APPENDIX F

Checklist Example: Eau Claire
DETAILED CHECKLIST FOR SECONDARY LAND-USE IMPACTS OF HIGHWAY PROJECTS: COMPLETED CASE STUDY

U. S. Highway 12 Widening Project in Eau Claire, WI

Introduction

This case study illustrates the procedure for completing the "checklist" approach for evaluating secondary land-use impacts of transportation projects. The transportation project selected is the expansion of U. S. Highway 12 (Clairemont Avenue) in Eau Claire, Wisconsin -- a project completed in 1970. The project widened Clairemont Avenue from a two to six lane principal arterial.

Preparation of this case study followed the overall approach of this research study to evaluate the land-use impacts of projects completed around 1970 so that the projected and actual impacts could be compared. In completing the detailed checklist, every effort was made to use actual data; however, because of the difficulty in finding historical data for 1970, it was sometimes necessary, for the sake of illustrating this procedure, to estimate conditions and data for 1970 or resort to more, readily accessible, recent data.

The case study closely follows the "Detailed Checklist for Secondary Land-Use Impacts of Highway Projects" found in Appendix E.

Case Study

1. Summary description of the major secondary land-use impacts identified in this analysis

Overall, the project is likely to have limited impacts on the location of industrial, commercial, and residential activities within Eau Claire and vicinity. The project will reduce driving times along the 3.25 mile length of Clairemont Avenue by 2.5 minutes. This improvement in accessibility and resulting increase in traffic volumes is likely to have a major impact on the location of commercial activities. It is expected that strip commercial development will intensify along Clairemont Avenue -- and commercial development is likely to cluster most heavily at the endpoints of the project. The only potentially significant, negative impact identified is that the project may adversely affect the commercial attractiveness of the CBD.
2. Description of existing constraints on development

The 1967 Eau Claire Land Use Plan provides a general guide for development of the Eau Claire area until 1990. The Land-Use Plan recommends a policy of encouraging residential growth to the north and west to make better use of existing public facilities in those areas and to achieve a more balanced community. The Plan also identifies land to be withheld from development or restricted from development. Land to be restricted in use falls into six area types:

* floodplains
* airport noise abatement zone
* areas that cannot be supplied with municipal utilities
* agricultural areas
* open space

The land to be restricted from use is shown in Figure F.1. The floodplains areas are predominately adjacent to the Chippewa River and are unsafe for development. Areas near the airport are unsuitable for residential purposes; the Federal Aviation Agency has proposed buffer zones for noise abatement that extend 15,000 feet beyond the ends of the runway. Steep slope areas (above Harding Avenue and the slopes of Mt. Washington) are designated as not suitable for residential development. Because of the natural drainage areas (see drainage divide on figure) it is unlikely that certain areas adjacent to Eau Claire will be supplied with municipal utilities. Accordingly, the Plan discourages the intensive development of those areas. The Plan also recommends that urban sprawl to agricultural lands be restricted using agricultural zoning. Finally, the Plan recommends that because wooded areas, lakes and streams, and slopes offer opportunities for significant open space and scenic contrast, that development in these areas should be constrained.

3.1. Spatial distribution of existing industrial activity

3.1.a. Industrial employment data

Employment data for Eau Claire City and Chippewa Falls City for 1950 to 1980 are given in Table F.1. Employment data for 1980 are included in this illustration for completeness. However, in using this historical case study, the focus is on data up to 1970 because the project was undertaken then.

Manufacturing employment in Eau Claire City declined dramatically from 1950 to 1960, dropping from 4,829 to 3,887. During the 1960s, employment in manufacturing rebounded to reach 4,163 in 1970. Manufacturing employment in Chippewa Falls City increased from 970 to 1,401 during 1960 to 1970.
Figure F.1. Existing Constraints on Development Near the Project.
Table F.1

EMPLOYMENT IN EAU CLAIRE CITY AND CHIEPEWA FALLS CITY
IN 1960 TO 1980

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>4,829</td>
<td>3,887</td>
<td>4,163</td>
<td>3,454</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>970</td>
<td>1,401</td>
<td>1,348</td>
<td></td>
</tr>
<tr>
<td>Wholesale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>696</td>
<td>727</td>
<td>760</td>
<td>998</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>130</td>
<td>124</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>2,636</td>
<td>2,598</td>
<td>3,686</td>
<td>5,255</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>820</td>
<td>899</td>
<td>943</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>1,655</td>
<td>2,378</td>
<td>4,041</td>
<td>5,241</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>890</td>
<td>1,173</td>
<td>1,249</td>
<td></td>
</tr>
<tr>
<td>FIRE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>436</td>
<td>545</td>
<td>731</td>
<td>1,286</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>100</td>
<td>135</td>
<td>221</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>10,252</td>
<td>10,135</td>
<td>13,381</td>
<td>16,234</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>2,910</td>
<td>3,732</td>
<td>3,901</td>
<td></td>
</tr>
</tbody>
</table>


