

EXHIBIT C

MASTER ENVIRONMENTAL IMPACT REPORT (MEIR) REVIEW SUMMARY

Projected Population and Housing. The City of Fresno experienced a period of notable growth in the construction of single family residences over the first five-year period of the 2025 Fresno General Plan (2003 through 2007). However, this development has occurred within the parameters anticipated by the General Plan and the mitigation measures established by Master Environmental Impact Report (MEIR 10130/SCH 2001071097). The General Plan and its MEIR utilized a projected population growth rate for purposes of land use and resource planning. This projection anticipated an annual average population growth of approximately 1.9 percent over the 23-year planning period. Population estimates provided by the State of California Department of Finance (DOF) indicate a population growth of approximately 60, 000 people between 2002 and 2007 with a growth rate varying from 1.47 to 1.97 percent per year. These estimates are well within the growth projections of the General Plan and MEIR.

As of May 2013, the City has processed 136 plan amendment applications since the adoption of the 2025 Fresno General Plan. These applications have resulted in changes of planned land use that affected approximately 1,586 acres, representing approximately one percent of the land area within the 2025 Fresno General Plan boundary. The impacts of these amendments are minimal and not significant in relation to the balance of the density and intensity of the land uses impacted by the plan amendment applications.

Based upon this, many of the assumptions relied upon for the MEIR to address other impacts, such as traffic, air quality, need for public utilities, services and facilities and water supplies are still valid to the extent that these assumptions relied upon projected population growth during the General Plan planning period. For this reason and the others provided below, the Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known pursuant to CEQA Guideline Section 15179(b)(1) and the MEIR may still be relied upon.

Transportation and Circulation. Subsequent to the certification of the MEIR the City of Fresno has required the preparation of approximately 200 site specific traffic impact studies and had required the provision of street, intersection signalization and transportation improvements in accordance with the adopted mitigation measures of the MEIR. The City's Traffic Engineer reports that through review of these approximately 200 traffic impact studies, the City has not seen traffic counts substantially different than those predicted by the MEIR. Concurrently with these efforts, the City adopted a new program for traffic signal and major street impact fees to pay for planned improvements throughout Fresno (not just in new growth areas, as has been the case with the previous impact fee program). These fees will more comprehensively provide for meeting transportation infrastructure needs and will expedite reimbursement for developments, which construct improvements that exceed the project's proportionate share of the corresponding traffic or transportation capacity needs.

In addition to the local street system, the City has entered into an agreement with the California Department of Transportation to collect impact fees for state highway facilities which may be impacted by new development projects. The City participates in the Fresno County

Transportation Authority, which recently was successful in obtaining voter re-authorization of a half-cent sales tax to be dedicated to a wide range of transportation facilities and programs (including mass transit). The City is also an active participant in ongoing regional transportation planning efforts, such as a freeway deficiency study, a corridor study for one or more additional San Joaquin River crossings, and the State's "Blueprint for the Valley" process. All these studies were commenced after the MEIR was certified, but none of them is yet completed. Therefore, it cannot be concluded that Fresno's environmental setting or the MEIR analysis of traffic and circulation have materially changed since November of 2002.

Therefore, Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known based upon traffic impacts pursuant to CEQA Guideline Section 15179(b)(1).

Air Quality and Global Climate Change Staff has worked closely with the regional San Joaquin Valley Air Pollution Control District (SJVAPCD) since the November 2002 certification of the 2025 Fresno General Plan Master Environmental Impact Report (MEIR). Potential air quality impacts have been analyzed for every environmental assessment initial study done for City development projects. Projects are required to comply with SJVAPCD rules and regulations via conditions of approval and mitigation measures formulated in the MEIR.

Overall, revisitation of these issues leads to the conclusion that, while there have been changes in air quality laws, planning requirements, and rules and regulations since certification of the MEIR, the actual environmental setting has not evidenced degradation of air quality. (Because air quality and global climate change are matters of some public controversy, additional documentation has been supplied on this issue; please refer to the appended full analysis with supporting data.)

In conjunction with SJVAPCD attainment plans and attendant rules and regulations that were adopted prior to the certification of the MEIR, policies in the 2025 Fresno General Plan and MEIR mitigation measures aimed at improving air quality appear to be working. Since 2002, data show that pollutant levels have been steadily decreasing for ozone/oxidants and for particulate matter (10 microns and 2 microns in size). Recent adoption of new air quality attainment plans by SJVAPCD, calling for broader and more stringent rules and regulations to achieve compliance with national and state standards, is expected to accelerate progress toward attainment of clean air act standards.

Analysis of global climate change analysis was not part of the MEIR in 2002, due to lack of scientific consensus on the matter and a lack of analytical tools. However, under the MEIR and General Plan mitigation measures and policies for reducing all forms of air pollution, levels of greenhouse gases have been reduced along with the other regulated air pollutants. At this point in time, detailed analysis and conclusions as to the significance of greenhouse gas emissions and strategies for mitigation are still not feasible, because the legislatively-mandated greenhouse gas inventory benchmarking and the environmental analysis policy formulation tasks of the California Environmental Protection Agency Air Resources Board and the Governor's Office of Planning and research are not completed. The information available does not support any conclusion that Environmental Assessment No. EA-14-018 or other City projects would have a significantly adverse impact on global climate change. Similarly, there is insufficient information to conclude that global climate change would have a significantly adverse impact upon the City of Fresno or specific development projects.

Staff is not aware of any particular circumstance or information that would make impacts to air quality a reasonably foreseeable impact or more severe impact from that identified in the MEIR. Therefore, Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known based upon air quality impacts pursuant to CEQA Guideline Section 15179(b)(1).

Water Supply, Quality and Hydrology. The City of Fresno has initiated, continued and completed numerous projects addressing general plan and MEIR provisions relating maintaining an adequate supply of safe drinking water to serve present and future projected needs. A water meter retrofit program to meter service to all consumers by the end of the year 2012 is underway, in compliance with State law that predated the MEIR and with new regulations affecting the U.S. Bureau of Reclamation Central Valley Project. (While the federal regulation has trumped a voter-approved City charter amendment that specifically prohibited using meters for residential development, the City's plans and policies have always contained measures calling for water conservation and for seeking ways to reduce average consumption of households. Metering is recognized as the best implementation measure for this, and does not constitute a change in the City's environmental setting or the analysis and mitigation in the 2025 Fresno General Plan MEIR.) After certification of the MEIR, the City commenced operation of its northeast area surface water treatment facility; initiated and began construction of additional groundwater wells with granular activated carbon filtration systems as necessary to remediate groundwater contamination that was discussed in the MEIR and its mitigation measures; provided for additional groundwater recharge areas; and expanded its network of water transmission main pipeline improvements allowing for improved distribution of water supply.

