CHAPTER FOUR

PROJECT ALTERNATIVES

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4.1 Introduction

The California Environmental Quality Act and the implementing CEQA Guidelines require that alternatives to the proposed project be discussed in the Environmental Impact Report (EIR). The value of such discussion is to inform public decision-makers of the differential environmental impacts which may be associated with each potential alternative, and to enable a reasoned judgment to be made as to which alternative to the proposed project may be environmentally superior. Section 15126.6 of the CEQA Guidelines provides the following description of what should be included in the alternatives discussion in an EIR:

(a) Alternatives to the Proposed Project. An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The Lead Agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

(b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

(c) Selection of a range of reasonable alternatives. The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be

used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

(d) Evaluation of Alternatives. The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

(e) "No Project" alternative.

(1) The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (see Section 15125).

(2) The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

(3) A discussion of the "no project" alternative will usually proceed along one of two lines:

(A) When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative

plans would be compared to the impacts that would occur under the existing plan.

(B) If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.

(C) After defining the no project alternative using one of these approaches, the lead agency should proceed to analyze the impacts of the no project alternative by projecting what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

(f) Rule of reason. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.

(1) Feasibility. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can

reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

(2) Alternative locations.

(A) Key question. The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.

(B) None feasible. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR. For example, in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location.

(C) Limited new analysis required. Where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of the potential project alternatives to the extent the circumstances remain substantially the same as they relate to the alternative.

(3) An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

The sections of the chapter that follow present a description of the alternatives considered and an analysis of the alternatives in the context of CEQA and the CEQA Guidelines. The range of alternatives addressed includes an evaluation of the no project alternative (which is required to be addressed), a reduced project size alternative, and a concentrated growth alternative. Finally, this chapter presents an analysis of the comparative environmental superiority of the various alternatives, as required by CEQA.

4.2 Project Objectives

As stated in Chapter Two of the DEIR, the *Merced Vision 2030 General Plan* contains a comprehensive set of goals and policies that establish the planning philosophy that will direct future City growth. To achieve its purpose of providing for future population growth, the plan contains land use policies that provide adequate area for housing, employment and commercial activities. The plan also contains policies and standards for the provision of public services and infrastructure necessary to support future population growth.

Beyond the physical needs of future population growth, the plan contains design and open space provisions. These provisions provide an important element to the planning process. Future growth and development are expected to contribute to the overall well being of the community while preserving and enhancing the City's present quality of life.

From the standpoint of "sustainable growth," the *Merced Vision 2030 General Plan* contains provisions to ensure that future growth and development:

- Is directed away from concentrations of "prime" agricultural land,
- Conserves water and do not over-tax or contaminate the region's water resources,
- Preserves and protects important area wildlife habitat,
- Minimizes adverse growth related impacts on the region's air quality and greenhouse gas emissions,
- Conserves non-renewable energy resources, and
- Preserves important cultural and historic resources.

4.3 Alternatives Rejected

According to the CEQA Guidelines, two primary provisions are necessary for an adequate alternative site analysis – feasibility and location. The EIR should consider alternate project locations if a significant project impact could be avoided or substantially lessened by moving the project to an alternate site. An alternative site for the proposed project would not be feasible because the project consists of the update of the City of Merced's General Plan. The project is, by definition, located in and around the City of Merced. Since the project consists of a plan update for a specific area, an alternative location for this project is not feasible.

A discussion of an infeasible alternative site would not meet the "rule of reason" under CEQA and this alternative was eliminated from further consideration in this EIR.

4.4 Project Alternatives

The following sections present a description of the alternatives considered and an analysis of the alternatives in the context of the *CEQA Guidelines*. This EIR includes an evaluation of the following alternatives:

- **Existing General Plan (No Project) Alternative.** Under this alternative, the Merced Vision 2030 General Plan would not be adopted, and the existing Merced Vision 2015 General Plan would remain in effect.

- **Reduced Project Area Alternative.** Under this alternative, slightly less new development would be allowed in comparison with the proposed General Plan and growth would be restricted to a smaller area within the 1997 SUDP boundary. This alternative was considered feasible because the City could grow at a slower pace than expected.

- **Concentrated Growth Alternative.** Under this alternative, the total amount of new development would be similar to that allowed under the Plan Update but residential densities would be increased in and around existing developed areas, leaving more land designated as Open Space or Reserve.

These alternatives are summarized in the next section and compared with the proposed project. This chapter concludes with an analysis of the comparative environmental superiority of the various alternatives, as required by CEQA.

4.4.1 EXISTING GENERAL PLAN (NO PROJECT) ALTERNATIVE

The No Project Alternative is required under CEQA. Under the "No Project" or existing General Plan alternative, development would occur as allowed under the existing LAFCO approved SOI with the same General Plan Land Use map in effect (reference Figure 2-3). The land use designations established by the existing General Plan would accommodate a residential population ranging between 139,899 and 298,614 persons. Lands currently used or planned for longer term agricultural use would continue in that use with the associated impacts. Policies in the existing General Plan would remain the same and would not be updated to address current issues such as new flood regulations and greenhouse gas emissions.

