

5.0 SOCIAL AND ECONOMIC

5.1 SOCIAL

5.1.1 INFORMATION FROM THE DEIS THAT REMAINS UNCHANGED

The population and economic characteristics of the I-494 study area have not changed substantially since publication of the DEIS. Information from the 1980 and 1990 census was used to detail the historic demographic characteristics of the corridor. The demographic information includes census tracts abutting I-494 through the study area. This same demographic information was used in the DEIS for historical trends. The 1990 Census continues to be the most recent source for economic data. The planned release date of 2000 Census economic data at the City level is March 2002.

The anticipated impacts on residents who are not relocated, the anticipated extent of impacts on neighborhood cohesion and the anticipated impacts on businesses that are not relocated, as described in Section 5.2 of the DEIS, have not changed since publication of the DEIS or as a result of the Preferred Alternative.

5.1.2 CHANGES IN THE SETTING OR TECHNICAL ANALYSIS SINCE THE DEIS

The description of demographic characteristics in the DEIS has been updated and expanded to provide a description of each of the five cities within the study area. The description of population in the DEIS was based on the 1990 Census. The description of household data in the DEIS was based on 1988 housing unit data by Metropolitan Council traffic analysis zones (TAZs). Since publication of the DEIS, population data from the 2000 Census have been released and household data from the 1990 Census and 2000 Census have been released and are included in Table 5.1. The most recent Metropolitan Council estimate for employment (1997) is included in Tables 5.1 and 5.2. Table 5.2 also includes historic information on employment for each of the five cities within the study area. In addition, Metropolitan Council forecasts for 2020 have replaced the Metropolitan Council's 2010 forecasts used in the DEIS to depict the forecast year conditions.

5.1.2.1 Summary of Population and Economic Characteristics

Population and Household Growth

According to the U.S. Census, the population of the Minneapolis-St. Paul Metropolitan Area grew by 15.3 percent between 1980 and 1990 from 1,985,873 to 2,288,729. The number of households increased by 21.4 percent during the same time period from 721,357 to 875,504. Between 1990 and 2000, the population of the Minneapolis-St. Paul Metropolitan Area increased by another 25.3 percent to 2,868,847, and the number of households increased by an additional 25.6 percent to 1,100,190. The most recent Metropolitan Council forecasts show a 2020 population of 3,091,390 and a 2020 household total of 1,269,320. These forecasts have not been revised since the 2000 Census.

Table 5.1 illustrates the growth of cities in the I-494 corridor study area between 1980 and 2000, as well as the forecasted growth through 2020. This growth in households through 2020 is expected to be strongest in Eden Prairie as the community continues to develop. The number of households in Bloomington, Richfield and Minnetonka are also expected to increase as areas within those communities are redeveloped as mixed-use and multiple family developments. The overall more rapid growth in households compared to population, shown in the table, reflects the ongoing metropolitan trend of a decreasing household size.

**TABLE 5.1
I-494 CORRIDOR STUDY AREA
MUNICIPAL POPULATION AND HOUSEHOLD GROWTH, 1980 – 2020**

City	Population/ Households	1980 Census ⁽¹⁾	1990 Census ⁽¹⁾	Percent Change (1980-1990)	2000 Census ⁽¹⁾	Percent Change (1990-2000)	2020 Forecast ⁽²⁾	Percent Change (2000 – 2020)
Bloomington	Population	81,831	86,335	+ 5.5 %	85,172	- 1.3 %	91,000	+ 6.8 %
	Households	28,660	34,488	+ 20.3 %	36,400	+ 5.5 %	38,000	+ 4.4 %
Eden Prairie	Population	16,263	39,311	+ 141.7 %	54,901	+ 39.6 %	59,500	+ 8.4 %
	Households	5,383	14,477	+ 168.9 %	20,457	+ 41.3 %	26,000	+ 27.1 %
Edina	Population	46,073	46,070	0±	47,425	+ 2.9 %	49,000	+ 3.3 %
	Households	17,961	19,860	+ 10.6 %	20,996	+ 5.7 %	21,500	-2.4%
Minnetonka	Population	38,683	48,370	+ 25.0%	51,301	+ 6.0 %	50,800	-1.0%
	Households	12,667	18,687	+ 47.5 %	21,393	+ 14.5 %	22,700	+ 6.1%
Richfield	Population	37,851	35,710	- 5.7 %	34,439	- 3.6 %	40,000	+ 16.1 %
	Households	15,258	15,551	+ 1.9 %	15,073	- 3.0 %	17,200	+ 14.1 %
TOTAL	Population	220,701	255,796	+ 15.9 %	273,238	+ 6.8 %	290,300	+ 6.2 %
	Households	79,929	103,063	+ 28.9 %	114,319	+ 10.9 %	125,400	+ 9.6 %

Source: ⁽¹⁾US Census Bureau

⁽²⁾Metropolitan Council, 1996 (population forecast revised in 1998)

Economic Conditions

Based upon U.S. census information, the 1989 median household income levels for the municipalities in the study area were as follows:

- Bloomington – \$41,736
- Eden Prairie – \$52,956
- Edina – \$48,936
- Minnetonka – \$50,659
- Richfield – \$32,405

The 1989 median household income for Hennepin County was \$35,659 and for the Minneapolis-St. Paul Metropolitan Area was \$36,565. While certain portions of the study area corridor have somewhat higher concentrations of low- and moderate-income persons than the remainder of the study area, the data did not reveal high concentrations relative to Hennepin County as a whole. Environmental Justice issues are discussed in greater detail in Section 5.4 of the FEIS.

The I-494 corridor includes a wide variety of commercial, office and light industrial businesses with a substantial employment base. Table 5.2 presents information regarding growth of employment, by city, within the study area since 1980. Growth of employment within the five cities in the corridor is projected by the Metropolitan Council to increase from 202,846 in 1990 to 297,100 through 2020. The largest percentage growth is anticipated in Eden Prairie, which is still developing, while the largest numerical growth is anticipated in Bloomington. The construction of Phase II of the Mall of America in the southeast quadrant of TH 77 and I-494 and the redevelopment of land south of I-494 near the Minneapolis-St. Paul International Airport are reflected in the 2020 forecasts, as are new developments and redevelopment along the corridor in all five cities.

**TABLE 5.2
I-494 CORRIDOR STUDY AREA
EMPLOYMENT INFORMATION BY CITY, 1980 – 2020 (JOBS)**

City	1980 Census ⁽¹⁾	1990 Census ⁽¹⁾	Percent Change (1980-1990)	1997 Estimate ⁽²⁾	Percent Change (1990-1997)	2020 Forecast ⁽²⁾	Percent Change (1997 – 2020)
Bloomington	61,098	75,837	+ 24.1 %	90,853	+ 19.8 %	112,000	+ 23.3 %
Eden Prairie	12,807	36,095	+ 181.8 %	44,319	+ 22.8 %	56,500	+ 27.5 %
Edina	36,061	44,534	+ 23.5 %	52,819	+ 18.6 %	60,000	+ 13.6 %
Minnetonka	19,818	35,536	+ 79.3 %	45,283	+ 27.4 %	56,000	+ 23.7 %
Richfield	10,798	10,844	+ 0.4 %	10,405	- 4.0 %	12,600	+ 21.1 %
TOTAL	140,582	202,846	+ 44.3 %	243,679	+ 20.1 %	297,100	+ 21.9 %

Source: ⁽¹⁾US Census Bureau

⁽²⁾Metropolitan Council, 1998

5.1.3 IMPACTS ASSOCIATED WITH THE PREFERRED ALTERNATIVE

The Preferred Alternative should have no discernable impacts on population characteristics at the city or regional levels. The Preferred Alternative will require acquisition of a number of housing units and businesses and relocation of the affected individuals. These impacts are detailed in Section 5.2.3. However, such relocation is not expected to disproportionately affect low income and/or minority populations.

Some parkland will be acquired, as is further discussed in Chapter 8 of this FEIS, but the impact on any social group or neighborhood is not expected to be measurable.

Interstate 494 currently serves and will continue to serve as a boundary between communities and neighborhoods in the study area. As such, no neighborhoods would be split nor would any social groups, neighborhoods, or ethnic groups be isolated. Construction of the Preferred

Alternative would not further separate residents or social groups from community facilities. Access to properties lost due to frontage road removal is being restored through development of parallel transportation facilities. (see Section 4.3.3.2).

5.1.4 MITIGATION MEASURES

No mitigation measures are necessary as the population characteristics and social/community relationship within the study area would not be changed by implementation of the Preferred Alternative.

5.2 RIGHT-OF-WAY AND RELOCATION

5.2.1 INFORMATION FROM THE DEIS THAT REMAINS UNCHANGED

Right-of-way and relocation issues associated with the reconstruction of I-494 were discussed in Section 5.2.1 of the DEIS. The right-of-way acquisition needs for the FEIS were determined using the same general procedures as those for the DEIS.

5.2.2 CHANGES IN THE IMPACTS OR TECHNICAL ANALYSIS THAT HAVE OCCURRED SINCE THE DEIS

The properties affected by corridor reconstruction have been defined based upon the preliminary construction limits developed for the Preferred Alternative.

The property information that was obtained from Hennepin County for the DEIS has been updated to reflect 1999 assessed values. Business counts reflect current conditions. The presentation of the technical analysis has been restructured to present information by municipality rather than by the corridor segment areas and interchange areas detailed in the DEIS. In addition to these changes, the FEIS analysis has been expanded to include consideration of residential and business relocation potential.

Since publication of the DEIS, some conditions in the corridor have changed contributing to the reduction in right-of-way impacts. These changes include:

- The manufactured home park that was located between Chicago and Portland Avenue south of I-494 has been redeveloped into a retail commercial use. Relocation of the affected residents was addressed as part of that project.
- The residential properties identified for acquisition in the DEIS along 77th Street in Richfield have been acquired as part of a project for which a separate Environmental Assessment was completed.

- The area bounded by Lyndale Avenue, I-494, Colfax Avenue and 77th Street has been redeveloped as retail and would accommodate the Preferred Alternative without affecting the retail development due to right-of-way acquisition.
- Cities in the I-494 corridor reoriented access for parcels that were expected to be affected by the proposed reconstruction of I-494 in order to reduce the impacts of right-of-way acquisition.
- The reduction in project scale discussed in Section 3.4 of this FEIS has resulted in a projection of substantially fewer parcel acquisitions than would have been required for the range of Build alternatives analyzed in the DEIS. There are approximately 35 to 40 percent of the number of total acquisitions and 75 to 90 percent of the number of partial acquisitions reported for the range of alternatives assessed in the DEIS. In particular, there are far fewer total residential acquisitions.