As called for in 2025 General Plan policies and MEIR mitigation measures, the City has implemented several programs for preventing water pollution: In conjunction with Fresno Metropolitan Flood Control District and the Regional Water Quality Control Board (RWQCB) City inspectors assist in enforcing the National Pollutant Discharge Elimination System Stormwater Pollution Prevention regulations, The Planning and Development Department also consults with RWQCB on specific development projects which may require on-site wastewater treatment, and provides project-specific conditions and even supplemental environmental analysis for such projects, with specific mitigation measures. The City's Department of Public Utilities has enhanced its industrial pretreatment permitting program for industrial wastewater generators who discharge to the Fresno-Clovis Wastewater Treatment and Reclamation Facility.

Staff is not aware of any particular circumstance or information that would make impacts to water supply, quality and hydrology a reasonably foreseeable impact or more severe impact from that identified in the MEIR. The Director of Public Utilities finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known based upon traffic impacts pursuant to CEQA Guideline Section 15179(b)(1).

Agricultural Resources. The implementation of applicable policies since adoption of the 2025 Fresno General Plan has encouraged the development of urban uses in a more systematic pattern that avoids discontinuity and the creation of vacant by-passed properties. These efforts, together with the requirement to record "right-to-farm" covenants, facilitate the continuation of existing agricultural uses within the city's planned urban growth boundary during the interim period preceding orderly development of the property as anticipated by the General Plan. Staff is not aware of any particular circumstance or information that would make impacts from loss of

agricultural resources a reasonably foreseeable impact or more severe impact from that identified in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related to loss of agricultural resources pursuant to CEQA Guideline Section 15179(b)(1).

Demand for Utilities and Service Systems. The City of Fresno has continued to provide for utilities and service systems commensurate with the demands of increased population and employment within its service area, implementing policies of the 2025 Fresno General Plan and conforming to MEIR mitigation measures. Programmatic measures have been continued, expanded or initiated to increase the efficiencies of providing services in a manner that will reduce potential impacts upon the natural and human environment. These improvements have included bringing the City's first surface water treatment plant on-line to distribute treated surface water, thereby preventing a worsening of groundwater overdraft in northeast Fresno; converting a substantial portion of the City's service vehicle fleet to alternative fuels; and expanding recycling and conservation measures (including contracting with a major material sorting and recycling facility and a green waste processor to comply with AB 939 solid waste reduction mandates) to more judiciously use resources and minimize adverse impacts the environment. Adoption of City-wide police and fire facility development impact fees and a contract to consolidate fire service with an adjacent fire prevention district have been accomplished to assure the provision of adequate firefighting capacity to serve a broader geographic extend of urban development and more intensive and mixed-use development throughout the metropolitan area.

Because these changes were anticipated in, or provided for by, the 2025 Fresno General Plan and its MEIR mitigation measures, they do not constitute a significant or adverse alteration of Fresno's environmental setting. Staff is not aware of any particular circumstance or information that would make impacts from increased demand for utilities and service systems and public facilities a reasonably foreseeable impact or more severe impact from that identified in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related to increased demand for utilities, service systems, and public facilities pursuant to CEQA Guideline Section 15179(b)(1).

Demand for Recreational Facilities. The City of Fresno has adopted and City-wide parks facility and Quimby Act fee which provides for the acquisition of new open space and recreation facilities as well as improvements to existing facilities and programs to provide a broader range of recreation opportunities. Staff is not aware of any particular circumstance or information that would make impacts from increased demand for recreational facilities a reasonably foreseeable impact or more severe impact from that identified in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related to increased demand for utilities, service systems, and public facilities pursuant to CEQA Guideline Section 15179(b)(1).

Biological Resources. The City continues to evaluate all development proposals for potential impacts upon natural habitats and associated species dependent upon these habitats. The City supports continuing efforts to acquire the most prominent habitats where appropriate, such as portions of the San Joaquin River environs. When development or public works projects have been proposed in this area, they have been subject to site-specific evaluation through

supplemental environmental analyses, and appropriate mitigation measures and conditions applied as derived from consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game. The City has imposed MEIR mitigation measures related to Biological Resources on projects that identified potential impacts to biological resources. Staff finds that this has adequately addressed any potential impact to biological resources. Staff is not aware of any particular circumstance or information that would make impacts from loss of biological resources a reasonably foreseeable impact or more severe impact from that identified in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related to loss of biological resources pursuant to CEQA Guideline Section 15179(b)(1).

Potential Disturbance of Cultural Resources. The City of Fresno has implemented numerous efforts to identify historic and cultural resources, and provide thorough consideration as to their value and contributions to understanding or historic and cultural heritage.

Additionally, staff follows the MEIR mitigation measures for potential cultural resources. Staff is not aware of any particular circumstance or information that would make impacts to cultural resources a reasonably foreseeable impact that was not identified in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related to loss of cultural resources pursuant to CEQA Guideline Section 15179(b)(1).

Within the last five years, the City has lost two lawsuits (Valley Advocates v. COF and Heritage Fresno v. RDA, City of Fresno) related to historical resources that related to six particular buildings at two different particular sites. The CEQA projects at issue were reviewed under independent CEQA documents, not under the MEIR as subsequent projects (*i.e.*, one under a separate EIR and one under a categorical exemption). These projects are site specific and are not reasonably expected to create additional impacts to cultural resources that would affect a finding under Section 15179. These particular projects may be properly assessed under the MEIR focused EIR procedures or mitigated negative declaration procedures under Section 15178 and not affect the overall MEIR findings.