The No Project Alternative would have the following impacts relative to adoption of the General Plan unless mitigated by other City policies/ordinances, including environmental review.

Aesthetics

Future development in Merced will change the appearance of the City under either the No Project Alternative or the proposed General Plan. Of specific concern for Merced, in terms of aesthetics, is preserving its traditional historic ambiance as well as the agricultural character around the City's edges created by the farm lands surrounding the City. The No Project Alternative contains fewer policies and actions specifically related to preserving and enhancing

community character than the proposed General Plan. The "no project" alternative would have ***greater*** impact on aesthetics.

Agriculture and Forest Resources

The No Project Alternative would designate fewer acres for urban development, compared to the proposed General Plan. While some of this area may develop with very low density residential uses, as allowed by the City and County's agricultural designations, there would be a decrease in the amount of agricultural resources lost to urban development. Under this alternative, the impacts, including cumulative impacts, would remain significant and unavoidable to agricultural resources, as the alternative would still result in the conversion of agricultural land to urban uses. Agricultural impacts under the No Project Alternative would be ***lessened*** in comparison with the proposed General Plan.

Air Quality

The No Project Alternative would result in fewer urban uses and less vehicle emissions and stationary source air emissions. Construction-related emissions would also be lessened under the No Project Alternative. Implementation of the No Project Alternative would not avoid a significant, unavoidable and cumulative air quality impact since the air basin is non-attainment for selected criteria pollutants. Although there would be less development under the existing General Plan, the existing General Plan contains fewer policies with regard to air quality improvement and reduction in greenhouse gas emissions. As a result, the No Project Alternative would result in ***similar*** air quality impacts relative to the proposed General Plan.

Biological Resources

The No Project Alternative would reduce the amount of land converted from farmland to urban development. As a result, there would be a decrease in the amount of potential habitat/foraging land lost. In addition, there would be a reduction in the potential for other sensitive biological resources to be affected by conversion of land to urbanized uses. The No Project Alternative would have ***less*** impact on biological resources.

Cultural Resources

Historic resources could be affected equally under both General Plan scenarios because the historical resources of the City are primarily located in the existing developed areas. The proposed General Plan includes policies to reduce potential impacts to cultural resources. The No Project Alternative would have a ***similar*** impact on cultural resources as the proposed General Plan.

Geology and Soils

Buildout under the existing General Plan would be less than under the proposed General Plan and would result in ***less*** impacts to geology and soils.

Hazards and Hazardous Materials

Implementation of the No Project Alternative would result in a reduction in new urban development in comparison with implementation of the Plan Update and would expose fewer people to hazards and hazardous material sources, and reduce the number of potential new hazardous materials generators. While new development under both the No Project Alternative and the proposed General Plan would be subject to General Plan policies and local, State and federal regulations that would reduce the potential for hazards and hazardous materials impacts to a less than significant level, the No Project Alternative would result in ***less*** potential impacts relative to the proposed General Plan.

Hydrology and Water Quality

Implementation of the No Project Alternative would reduce the amount of land converted from farmland to urban development, thereby reducing the amount of land subject to grading for construction; however, undeveloped land may still be cleared on a regular basis for agricultural activities, leaving bare soil open to erosion. Since agriculture consumes more water than an equivalent acreage of urban development, the No Project alternative will consume more ground and surface water than development under the proposed General Plan. In addition, agricultural uses often involve the use of herbicides or pesticides which could result in polluted runoff. The impact on hydrology and water quality would be ***similar*** to development under the proposed General Plan.

Land Use and Planning

Neither the proposed Plan Update nor the No Project Alternative would divide any existing communities, and implementation of the No Project Alternative would not differ from implementation of the proposed General Plan in this regard. Implementation of the No Project Alternative would result in land use inconsistencies, less coordination with specific project plans currently underway, and future projects would not be subject to policies proposed for inclusion in the proposed General Plan designed to improve regional planning coordination. The No Project Alternative would have ***greater*** impacts on land use and planning.

Mineral Resources

Impacts to mineral resources are not an issue within the City of Merced and implementation of the No Project Alternative would have a ***similar*** effect on this resource than implementation of the proposed General Plan.

Noise

Implementation of the No Project Alternative would generate less traffic and less traffic related noise than implementation of the proposed General Plan. Noise impacts would be ***lessened*** in comparison with the proposed General Plan.

Population and Housing

The No Project Alternative would result in a smaller buildout population (between 139,899 and 298,614 persons) than that which would occur under the proposed General Plan (between 152, 063 and 328,956 persons). Similar to the proposed General Plan, the No Project Alternative would not displace housing and population, or create new population growth beyond that which is expected or planned. Since the No Project Alternative would result in a smaller population, it would have ***less*** impact on population and housing.