Note: This table shows employment by place of residence.
These data in Table F.1 reveal the profound structural changes occurring during 1950 to 1970. The proportion of employment in manufacturing in Eau Claire City declined from 47 percent in 1950 to 31 percent in 1970. The share of employment in retail and services, on the other hand, increased significantly. These overall trends in employment are reflections of similar shifts in the state and national economies.

3.1.b. Projections of manufacturing employment

Table F.2 shows employment projections for Eau Claire City in 1967 for the year 1990. The projections provide only very aggregate sectors: trade and services, and other employment.

In these projections, trade and services employment is expected to grow rapidly and to more than offset declining employment in other sectors. The projections, although they lack sectoral detail, appear to predict a decline in manufacturing employment.

More recent manufacturing employment projections -- for Eau Claire county up to 2010 -- are given in Table F.3.

The future growth of manufacturing employment in Eau Claire City and Chippewa Falls City is likely to remain stable in the short term in response to overall regional economic trends. An upturn in manufacturing employment growth may occur in the area as manufacturing activities spin off from the Twin Cities. The recent expansion of Cray Research in Chippewa Falls is an example of this trend. However, for purposes of estimating secondary land-use impacts of the current project, the growth of manufacturing activity in Eau Claire City and Chippewa Falls City is likely to be minimal.

3.1.c. Identification of existing areas zoned for industrial activity

The existing areas zoned for industrial activity are shown on Figure F.2. All industrial zones have excess capacity; all have occupancy rates of 60 percent or less. There are no new industrial zones planned.
Table F.2

EMPLOYMENT PROJECTIONS: EAU CLAIRE 1990

<table>
<thead>
<tr>
<th></th>
<th>1967</th>
<th>1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade and Services Employment</td>
<td>9,901</td>
<td>14,100</td>
</tr>
<tr>
<td>Other Employment</td>
<td>10,057</td>
<td>8,500</td>
</tr>
<tr>
<td>Total Employment</td>
<td>19,958</td>
<td>22,600</td>
</tr>
</tbody>
</table>

### Table F.3

EMPLOYMENT PROJECTIONS FOR EAU CLAIRE COUNTY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>6,202</td>
<td>4,729</td>
<td>4,947</td>
<td>5,416</td>
<td>5,701</td>
<td>6,015</td>
</tr>
<tr>
<td>Wholesale &amp; Retail</td>
<td>6,727</td>
<td>7,310</td>
<td>9,579</td>
<td>12,075</td>
<td>13,096</td>
<td>14,092</td>
</tr>
<tr>
<td>Other</td>
<td>18,513</td>
<td>19,081</td>
<td>19,552</td>
<td>22,226</td>
<td>23,497</td>
<td>24,436</td>
</tr>
<tr>
<td>TOTAL</td>
<td>31,442</td>
<td>31,120</td>
<td>34,078</td>
<td>39,707</td>
<td>42,294</td>
<td>44,343</td>
</tr>
</tbody>
</table>


Note: This table shows employment in establishments.
Figure F.2. Industrial Locations in Eau Claire
3.1.d. Identification of major employers

Major employers with 200 or more employees are shown in Figures F.3 and F.4. Manufacturing firms are highlighted. As can be seen in Figure F.3, no major manufacturing employers are located in the general vicinity of the project.

3.2. Evaluate Project impact on the spatial distribution of industrial activity

3.2.a. Travel time accessibility

One of the major factors important to industrialists in locating their plants is accessibility to markets and suppliers. In selecting industrial sites, managers are concerned with access to interstate highways, airport, other transport facilities, and to the central business district. In assessing how a highway project might affect the spatial distribution of industrial activity, the most important question is how will the project affect travel time accessibility from the major industrial zone.

Pre- and post-project travel time accessibility is determined by assessing the changes in speed (and distance) that result from the project.