Generation of Noise. The City of Fresno continues to implement mitigation measures and applicable plan policies to reduce the level of noise to which sensitive noise receptors are exposed. These efforts include identification of high noise exposure areas, limiting the development of new noise sensitive uses within these identified areas and conducting noise exposure studies and requiring implementation of appropriate design measures to reduce noise exposure. Staff finds that these efforts have adequately addressed any potential impacts that may have arisen related to noise and is not aware of any facts or circumstance that would make noise impacts have a more severe impact than that identified in the MEIR. Additionally, staff is not aware of any information or data that was not known at the time that the MEIR was certified that would be able to mitigate noise impacts beyond that identified and contemplated by the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related to noise impacts pursuant to CEQA Guideline Section 15179(b)(1).

Geology and Soils. The City of Fresno has a predominantly flat terrain with few geologic or soil quality constraints. The City continues to apply applicable local and state construction codes and standards and continues to adopt new standards as appropriate to insure the safety of residents and protection of property improvements.

Staff finds that these codes and standards have adequately addressed any potential impacts that may have arisen related to geology and soils and is not aware of any facts or circumstance that would make impacts related to geology and soils a reasonably foreseeable impact not addressed in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known regarding impacts related to geology and soils pursuant to CEQA Guideline Section 15179(b)(1).

Hazards and Potential Generation of Hazardous Materials The City continues to implement General Plan policies and assure compliance with MEIR mitigation measures as new development is planned and constructed, and as Code Enforcement activities are conducted, in order to prevent flood damage, structural failures due to soil and geologic instability, and wildfire losses. Development in the vicinity of airports has been reviewed and appropriately conditioned with regard to adopted and updated airport safety and noise policies. In consultation with Fresno County Environmental Health and the California Environmental Protection Agency Department of Toxic Substances Control, industrial and commercial facilities that use, handle, or store potentially hazardous materials are appropriately sited, conditioned, and inspected periodically by the Fresno Fire Department to prevent adverse occurrences. Homeland Security regulations have been taken into consideration when reviewing food production, processing and storage facilities, and the City has conducted and participated in multiple emergency response exercises to develop response plans that would protect life, health, and safety in the event of railroad accidents and other potential hazards.

Staff finds that these procedures, as outlined in the 2025 Fresno General Plan and its MEIR (as well as in related regulations and codes pertaining to hazards and hazardous materials) have adequately addressed potential impacts that may have arisen related to hazards. Staff is not aware of any facts or circumstance that would make impacts related to hazards and hazardous materials reasonably foreseeable impacts not addressed in the MEIR. Staff finds that the circumstances have not materially changed from the time the MEIR was certified and/or new information is not known related to impacts from hazards and hazardous materials pursuant to CEQA Guideline Section 15179(b)(1).

Demand for Energy. The City of Fresno has taken a number of steps to reduce energy consumption, both “in house” to set an example, and in the policy arena. The most notable “in-house” actions are the following:

- Construction of solar panel generator facilities at the Municipal Services Center (MSC) and at Fresno-Yosemite International Airport. The MSC facility, completed_ in 2004, generates 3.05 GWt of energy (equivalent to operation of 286 homes per year) and has resulted in reduction of 966 tons of CO₂ emissions (equivalent to 2,414,877 vehicular miles not driven).
- Replacement of a significant number of vehicles in the municipal fleet with clean air vehicles (please refer to the following table).

CURRENT CITY OF FRESNO "CLEAN AIR" FLEET

50	CNG Transit Buses
4	CNG Trolleys
6	CNG Handi-Ride Buses
59	Retrofitted Diesel Powered Buses with REV (reduced emission vehicle) engines and diesel particulate traps
2	Hybrid (gasoline-electric) Transit Buses
2	Hybrid (diesel-electric) Transit Buses
12	Compressed Natural Gas (CNG) Pickups, Vans and Sedans
7	Flex Fuel Pickups, Vans and Sedans (CNG/Unleaded Fuel)
3	Compressed Natural Gas (CNG) Street Sweepers
52	Hybrid (gasoline-electric) Sedans and Trucks
34	Electric Vehicles
5	Propane Powered Vehicles
103	LNG Powered Refuse Trucks
59	Retrofitted Diesel Powered Refuse Trucks with combination lean NOx catalyst and diesel particulate filters
9	Retrofitted Diesel Powered Street Sweepers with combination lean NOx catalyst and diesel particulate filters
1	Plug-In CNG/Electric Hybrid Refuse Truck
56	Heavy duty diesel trucks and construction equipment equipped with exhaust after-treatment devices
9	Off Road Equipment with exhaust after-treatment devices
473	Total "Clean Air" Vehicles in the City of Fresno fleet

In the development standards policy arena, the City is taking numerous steps to increase residential densities and connectivity between residential and commercial land uses, thus facilitating more walking, biking and transit ridership (which has increased 22% in recent months) and saving energy:

- Amended the zoning code to allow development of mixed use projects in all commercial zone districts citywide, and in the C-M and M-1 zone districts within the Central Area.
- Amended the zoning code to allow density bonuses for affordable housing projects. Such bonuses permit density increases of approximately 30%.
- Amended zoning code to eliminate the “drop down” provision, which permitted development at one density range less than that shown on the adopted land use map.
- Amended the zoning code to increase heights in various residential and commercial zone districts and reduce the minimum lot size in the R-1 zone district from 6,000 to 5,000 square feet.
- Initiated the Activity Center Study, which is defining the potential Activity Centers located in Exhibit 6 of the 2025 Fresno General Plan and proposing design classifications and increased density ranges for these centers and corresponding transportation corridors.

Staff is not aware of any facts or circumstance that would make impacts related to energy demands reasonably foreseeable impacts that were not addressed in the MEIR. Staff finds that the circumstances have not materially changed from the time the MEIR was certified and/or new information is not known related to energy demand impacts pursuant to CEQA Guideline Section 15179(b)(1).

Mineral Resources. The City of Fresno has adopted plan policies and City ordinance provisions consistent with requirements of the State of California necessary to preserve access to areas of identified resources and for restoration of land after resource recovery (surface mining) activities. Staff finds that these policies and Fresno Municipal Code provisions have adequately addressed any potential impacts that may have arisen related to mineral resources and is not aware of any facts or circumstance that would make loss of mineral resources a reasonably foreseeable impact not addressed in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related to loss of mineral resources pursuant to CEQA Guideline Section 15179(b)(1).

School Facilities. The City of Fresno continues to consult with affected school districts and participate in school site planning efforts to assure the identification of appropriate location alternatives for planned school facilities. Staff is not aware of any information from the school districts or otherwise to demonstrate that adequate school facilities are not being accommodated under the current General Plan and/or that the need for school facilities is expected to cause impacts not identified in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related to need for school facilities pursuant to CEQA Guideline Section 15179(b)(1).