Recreation

The No Project Alternative would result in a smaller population at buildout than that which would occur under the proposed General Plan, which would place a smaller demand on parks/recreation services. Although the proposed General Plan includes policies that would ensure adequate provision of parks/recreation services, resulting in a less than significant impact, implementation of the No Project Alternative would result in ***less*** potential impacts on parks/recreation than the proposed General Plan.

Public Services

Implementation of the No Project Alternative would result in a smaller population at buildout than the proposed General Plan at buildout, which would place a smaller demand on public services. Although the proposed General Plan includes a range of policies that would ensure the adequate provision of public services, resulting in a less than significant impact, the No Project Alternative would result in ***less*** potential impacts than the proposed General Plan.

Transportation/Traffic

The No Project Alternative would generate less traffic than the proposed General Plan since there would be less development. The No Project Alternative would yield approximately 5,190,000 daily vehicle miles of travel (VMT) whereas the proposed General Plan would yield approximately 8,657,000 daily VMT. While the No Project Alternative would generate less traffic, the alternative does not provide, in detail, the improvements that would be necessary for the roadway system to accommodate projected traffic volumes. Nevertheless the analysis of future traffic shows that the proposed General Plan would result in levels of services that exceed "C" on more roadway segments than in the No Project Alternative. The No Project Alternative avoids significant impacts by maintaining a level of service of "C" or better on portions of Thornton Avenue, North SR 59, "R" Street, "M" Street, Martin Luther King Jr. Way/South SR 59, "G" Street, Parsons Avenue/Gardner Road, Campus Parkway, Tyler Road, Old Lake Road, Bellevue Road, Cardella Road, Yosemite Avenue, Olive Avenue, SR 140, 16th Street, 14th Street, 13th Street, Childs Avenue, Gerard Avenue and Dickenson Ferry/Mission Avenue. The No Project Alternative would result in ***less*** potential impacts to traffic and circulation compared to the proposed General Plan.

Utilities/Services

Implementation of the No Project Alternative would result in a smaller population at buildout than the proposed General Plan at buildout, which would place a smaller demand on utility services. Although the proposed General Plan includes a range of policies that would ensure the adequate provision of utility services, resulting in a less than significant impact, the No Project Alternative would result in ***less*** potential impacts than the proposed General Plan.

Greenhouse Gas Emissions (Global Climate Change)

Implementation of the No Project Area Alternative would result in a reduction of locally generated greenhouse gas emissions that contribute to global warming. It may be argued that development that is not accommodated in Merced would occur elsewhere in the region to accommodate population and jobs growth, and there would be no real avoidance or reduction in impacts from a cumulative perspective. The proposed General Plan includes policies to lessen such impacts. If development occurs elsewhere, these policies will not be imposed on new development although other local agencies may have their own policies to address greenhouse gas emissions. Since the existing General Plan does not directly address greenhouse gas emissions and global warming, development under the No Project Alternative would have a ***greater*** impact on greenhouse gas emissions.