5.2.3 PREFERRED ALTERNATIVE IMPACTS AND MITIGATION

5.2.3.1 Methodology

The following guidelines were used to minimize the right-of-way acquisition needs for the reconstruction of I-494:

- To the extent possible, all proposed improvements were designed within existing state and local government-owned right-of-way.
- Where additional right-of-way was required to accommodate the proposed design, the right-of-way acquisition was minimized to the extent possible.
- In areas where it was especially desirable to minimize right-of-way acquisition, for example to avoid impacts to parklands and residential and commercial structures, vertical retaining walls were included instead of more customary backslopes or fill slopes.

The following data sources were used to complete the right-of-way analysis:

Impact Information

- Information on property ownership, estimated market value, and taxes was obtained from Hennepin County property tax records.
- Information on business names was obtained through the *Minneapolis Metro Business Directory* and confirmed through field survey.
- Information on commercial/industrial square footage was obtained from City Assessors' records.

- Meetings were held with staff from the cities of Bloomington and Richfield to specifically discuss right-of-way issues. These cities provided local/access information which was used to refine right-of-way analysis.
- Information on job impact was based on standard ratio of employees to building area as cited by the Institute of Transportation Engineers (ITE).

Relocation Information

- Information on residential construction activity was obtained from building permit records. Information on sales of residential properties was obtained from the *Residential Real Estate Activity Report*, published by the Minneapolis Area Association of Realtors.
- Information on capacity for job and housing unit growth was obtained from the Metropolitan Council.
- Information on commercial/industrial vacancies was obtained from the *2000 Towle Report*, a periodical published by Towle Real Estate, which reports on the commercial real estate market in the Minneapolis-St. Paul Metropolitan Area.
- Information on redevelopment potential was based on city comprehensive plans.

5.2.3.2 Impact Analysis

Impacts were defined as being either total or partial acquisitions. Total acquisitions were assumed where structures (house, office building) will be removed by the project or where a substantial portion of the parcel's land area would be acquired. Total acquisition costs were estimated using Mn/DOT recommended methodologies.

Partial acquisitions were defined as properties where some level of land acquisition is required, but is limited to boulevard or lawn areas, sections of unmaintained grounds, and minor (replaceable) parking impacts. The acquisition costs were estimated using Mn/DOT recommended methodologies. The costs of partial acquisitions included the value of the land being acquired and the potential for severance compensation.

Impacts were determined by defining right-of-way acquisition needs associated with the Preferred Alternative and construction requirements. Right-of-way impacts were grouped by land use type (residential and non-residential).

For the entire corridor, the Preferred Alternative is estimated to impact 291 properties. Affected are 150 residential and 141 non-residential parcels. The impacts result from widening the mainline, reconstructing the interchanges, reconfiguring the frontage road system, and providing for storm water ponding. The right-of-way needs are illustrated in Figures 3.1 through 3.12.

Table 5.3 presents the number and type of affected parcels, degree of acquisition (total or partial), and total estimated acquisition/relocation costs for each municipality and the corridor in its entirety. The table footnotes indicate assumptions used in compiling the data, including the availability of local access agreements to serve certain impacted properties.

Acquisition Impacts by Municipality

The reconstruction of I-494 will directly impact five municipalities: Minnetonka, Eden Prairie, Edina, Bloomington, and Richfield. It will also directly impact the Minneapolis-St. Paul International Airport, (included within the discussion of Bloomington impacts below). As detailed in the following discussion, each jurisdiction will incur varying impacts in terms of number of parcels, land uses, and acquisition costs. For the past several years, efforts have been made by cities in the corridor to provide alternate access to properties anticipated to be affected by right-of-way acquisition.

Minnetonka

Residential impacts in Minnetonka include one total acquisition and six partial acquisitions. The residential parcel to be totally acquired is vacant. All of the partially impacted residential properties are single-family residences. Non-residential impacts include no total acquisitions and three partial acquisitions. Two of the partial acquisitions are of industrial property; the other is public land.

Eden Prairie

One residential property, which is a free-standing garage on its own lot, will be totally acquired in Eden Prairie. One vacant residential property will be partially acquired. Non-residential impacts include one total acquisition and one partial acquisition. The total acquisition and the partial acquisition are both vacant commercial sites.

Edina

No residential property will be acquired in Edina. Non-residential impacts include one partial acquisition of a tax-exempt vacant property.

Bloomington

Bloomington will incur the largest number of right-of-way impacts of the municipalities along the I-494 corridor. Table 5.3 summarizes the estimated acquisition impacts within the City for the Preferred Alternative, including the preferred concept for the East Bush Lake Road/I-494 interchange (see Section 3.4.3). Preferred Alternative residential impacts include 26 total acquisitions and 64 partial acquisitions. All of the 26 total acquisitions are single-family homes and will require relocation. One of these is a transitional housing facility and is discussed in Section 5.6.3. Of the 64 partial acquisitions, seven properties are single-family, seven are apartment properties, 46 are condominium units, three are garages associated with the condominiums yet assigned individual parcel codes for tax purposes, and one is a common open space parcel for a townhouse development.

**TABLE 5.3
SUMMARY OF STUDY AREA RIGHT-OF-WAY IMPACTS BY MUNICIPALITY – PREFERRED ALTERNATIVE**

	Total Acquisitions						Partial Acquisitions ⁽³⁾			
	Number of Parcels		Estimated Acquisition/Relocation Cost		Estimated Market Value		Number of Parcels		Estimated Acquisition	
Municipality	Res	Non-res	Res	Non-res	Res ⁽¹⁾	Non-res	Res	Non-res	Res	Non-res
Minnetonka	1 (.02 ha/ 0.6 ac.)	0	\$ 56,000	\$ 0	\$ 28,000	\$ 0	6 (.02 ha/ 0.6 ac.)	3 (0.2 ha/ 0.6 ac.)	\$ 221,065	\$ 1,588,100
Eden Prairie	1 (0.4 ha/ 1.1 ac.)	1 (1.3 ha/ 3.3 ac.)	\$ 159,000	\$ 1,142,400	\$ 79,500	\$ 672,000	1 (0.7 ha/ 1.7 ac.)	1 (0.8 ha/ 2.0 ac.)	\$ 9,935	\$ 2,246,250
Edina	0	0	\$ 0	\$ 0	\$ 0	\$ 0	0	1 (1.6 ha/ 3.9 ac.)	\$ 0	\$ 1,680,000
Bloomington	26 (2.7 ha/ 6.7 ac.)	32 (20.2 ha/ 50.0 ac.)	\$ 4,799,200	\$34,636,098	\$2,399,600	\$20,374,175	64 (0.8 ha/ 1.9 ac.)	75 (12.1 ha/ 29.9 ac.)	\$ 1,248,032	\$ 83,457,096
Richfield	33 (2.8 ha/ 7.0 ac.)	2 (0.5 ha/ 1.3 ac.)	\$ 6,667,200	\$ 3,884,500	\$3,333,600	\$ 2,285,000	18 (1.3 ha/ 3.2 ac.)	24 ⁽²⁾ (1.1 ha/ 2.8 ac.)	\$ 3,645,267	\$ 13,656,280
Airport	0	0	\$ 0	\$ 0	\$ 0	\$ 0	0	2 (1.7 ha/ 4.2 ac.)	\$ 0	\$ 3,647,000
Totals	61 (6.2 ha/ 15.4 ac.)	35 (22.1 ha/ 54.6 ac.)	\$11,681,400	\$39,662,998	\$5,840,700	\$23,331,175	89 (2.3 ha/ 5.8 ac.)	106 (17.5 ha/ 43.1 ac.)	\$5,124,299	\$106,274,726

⁽¹⁾ Includes an estimate of \$100,000 for one non-profit-owned housing unit for which Estimated Market Value (EMV) was not available

⁽²⁾ Includes a 119-bed nursing home

⁽³⁾ Fifteen (15) of these partial acquisitions have been characterized this way because of local access agreements which landowners reportedly hold. It is possible, pending future negotiations among interested parties regarding individual properties, that some of these 15 properties would not require acquisition at all, or, on the other hand, may require total acquisition, along with three other parcels currently not counted among the acquisitions. A worst case would involve an additional 10 properties requiring total acquisition, and a partial property acquisition increasing in size. This worst case would add \$23,791,540 to the right-of-way acquisition costs for the overall project.

Non-residential impacts include 32 total acquisitions and 75 partial acquisitions. Of the total property acquisitions, three are park parcels (two contiguous as part of one park resource), four are vacant commercial parcels, and 25 are commercial/industrial properties. The commercial/industrial properties affected by acquisition comprise 26 retail/service establishments, 13 office businesses, and 10 industrial businesses. (Several parcels are sites of more than one business establishment.)

Forty-four of the partial acquisitions are commercial, four are vacant, 13 are industrial, 11 are park properties, (including multiple parcels within each of the three affected parks) two are church properties, and one is property owned by the Metropolitan Airports Commission. There are also two additional airport properties to be partially acquired, shown separately from Bloomington parcels in Table 5.2.

As discussed in Section 3.4.3 of this FEIS, concerns have been raised regarding the Preferred Alternative design for the I-494/East Bush Lake Road Interchange. Three alternate designs for this interchange have been identified and evaluated. These alternate designs are not preferred by Mn/DOT, but it is possible that one of them could be implemented through discussions with FHWA. Table 5.4 identifies right-of-way impacts for Bloomington (all right-of-way impacts for this interchange for all alternatives are within Bloomington) and the study area total assuming each of the alternate designs for the I-494/East Bush Lake Road interchange.

Richfield

Residential impacts include 33 total acquisitions and 18 partial acquisitions. Twenty-nine of the total residential property acquisitions are single-family homes, one is a two-family dwelling, and three are vacant residential parcels. The partial acquisitions affect nine single-family properties, two vacant residential parcels, and seven apartment properties.

The majority of residential property acquisitions in Richfield would be located in the northeast quadrant of the I-494/I-35W interchange, north of 76th Street (see Figures 3.8 and 3.9). A number of residents of this area and some City officials have raised objections to the extent of acquisitions proposed in this area. However, a review of previous environmental documentation for the I-494/I-35W interchange area indicates that the identification of right-of-way impacts in this area is not new. As discussed in Section 3.4.3 of this FEIS, the I-494 DEIS referenced the I-35W Reconstruction DEIS for information on alternatives and impacts (including right-of-way impacts) for the I-35W/I-494 interchange area. All of the total residential acquisitions in Richfield associated with the reconstruction of the I-35W/I-494 interchange identified on Figures 3.8 and 3.9 and included in the analysis in this FEIS were also identified as total acquisitions in the right-of-way analysis for this interchange in the I-35W DEIS and, therefore by reference, the I-494 DEIS. The I-35W DEIS and the I-494 DEIS each went through a formal public review and comment process, including public hearings. The Minnesota Department of Transportation acknowledges the concerns of residents in this area and will continue to refine this interchange area during final project design to reduce, to the greatest extent feasible, the number of total residential acquisitions east of I-35W and north of 76th Street.