Potential Aesthetic Impacts. Design Guidelines were appended to the 2025 Fresno General Plan through the plan adoption process conducted concurrently with MEIR analysis. As noted previously, General Plan policies encourage and promote infill development, and the City of Fresno Planning and Development Department has implemented design guidelines for reviewing infill housing development proposals. The Department has prepared detailed design guidelines for the Tower District Specific Plan area and the Fulton-Lowell Specific Plan area, both of which contain enclaves of unique structures. The City has adopted policies promoting incorporation of public art within private development projects, which will contribute to a more appealing visual environment, benefitting users of the private property as well as the surrounding community. In addition, the City of Fresno and the City of Fresno Redevelopment Agency have funded public improvements which improve the general aesthetic. Staff is not aware of any situation or circumstances where there are reasonably foreseeable aesthetic impacts not identified and assessed in the MEIR. Staff finds that the circumstances have not changed from the time the MEIR was certified and/or new information is not known related aesthetic impacts pursuant to CEQA Guideline Section 15179(b)(1).

Appendix: Status of MEIR Analysis With Regard to Air Quality and Climate Change

APPENDIX**STATUS OF MEIR ANALYSIS WITH REGARD TO AIR QUALITY AND CLIMATE CHANGE****EXECUTIVE SUMMARY**

Planning staff has worked closely with the regional San Joaquin Valley Air Pollution Control District (SJVAPCD) since the November 2002 certification of the 2025 Fresno General Plan Master Environmental Impact Report (MEIR). Potential air quality impacts have been analyzed for every environmental assessment initial study done for City development projects. Projects are required to comply with SJVAPCD rules and regulations via conditions of approval and mitigation measures formulated in the MEIR.

Overall, revisitation of these issues leads to the conclusion that, while there have been changes in air quality laws, planning requirements, and rules and regulations since certification of the MEIR, the actual environmental setting has not evidenced degradation of air quality. In conjunction with SJVAPCD attainment plans and attendant rules and regulations that were adopted prior to the certification of the MEIR, policies in the 2025 Fresno General Plan and MEIR mitigation measures aimed at improving air quality appear to be working. Since 2002, data show that pollutant levels have been steadily decreasing for ozone/oxidants and for particulate matter (10 microns and 2 microns in size). Recent adoption of new air quality attainment plans by SJVAPCD, calling for broader and more stringent rules and regulations to achieve compliance with national and state standards, is expected to accelerate progress toward attainment of clean air act standards.

Analysis of global climate change analysis was not part of the MEIR in 2002, due to lack of scientific consensus on the matter and a lack of analytical tools. However, under the MEIR and General Plan mitigation measures and policies for reducing all forms of air pollution, levels of greenhouse gases have been reduced along with the other regulated air pollutants. At this point in time, detailed analysis and conclusions as to the significance of greenhouse gas emissions and strategies for mitigation are still not feasible, because the legislatively-mandated greenhouse gas inventory benchmarking and the environmental analysis policy formulation tasks of the California Environmental Protection Agency Air Resources Board and the Governor's Office of Planning and research are not completed. The information available does not support any conclusion that Environmental Assessment No. EA-14-018 or other City projects would have a significantly adverse impact on global climate change. Similarly, there is insufficient information to conclude that global climate change would have a significantly adverse impact upon the City of Fresno or specific development projects.

SUPPORTING DATA AND ANALYSIS

While there have been changes in air quality regulations since the November 2002 certification of the 2025 Fresno General Plan MEIR, the actual environmental setting has not evidenced degradation of air quality.

The adverse air quality impacts associated with the myriad of human activities potentiated by the long range general plan for the Fresno metropolitan area can be expected to remain significant and unavoidable, and cannot be completely mitigated through the General Plan or through project-level mitigation measures. In order to provide a suitable living environment within the metropolitan area, the General Plan and its MEIR included numerous air pollution reduction measures.

The 2025 Fresno General Plan and its MEIR gave emphasis to pursuing cleaner air as an overarching goal. The urban form element of the General Plan was designed to foster efficient transportation and to support mass transit and subdivision design standards are being implemented to support pedestrian travel. Strong policy direction in the Public Facilities and Resource Conservation elements require that air pollution improvement be a primary consideration for all land development proposals, that development and public facility projects conform to the 2025 Fresno General Plan and its EIR mitigation measures, and that the City work conjunctively with other agencies toward the goal of improving air quality.