4.4.2 REDUCED PROJECT AREA ALTERNATIVE

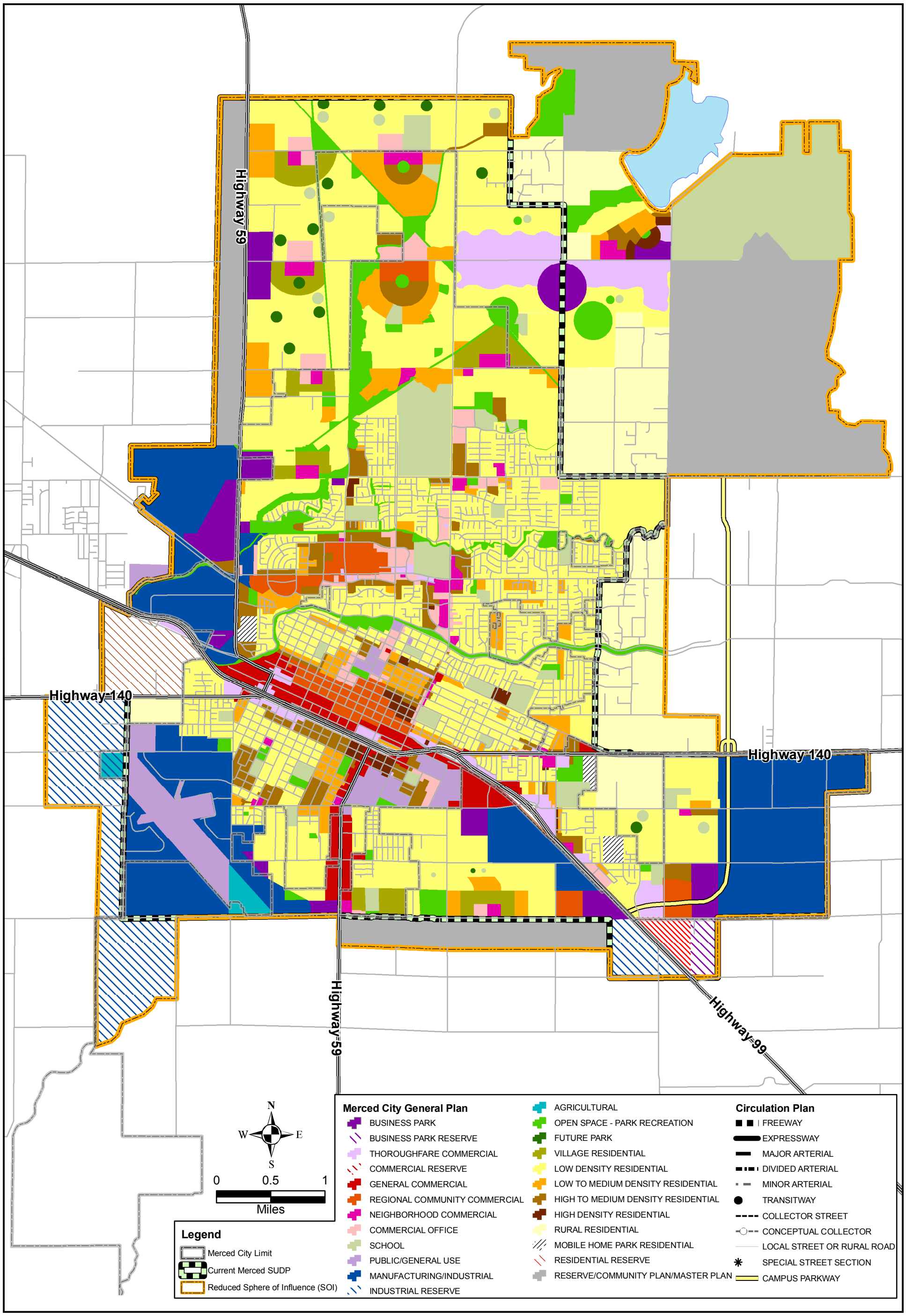
The Reduced Project Area Alternative would update the General Plan elements and policies, but would restrict growth to a smaller area. In this Alternative, the two Community Plan areas identified in the northwest and southwest corners of the 2030 Plan area are deleted from the proposed Project. This alternative was considered feasible because the City could grow at a slower pace than is being planned for. Further, the potential population under the proposed General Plan at buildout (between 152,063 and 328,956 persons) exceeds that projected for 2030 (116,800). Figure 4-1 shows the Reduced Project Area Alternative.

Aesthetics

The Reduced Growth Alternative would contain the same goals, policies and standards addressing the visual appearance of new development as the proposed General Plan. As a result, the potential project-level aesthetic impacts of new development would be ***similar*** to the proposed General Plan.

Agriculture and Forest Resources

The Reduced Project Area Alternative would result in less land designated for urban uses than the proposed General Plan. While some of this area may develop as very low density residential uses, as allowed by the County's agricultural designations, there would be a decrease in the amount of agricultural resources lost to urban development. Under this alternative, the impacts, including cumulative impacts, would remain significant and unavoidable to agricultural resources, since the alternative would still result in the conversion of agricultural land to urban



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MERCED VISION 2030 GENERAL PLAN EIR
2030 REDUCE SPHERE OF INFLUENCE LAND USE MAP

Figure 4-1

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uses. Since less agricultural land would be converted, the Reduced Growth Alternative would have ***less*** impact to agricultural resources than the proposed General Plan.

Air Quality

The Reduced Project Area Alternative would result in less land designated for urban uses, leading to fewer homes and commercial uses and less traffic, which would result in fewer greenhouse gas emissions. Although the effects to air quality from this alternative would still result in significant unavoidable and cumulative impacts, they would be ***less*** than under the proposed General Plan.

Biological Resources

There are limited biological resources in the Planning Area due to urbanization and intense agricultural production. Implementation of the Reduced Project Area Alternative would decrease the amount of land converted from farmland to urban development and there may be a reduction in the potential for biological resources to be affected by conversion of land to urbanized uses. The Reduced Growth Alternative would result in ***less*** biological resource impacts in comparison with the proposed General Plan.

Cultural Resources

The Reduced Project Area Alternative would result in less development than the proposed General Plan. While there is a low probability for archeological and paleontological resources to occur in the excluded areas, this alternative would result in less extensive grading activities. Because this alternative would also be subject to the proposed General Plan policies and mitigation measures that address the protection of cultural and historical resources, the alternative's impacts to cultural and historical resources would also be reduced to a less than significant level. As a result, the Reduced Project Area Alternative would be ***similar*** to the proposed General Plan with regard to cultural and historic resources.

Geology and Soils

While the Reduced Project Area Alternative would result in fewer housing units and nonresidential uses compared to the proposed General Plan, there are no geological or soil related hazards in the area that would increase the risk of geology and soils hazards. In addition, the Reduced Project Area Alternative would be subject to the same General Plan policies, as well as federal, state and local regulations, that would reduce the potential for geology or soils related impacts to a less than significant level. As a result, the Reduced Project Area Alternative would result in ***similar*** impacts to geology and soils as the proposed General Plan.