In the case of the U. S. Highway 12 (Clairemont Avenue) project, average driving speeds along Clairemont Avenue have increased from an estimated 28 mph (assuming at or below capacity on a one lane, principal arterial in a residential area) to an estimated 37 mph (on the same road expanded into three lanes each direction). These estimated speeds are consistent with no over capacity traffic loads.

Traffic count data for several years preceding construction on the project indicate, however, that some traffic congestion was likely during peak hours. The pre-project design capacity of one-way traffic along Clairemont Avenue was 708 vehicles per hour. Two-way traffic counts along portions of Clairemont Avenue in 1967 exceeded 18,000 and 19,000 average daily volumes (ADV), which implies one-way ADV of 9,000 and higher. Assuming that evening peak volumes are approximately 9 percent of ADV, the one-way evening peak volumes of 810 vehicles per hour are estimated for 1967. Some congestion along Clairemont Avenue therefore must have lowered average speeds at least during peak hours.

Because of this congestion, we assume that the pre-project speeds along Clairemont Avenue were, on average, 25 mph. The project, the portion of Clairemont Avenue widened to three lanes, is 3.25 miles. Thus, the running time along the project is estimated to have decreased from approximately 7.8 minutes to 5.3
Figure F.3. Major Employers in Eau Claire

Figure F.4. Major Employers in Chippewa Falls
minutes, a 2.5 minute (32 percent) reduction in travel time.

3.2.b. Project impact on accessibility from industrial zones to freeway, transfer depots, CBD

As shown on Figure F.2, only one industrial zone will have direct accessibility gains as a result of this project: the industrial zone at the west end of the project. The project will yield a 2.5 minute travel time decrease while driving to Highway 53. This travel time savings will lead to relatively minor improvements in accessibility to other industrial zones, to the central business district, to other commercial areas and to other transportation depots, such as the airport.

3.2.c. Project impact on accessibility to major highway interchanges

In terms of accessibility to a major interstate highway, the industrial zone at the west end of the project is already well situated, adjacent to an interchange with Interstate 94. The project does little to improve accessibility of this industrial zone to the interstate highway.

3.2.d. Project impact on industrial location decisions

As shown in section 3.1.a, manufacturing employment in Eau Claire and Chippewa Falls has shown a significant decline. Trends suggest that manufacturing employment growth will be modest at best. However, the lack of growth in manufacturing employment does not mean that the spatial distribution of manufacturing activities will be unchanged. Even if manufacturing employment were to remain stable or to decline, new manufacturing firms will be established as other firms go out of business, and there will be some movement of existing firms within the SMSA.

Where will new manufacturing firms locate? The industrial zone with the greatest accessibility to the interstate highway interchange, which also has excess capacity, is at the west end of the project (see Figure F.2). The general accessibility improvements accruing to this zone as a result of the project, although marginal, may attract new industry to locate there. But, because of the zone's location relative to the interstate highway, the zone would possess this advantage in the absence of the project.

In sum, we find that industrial employment is not growing and industrial zones have considerable excess capacity. We also find that the project will have a minimal affect on travel time accessibility for all industrial zones. Thus, we conclude that
the project is likely to have very little impact on the location of industrial activity within Eau Claire City and Chippewa Falls City.

3.2.e. Likelihood of industrial rezoning because of Project

Existing industrial zones have excess capacity and industrial employment is not growing. Moreover, the project has limited impact on accessibility for industrial firms. Therefore, the project is not likely to lead to any industrial rezoning.

4.1. Spatial distribution of existing commercial activity

4.1.a. Commercial employment data

Employment in commercial activities for Eau Claire City and Chippewa Falls City in 1950 to 1980 is shown in Table F.4. Again, 1980 data are shown for illustration purposes but are not used in this case study. Employment growth in the retail, services, and FIRE sectors is extremely rapid. Total commercial employment has increased by 59 percent between 1960 and 1970.

Over this period, the Eau Claire-Chippewa Falls SMSA has become the primary wholesale/retail trade and services center for West Central Wisconsin. Customers for trade and services are drawn from all surrounding counties including Eau Claire, Chippewa Falls, Dunn, Barron, Rusk, Clark, Jackson, Buffalo, and Pepin counties. Figure F.5 shows travel time accessibility from the project area to outlying areas. The trade area for high order goods and services purchases in Eau Claire extends even beyond the 50 minute travel time radius shown in Figure F.5.