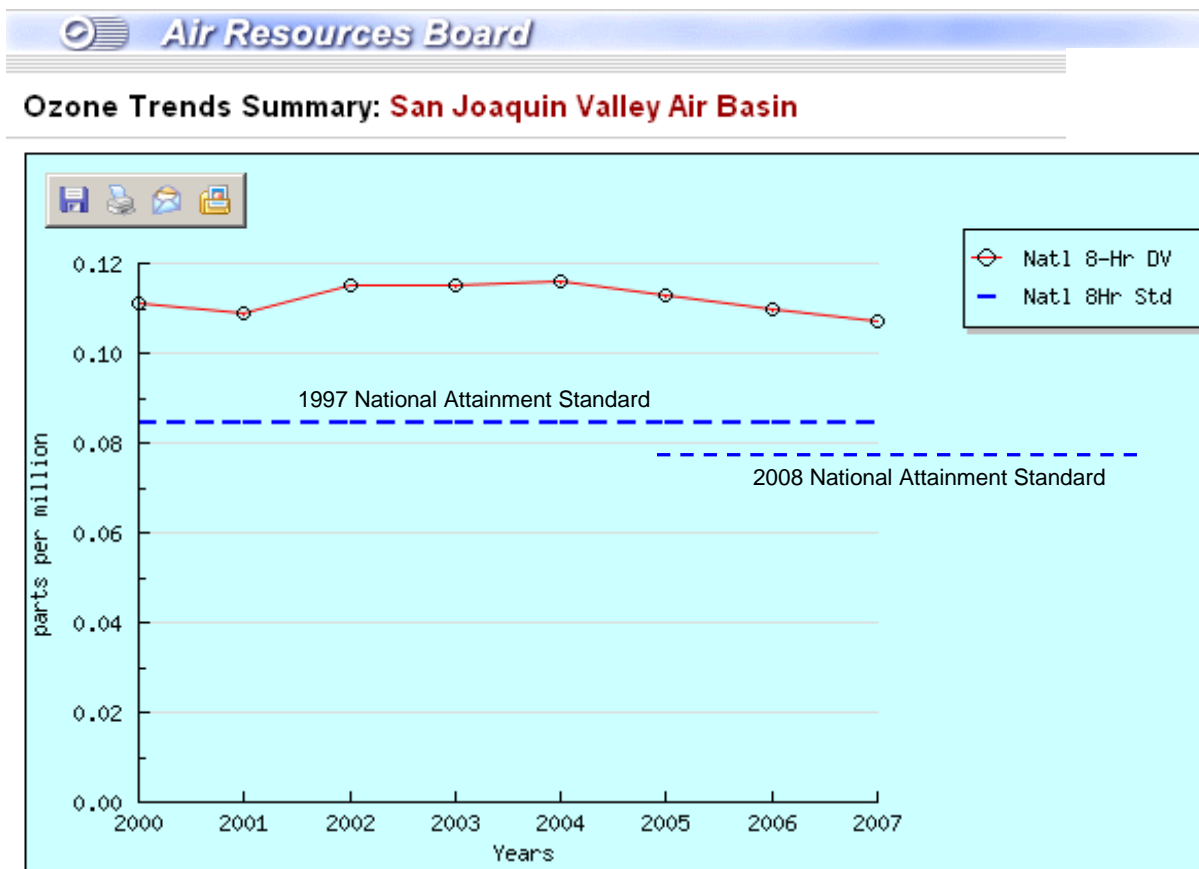
The MEIR mitigation checklist sketched out a series of actions for the City to pursue with regard to its own operations, and City departments are pursuing these objectives. The Fresno Area Express (FAX) bus fleet and the Department of Public Utilities solid waste collection truck fleet are being converted to cleaner fuels. Lighter-duty vehicle fleets are also incorporating alternative fuels and “hybrid” vehicles. Mass transit system improvements are supporting increased ridership. Construction of sidewalks, paseos, bicycle lanes and bike paths is being required for new development projects, and are being incorporated into already-built segments of City rights-of-way with financing from grants, gas tax, and other road construction revenues. Traffic signal synchronization is being implemented. The Planning and Development Department amended the Fresno Municipal Code to ban all types of residential woodburning appliances, thereby removing the most prominent source of particulate matter pollution from new construction.

Pursuant to a specific MEIR mitigation measure, all proposed development projects are evaluated with the “Urbemis” air quality impact model that evaluates potential generation of a range of air pollutants and pollutant precursors from project construction, project-related traffic, and from various area-wide non-point air pollution sources (e.g., combustion appliances, yard maintenance activities, etc.). The results of this “Urbemis” model evaluation are used to determine the significance of development projects’ air quality impacts as well as the basis for any project-specific air quality mitigation measures.

There are no new (*i.e.*, unforeseen in the MEIR) reasonable mitigation measures which have become available since late 2002 that would assure the reduction of cumulative (city-wide) air quality impacts to a less than significant level at project buildout, even with full compliance with attainment plans and rules promulgated by the California Air Resources Board and the San Joaquin Valley Air Pollution Control District.

Through implementation of regional air quality attainment plans by the San Joaquin Valley Unified Air Pollution Control District (SJVAPCD), as supported by implementation of 2025 Fresno General Plan policies and MEIR mitigation measures, air pollution indices have shown improvement. Progress is being made toward attainment of federal and state ambient air quality standards.

Ozone/oxidant levels have shown gradual improvement, as depicted in the following graphs and charts from the California Air Resources Board (graphics with an aqua background) and from the San Joaquin Valley Air Pollution Control District (those with no background color):



GRAPH NOTES: The "National 1997 8-Hour Ozone Design Value" is a three-year running average of the fourth-highest 8-hour ozone measurement averages in each of the three years (computed according to the method specified in Title 40, Code of Federal Regulations, Part 50, Appendix I).

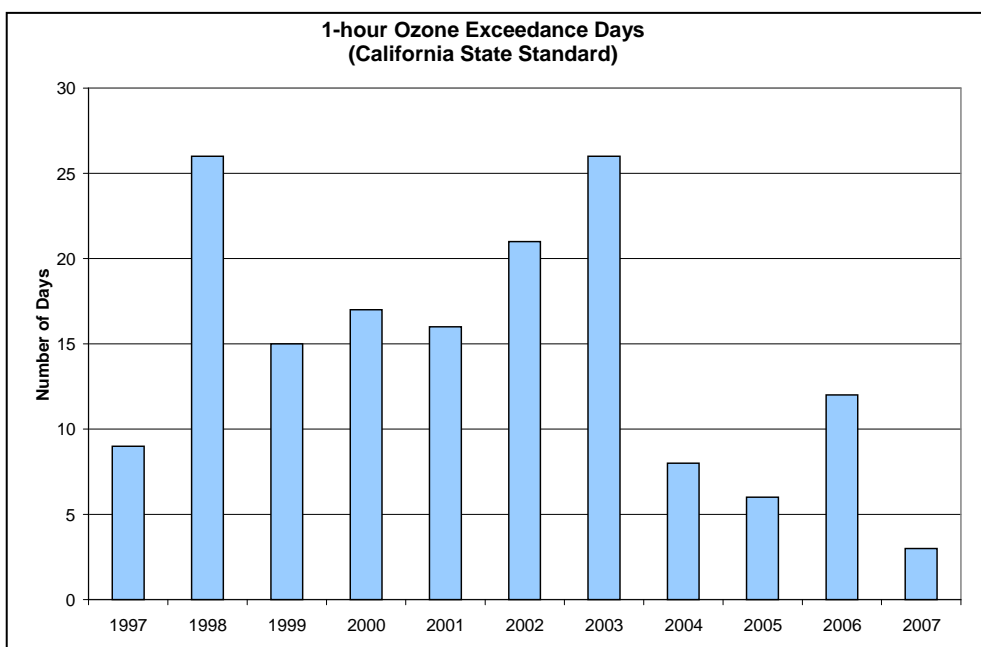
Under the 1997 standard, in effect through the end of 2007, "Attainment" would be achieved if the three-year average were less than, or equal to, 84 parts per billion (ppb), or 0.084 parts per million (ppm). In 2008, a new National 8-Hour Ozone Attainment standard went into effect: a three year average of 75 ppb (0.075 ppm). Data and attainment status for 2008 is expected to become available in 2009.