**TABLE 5.4
SUMMARY OF RIGHT-OF-WAY IMPACTS FOR ALTERNATE DESIGNS AT I-494/EAST BUSH LAKE ROAD INTERCHANGE – BLOOMINGTON AND STUDY AREA**

	Total Acquisitions						Partial Acquisitions ⁽³⁾			
	Number of Parcels		Estimated Acquisition/Relocation Cost		Estimated Market Value		Number of Parcels		Estimated Acquisition	
	Res	Non-res	Res	Non-res	Res ⁽¹⁾	Non-res	Res	Non-res	Res	Non-res
Folded Diamond to the East										
Bloomington	26 (2.7 ha/ 6.7 ac.)	29 (6.0 ha/ 14.7 ac.)	\$ 4,799,200	\$52,736,098	\$2,399,600	\$31,882,875	64 (0.8 ha/ 1.9 ac.)	75 (12.1 ha/ 29.9 ac.)	\$1,248,032	\$ 83,457,096
Study Area Total	61 (6.2 ha/ 15.4 ac.)	38 (25.4 ha/ 62.6 ac.)	\$11,681,400	\$57,762,998	\$5,840,700	\$34,839,875	89 (2.3 ha/ 5.8 ac.)	106 ⁽²⁾ (7.5 ha/ 43.1 ac.)	\$5,124,299	\$106,274,726
Picture Drive On-Ramp										
Bloomington	26 (2.7 ha/ 6.7 ac.)	32 (20.2 ha/ 50.0 ac.)	\$ 4,799,200	\$34,636,098	\$2,399,600	\$20,374,175	64 (0.8 ha/ 1.9 ac.)	76 (12.6 ha/ 31.1 ac.)	\$1,248,032	\$ 83,957,096
Study Area Total	61 (6.2 ha/ 15.4 ac.)	35 (22.1 ha/ 54.6 ac.)	\$11,681,400	\$39,662,998	\$5,840,700	\$23,331,175	89 (2.3 ha/ 5.8 ac.)	107 ⁽²⁾ (18.0 ha/ 44.5 ac.)	\$5,124,299	\$106,774,726
On-Ramp Under Railroad										
Bloomington	26 (2.7 ha/ 6.7 ac.)	33 (20.7 ha/ 51.2 ac.)	\$ 4,799,200	\$34,936,098	\$2,399,600	\$20,517,075	64 (0.8 ha/ 1.9 ac.)	74 (12.0 ha/ 29.6 ac.)	\$1,248,032	\$ 83,336,096
Study Area Total	61 (6.2 ha/ 15.4 ac.)	36 (22.6 ha/ 55.8 ac.)	\$11,681,400	\$39,962,998	\$5,840,700	\$23,474,075	89 (2.3 ha/ 5.8 ac.)	105 ⁽²⁾ (17.4 ha/ 42.8 ac.)	\$5,124,299	\$106,153,726

⁽¹⁾ Includes an estimate of \$100,000 for one non-profit-owned housing unit for which Estimated Market Value (EMV) was not available

⁽²⁾ Includes a 119-bed nursing home

⁽³⁾ Fifteen (15) of these partial acquisitions have been characterized this way because of local access agreements which landowners reportedly hold. It is possible, pending future negotiations among interested parties regarding individual properties, that some of these 15 properties would not require acquisition at all, or, on the other hand, may require total acquisition, along with three other parcels currently not counted among the acquisitions. A worst case would involve an additional 10 properties requiring total acquisition, and a partial property acquisition increasing in size. This worst case would add \$23,791,540 to the right-of-way acquisition costs for the overall project.

Non-residential impacts include two total acquisitions and 24 partial acquisitions. The total acquisitions include a gas station and a 119-bed nursing home. While the nursing home is listed here among the non-residential properties, it is also a residence and its acquisition will require relocation of the residents to alternate care appropriate to their needs. Twenty of the partial acquisitions are commercial properties, one is vacant, two are churches, and one is industrial.

Residential Relocation Impacts by Municipality

As shown in Table 5.5, reconstruction of I-494 will require relocation of 57 dwelling units. Relocation is not anticipated for any residential parcel identified as a partial acquisition.

Bloomington

Relocation will be required for the 26 single-family homes that will be acquired for right-of-way. In 1999, 31 housing units were built in Bloomington, all of which were single-family units. From 1995 through 1999, an average of 65 single-family residential building permits were issued yearly. However, single-family production is expected to slow substantially over the next several years. Bloomington is projected to add 1,144 households by the year 2020. City staff advised that about ten percent of accompanying housing unit growth will be single-family, for an average net annual growth of only about five single-family units per year. The anticipated construction of new multifamily, particularly senior housing options, may result in turnover in the existing single-family stock, opening up opportunities for relocation of affected households.

The Multiple Listing Service (MLS) reported sales of 899 single-family residences in Bloomington in 1999. Of these, 104 were homes with two or fewer bedrooms, 375 with three bedrooms, 320 with four or more bedrooms. The average price of these homes was \$157,828. The MLS distinguishes between the East Bloomington and West Bloomington market areas in its data reporting and reported a median price in the East Bloomington market area of \$112,900 and a median price in the West Bloomington market of \$155,000 for 1999. Of the 25 single-family structures to be acquired for the project for which estimated market value is available, the average 1999 estimated market value, as determined by the Hennepin County Assessor was \$96,000 with a median EMV of \$98,500. With the consideration that assessor's estimated market value (EMV) are generally somewhat lower than actual market sales prices, the impacted properties nonetheless have lower value than the average property sold in the Bloomington during 1999. The closest comparability is in the East Bloomington market area. If comparable replacement housing cannot be found within Bloomington, properties in adjacent communities could be considered.

Richfield

Relocation will be required for the 29 single-family homes and one two-family home that will be acquired for right-of-way. In 1999, 12 single-family housing units were built in Richfield, as well as 142 multi-family units. From 1995 through 1999, an average of 12 single-family residential building permits were issued yearly. Richfield is expected to add 1,700 households by 2020. Like Bloomington, Richfield is a fully developed community where most new housing

**TABLE 5.5
SUMMARY OF STUDY AREA RESIDENTIAL AND NON-RESIDENTIAL RELOCATION BY MUNICIPALITY⁽¹⁾ –
PREFERRED ALTERNATIVE**

Total residential and business relocations will occur only in Bloomington and Richfield

	Residential ⁽²⁾	Non-Residential									
	Dwelling Units	Retail/service		Office		Industrial		Total Number Structures	Total Number of Businesses	Total area of Business Space	Total Number of Employees ⁽⁴⁾
		Structures	Businesses	Structures	Businesses	Structures	Businesses				
Bloomington	26	8	26	3	13	13	10	24	49	45,829 (m ²) (492,794 sq. ft.)	900
Richfield	31 ⁽³⁾	2	2	0	0	0	0	2	2	5,206 (m ²) 55,975 sq. ft.)	40
Totals	57	10	28	3	13	13	10	26	51	51,035 (m ²) (548,769 sq. ft.)	940

⁽¹⁾ The relocation impacts are based on right-of-way impacts reported in Table 5.3 in which 14 partial acquisitions are characterized as such because of local access agreements which landowners reportedly hold. It is possible, pending future negotiations among interested parties that some of these 14 properties would not require acquisition at all, or, on the other hand, may require total acquisition along with three other parcels not counted among the acquisitions. A worst case would involve 10 additional properties requiring total acquisitions. This worse case would require relocation of one additional dwelling unit and 13 additional businesses.

⁽²⁾ These figures do not include the 24-bed residential care facility or the 119-bed nursing home. The nursing home is included in the Non-residential: Retail/service counts.

⁽³⁾ Includes one two-family structure.

⁽⁴⁾ Number of employees is an estimate based upon employees per 93 square meters (1,000 square feet) standards for different land uses and SRF estimates. The figures do not reflect actual employee counts for the current businesses.

options will become available as a result of redevelopment, with an emphasis on attached single-family and higher density multiple family development. While this level of activity in new detached single-family construction may not be sufficient to accommodate the relocation needs within Richfield, construction of new housing alternatives to serve the changing housing market will allow for turnover in the existing single-family housing stock that will help accommodate the relocation needs of affected residents.

The Multiple Listing Service reported sales of 439 single-family residences in Richfield in 1999. Of these, 99 were homes with two or fewer bedrooms, 285 with three bedrooms, and 55 with four or more bedrooms. The average price of these homes was \$114,031 with a median price of \$114,500. Of the 29 single-family structures to be acquired for the project, the average 1999 estimated market value was \$111,100 with a median EMV of \$112,500. With EMVs generally lower than actual market sales price, the data suggest that the impacted residential properties have comparable or slightly higher values than the average property sold in 1999.

In addition to these residential relocations, the project will affect residents of a 119-bed nursing home. Relocation of nursing home residents will be determined by the level of care needed by each of the affected residents and the availability of appropriate space at alternate facilities. Impacts on this facility are further discussed in Section 5.6.3.

Non-Residential/Business Relocation

The reconstruction of I-494 will necessitate the acquisition and relocation of retail/service establishments, office space and industrial buildings. Each of these types of businesses has different relocation needs, including highway access, highway visibility, zoning, and structure and parcel size. In addition, successful relocation should minimize negative impacts to employee commuting patterns. Every attempt will be made to allow businesses to relocate in relative proximity to their existing location.

Table 5.5 details, by municipality, the number and types of businesses that will be acquired by the project, and provides an estimate of the number of employees affected by these acquisitions for the Preferred Alternative, including the preferred concept at the East Bush Lake Road/I-494 interchange. Bloomington and Richfield are the only municipalities in the project area that will have businesses acquired. In total, the project will displace 51 businesses employing up to 940 persons, eliminating approximately over 51,150 square meters (550,000 square feet) of commercial/industrial space. Section 5.3.3 discusses these economic impacts in detail.

As discussed under the “Acquisition Impacts by Municipality” heading, above, Mn/DOT has identified three alternate designs for the I-494/East Bush Lake Road Interchange. It is possible, through discussions with FHWA, that one of these alternates may be implemented in the future. The non-residential/business relocation impacts for each of these alternates, for Bloomington and the total study area, are presented on Table 5.6.