Hazards and Hazardous Materials

In comparison with the proposed General Plan, the Reduced Project Area Alternative would result in fewer residential non-residential uses, a reduction in population increase, and a reduction in the generation of hazardous materials and waste. The Reduced Project Area

Alternative would be subject to the same General Plan policies and standards, as well as federal, State and local regulations, that would reduce the potential for hazards and hazardous materials related impacts to a less than significant level. The Reduced Project Area Alternative would result in ***less*** potential impacts compared to the proposed General Plan.

Hydrology and Water Quality

Implementation of the Reduced Project Area Alternative would result in a decrease in the amount of land converted from farmland to urban development in comparison with the proposed Plan Update, thereby decreasing the amount of land subject to grading for new construction; however, vacant land may still be cleared on a regular basis for agricultural activities, leaving bare soil open to erosion. Water use under this alternative could potentially be increased in that agricultural irrigation demands could exceed urban use demands. Urban development under this alternative would be subject to the same General Plan policies as the proposed General Plan, as well as federal, State and local regulations, which would reduce the potential impacts on hydrology and water quality to a less than significant level. Impacts to hydrology and water quality would be ***similar*** under the Reduced Project Area Alternative.

Land Use and Planning

The area surrounding the City limits and within the Planning Area does not include any established communities that would be divided by the Reduced Project Area Alternative, and the alternative would be subject to the same General Plan policies as the proposed General Plan in regards to updating other land use plans and policies for consistency. The Reduced Project Area Alternative would have ***similar*** land use impacts as the proposed General Plan.

Mineral Resources

Impacts to mineral resources are not an issue within the City of Merced and implementation of the Reduced Project Area Alternative would have a ***similar*** effect on this resource than implementation of the proposed Plan Update.

Noise

The Reduced Project Area Alternative would result in fewer housing units and non-residential uses and would generate fewer vehicle trips, resulting in less noise. The alternative would include the same General Plan policies pertaining to noise as the proposed General Plan that would reduce potential noise impacts to a less than significant level. The Reduced Project Area Alternative would result in ***less*** noise impacts in comparison to the proposed General Plan.

Population and Housing

As is the case with the proposed General Plan, the Reduced Project Area Alternative would not result in displacement of housing or people. Both the Reduced Project Area Alternative and Plan Update would have less than significant impacts. Since the Reduced Project Area Alternative would result in less population growth there would be ***less*** impact on population and housing.

Recreation

The Reduced Project Area Alternative would result in fewer housing units and would place a smaller demand on parks/recreation services and the Reduced Project Area Alternative would result in fewer potential recreation impacts in comparison to the proposed General Plan. The Reduced Project Area Alternative would include the same General Plan policies pertaining to recreation as the proposed General Plan ensuring the adequate provision of parks/recreation services. The Reduced Project Area Alternative would have ***less*** impact on parks and recreation services.

Public Services

The Reduced Project Area Alternative would include the same General Plan public service policies as the proposed Plan, reducing potential public services impacts to a less than significant level. However, due to less development, the Reduced Project Area Alternative would result in ***less*** public services impacts in comparison to the proposed General Plan.

Transportation/Traffic

Although the Reduced Project Area Alternative would include the same General Plan policies as the proposed General Plan there would be less new urban development and fewer street improvements, commensurate with development under the Reduced Project Area Alternative, compared to implementation of the proposed Plan. Consequently, implementation of the Reduced Project Area Alternative would ***lessen*** the severity of some of the significant unavoidable impacts to portions of the circulation system in comparison with the proposed General Plan.

Utilities/Services

The Reduced Project Area Alternative would include the same General Plan policies to address the provision of utilities and mitigation of potential impacts associated with development related construction of new utility services. The Reduced Project Area Alternative would result in fewer housing units and non-residential uses and the demand for utilities would be ***less*** than would occur under the proposed General Plan.

Greenhouse Gas Emissions (Global Climate Change)

Implementation of the Reduced Project Area Alternative would result in less land being designated for urban uses and less vehicular use. Greenhouse gas emissions which contribute to global climate change would be reduced under this alternative. Global climate change impacts resulting from implementation of this alternative could be ***less*** due to less development, but would remain significant and unavoidable.

4.4.3 CONCENTRATED GROWTH ALTERNATIVE

The Concentrated Growth Alternative assumes approximately the same number of residential units at buildout as the proposed General Plan, as well as the same goals, objectives, and policies. The density of residential development would increase to reduce the amount of land needed to provide the same growth capacity. Residential land use densities near and within proposed village locations and Transit Oriented Development (TOD) corridors would be increased significantly (25-50%), and minimum densities would be imposed. As a result, more of the land in the Planning Area would be left in open space or agricultural use. Figure 4-2 shows the Concentrated Growth Alternative.