The California Clean Air Act has a different calculation method for its 8-hr oxidant [ozone] standard design value, and an attainment standard that is lower (0.070 ppm). The ozone improvement trend under the state Clean Air Act 8-hour ozone standard parallels the trend for the national 8-hour standard.

Correspondingly, the number of days per year in which the National 8-hour Ozone Standard has been exceeded have also decreased since the end of 2002:

Ozone Trends Summary: San Joaquin Valley Air Basin

In 1997, the Federal Clean Air Act repealed the former National 1-hour Ozone standard. However, the California Clean Air Act retains this air pollution parameter. The days per year in which the State of California 1-hour ozone standard has been exceeded have also shown a generally decreasing trend in the time since the 2025 Fresno General Plan MEIR was certified:

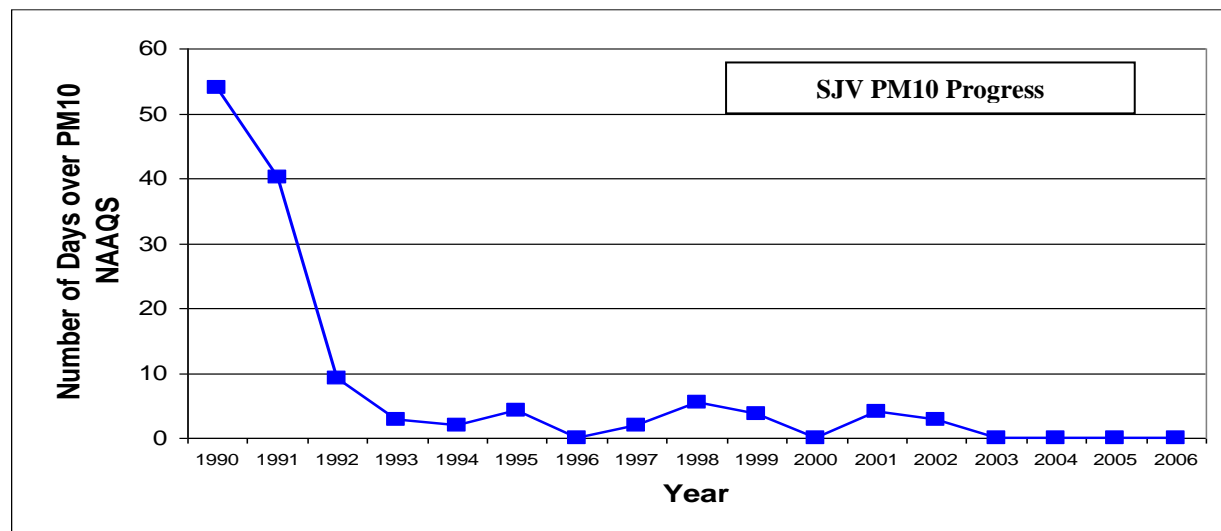


The current ozone attainment plan for the San Joaquin Valley Air Basin, in place when the MEIR for the 2025 Fresno General Plan was certified, is linked to a federal designation of "Serious Nonattainment." While ozone/oxidant air quality conditions are showing a trend toward improvement, the rate of progress toward full attainment is not sufficient to reach the national ambient air quality standards by the target date established by the attainment plan. Mobile sources (vehicle engines) are the primary source for ozone precursors, and the regulation of mobile sources occurs at the national and state levels and is beyond the direct regulatory reach of the regional air pollution control agency. As noted in the 2025 Fresno General Plan MEIR and reflected in the Statement of Overriding Considerations made when the MEIR was certified, potentially significant and unavoidable adverse air quality impacts are inherent in population growth and construction in the City of Fresno, given the Valley's climatology and the limitations on regulatory control of air pollutant precursors.

In 2004, the San Joaquin Valley Air Pollution Control District, in conjunction with the California Air Resources Board, approved a re-designation for the San Joaquin Valley Air Basin to "Extreme Nonattainment" status for ozone, approving a successor air quality attainment plan that projects San Joaquin Valley attainment of the national 8-hour ozone standard by year 2023. This designation and its accompanying attainment plan were submitted to the U.S. Environmental Protection Agency (USEPA) in November of 2004. To date, no formal action has been taken by USEPA to date on the proposed designation or the attainment plan; the Valley remains in "Severe Non- attainment" as of this writing.

The change from "Severe" to "Extreme" ozone Nonattainment would represent an extension of the deadline for attainment, but since the regional air basin would not have achieved attainment by the original deadline, this does not materially affect environmental conditions for the City of Fresno as they were analyzed in the MEIR for the 2025 Fresno General Plan. The proposed revised ozone attainment plan includes not only all the measures in the preceding ozone attainment plan, but additional measures for regulating a wider range of activities to attain ambient air quality standards.

The Valley's progress toward attaining national and state standards for PM-10 (particulate matter less than 10 microns in diameter) has been greater since certification of the MEIR:



As the preceding chart reveals, levels of PM-10 air pollution have decreased since 2002. When the MEIR was certified, the San Joaquin Valley Air Basin was designated in “Serious Nonattainment” for national standards. As of 2007, the number of days where standards were exceeded has decreased to the extent that the Valley has been deemed to be in Attainment. Under Federal Clean Air Act Section 107(d)(3), PM-10 attainment plans and associated rules and regulations remain in place to maintain this level of air quality. New and expanded regulations proposed to combat “Extreme” ozone pollution and PM-2.5 (discussed below) would be expected to provide even more improvement in PM-10 pollution situation.

The 2025 Fresno General Plan provided policy direction in support of “indirect source review” as a method for controlling mobile source pollution. Although vehicle engines and fuels are outside the purview of local and regional jurisdictions in California, approaching mobile source pollution indirectly, through regulation and mitigation of land uses which generate traffic, is an alternative approach.