**TABLE 5.6
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL RELOCATION BY MUNICIPALITY – ASSUMING
ALTERNATE DESIGNS FOR I-494/EAST BUSH LAKE ROAD INTERCHANGE – BLOOMINGTON AND STUDY AREA**

	Residential ⁽²⁾	Non-Residential									
	Dwelling Units	Retail/service		Office		Industrial		Total Number Structures	Total Number of Businesses	Total area of Business Space	Total Number of Employees ⁽⁴⁾
		Structures	Businesses	Structures	Businesses	Structures	Businesses				
Folded Diamond to the East											
Bloomington	26	8	26	6	47	13	10	27	83	65,070 (m ²) (699,674 sq. ft.)	1,520
Study Area	57 ⁽³⁾	10	28	6	47	13	10	29	85	70,275 (m ²) (755,649 sq. ft.)	1,520
Picture Drive On-Ramp											
Bloomington	26	8	26	3	13	13	10	24	49	45,829 (m ²) (492,794 sq. ft.)	900
Study Area	57 ⁽³⁾	10	28	3	13	13	10	26	51	51,035 (m ²) (548,769 sq. ft.)	940
On-Ramp Under Railroad											
Bloomington	26	8	26	3	13	13	10	24	49	45,829 (m ²) (492,794 sq. ft.)	900
Study Area	57 ⁽³⁾	10	28	3	13	13	10	26	51	51,035 (m ²) (548,769 sq. ft.)	940

⁽¹⁾ The relocation impacts are based on right-of-way impacts reported in Table 5.3 in which 14 partial acquisitions are characterized as such because of local access agreements which landowners reportedly hold. It is possible, pending future negotiations among interested parties that some of these 14 properties would not require acquisition at all, or, on the other hand, may require total acquisition along with three other parcels not counted among the acquisitions. A worst case would involve 10 additional properties requiring total acquisitions. This worse case would require relocation of one additional dwelling unit and 13 additional businesses.

⁽²⁾ These figures do not include the 24-bed residential care facility or the 119-bed nursing home. The nursing home is included in the Non-residential: Retail/service counts.

⁽³⁾ Includes one two-family structure.

⁽⁴⁾ Number of employees is an estimate based upon employees per 93 square meters (1,000 square feet) standards for different land uses and SRF estimates. The figures do not reflect actual employee counts for the current businesses.

5.2.3.3 Mitigation

Two booklets entitled *Relocation: Your Rights and Benefits* and the *Guidebook for Property Owners* have been produced by Mn/DOT to provide information to potential displacees on their rights and benefits under the Relocation Assistance Program. These documents are available from the Mn/DOT Office of Right-of-Way. The relocation assistance program is briefly described below. Further information may be found in the above-mentioned booklets or by contacting Mn/DOT.

In addition, Mn/DOT has procedures in place to ensure that affected nursing home residents are relocated to facilities that can provide the appropriate level of care for each individual's circumstance.

Project Assurance

Mn/DOT will provide relocation payments and services as required under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and as required under state law.

All persons lawfully occupying real property will be given no less than 90 days' written notice in which to vacate their dwelling or business. In most cases, 120 days would be granted with the possibility of extensions of time on a lease agreement.

Mn/DOT will ensure that comparable replacement residential dwellings would be available within a reasonable period prior to displacement or provided in accordance with the provisions of Last Resort Housing.

Relocation Benefits

Mn/DOT's Relocation Assistance Program has been developed following the guidelines established in federal regulations. The Uniform Relocation Assistance and Real Property Acquisition Assistance Policies Act of 1970, as amended, establishes "...a uniform policy for fair and equitable treatment of persons displaced as a result of federal and federally assisted programs in order that such persons shall not suffer disproportionate injuries as a result of programs designed for the benefit of the public as a whole."

Mn/DOT is committed to assuring that the relocation process is as simple and straightforward as possible. Relocation Advisors are available to provide information on programs and benefits and to develop individual relocation plans. Relocation resources are available to all residential and business relocatees without discrimination.

Residential Relocation Assistance

Those whose housing would be displaced are entitled to reimbursements for certain expenses such as moving costs, replacement housing costs, and appraisal fees.

Replacement housing units must be “decent, safe and sanitary” and must be functionally equivalent to the present dwelling with respect to the number of rooms and living space, location and general improvements. This functional equivalence standard also pertains to the level of care required for nursing home residents being relocated. The structure must meet all the minimum housing requirements established by federal regulations and conform to applicable housing and occupancy codes.

Although an adequate supply of comparable replacement housing sites can generally be found, an administrative process called Last Resort Housing is available to address situations where the supply of replacement sites is inadequate. Last Resort Housing guarantees that comparable housing will be provided before the owner is required to move.

Business Relocation Assistance

Relocation benefits may also be available for businesses, farms, and non-profit organizations. Payment may be made for:

- Moving costs
- Tangible personal property loss as a result of relocation or discontinuance of an operation
- Re-establishment expenses
- Costs incurred in identifying a replacement site

Businesses, or non-profit organizations may be eligible for fixed payments in lieu of moving and reestablishing costs.

Mn/DOT will assist businesses in finding replacement sites, but is not obligated to provide them with such sites.

5.2.4 OTHER POTENTIAL RIGHT-OF-WAY IMPACTS—EAST DRAINAGE SYSTEM

As discussed in Section 6.3.4 (Surface Water Drainage) of this FEIS, the existing trunk storm sewer line serving the I-494 corridor from approximately the I-494/I-35W interchange area east to the Minnesota River is currently under-capacity, and capacity improvements will need to be made. The Minnesota Department of Transportation is currently conducting a study to address alignment, construction, and outfall options to address this issue. From the I-494/I-35W interchange (or possibly from the I-494/Penn Avenue interchange) east to 34th Avenue, it is anticipated that this added capacity will be provided within existing Mn/DOT right-of-way.

East of approximately 34th Avenue, it is anticipated that added capacity will be provided in the form of a buried overflow line for flows greater than 16.8 cubic meters per second (cms, or 600 cubic feet per second [cfs]). Pending the findings of the above referenced Mn/DOT

drainage study, the location of this line is not known. However, as is discussed in more detail in Section 6.3.4.4 of this FEIS, it is anticipated that this line and its outfall will be located within the review area identified on Figure 6.16.

If the study were to designate Military Reservation Pond (see Figure 6.16) as the outfall location, the line would pass through I-494 right-of-way and other land already owned by Mn/DOT. However, if the alignment to MAC Pond 040 is selected, it may be necessary to obtain an easement from MAC and/or the U.S. Air Force for line installation and maintenance purposes.

Prior to completion of the Mn/DOT drainage study, the right-of-way impacts east of 34th Avenue associated with enhancements to the I-494 drainage system cannot be determined. However, if right-of-way acquisition in this area is required, it would not result in the relocation of businesses or residents nor will it impact any parkland subject to Section 4(f) provisions. Once the drainage study is completed and a determination is made regarding a preferred design, coordination will take place with any affected land holder(s) to secure the necessary right-of-way.

5.3 ECONOMIC AND FISCAL

5.3.1 INFORMATION FROM THE DEIS THAT REMAINS UNCHANGED

The overall economic characteristics of the I-494 corridor study area as described in Section 5.2.3 of the DEIS have not changed substantially since the publication of the DEIS.

5.3.2 CHANGES IN THE SETTING OR TECHNICAL ANALYSIS SINCE THE DEIS

Historic employment data for each of the five cities in the study area have been provided (Table 5.2) and Metropolitan Council employment forecasts for 2020 have replaced the Metropolitan Council's 2010 forecasts used in the DEIS. The most current data on commercial/industrial vacancy has also been included.

Property tax impact data have been updated to reflect 2000 taxes payable for affected properties. Business counts have been updated with current field surveys and reverse directory information.

5.3.3 IMPACTS ASSOCIATED WITH THE PREFERRED ALTERNATIVE

Business and Job Impacts

As shown in Table 5.5 the acquisition of property for project right-of-way is anticipated to displace 51 businesses and up to 940 jobs (or, as shown in Table 5.6, the Folded Diamond to the East alternate design for the East Bush Lake Road interchange would displace up to 85 businesses and up to 1,520 jobs). This job impact is in the context of current job levels of 240,000 in the study corridor and over 830,000 in the Minneapolis-St. Paul Metropolitan Area.

The majority of these business impacts are in Bloomington, concentrated in the northeast quadrant of the I-494/TH 100 interchange and on the south side of I-494 between Lyndale and 12th Avenue (and, for the Folded Diamond to the East alternate design for the East Bush Lake Road interchange, a concentration of impacts would also occur at the northeast quadrant of the interchange). Two businesses in Richfield will also be affected. No business displacement is anticipated in the remaining cities in the study area.

Together, Bloomington and Richfield are projected to increase by 10,800 jobs by 2010 and 18,500 jobs by 2020. For all municipalities in the project area, the total projected employment growth is 24,000 by 2010 and 31,000 by 2020. This growth indicates capacity within the study area to compensate for the 940 jobs displaced as a result of the project.

Information from *Towle Report 2000*, published by Towle Real Estate, which focuses on the commercial real estate market in the Minneapolis-St. Paul area, was compiled to assess the potential for relocating displaced businesses within existing facilities. For purposes of this analysis, the two sectors defined as Southwest and West in the *Towle Report* are combined and referred to as the southwestern metropolitan area. This area comprises Bloomington, Richfield, Edina, Eden Prairie, Hopkins, Minnetonka, St. Louis Park, Golden Valley, Plymouth, Wayzata and Excelsior. Table 5.7 presents the most recent data as well as trends in industrial, office and retail space.

Industrial Space

Industrial space in *Towle Report 2000* is categorized in a number of ways. For this analysis, the following types of industrial space were grouped into one category: 1) Office Showroom/Business Center which typically includes one-story multi-tenant projects with over 2,325 square meters (25,000 square feet) of rentable space of which at least 30 percent is finished office space. These spaces are typically located near highways and are highly visible; 2) Office Warehouse buildings which are usually multi-tenant facilities with at least 2,325 square meters (25,000 square feet) of rentable space, or larger. These facilities are typically 10 to 20 percent finished office space; and 3) Bulk Warehouse buildings, typically 4,650 square meters (50,000 square feet) or larger of which five to 10 percent is finished office space.

Most of the properties acquired by the Preferred Alternative fall into one of the three categories defined above. A total of 27,564 square meters (296,393 square feet) of industrial space has been identified as requiring relocation. As of the third quarter of 1999, there was approximately 176,700 square meters (1.9 million square feet) of vacant industrial space in the southwest metropolitan area, adequate vacancy to expect that satisfactory relocation sites can be found for most of the industrial properties affected by the reconstruction of I-494.

Office Space

There has been a large increase in office vacancies between 1997 and 1999. The most recent data provided in the *Towle Report* indicate approximately 176,700 square meters (1.9 million square feet) of vacant office space in the southwest metropolitan area. The Preferred Alternative will require relocation of 4,158 square meters (44,705 square feet) of office space, which should be able to be accommodated within the existing office space capacity.