4.1.b. Projections of commercial employment

Projections made in 1967 for trade and service employment in Eau Claire (see Table F.2) indicate an increase of 4,199 jobs in Eau Claire over this period. Because of this projected increase in commercial activity, we want to examine closely the potential impacts of the project on the location of retail outlets and other commercial establishments.
### Table F.4

COMMERCIAL EMPLOYMENT IN EAU CLAIRE CITY AND CHIPPENWA FALLS CITY IN 1950 TO 1980

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>686</td>
<td>625</td>
<td>760</td>
<td>998</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>130</td>
<td>124</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>2,636</td>
<td>2,170</td>
<td>3,686</td>
<td>5,255</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>820</td>
<td>899</td>
<td>943</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>1,655</td>
<td>2,290</td>
<td>4,041</td>
<td>5,241</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>890</td>
<td>1,173</td>
<td>1,249</td>
<td></td>
</tr>
<tr>
<td>FIRE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>436</td>
<td>494</td>
<td>731</td>
<td>1,286</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>100</td>
<td>135</td>
<td>221</td>
<td></td>
</tr>
<tr>
<td>TOTAL COMMERCIAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eau Claire City</td>
<td>5,423</td>
<td>5,579</td>
<td>9,218</td>
<td>12,780</td>
</tr>
<tr>
<td>Chippewa Falls City</td>
<td>1,940</td>
<td>2,331</td>
<td>2,553</td>
<td></td>
</tr>
</tbody>
</table>

4.1.c. Identification of areas zoned for commercial activity

The areas zoned for commercial activity are shown on Figure F.6. The major commercial zones in proximity of the project are at the east and west ends of the project (shown by the solid black line) and in the central business district of Eau Claire, just north of the center of the project.

The major shopping area locations are shown in Figures F.7 and F.8. The shopping areas closest to the project are: London Square Mall, Shopko Plaza Shopping Center, K-Mart, and the Putnam Heights Shopping Center. In 1969, the occupancy rates of these shopping areas were London Square Mall (did not exist), Shopko Plaza Shopping Center (did not exist), K-Mart (75 percent), and the Putnam Heights Shopping Center (90 percent).

In 1970, development of a shopping center at what is now London Square Mall was under consideration.

4.2. How the Project will affect spatial distribution of commercial activities

4.2.a. Project impact on travel time accessibility to commercial zones

As shown in 3.2.a., the project will reduce driving times along Clairemont Avenue from Highway 53 to the Chippewa River from 7.8 to 5.3 minutes -- a reduction of 32 percent.

The reductions in travel time along Clairemont Avenue also contribute to increases in accessibility between commercial zones at either end of the project and the central business district.

Accessibility to the I-94 interchange is relatively unaffected by the project. However, some reduction in congestion will likely result because of the project.

The project is not likely to lead to any significant increases in the population that will be within a 30 minutes driving time of the commercial zones. Figure F.5 shows the accessibility contours from the project. These contours are essentially unchanged by the project.
Figure F.6. Commercial Locations in Eau Claire
Figure F.7. Major Shopping Areas in Eau Claire

Figure F.8. Major Shopping Areas in Chippewa Falls
4.2.b. Project impact on consumer visibility of commercial business activity

Because it is very important for most retail and service businesses to be visible to consumers, these businesses typically locate along major highways and arterials. The impact of the project on the desirability of certain locations for commercial businesses can be estimated by comparing pre-project and forecasted traffic volumes through commercial zones (see Table F.5). For the purposes of this example, forecasted traffic volumes are drawn from the 1972 edition of "Wisconsin Traffic Data."

In order to account for the general increases in traffic volumes expected from 1970 to 1972, the average daily volumes (ADVs) of a wide selection of locations throughout Eau Claire were averaged. On average, the ADVs in Eau Claire increased by approximately 13 percent from 1970 to 1972.

Thus, the increases in traffic volumes along the project are very high. This suggests that retail and service businesses may be attracted to locate along the project. It is very likely that strip development of commercial activities may intensify along Clairemont Avenue because of the project.

4.2.c. Project impact on the commercial trade area

Commercial trade areas can be roughly categorized as primary or secondary trade areas. The primary trade area of a region is typically defined as the local area from which consumers are drawn, accounting for approximately 80 to 90 percent of sales. The secondary trade area is defined as the broadest area from which consumers can be drawn. Maximum driving times for customers within the primary trade area range from 15 to 20 minutes. The maximum driving time is between 30 and 50 minutes for the secondary trade area.

