Romence Road: Angling Road to Oakland Drive
	<i>Kalamazoo Avenue: Michigan Avenue to Westnedge Ave</i>	34	Romence Road: Portage Road to Sprinkle Road
	<i>Lovell Street: Michigan Avenue to Portage Street</i>	35	Shaver Road: Vanderbilt Avenue to South City Limit
7	Crosstown Parkway: Vine Street to King Highway (I-94BL)	36	Schuring Road: Oakland Drive to Westnedge Avenue
8	Drake Road: Canterbury Avenue to Grand Prairie Road	37	South Sprinkle Road: Centre Avenue to TU Avenue
9	I-94 Bridge under Lovers Lane	38	South Sprinkle Road: Cork Street to Miller Road
10	I-94: 12th Street to east of US-131	39	South Sprinkle Road: Centre Avenue to Milham Avenue
11	I-94: west of 12th Street to Sprinkle Road	40	Stadium Drive: County Line to 6 th Street
12	Kilgore Road: Lovers Lane to west of Portage Road	41	Stadium Drive: 6 th Street to 8 th Street
13	Kilgore Road: Oakland Drive to Westnedge Avenue	42	US-131/US-131BR Corridor Improvement Study with KATS
14	Kilgore Road: Old Kilgore Road to Lovers Lane	43	US-131/US-131BR Project Components
15	KL Avenue: 9 th Street to Drake Road		<i>Michigan Avenue/Riverview Drive: north of Paterson Street to Mills Street</i>
16	Lovers Lane: Milham Avenue to Centre Avenue		<i>Mosel Street: Douglas Avenue to Westnedge Avenue</i>
17	Lovers Lane: Milham Avenue to Kilgore Road		<i>Pitcher/Porter Connector: Paterson Street to Michigan Avenue</i>
18	Mall Drive: Constitution Boulevard to J.C. Penney Drive		<i>Westnedge Avenue: US-131BR to Westnedge Avenue</i>
19	Michigan Avenue/KL Avenue: KL Avenue to Knollwood Avenue	44	Westnedge Avenue: Andy Avenue to Idaho Avenue
20	Milham Avenue: Lovers Lane to Portage Road	45	Westnedge Avenue: Kilgore Road to Marketplace
21	Milham Avenue: 12 th Street to Oakland Drive	46	Westnedge Avenue: Idaho Ave to Romence Rd & Kilgore Rd to Andy Ave
22	Milham Avenue: Oakland Drive to Westnedge Avenue	47	Westnedge Avenue/Shaver Road: Romence Road to Centre Avenue
23	N Avenue: Sprinkle Road to 29 th Street	48	Whites Road: Oakland Drive to Westnedge Avenue
24	Newport Avenue Extension: Gladys Street to Romence Road	49	Zylman Avenue: Portage Road to Sprinkle Road