**TABLE 5.7
COMMERCIAL REAL ESTATE VACANCIES IN THE SOUTHWEST
METROPOLITAN AREA**

	Study Date	Number of Buildings	Area m ² (ft ²)	Amount Vacant m ² (ft ²)	Percent Vacant
Industrial*	3rd Qtr 97	398	2,543,612 (27,350,663)	219,501 (2,360,226)	8.6
	3rd Qtr 98	409	2,588,819 (27,836,768)	170,966 (1,838,344)	6.6
	3rd Qtr 99	421	2,685,602 (28,877,448)	174,632 (1,877,763)	6.5
Office	2nd Qtr 97	198	1,661,758 (17,868,365)	78,495 (844,032)	4.7
	2nd Qtr 98	201	1,714,333 (18,433,688)	82,949 (891,925)	4.8
	2nd Qtr 99	213	1,830,848 (19,686,538)	178,645 (1,920,914)	9.7
Retail	1998	76	589,107 (6,334,484)	35,539 (382,140)	6.0
	1999	79	609,388 (6,552,559)	34,992 (376,258)	5.7
	2000	78	654,893 (7,041,860)	31,092 (334,322)	4.7

*Includes office showroom/business center, office warehouse, and bulk warehouse space.

Source: *Towle Report 2000*. Towle Real Estate.

The Folded Diamond to the East alternate design for the East Bush Lake Road interchange would increase this relocation requirement to 23,397 square meters (251,585 square feet) which should also be able to be accommodated within the existing office space capacity.

Retail Space

Towle Real Estate classifies retail space as neighborhood, community, regional, super regional and downtown retail mixed use. Approximately 9,486 square meters (102,000 square feet) of business space being acquired for the reconstruction of I-494 can be characterized as falling within the neighborhood/community center category of retail. Table 5.5 shows that vacancy rates of retail space have declined between 1998 and 2000. The available space has declined by 12 percent over this period, with approximately 31,092 square meters (334,326 square feet) of retail space of this nature available as of the most recent report. While at least a portion of the acquired retail properties could locate within existing vacant space within the southwest market area, restoration of the services these businesses provide to the neighborhood markets they now serve would likely occur only in the context of neighborhood redevelopment.

Towle Report 2000 does not provide vacancy rates for retail/service facilities under 2,790 square meters (30,000 square feet). The uses acquired by the Preferred Alternative within this group include a gas station, restaurants, and smaller freestanding retail stores. Typically, these land uses required highly visible and accessible sites which generally are in high demand within developed areas such as the I-494 study area. As with the other acquired properties, the ability to relocate these uses proximate to I-494 will be dependent upon market conditions at the time acquisition activities are initiated.

Redevelopment

New commercial and office development in the two municipalities affected by business acquisitions will occur as a result of redevelopment. The pending *Bloomington Land Use Guide Plan (2000)* identifies several locations along I-494 redevelopment as office, community commercial or regional commercial. The current *Richfield Comprehensive Plan (1997)* projects a 12-hectare (29-acre) net increase in land devoted to commercial or office use in three planning sub-areas along the I-494 corridor. In addition, there are several redevelopment sites elsewhere in both communities, which should provide capacity for restoration of business space and jobs displaced as a result of reconstruction of I-494.

Fiscal Impacts

As is further discussed in Section 5.2, the Preferred Alternative is expected to result in total acquisition of 96 parcels. The 2000 taxes payable for these properties totals \$1.0 million. By comparison, 2000 taxes payable for all properties within the five municipalities in the study area combined is approximately \$295 million (including City, School District and HRA levies), and for Hennepin County as a whole exceeds \$1.6 billion (also including miscellaneous levies).

Table 5.8 compares property tax loss (property taxes payable 2000) for total acquisitions with total taxes payable (2000 City, HRA, and School District spread levies), by study area municipality.

**TABLE 5.8
TAXES PAYABLE--TOTAL ACQUISITION PROPERTIES –
PREFERRED ALTERNATIVE**

	Taxes Payable for Total Acquisition Properties⁽¹⁾	Total Taxes Payable⁽²⁾
Minnetonka ⁽³⁾	\$ 500	\$ 47.5M
Eden Prairie	\$ 33,000	\$ 77.8M
Edina	\$ 0	\$ 59.5M
Bloomington	\$ 853,100	\$ 86.5M
Richfield	\$ 123,400	\$ 24.3M
Total	\$1,010,000	\$295.6M

⁽¹⁾ 2000 Property Taxes Payable 2000 for properties affected by total acquisition, rounded to nearest 100.

⁽²⁾ Includes 2000 City, HRA, and School District spread levies. Does not include miscellaneous spread levies such as county, Metro Council, or watershed districts. Rounded to 0.1 million.

⁽³⁾ Includes School District 276 spread levy only.

The Folded Diamond to the East (Figure 3.14) alternate design for the East Bush Lake Road interchange increases the taxes payable for total acquisition properties to \$1,518,600. The On-Ramp Under Railroad (Figure 3.16) alternate design increases the amount to \$1,015,000.

5.3.4 MITIGATION MEASURES

Business and Jobs

Mitigation of business relocation impacts of right-of-way acquisition is described in Section 5.2.3.3. Businesses and jobs lost as a result of the project will be offset by substantial anticipated growth in jobs as a result of redevelopment in the affected municipalities, including redevelopment in the I-494 corridor itself.

Fiscal

Actual net property tax losses within each municipality will depend on the extent to which residents and commercial businesses relocate within the same city. The initial loss in property taxes may be partially or fully offset by potential increases in commercial property value within the corridor with redevelopment and improved access.

5.4 ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, issued in 1994, requires that environmental justice be addressed in all federal planning and programming activities. In compliance with this Executive Order, low-income and minority populations in the study area were identified through review of the 1990 census data and contacts with the affected municipalities.

5.4.1 INFORMATION FROM THE DEIS THAT REMAINS UNCHANGED

The 1992 DEIS was prepared prior to Executive Order 12898 and, therefore, did not directly address environmental justice. Social characteristics of the project area were described in Section 4.1.1 of the DEIS.

5.4.2 CHANGES IN THE SETTING OR TECHNICAL ANALYSIS SINCE THE DEIS

Since environmental justice was not discussed in the DEIS, all of the information in this section is new. This section describes the process used to define potential environmental justice impacts and provides information about the local population.

The steps for defining environmental justice impacts include:

- Identification of the location of low-income population and/or minority population in the project area.

- Identification of the impacts of the project upon the identified low-income population and/or minority population.
- Determination of whether or not the impacts are disproportionately high or adverse.

5.4.3 IDENTIFICATION OF LOW-INCOME OR MINORITY POPULATION

For the purposes of environmental justice, a low-income population or minority population is defined as a geographic concentration of people or households meeting the racial or income criteria set forth in Executive Order 12898. Information on population characteristics of the corridor was obtained primarily from these sources: 1990 Census data, 2000 Census data, discussions with City staff for insights into population trends, review of current property tax information and rental rates for update on low-income population, and review of 1999 public school enrollment demographics for update on minority population.

The portions of the corridor which are likely to have concentrations of low-income and/or minority person include the apartment areas along the north side of I-494 at Penn Avenue and between Nicollet and TH 77, as well as in apartment areas 0.4 kilometer (0.25 mile) south of I-494 between Portland and TH 77.

The details of this finding are described below.

Low Income

Income data at the census tract level from the 2000 Census is scheduled for release June-September 2002, making it unavailable for analysis in this FEIS. The 1990 Census reported poverty levels (the number of persons in poverty as a percent of total population) as being below the Hennepin County level (10.2 percent) in 26 of the 27 project area census tracts. Census Tract 248.02 in Richfield had a 1990 poverty level of 10.9 percent. While this was only slightly higher than the countywide level, all persons at or below the poverty level were located in the block group that includes the apartment area on the north side of I-494 between Nicollet and 12th Avenue. This block group had a 1990 poverty level of 22.4 percent.

One of the apartment buildings in this area is currently a project-based Section 8 facility with 153 one-bedroom units, representing a concentration of low-income persons. Current rental rate comparisons cannot confirm whether or not the other apartment complexes in this area house a concentration of low-income persons. The apartments along I-494, which range in rental rates from \$698 to \$770 for one-bedroom and from \$755 to \$790 for two bedroom, are comparable to metropolitan averages of \$654 for one-bedroom units and \$806 for two-bedroom units and to the average rental rate of \$774 for all apartments in the Bloomington, Richfield, Edina area (Source: *Apartment Guide Metro Report*, March 2000). These rents are somewhat lower than those reported for other areas of the I-494 corridor, however, and lower income families have limited choice due to the very low apartment vacancy rates and limited stock of affordable housing in the metropolitan area.

Minority Population

The 2000 Census reported racial minority population levels as being below the countywide level (21.1 percent) in 23 of the 28 project area census tracts. (As indicated above, in 1990, there were 27 census tracts in the project area. A tract split resulted in there being 28 census tracts in the project area in 2000.) The census tracts with higher than county-average minority population include three in Richfield and two in Bloomington.

Census Tract 243 in Richfield is located between Xerxes Avenue and I-35W on the north side of I-494. There is a concentration of rental apartments west of Penn Avenue in this area. This tract had a 2000 minority population of 33.2 percent.

Census Tract 248.02 and Census Tract 249.03 in Richfield are located between Nicollet Avenue and TH 77, with I-494 as their southern boundary. The two tracts abut one another at 12th Avenue and extend to 74th and 73rd Streets, respectively, on the north. Census Tract 248.02 had a 2000 minority population of 38.9 percent. Census Tract 249.03 had a 2000 minority population of 38.3 percent. Land use in these tracts is predominantly residential, with the area closest to the freeway, between 77th Street and I-494, including numerous multi-family dwellings. There is also a 119-bed nursing home located in this area.

Census Tract 252.01 and Census Tract 251 in Bloomington are located between Portland Avenue and the Mississippi River on the south side of I-494, and abut each other at TH 77. Census Tract 252.01, which is located west of TH 77, had a 2000 minority population of 38.1 percent. Census Tract 251 had a 2000 minority population of 23.1 percent. The closest residences to the project area are located approximately 0.4-kilometer (.25-mile) south of I-494 in Census Tract 252.01.

5.4.4 IMPACTS OF THE PREFERRED ALTERNATIVE ON LOW-INCOME POPULATIONS OR MINORITY POPULATIONS

If any minority or low-income population concentrations are found in the study area, Executive Order 12898 requires that the proposed actions be reviewed to determine if there are disproportionately high or adverse effects on these populations. Disproportionate is defined in two ways: the impact is “predominately borne” by the minority or low-income population group, or the impact is “more severe” than that experienced by non-minority or non-low income populations.