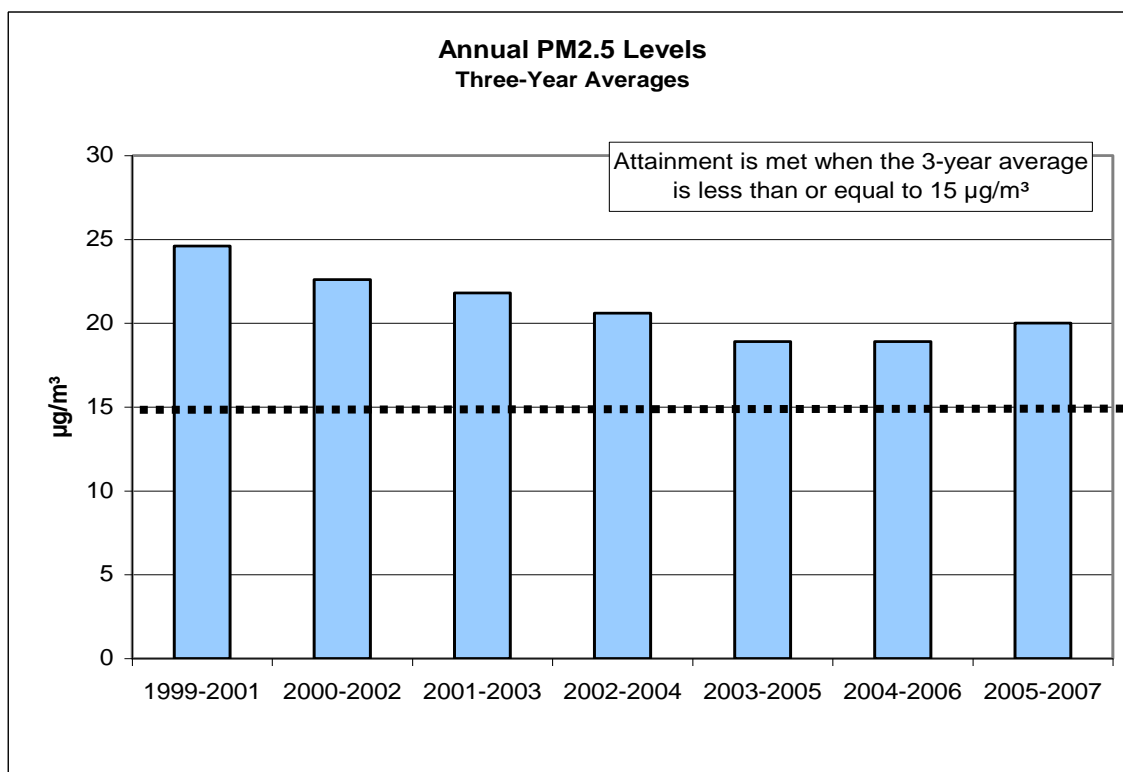
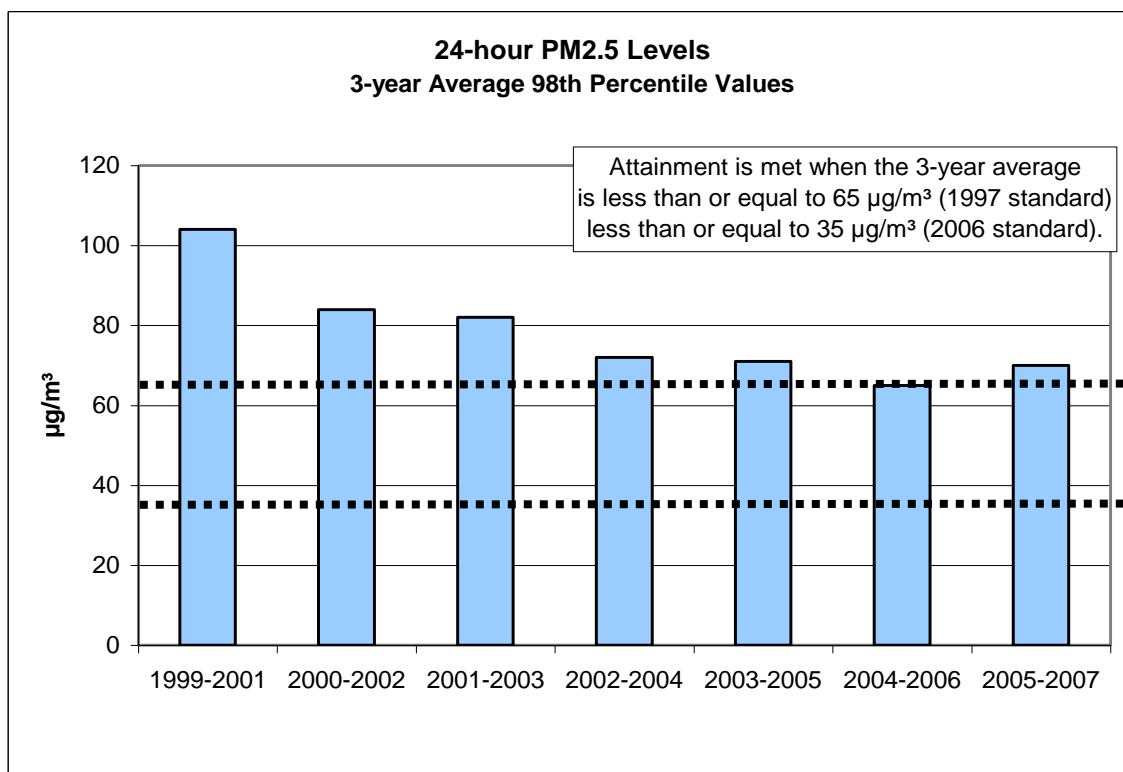
In March of 2006, the San Joaquin Valley Air Pollution Control District adopted Rule 9510, its Indirect Source Review Rule. Full implementation of this Rule has been delayed due to litigation (mitigation fees are being collected and retained in holding accounts), but projects are already being evaluated under Rule 9510 and are implementing many aspects of the Rule, such as clean air design (pedestrian and bike facilities; proximal siting of residential and commercial land uses; low-pollution construction equipment; dust control measures; cleaner-burning combustion appliances, etc.).

It is anticipated that full implementation (release of mitigation impact fees for various clean air projects throughout the San Joaquin Valley) and subsequent augmentation of the Indirect Source Review Rule will accelerate progress toward attainment of federal and state ozone standards, and will be an important component of the attainment plan for PM-2.5 (very fine particulate matter) and for greenhouse gas reductions to combat global climate change.