Commercial developers typically estimate the demand for new shopping centers in terms of levels of population and income within the commercial trade areas.

The task here is to determine whether or not a highway project will significantly increase the commercial trade area -- stimulating new commercial sales and activities. A procedure for estimating the impact of a highway project on the size of the commercial trade area is to determine the increase in population that would reside within 30 to 50 minutes driving time from the major commercial centers, if the project were undertaken.

For this project, the primary trade area is considered to include the urbanized areas of Eau Claire and Chippewa Falls and all those areas within 20 minutes travel time (see Figure F.5).
Table F.5

PRE- AND POST-PROJECT AVERAGE DAILY TRAFFIC VOLUMES

<table>
<thead>
<tr>
<th>Location</th>
<th>1970</th>
<th>1972</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hwy. 85 and Clairemont Avenue</td>
<td>7,440</td>
<td>10,605</td>
<td>+42.5</td>
</tr>
<tr>
<td>Clairemont and State Street</td>
<td>9,970</td>
<td>15,595</td>
<td>+56.4</td>
</tr>
<tr>
<td>Clairemont and Rudolf Road</td>
<td>7,795</td>
<td>14,925</td>
<td>+91.5</td>
</tr>
<tr>
<td>Clairemont and Hwy. 53</td>
<td>6,440</td>
<td>10,685</td>
<td>+65.9</td>
</tr>
</tbody>
</table>

The secondary trade area extends to the 50 minute contour.

Because this project consists of widening a 3.25 mile stretch of Clairemont Avenue and results in a travel time reduction of only 2.5 minutes along Clairemont Avenue, the accessibility impacts on commercial trade areas are limited. Any increases in commercial trade areas resulting from this project are expected to be minor. For all intents and purposes, accessibility within the commercial trade areas is likely to remain roughly equivalent to that shown in Figure F.5.

4.2.d. Existing regional shopping centers

The only regional shopping centers within 10 miles of the project are the planned London Square Mall, Putnam Heights Shopping Center and the central business districts (CBDs) of Eau Claire and Chippewa Falls. The planned London Square Mall, yet to be built, is assumed to have had 0% of its gross leasable area (GLA) leased at the time of the project. It is not possible to estimate directly the percentage of GLA leased in either of the CBDs. However, in Eau Claire there was general consensus that businesses in the CBD were beginning to decentralize.

Because the existing regional shopping areas have excess capacity, and because the project is not likely to produce any significant increase in the primary or secondary trade areas, there is little evidence to suggest that the project will induce a new shopping center. This conclusion also stems from the marginal project impact on consumer accessibility to major highway interchanges.

4.2.e. Project impact on consumer accessibility to an interstate highway interchange

The project is likely to lead to minor improvements in accessibility to two of the three I-94 interchanges in Eau Claire. The reduction of congestion at the intersection of Clairemont Avenue and County Highway 85 (Hendrickson Drive, which connects to I-94) may increase the attractiveness of commercial developments in between Clairemont Avenue and the I-94/County 85 interchange.

Another corridor/interchange with potential for reduced commercial development is the 3 mile stretch of Highway 53 connecting Clairemont Avenue to I-94. However, the interchange is 3 miles away from the existing commercial developments on Clairemont Avenue and there is virtually no commercial development along this corridor.
4.2.f. Project impact on commercial activities in the CBD

The project is located more than 0.75 miles from the Eau Claire's central business district (CBD) and does not directly improve accessibility of consumers to the CBD. In fact, close inspection of Figure F.6 reveals that the project may serve to improve the linkages and accessibility to and between two of the shopping areas which pose the greatest competitive threat to commercial activities within the CBD. Because of the project's positive impact on accessibility to the commercial activities along Clairemont Avenue, it is likely that the project may adversely affect the commercial attractiveness of the CBD.

5.1. Spatial distribution of existing residential locations

5.1.a. Population data and projections

The population of Eau Claire County increased by 15.3 percent from 1960 to 1970. For analyzing the impact of this project, it is assumed that this trend will continue.

5.1.b. Identification of existing areas zoned for residential location

Figure F.9 shows the pattern of residential location in Eau Claire and Chippewa Falls in relation to the project. This map does not define residential zoning demarcations, but is an approximation of the status of areas zoned for residential development in 1970.

The residential neighborhoods in the areas directly south of the project are likely to gain most in term of improvements in accessibility by the widening of Clairemont Avenue.