Issues that were considered when evaluating the potential for environmental justice impacts included social impacts, right-of-way, access, transit, pedestrian and bicycle travel, visual quality, air quality, noise and parks. Of these topics, only right-of-way and noise will impact study area households where concentrations of low-income and minority persons are likely. However, these impacts will not be disproportionate to these populations and/or noise mitigation was determined to be cost-effective in the analyses performed for this FEIS (see Section 6.2.4). These findings are detailed below.

Right-of-Way

There is no evidence that property acquisition for right-of-way will cause disproportionate displacement of persons in areas with concentrations of low-income and/or minority populations. The project will acquire one homesteaded (owner-occupied) single family home, one non-homesteaded (rental) single-family home, one homesteaded two-family residence, and a 119-bed nursing home within an area identified as having concentrations of low-income and minority populations.

All other residential property acquisitions required for this project are located in census tracts with 1990 poverty levels ranging from 3.3 to 7.2 percent, compared to the countywide level of 10.2 percent, and 2000 minority population levels ranging from 9.9 to 17.6 percent compared to the countywide level of 21.1. Current (2000) Hennepin County tax records report 51 of the 54 remaining affected occupied residential properties as homesteaded, or owner-occupied, and an average 1999 estimated market value of affected residences of \$101,565, indicating that the neighborhoods in which these residents reside have not become low-income areas since the last census. Thus, low-income and/or minority populations would not be disproportionately impacted due to right-of-way acquisition of residential property as the majority of residential right-of-way acquisitions occur in areas where there are no concentrations of low-income and/or minority persons.

Businesses will be displaced near residential areas identified as likely having concentrations of low-income or minority populations. Displaced will be a service station near apartment areas in Census Tract 248.02 on the north side of I-494 and two adjacent small neighborhood shopping centers in and near Census Tract 252.01. There are 21 businesses located within these two shopping centers, providing grocery, drug store, discount household goods, barber/beauty shop, and other neighborhood commercial services. One business is an ethnic Hispanic market.

The business displacements will not cause disproportionately high or adverse impacts on low-income or minority persons. The ethnic market is one of 21 affected businesses in this neighborhood shopping node and one of 51 affected businesses in the project area. Section 5.2.3.2 discusses the nature of non-residential impacts by municipality.

Approximately two-thirds of the area now occupied by the two shopping centers will be available for redevelopment following construction of the project. The City of Bloomington has designated the area for neighborhood commercial use in its current *Comprehensive Plan* in order to continue the availability of neighborhood commercial services to the residential area.

In the interim, pharmacy, household goods, and limited groceries are available at the Walmart store directly to the east of the neighborhood shopping node. The nearest Hispanic market advertised in the current US West Yellow Pages is located approximately 1.6 kilometers (one mile) to the northwest. The nearest full-service grocery is located 2.4 kilometers (1.5 miles) to the west.

Noise

The noise impact analysis presented in Section 6.2 concludes that, before mitigation, future daytime and nighttime noise standards are violated at all receptors in areas identified above as having a concentration of minority and/or low-income persons, specifically the apartment areas along the north side of I-494 between Penn Avenue and TH 77 in Richfield. The areas south of I-494 between Portland Avenue and the Mississippi River in Bloomington which have been identified as having a concentration of minority persons, have no residences closer to the freeway than approximately 400 meters (1,350 feet). Noise mitigation is generally not effective beyond approximately 150 meters (500 feet).

However, the adverse noise impact would not be predominantly borne by these low-income or minority populations because the noise impact analysis also finds that, of the 82 residential receptor sites in the corridor as a whole, future daytime noise standards are violated at 71 sites and nighttime noise standards are violated at 81 sites. Furthermore, while the range of noise levels reported for the apartment areas between Nicollet Avenue and TH 77 and near Penn Avenue are on the whole higher than levels at residential receptor sites in a majority of other segments of the corridor, these higher levels are not exclusively experienced in the segments. The noise impact analysis reveals similar clusters of higher noise levels in two project area segments located in Minnetonka.

Finally, noise mitigation measures (noise walls) were studied where noise levels are projected to exceed standards in residential areas. Section 6.2.4 describes the feasibility analysis for noise mitigation in detail. This analysis determined that noise walls would be a cost-effective means for mitigating noise impacts in the areas identified as having a concentration of low income and/or minority populations where (unmitigated) noise levels would exceed state standards.

5.4.5 MITIGATION OF IMPACTS ON PROTECTED POPULATIONS

Environmental Justice Finding

Based on the available data, portions of the corridor are likely to have concentrations of low-income and/or minority populations. However, the proposed project will not cause disproportionately high and adverse effects on these populations. Therefore, no mitigation related to environmental justice impacts is required. However, mitigation of right-of-way and noise impacts is discussed, respectively, in Section 5.2.3.3 and Section 6.2.4.

5.5 LAND USE AND DEVELOPMENT

Existing and planned land use in the I-494 corridor were described in Section 4.1.2 of the DEIS. Land use impacts associated with I-494 reconstruction were addressed in Section 5.2.5 of the DEIS.

5.5.1 INFORMATION FROM THE DEIS THAT REMAINS UNCHANGED

As discussed in the DEIS, the I-494 corridor has been one of the major locations of non-residential growth in the Minneapolis-St. Paul Metropolitan Area between 1960 and 2000. The existing pattern of land uses includes a mixture of retail and service businesses, office buildings, light industry, motels, restaurants, automobile sales, apartments, single-family homes, parks and wetlands. Land uses are primarily single-family residential and open space along the north-south segment of the corridor and commercial along the east-west segment of the corridor.

Existing and planned land uses within the study area have not changed substantially since publication of the DEIS, except as noted below. In addition, the pattern of planned land use is not substantially different from the existing land use pattern.

5.5.2 CHANGES IN THE SETTING OR TECHNICAL ANALYSIS SINCE THE DEIS

The existing land use has changed in several locations within the study area since publication of the DEIS. Specific land use changes include the following:

Bloomington

- The manufactured home park that was located between Chicago and Portland Avenue south of I-494 has been redeveloped into a retail commercial use.
- The industrial use that was located between the Soo Line railroad and Lyndale Avenue south of I-494 has been redeveloped into a retail commercial use.
- Additional land has been added to the park and open space system between TH 100 and TH 169 both north and south of I-494.

Eden Prairie

- Additional land has been added to the park and open space system between TH 169 and TH 212/Flying Cloud Drive north of I-494.
- Additional land has been added to the park and open space system between TH 212/Flying Cloud Drive and TH 62 both east and west of I-494.
- A parcel in the northeast quadrant of the intersection of I-494 and Valley View Road has been developed as an office use.
- Several parcels near the intersection of I-494 and Prairie Center Drive have been developed as commercial uses.
- A parcel north of I-494 west of TH 100 has been developed as an office use.

Edina

- There are no changes in the existing land use within the study area in Edina, although some areas have been redeveloped to similar uses.
- An undeveloped parcel north of I-494 between France and York Avenues has been developed into a commercial use.

Minnetonka

- The southeast quadrant of the intersection of I-394 and I-494 has been developed as a commercial and office use.
- The northwest and northeast quadrants of the intersection of TH 62 and Baker Road has been developed as a commercial use.
- The northeast, southeast and southwest quadrants of the intersection of Excelsior Boulevard and Baker Road have been developed as a commercial use.

Richfield

- The area between Lyndale Avenue and I-35W north of I-494 has been redeveloped into a mixed-use development with a retail commercial focus.
- The office use west of I-35W and north of I-494 has been redeveloped into a retail commercial use.

The planned land use has also changed in several locations within the study area since publication of the DEIS. These changes reflect development and redevelopment that have occurred since publication of the DEIS or redevelopment activities that are planned within individual communities. Any future development is anticipated to be consistent with local plans.

5.5.3 IMPACTS ASSOCIATED WITH THE PREFERRED ALTERNATIVE

The majority of the land along the I-494 corridor is already developed. The north-south segment through Eden Prairie and Minnetonka is primarily residential and the east-west segment through Edina, Bloomington and Richfield is primarily commercial. Since the I-494 corridor is an existing facility in place since the 1960s, major changes in existing land use and development patterns within the study area because of implementation of the Preferred Alternative are not likely. However, certain areas will be affected by right-of-way acquisition as described in detail in Section 5.2.3, or modifications in the connections to local roadways and properties could occur as described in Sections 3.4 and 4.3 of this FEIS.

Land use changes are not expected within the five affected communities with construction of the Preferred Alternative, unless redevelopment activities are initiated by the cities. Any changes in traffic patterns resulting from construction of the Preferred Alternative are not expected to be substantial enough to induce land use changes within the individual communities.

5.5.4 MITIGATION MEASURES

The majority of the land along the I-494 corridor is already developed. Implementation of the Preferred Alternative is not expected to induce land use changes. Municipalities in the study corridor recognize I-494 as an existing facility in their future land use planning and have identified areas of redevelopment at several locations along the corridor. Where cities have planned redevelopment, the I-494 reconstruction project may facilitate the implementation of neighborhood and City plans. Mn/DOT has met with City staff to review proposed I-494 reconstruction/interchange concept plans in order to coordinate I-494 reconstruction with local development plans where possible.

Since the proposed I-494 reconstruction is consistent with local land use plans, no mitigation for impacts is needed. Ultimately, each city has and will continue to make its own decisions regarding land use changes along the I-494 corridor. Individual cities will be responsible for addressing potential land use changes through their land use plans, land use controls and the use of incentives for development or redevelopment activities.

5.6 PUBLIC FACILITIES

5.6.1 INFORMATION FROM THE DEIS THAT REMAINS UNCHANGED

The overall number and location of public facilities (park and recreation areas, schools, religious institutions, health care facilities, community centers, libraries, etc.) has not changed substantially since publication of the DEIS. The information included in the DEIS was based on city comprehensive plans, city inventories and field visits. The facilities directly adjacent to the I-494 corridor have been updated as discussed below.

5.6.2 CHANGES IN THE SETTING OR TECHNICAL ANALYSIS SINCE THE DEIS

The list of public facilities within the area of proposed right-of-way acquisition or directly adjacent to proposed right-of-way acquisition for the Preferred Alternative has been updated since publication of the DEIS for this FEIS. This listing is presented below.