The Concentrated Growth Alternative would have the following impacts relative to adoption of the proposed General Plan.

Aesthetics

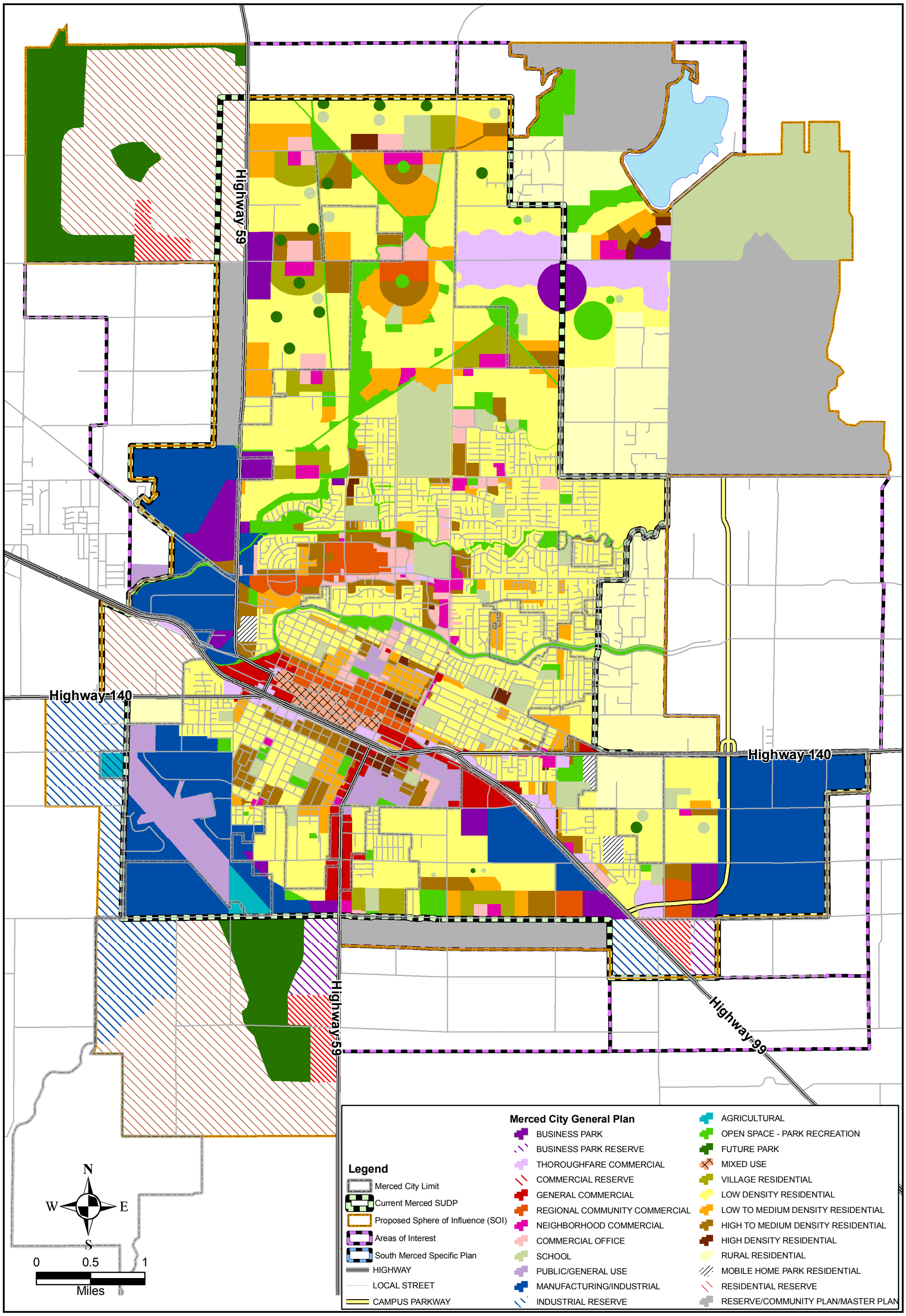
The Concentrated Growth Alternative would contain the same policies addressing the visual appearance of new development as the proposed General Plan. As a result, the potential project-level aesthetic impacts of new development would be self-mitigated in the same manner as the proposed General Plan. However, since the Concentrated Growth Alternative would reduce the amount of land converted to urban uses compared to the proposed General Plan, this alternative would have ***less*** of an impact to aesthetics than the proposed General Plan.

Agriculture and Forest Resources

The primary difference between the Concentrated Growth Alternative and the proposed General Plan is that the Concentrated Growth Alternative would designate fewer acres for urban development, since it would focus new residential uses at medium and high density residential development over a more limited area. While some of this agricultural land surrounding the City may develop with very low density residential uses, as allowed by the County's agricultural designations, there would be a decrease in the amount of agricultural resources lost to urban development. Under the Concentrated Growth Alternative, impacts to agricultural resources, including cumulative impacts, would remain significant and unavoidable, as the alternative would still result in the conversion of agricultural land to some non-agricultural uses. The Concentrated Growth Alternative would have a ***less*** severe impact on agricultural resources than implementation of the proposed General Plan.