5.1.c. Identification of residential densities

Dwelling-unit densities are used as a proxy for population densities. Forecasted densities in Eau Claire and Chippewa Falls for 1975 and 2000 are shown in Figures F.10 and F.11. In the residential areas just south of the project, the forecast suggests that there is likely to be increasing population densities in six of the most southerly neighborhoods between Clairemont Avenue and I-94.
Figure F.9. Location of Residential Areas in Eau Claire
Figure F.10. Forecasted Dwelling-Unit Densities in Eau Claire

Figure F.11. Forecasted Dwelling-Unit Densities in Chippewa Falls
5.2. How the Project will affect the spatial distribution of residential location and densities

5.2.a. Project impact on travel time accessibility for residential activity

The primary considerations affecting residential location choice are the transportation costs to work, shopping, and recreation in relation to rent or cost of housing. The task here is to determine the magnitude of the impact of this project on the demand for housing within existing neighborhoods as well as for new housing developments or subdivisions. Typically, changes in residential location will occur if there are changes in the location of major employment centers, both industrial employment and service employment. But, changes in residential location are also likely to result from changes in accessibility to jobs and commercial centers. Transportation projects that reduce the travel time of the home-to-work trip often give rise to housing developments further away from the work centers because workers can minimize their rent by moving further out while keeping their travel times constant.

The project will reduce the driving time of driving along Clairemont Avenue from the bridge to Highway 53 by 2.5 minutes. It is unlikely that this project will have major impact on home-to-work travel times. At most, this accessibility improvement is only likely to have an impact on residential locations that extend in either direction from the endpoints of the project. For example, the project may possibly contribute to increased demand for housing development in areas west of the project, in western Eau Claire, and in areas to the east of the project, south of Altoona. Since the project is likely to have a very limited impact on the location of industrial or service employment within Eau Claire, it is also quite likely that the project's impact on residential location will be minor.

5.2.b. Likelihood of Project to result in residential rezoning

Because the accessibility impacts of the project are relatively minor, it is not likely that the project, by itself, will induce a change in residential zoning patterns. Generally, however, the project is likely to contribute to the gradual expansion of the urbanized area in south Eau Claire.
5.2.c. Likelihood of Project to contribute to a
deterioration in community/neighborhood qualities
or a decline in community residential values

Because the overall impacts of the project are expected to
be minor, the project is not likely to lead to any significant
deterioration in neighborhood qualities or values. However, the
strip commercial development that is anticipated along Clairemont
Avenue, particularly at the endpoints of the project, may
penetrate the fringes of the established residential communities
in those areas.

6. Project impact on agricultural activity within 10 miles of
the Project

The impact of a project on agricultural activity in the area
is a key consideration in assessing whether or not there is
potential for any significant negative impacts of the project.
Generally, if a transportation project has a major impact on
residential development on the fringes of the urbanized area,
then it is likely that some farming activities will be adversely
affected. While this does not mean that the overall impact of
the project will be negative, it does call attention to one
possible negative effect that may have to be reconciled.

The overall impact of this project is likely to be limited
to areas within the urbanized area of Eau Claire. Therefore, it
is not anticipated that agricultural activity will be affected at
all by this project.

7. Project impact on land values

In general, the likely impact of a transportation project on
land values is an increase in the value of any land that
benefits, directly or indirectly, by an improvement in
accessibility. In other words, accessibility improvements are
generally capitalized into land values.

It is expected that the major impact of this project on land
values will be the increase in the value of commercial real
estate along Clairemont Avenue. In addition, if some portion of
commercial activity from the Eau Claire CBD is attracted to
Clairemont Avenue, there may be some decline in land values in
the CBD. Finally, because of some gains in accessibility for
residential areas just south of the project, these areas may
experience a small increase in land values as a result of the
project.
8. Project impact on commuting patterns and mass transportation

Because the influence of the project on industrial, commercial, and residential activity is likely to be minor, it is not anticipated that this project will change commuting patterns.

9. Project impact on public land use or public services

The major public land uses in the vicinity of the project include the University of Wisconsin--Eau Claire, State of Wisconsin offices, and the District 1 Technical Institute. All of these facilities are clustered at the west end of Clairemont Avenue (see Figure F.3).

It is unlikely that the project will have any impact on the location of these public facilities. The project will yield accessibility benefits to the employees and users of these public facilities.