The inventory of facilities adjacent to I-494 has been updated and includes the following:

Bloomington

- Mn/DOT maintenance facility, France Avenue south of I-494
- Portland Avenue United Methodist Church, 8000 Portland Avenue South
- Christ the King Lutheran Church, 8600 Freemont

- Hyland-Bush-Anderson Lakes Regional Park Reserve, Highwood Corridor: between West Bush Lake Road and East Bush Lake Road
- Beaverbrook Park, Green Valley Drive
- Unnamed open space along Nine Mile Creek, east of East Bush Lake Road
- Cornerstone Advocacy transition housing facility, Humboldt Avenue

Eden Prairie

- The International School of Minnesota, 6385 Beach Road
- City of Eden Prairie ground reservoir, Baker Road and Pinnacle Drive
- Hennepin County Medical Center paramedic garage, Flying Cloud Drive and Technology Drive
- Eden Prairie Presbyterian Church, 9145 Eden Prairie Road
- Mn/DOT construction offices and maintenance site, Bryant Lake Drive and Willowood

Edina

- Cardinal Stritch College, 3300 Edinborough Way

Minnetonka

- Hopkins West Junior High School, 3830 Baker Road
- St. Paul's Lutheran Church, 13207 Lake Street Extension
- Kingdom Hall of Jehovah Witnesses, 13001 Lake Street Extension
- City of Minnetonka water tower and treatment plant #4, 4300 Baker Road
- Immaculate Heart of Mary Church and School, 13505 Excelsior Boulevard
- Minnetonka City Hall, 14600 Minnetonka Boulevard

Richfield

- St. Richard's Catholic Church and School, 7540 Penn Avenue South
- Berea Lutheran Church, 7538 Emerson Avenue South
- Emerson Congregational United Church of Christ, 7601 Girard Avenue South
- City of Richfield maintenance garage, 7700 Pillsbury Avenue South

- Assumption Catholic Church and School, 305 East 77th Street
- Richfield Health Center, 7727 Portland Avenue South
- House of Prayer Lutheran Church, 7625 Chicago Avenue
- Progress Valley residential care facility, 308 East 78th Street
- Church of Christ, 7314 Humboldt Avenue
- Cornerstone Advocacy transitional housing facility, Portland Avenue

In addition, the Fort Snelling National Cemetery and the Minneapolis-St. Paul International Airport are in proximity to the eastern portion of the project corridor.

5.6.3 IMPACTS ASSOCIATED WITH THE PREFERRED ALTERNATIVE

The Preferred Alternative would require the acquisition of the public facilities within the study area, as listed below. Detailed information follows:

Bloomington

- Total acquisition of one park and recreation facility (Beaverbrook Park)
- Partial acquisition of a park and recreation facility (Hyland-Bush-Anderson Lakes Regional Park Reserve)
- Partial acquisition of Unnamed park open space (Unnamed area along Nine Mile Creek east of East Bush Lake Road)
- Partial acquisition of one church (Christ King Lutheran Church – 8600 Freemont Avenue)
- Total acquisition of one transitional housing facility (Cornerstone Advocacy – Humboldt Avenue)

Eden Prairie

- None

Edina

- None

Minnetonka

- None

Richfield

- Total acquisition of one nursing home (Richfield Health Center – 7727 Portland Avenue)
- Partial acquisition of two churches (Church of Christ – 7314 Humboldt Avenue; Church of the Assumption – 305 East 77th Street)
- Partial acquisition of one transitional housing facility (Cornerstone Advocacy – Portland Avenue)

In Bloomington, acquisition of a small portion of Hyland-Bush-Anderson Lakes Regional Park Reserve (Hyland Park), a portion of an unnamed open space along Nine Mile Creek, and complete acquisition of Beaverbrook Park would be required for the Preferred Alternative.

The acquisition of 1.8 hectares (4.4 acres) of open space and trail from Hyland Park is located along Marth Road. The proposed acquisition is 0.2 percent of the total area of the Park Reserve and is primarily open space. The trail that would be impacted would be reconstructed just south of the existing trail alignment. Beaverbrook Park, a 3.0 hectare (7.3-acre) community ballfield facility, is located along Green Valley Drive. Acquisition of 2.4 hectares (6.0 acres) of the 3.8-hectare (9.3-acre) unnamed open space corridor is located along the east side of East Bush Lake Road. The impact of right-of-way acquisition on both Hyland Park, Beaverbrook Park and the unnamed open space along Nine Mile Creek and the proposed mitigation are fully documented in Chapter 8.0, Section 4(f) and 6(f) Evaluation.

A single-family transitional housing facility in Bloomington is planned for acquisition, which may have an impact on Bloomington residents if the facility is not relocated in the community in that it will remove a housing opportunity for Bloomington families in transition.

In Richfield, a 119-bed nursing home is planned for total acquisition for the Preferred Alternative. If it is not relocated within the community, the loss of services offered by this facility may have an impact on residents of the facilities and/or residents of Richfield who use the facilities.

Partial acquisition of one church in Bloomington, two churches in Richfield and one transitional housing facility in Richfield is also required with the Preferred Alternative. These partial acquisitions are not anticipated to have any impact on the operation or users of these facilities.

5.6.4 MITIGATION

All persons (owners and renters) legally occupying acquired properties, businesses and non-profit organizations will be relocated in accordance with the Uniform Relocation and Real Property Acquisition Act of 1970, as amended, and 49 CFR Part 24. In addition, the policies

summarized in the Mn/DOT handbook *Relocation: Your Rights and Benefits* will be implemented when the relocation becomes necessary. Relocation procedures for residential and commercial properties are described in greater detail in Section 5.2.3.3.

It is important to users of the facilities that the services are not disrupted or permanently lost. The design of the Preferred Alternative attempted to avoid or minimize potential impacts on community services and facilities to the greatest extent possible.

The transitional housing facility in Bloomington is a single-family home. As discussed in Section 5.2.3.2, single-family relocation opportunities may be available due to turnover in the existing single-family stock resulting from anticipated construction of new multi-family, particularly senior housing options. Mn/DOT has procedures in place to ensure that residents of the nursing home are relocated to facilities which can provide the appropriate level of care for each individuals' need. The nursing home business itself could be located in the metropolitan area where a suitable site can be found.

The Minnesota Department of Transportation Relocation Advisors will assist these community facilities in addressing any special needs that they may have during the relocation process.

Mitigation for Hyland Park, Beaverbrook Park and the unnamed open space are discussed in Chapter 8, Section 4(f) and 6(f) Evaluation.

5.7 VISUAL IMPACTS

5.7.1 INFORMATION FROM THE DEIS THAT REMAINS UNCHANGED

The visual impacts of the proposed alternatives in the DEIS were evaluated based on the elements in the Mn/DOT Visual Impact Assessment (VIA) process, which includes the following steps:

1. Identify affected visual resources (natural, cultural and project environment)
 - Question #1 from the DEIS (Section 4.2.8)
2. Identify affected people (neighbors and travelers)
 - Question #2 from the DEIS (Section 4.2.8)
3. Define existing visual quality (natural, cultural and project)
 - Question #3 from the DEIS (Section 4.2.8)
4. Analyze impacts to visual quality (scale, extent, value)
 - Question #4 from the DEIS (Section 5.2.8)

5. Summarize visual impacts by alternative
 - Question #5 from the DEIS (Section 5.2.8)
6. Mitigate adverse visual impacts and enhance existing visual quality
 - Questions #6 and #7 from the DEIS (Section 5.2.8)

Detailed information on the existing visual environment (Steps 1, 2 and 3 of the VIA) was included in Section 4.2.8 of the DEIS, Visual Environment. This information has not changed substantially since publication of the DEIS.

The impacts and mitigation related to the Build alternatives (Steps 4, 5 and 6 of the VIA) was discussed in Section 5.2.8 of the DEIS, Visual Quality. While this information has not changed substantially since publication of the DEIS, a more detailed discussion of the visual impacts and mitigation related to the Preferred Alternative is provided in the FEIS.

5.7.2 CHANGES IN THE SETTING OR TECHNICAL ANALYSIS SINCE THE DEIS

There have been several changes in the visual setting since publication of the DEIS. Additional development has occurred adjacent to the I-494 corridor in Minnetonka and Eden Prairie, while several areas adjacent to the corridor in Bloomington and Richfield have been redeveloped to similar uses. In addition, several of the intersections and bridges within the corridor have been reconstructed since publication of the DEIS, including the Stone Road Bridge (1999), Minnetonka Boulevard interchange (1999), TH 212/Flying Cloud Drive interchange (2000) and TH 169 interchange (1998). In addition, the interchange with Penn Avenue will be reconstructed prior to implementation of the I-494 reconstruction project.

Although the visual resources and anticipated impacts have not changed substantially since publication of the DEIS, the method of presenting that information has been revised to reflect the VIA process. FEIS analysis of the existing conditions, anticipated impacts and proposed mitigation is divided into affected viewer groups, rather than being discussed by sub-area as in the DEIS. Affected viewers are defined in Step 2 of the VIA process as being either neighbors (viewers from the outside) or travelers (viewers from within) the I-494 system.

A summary of existing views is included to provide a basis for analysis of the visual impacts of the Preferred Alternative. Detailed observations of views in the study area are described in Section 4.2.8 of the DEIS.

A. Existing Visual Setting Viewed from Within the I-494 System by Travelers

The I-494 corridor is one of the oldest freeway segments in the Minneapolis-St. Paul Metropolitan Area and one of the most diverse in terms of visual quality. Roadway construction, roadway improvements and development have all occurred over the years on an incremental

basis; therefore, the corridor presents users with a great variety of visual elements and experiences. While the most dominant visual elements within the existing I-494 system are the roadway and corridor structures (interchanges, bridges, retaining walls and noise walls), the visual character of the corridor does vary substantially from the interchange with I-394 at the western edge to the Minnesota River at the eastern edge. There are three clearly distinct visual zones along the corridor: a scenic environment in the western segment; a suburban environment in the central segment; and an urban environment in the eastern segment.

The western segment, from I-394 to TH 212/Flying Cloud Drive, is predominantly low-density residential interspersed with a few office complexes and numerous natural features. The existing right-of-way is wider in this segment with rolling terrain and vegetation providing visual variety and screening most of the adjacent development. The roadway itself is a rural section with two lanes in each direction. The only noise walls located along this segment of the corridor are the noise walls between Excelsior Boulevard and Baker Road, although the weathered wood construction blends well with the adjacent landscape. A high voltage power line is located adjacent to the roadway within this segment; however, it does not appear to be incompatible with the roadway and provides additional open space adjacent to the roadway. Southbound travelers on this segment also have expansive views to the south as they approach the TH 212/Flying Cloud Drive interchange. Lighting within the corridor is limited to interchanges and little light spills over from adjacent development.

The central segment, from TH 212/Flying Cloud Drive to TH 100, is much more suburban in nature, with retail commercial, office complexes and residential developments interspersed with vegetation and natural areas. The existing right-of-way is narrower in this segment and the topography flattens, resulting in fewer opportunities for landscaping adjacent to the roadway. Screening of adjacent development is limited to that provided by vegetation in a few locations, and buildings and parking areas are much more visible to the traveler. Landscaping within this segment is also limited. The roadway itself becomes an urban section with two lanes in each direction. Lighting within the corridor is limited to interchanges, although light from adjacent commercial development is quite visible from the corridor.