Air Quality

Implementation of the Concentrated Growth Alternative would result in a similar number of housing units and non-residential square footage and would generate a similar number of vehicle trips compared to the proposed General Plan. The Concentrated Growth Alternative would result in placement of higher residential density in proximity to existing and proposed commercial areas. As a result, there may be a decrease in vehicle trips generated per dwelling unit compared to the proposed General Plan. The resulting reduction in vehicle miles traveled associated with the Concentrated Growth Alternative would result in a decrease in mobile source emissions;



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MERCED VISION 2030 GENERAL PLAN EIR
2030 CONCENTRATED GROWTH ALTERNATIVE LAND USE MAP

Figure 4-2

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however, for short local trips, trip length is not a significant factor in total overall vehicle emissions. This alternative would have ***less*** impact on air quality.

Biological Resources

Implementation of the Concentrated Growth Alternative would decrease the amount of land converted from farmland to urban development and there would be a reduction in the potential for biological resources to be affected by conversion of land to urbanized uses. Both the proposed General Plan and the Concentrated Growth Alternative would have less-than-significant impacts to biological resources, but this alternative would have ***less*** impact.

Cultural Resources

The Concentrated Growth Alternative would result in less extensive grading activities on undeveloped land, but there would still be the potential for disturbance of unknown cultural resources within the more developed areas of the City. Because this alternative would also be subject to the proposed General Plan policies designed to reduce potential impacts to cultural and historical resources to a less than significant level, the Concentrated Growth Alternative's impact to cultural resources would also be reduced to a less than significant level and the Concentrated Growth Alternative would be ***similar*** to the proposed Plan Update with regard to cultural and historic resources impact.

Geology and Soils

The Concentrated Growth Alternative would result in a similar number of people subject to the risk of geological and soils-based hazards as the proposed General Plan. The Concentrated Growth Alternative would also be subject to the same General Plan policies, as well as federal, state and local regulations, that would reduce the potential for geology or soils related impacts to a less than significant level. As a result, the Concentrated Growth Alternative would result in ***similar*** impacts as the proposed General Plan.

Hazards and Hazardous Materials

Implementation of the Concentrated Growth Alternative would result in a similar number of housing units and non-residential square footage within the planning area and would generate a similar increase in population and amount of hazardous materials and waste as implementation of the proposed General Plan. The Concentrated Growth Alternative would be subject to the same General Plan policies as the proposed General Plan, as well as federal, state, and local regulations reducing the potential for hazards and hazardous materials related impacts to a less than significant level and implementation of the Concentrated Growth Alternative would result in a ***similar*** impact as the proposed General Plan.

Hydrology and Water Quality

Implementation of the Concentrated Growth Alternative would result in a decrease in the amount of land converted from farmland to urban development in comparison with the proposed General

Plan, thereby decreasing the amount of land subject to grading for new construction. Vacant land may still be cleared on a regular basis for agricultural activities, leaving bare soil open to erosion and water use under this alternative could potentially be increased in that agricultural irrigation demands could exceed urban use demands. Urban development under this alternative would be subject to the same General Plan policies as the proposed General Plan Update, as well as federal, State and local regulations, which would reduce the potential impacts on hydrology and water quality to a less than significant level, resulting in a ***similar*** level of impact in comparison with the proposed General Plan Update.

Land Use and Planning

The area surrounding the City limits and within the Planning Area does not include any established communities that would be divided by the Concentrated Growth Alternative, and the Concentrated Growth Alternative would be subject to the same General Plan policies in regards to updating other land use plans and policies for consistency as the proposed General Plan. The Concentrated Growth Alternative would have ***similar*** land use impacts to the proposed General Plan.

Mineral Resources

Impacts to mineral resources are not an issue within the City of Merced SUDP/SOI and implementation of the Concentrated Growth Alternative would have a ***similar*** effect on this resource than implementation of the proposed Plan.

Noise

Implementation of the Concentrated Growth Alternative would result in generation of similar noise impacts due to a similar number of housing units and non-residential uses and related vehicle trips in comparison with the Plan. The Concentrated Growth Alternative would include the same General Plan noise policies as the proposed General Plan, reducing the noise impacts for both alternatives to a less than significant level. The Concentrated Growth Alternative would have a ***similar*** impact on noise as the proposed General Plan.

Population and Housing

In comparison with the proposed General Plan, implementation of the Concentrated Growth Alternative would result in a similar number of housing units and non-residential uses and the same planned population growth as the proposed General Plan. As is the case with the proposed General Plan, this alternative would not result in displacement of housing or people. This alternative would have a ***similar*** impact on population and housing as compared to the proposed General Plan.