The eastern segment, from TH 100 to the Minnesota River, was the first portion of I-494 to be constructed. This segment is urban in character with commercial retail, offices, hotels and higher density residential developments adjacent to the corridor. Although the width of the right-of-way in this segment is similar to the central segment, it appears much narrower. The topography is relatively flat, although the roadway itself is depressed in underpass areas. There is little landscaping in this segment and no screening of buildings or parking areas from the roadway. The roadway itself is an urban section with three lanes in each direction, a curb median and numerous retaining walls, especially in the areas where the roadway is depressed in underpass areas. The entire segment has lighting along the roadway, although the bright lights from the adjacent developments are more pronounced than the roadway lighting. There are also many billboards and advertising signs along this segment that are seen in close sequence over a short period of time.

B. Existing Visual Setting Viewed from Outside the I-494 System by Neighbors

The character of the corridor as viewed by neighbors adjacent to the corridor also varies substantially from the interchange with I-394 at the western edge to the Minnesota River at the eastern edge. In general, the area of a viewshed is inversely related to the density of adjacent development. The view of the corridor also has a greater impact on residential viewers than on retail commercial and office viewers, since a freeway is less in character with residential areas than with commercial areas. As with the visual setting for travelers, there are also three distinct visual zones for neighbors of the corridor: a predominantly low-density environment in the western segment; a suburban environment in the central segment; and an urban environment in the eastern segment.

In the western segment, from I-394 to TH 212/Flying Cloud Drive, the views of the corridor are limited from adjacent development. The rolling terrain and vegetation provide screening of the roadway and related structures from adjacent uses, although the roadway is visible from higher floors within office complexes. The noise walls between Excelsior Boulevard and Baker Road also screen the view of the corridor and the weathered wood construction of the noise walls blends well with the adjacent landscape. Lighting within the corridor is limited to interchanges and little light spills over into adjacent developments because of the topography in this segment.

In the central segment, from TH 212/Flying Cloud Drive to TH 100, the terrain is much flatter and there is less vegetation to screen the views of the corridor from adjacent development. The roadway and related structures are visible from the adjacent buildings, especially from the upper floors of office complexes and hotels. The visual impact is not as great in areas where there is vegetation or natural areas between the development and the roadway. Lighting within the corridor is limited to interchanges; however, the flatness of the terrain results in some light spilling over into adjacent developments. There is limited residential development in this segment of the corridor.

In the eastern segment, from TH 100 to the Minnesota River, the terrain is relatively flat and there is little vegetation to screen the views of the corridor from adjacent development. In areas where the development is one or two stories and the roadway is depressed in underpass areas, the roadway itself is not visible. However, the roadway and related structures are visible in areas where the roadway is at a similar elevation and from upper floors of office complexes, hotels and apartment buildings. In addition, the entire segment has lighting along the roadway, although it may be difficult to discern the roadway lighting from the lights from adjacent developments. There is limited residential development in this segment of the corridor.

While the freeway corridor visually separates some communities, the separation is less apparent in the western portion of the study area where communities developed around the roadway after it was constructed.

5.7.3 IMPACTS ASSOCIATED WITH THE PREFERRED ALTERNATIVE

As presented in the DEIS, visual impacts of the Preferred Alternative may occur to different groups: freeway users (travelers) and people who live along and have views of the highway (neighbors). In general, visual impacts for these two groups will include more and higher

bridges and structures; a more enclosed feeling because of a more extensive network of retaining walls; a general feeling of more pavement and hard surface treatments; and a potential reduction in the area available for landscaping. Since most of the I-494 improvements are being implemented within existing freeway right-of-way, relatively few substantial changes in the surrounding environment are anticipated. In some sections of freeway, adjoining properties will be acquired, but overall, little change is expected in the quality of the visual environment around the freeway.

Visual impacts of the Preferred Alternative for each viewer group (traveler or neighbor) are described below.

The Preferred Alternative will result in the following visual changes for travelers within the system:

- In the western segment, between I-394 and TH 212/Flying Cloud Drive, the corridor will retain much of its current visual character. The roadway will be widened primarily towards the median to accommodate an additional through lane in each direction. The existing wooden noise walls between Excelsior Drive and Baker Road will remain and no new noise walls are proposed. Several bridges and interchanges within this segment will be reconstructed and will generally be similar in elevation but longer (wider as seen from the roadway), and may include high occupancy vehicles (HOV) bypass lanes. The interchange with TH 62 will be reconstructed as a single-point interchange, which would increase the overall height by less than 1.5 meters (5 feet) and include retaining walls. While this segment will remain a rural section, a median barrier and roadway lighting will be installed.
- The central segment, between TH 212/Flying Cloud Drive and TH 100, will have a modified visual character. The I-494 roadway will be widened to accommodate an additional through lane in each direction as well as auxiliary lanes. No noise walls are proposed for this segment of I-494. However, as discussed in Section 6.2.4, a noise wall for a neighborhood east of TH 100 and north of 77th Street meets Mn/DOT's cost-effectiveness criteria and is currently proposed. Noise mitigation cost-effectiveness analyses will be reviewed during the Noise Exemption process which will take place after final roadway design is complete. A public involvement process including neighborhood meetings would be carried out before final determinations are made regarding noise wall implementation and design (technical and aesthetic considerations).

Several bridges and interchanges within this segment will be reconstructed and will generally be similar in elevation but longer (wider as seen from the roadway). The interchange with West Bush Lake Road will be reconstructed with a wider and longer bridge, which will be 1.5 to 3 meters (5 to 9 feet) higher than the existing bridge and include retaining walls. The interchange with East Bush Lake Road and the railroad bridge will be reconstructed as a longer bridge, which will be 1.5 to 3 meters (5 to 9 feet) higher than the existing bridge, and the number of ramps will be increased. The interchange with TH 100 will be reconstructed as a partial directional interchange with bridged ramps, which would increase the overall height

of the interchange by 9 to 13.5 meters (30 to 44 feet) and include retaining walls. The rural section of roadway between Prairie Center Road and TH 169 will be converted to an urban section with a median barrier and roadway lighting.

- The eastern segment, between TH 100 and the Minnesota River, will also have a modified visual character. The roadway will be widened to accommodate additional through lanes in each direction and auxiliary lanes. The roadway will also be depressed and there will be an extensive system of retaining walls. The retaining walls may create a harder, uniform space, compared to existing vegetated slope conditions. In areas where right-of-way width allows, stepped retaining walls with landscaping may be used to replace the existing vegetation within this segment. As discussed in Section 6.2.4, there are locations in this segment with concentrations of apartments, where the cost of noise walls meets Mn/DOT's cost-effectiveness criteria and are currently proposed. Noise mitigation cost-effectiveness analyses will be reviewed during the Noise Exemption process that will occur after roadway designs are finalized for each phase. A public involvement process including neighborhood meetings will be carried out before final decisions are made on whether to build noise barriers, and if they are built, what wall design is appropriate. If the land use has converted to commercial at the time of project construction, a noise barrier would not be proposed because it would be a visual obstruction for the businesses. Several bridges and interchanges within this segment will be reconstructed and will generally be similar in elevation but longer (wider as seen from the roadway). The interchange with I-35W will be reconstructed as a partial directional interchange with bridged ramps, which will increase the overall height of the interchange by 9 to 13.5 meters (30 to 44 feet) and include an extensive system of retaining walls.
- Ramps at the interchanges with TH 100, I-35W and TH 77 will be at substantially higher elevations than the existing interchanges, increasing the viewshed from the system at these locations.
- Architectural features (bridges, retaining walls, etc.) and other corridor elements (lighting, railings, etc.) can be used to provide an identity for individual communities adjacent to the roadway (see Section 5.7.4 below).

The Preferred Alternative will result in the following visual changes for neighbors of the system:

- In the western segment, between I-394 and TH 212/Flying Cloud Drive, the overall visual character will remain unchanged. The roadway will be widened primarily towards the median and no additional noise walls are proposed.
- In the central segment, between TH 212/Flying Cloud Drive and TH 100, the overall visual character will remain unchanged, except for the interchange with TH 100 where the ramps will be 7.5 meters (25 feet) to nine meters (30 feet) higher than the existing bridge. The I-494 roadway will be widened. Construction of a noise wall at the northeast quadrant of the TH 100/77th Street interchange would create a visual barrier between the roadways and the residences in that area.
- In the eastern segment, between TH 100 and the Minnesota River, the overall visual character will be changed somewhat, as the roadway will be depressed throughout this

segment and will be less visible from adjacent developments. If noise walls are constructed at residential areas (see Section 6.2.4 for locations), they would create a visual barrier between I-494 and the residences. In addition, existing buildings will be removed because of right-of-way requirements. This may change the visual character of these areas.

- Architectural features (bridges, retaining walls, etc.) and other corridor elements (lighting, railings, etc.) can be used to provide an identity for individual communities adjacent to the roadway (see Section 5.7.4 below).
- The proposed elevated ramps at the I-494/TH 100, I-494/I-35W, and I-494/TH 77 interchanges will be more visible from adjoining areas than the existing interchanges.

5.7.4 MITIGATION MEASURES

Mn/DOT will work with appropriate agencies and the affected communities to create a design guide to address the aesthetic features of the I-494 project during the final design phase. The goal of this document is to create a design that will help provide an identity for and enhance the appearance of communities adjacent to the corridor and to improve the visual appearance of the corridor itself.

Development of a design guide for each community will be used to create local points of visual interest and focus in and near the corridor. The design guide will address the following elements:

- Design of bridges, including architectural style, materials, railing details and lighting details.
- Design of retaining walls and noise walls, including materials, detailing and configuration.
- Selection and use of plant materials to soften the visual impacts of roadway improvement, including retaining walls and noise walls. Plant materials may also be used to provide a green space buffer adjacent to residential areas where space is available.
- Lighting, signage, and other streetscape elements may be used in some areas to add visual interest.

Use of the design guide is part of the overall visual mitigation for the project. The proposed visual mitigation is outlined below by affected viewers (travelers or neighbors).

Mitigation of visual impacts on travelers within the system may include:

- Materials, configurations and details of retaining walls within the corridor will be chosen for visual enhancement and to mitigate for any loss of green areas. Green areas may be replaced by new landscaping when space is available.
- Interesting visual elements may be incorporated into the architectural and structural components of the system (interchanges, bridges, retaining walls, noise walls, etc.).

Mitigation of visual impacts on neighbors of the system may include:

- Development of individualized gateway elements that will emphasize the entries into communities adjacent to the roadway. City officials will be involved in the design process.
- Adoption of a community design concept for corridor components to provide visual identity for each of the communities adjacent to the roadway.
- Creation of visually interesting neighborhood spaces where buildings are removed, including street furniture, lighting, plant materials. Design elements would be selected in accordance with city design concept input.
- Bridge designs that provide visual interest and are in character with the area.