Recreation

The Concentrated Growth Alternative would result in a similar number of housing units with a similar demand for parks/recreation services throughout the community. The same General Plan

policies for recreation would apply to this alternative as the proposed General Plan. The Concentrated Growth Alternative would result in a ***similar*** potential impact to recreation services as the proposed General Plan.

Public Services

As the Concentrated Growth Alternative would result in a similar number of housing units and non-residential square footage, it would result in a similar increase in demand for public services as the proposed project. The alternative would include the same General Plan policies to address the provision of public services and mitigation of potential impacts associated with the construction of new facilities. Because extension of public infrastructure and services to undeveloped areas surrounding the City would be lessened under this alternative, the Concentrated Growth Alternative would result in ***less*** impact on public services in comparison with the proposed General Plan.

Transportation/Traffic

Implementation of the Concentrated Growth Alternative would result in fewer vehicular trips in comparison with the proposed General Plan due to more compact development within the City. The Concentrated Growth Alternative would include the same General Plan policies as the proposed General Plan Update, but there would be a reduction in the extent of new public streets extending to outlying areas compared to implementation of the proposed General Plan. Implementation of the Concentrated Growth Alternative would not reduce the severity of significant impacts to deficient existing street segments or intersections in comparison with the proposed General Plan. The Concentrated Growth Alternative would result in ***less*** impact on transportation and traffic in comparison with the proposed General Plan.

Utilities/Services

Implementation of the Concentrated Growth Alternative would result in a similar number of housing units and non-residential uses, accompanied by similar demand for utilities in comparison with the proposed General Plan. The Concentrated Growth Alternative would include the same General Plan policies pertaining to utilities as the proposed General Plan, reducing potential utility-related impacts to a less than significant level. Because extension of utilities and services to undeveloped areas surrounding the City would be lessened under this alternative, the Concentrated Growth Alternative would result in ***less*** impact on utilities and services in comparison with the proposed General Plan.

Greenhouse Gas Emissions (Global Climate Change)

Implementation of the Concentrated Growth Alternative would result in a similar number of housing units and non-residential square footage but would generate fewer vehicular trips contributing to global warming in comparison with the proposed General Plan due to more compact development within the City. The reduction in vehicle miles traveled associated with the Concentrated Growth Alternative could result in a ***lessened*** greenhouse gas emissions contributing to global warming in comparison with the proposed General Plan.

4.5 Comparison of Alternatives and the Project

Table 4-1 shows a qualitative comparison of the alternatives and the project. This comparison provides the means to determine, in conformance with Section 15126.6 of the CEQA Guidelines, if any of the alternatives are feasible, and if feasible, would mitigate, avoid or substantially lessen environmental impacts associated with the project.

4.6 Conclusions

In accordance with the *CEQA Guidelines*, a reasonable range of project alternatives have been evaluated for their comparative environmental superiority. Based on Table 4-1 and the analyses developed in this EIR, the Reduced Project Area Alternative is the environmentally superior alternative because it reduces more potential impacts than other alternatives relative to the proposed General Plan and serves to reduce the severity of three significant cumulative impacts (agriculture, air quality, and transportation/traffic). The No Project alternative (existing General Plan) is environmentally inferior to the proposed General Plan and the other alternatives because it fails to achieve the objectives of the proposed General Plan.

Table 4-1
Environmental Impacts of Alternatives Compared to Project with Mitigations

Topic	Project with Mitigation	No Project Alternative	Reduced Project Area	Concentrated Growth
Feasible?	Yes	No	Yes	Yes
Aesthetics	Less than Significant	Greater	Similar	Lesser
Agriculture and Forest Resources	Significant, Cumulative	Lesser	Lesser	Lesser
Air Quality	Significant, Cumulative	Similar	Lesser	Lesser
Biological Resources	Less than Significant	Lesser	Lesser	Lesser
Cultural Resources	Less than Significant	Similar	Similar	Similar
Geology and Soils	Less than Significant	Lesser	Similar	Similar
Hazards and Hazardous Materials	Less than Significant	Lesser	Lesser	Similar
Hydrology and Water Quality	Less than Significant	Similar	Similar	Similar
Land Use and Planning	Less than Significant	Greater	Similar	Similar
Mineral Resources	No Impact	Similar	Similar	Similar
Noise	Less than Significant	Lesser	Lesser	Similar
Population and Housing	Less than Significant	Lesser	Lesser	Similar

Topic	Project with Mitigation	No Project Alternative	Reduced Project Area	Concentrated Growth
Recreation	Less than Significant	Lesser	Lesser	Similar
Public Services	Less than Significant	Lesser	Lesser	Lesser
Transportation/Traffic	Significant, Cumulative	Lesser	Lesser	Lesser
Utilities/Services	Less than Significant	Lesser	Lesser	Lesser
Greenhouse Gas Emissions (Global Climate Change)	Less than Significant	Greater	Lesser	Lesser
Number of Impacts Reduced		10	11	8
Number of Impacts Increased		3	0	0
Number of Impacts Unchanged		4	6	9