PM-2.5 is a newly-designated category of air pollutant, the component of PM-10 comprised of particles 2.5 microns in diameter or smaller. The 1997 Clean Air Act Amendments directed that this pollutant be brought under regulatory control, but federal and state standards/designations had not been finalized when the 2025 Fresno General Plan MEIR was drafted and certified. In the intervening time, the San Joaquin Valley Air Basin has been classified as being in “Nonattainment” for the 1997 federal PM-2.5 standard and for the State PM-2.5 standard.

An attainment demonstration plan for the federal 1997 PM-2.5 standard has been adopted by the SJVAPCD and approved by the California Air Resources Board, and forwarded to the EPA for approval (status as of mid-2008). The attainment plan would achieve compliance with the 1997 federal Clean Air Act PM-2.5 standard by year 2014, in conjunction with California Air Resources Board (and US EPA) action to improve diesel engine emissions. The San Joaquin Valley Air Basin has not yet been classified under the more stringent revised federal 2006 PM-2.5 standard; this classification is expected by 2009.

As with ozone and PM-10 pollution, levels of PM-2.5 have already been reduced by already-existing air quality improvement planning policies, mitigation measures, and regulations. The following charts depict historic PM-2.5 monitoring data for the regional air basin. Once the expected SJVAPCD attainment plan is implemented measures specific to PM-2.5 control, the rate of progress toward attainment of federal and state PM-2.5 standards will accelerate.



When the 2025 Fresno General Plan and its MEIR were approved in late 2002, the planning and environmental documents did not directly or separately analyze potential global warming and climate change impacts. However, the general policy direction for consideration of air quality parameters in development project evaluations and for reducing those air pollutants which are already under regulation would operate to control these potential adverse impacts.

“Global warming” is the term coined to describe a widespread climate change characterized by a rising trend in the Earth’s ambient average temperatures with concomitant disturbances in weather patterns and resulting alteration of oceanic and terrestrial environs and biota. When sunlight strikes the Earth’s surface, some of it is reflected back into space as infrared radiation. When the net amount of solar energy reaching Earth’s surface is about the same as the amount of energy radiated back into space, the average ambient temperature of the Earth’s surface would remain more or less constant. Greenhouse gases potentially disturb this equilibrium by absorbing and retaining infrared energy, trapping heat in the atmosphere—the “greenhouse gas effect.”

The predominant current opinion within the scientific community is that global warming is occurring, and that it is being caused and/or accelerated via generation of excess “greenhouse gases” [GHGs], that natural carbon cycle processes (such as photosynthesis) are unable to absorb sufficient quantities of GHG and cannot keep the level of these gases or their warming effect under control. It is believed that a combination of factors related to human activities, such as deforestation and an increased emission of GHG into the atmosphere from combustion and chemical emissions, is a primary cause of global climate change.

The predominant types of anthropogenic greenhouse gases (those caused by human activity), are described as follows. It should be noted that the starred GHGs are regulated by existing air quality policies and rules pursuant to their roles in ozone and particulate matter formation and/or as potential toxic air contaminants.

- carbon dioxide (CO₂), largely generated by combustion activities such as coal and wood burning and fossil fuel use in vehicles but also a byproduct of respiration and volcanic activity;
- *methane (CH₄), known commonly as “natural gas,” is present in geologic deposits and is also evolved by anaerobic decay processes and animal digestion. On a ton-for-ton basis, CH₄ exerts about 20 times the greenhouse gas effect of CO₂;
- *nitrous oxide (N₂O), produced in large part by soil microbes and enhanced through application of fertilizers. N₂O is also a byproduct of fossil fuel burning: atmospheric nitrogen, an inert gas that makes up a large proportion of the atmosphere, is oxidized when air is exposed to high-temperature combustion. N₂O is used in some industrial processes, as a fuel for rocket and racing engines, as a propellant, and as an anesthetic. N₂O is one component of “oxides of nitrogen” (NOX), long recognized as precursors of smog-causing atmospheric oxidants.
- *chlorofluorocarbons (CFCs), synthetic chemicals developed in the late 1920s for use as improved refrigerants (e.g., “Freon™”). It was recognized over two decades ago that this class of chemicals exerted powerful and persistent greenhouse gas effects. In 1987, the Montreal Protocol halted production of CFCs.

- *hydrofluorocarbons (HFCs), another class of synthetic refrigerants developed to replace CFCs;
- *perfluorocarbons (PFCs), used in aluminum and semiconductor manufacturing, have an extremely stable molecular structure, with biological half-lives tens of thousands of years, leading to ongoing atmospheric accumulation of these GHGs.
- *sulfur hexafluoride (SF₆) is used for insulation in electric equipment, semiconductor manufacturing, magnesium refining and as a tracer gas for leak detection. Of any gas evaluated, SF₆ exerts the most powerful greenhouse gas effect, almost 24,000 times as powerful as that of CO₂ on a ton-for-ton basis.
- water vapor, the most predominant GHG, and a natural occurrence: approximately 85% of the water vapor in the atmosphere is created by evaporation from the oceans.

In an effort to address the perceived causes of global warming by reducing the amount of anthropogenic greenhouse gases generated in California, the state enacted the Global Warming Solutions Act of 2006 (Codified as Health & Safety Code Section 38501 *et seq.*). Key provisions include the following:

- Δ Codification of the state's goal by requiring that California's GHG emissions be reduced to 1990 "baseline" levels by 2020.
- Δ Set deadlines for establishing an enforcement mechanism to reduce GHG emissions:
 - By June 30, 2007, the California Air Resources Board ("CARB") was required to publish "discrete early action" GHG emission reduction measures. Discrete early actions are regulations to reduce greenhouse gas emissions to be adopted by the CARB and enforceable by January 1, 2010;
 - By January 1, 2008, CARB was required to identify what the state's GHG emissions were in 1990 (set the "baseline") and approve a statewide emissions limit for the year 2020 that is equivalent to 1990 levels. (These statewide baseline emissions have not yet been allocated to regions, counties, or smaller political jurisdictions.) By this same date, CARB was required to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions.
 - By January 1, 2011, CARB must adopt emission limits and emission reduction measures to take effect by January 1, 2012.

As support for this legislation, the Act contains factual statements regarding the potential significant impacts on California's physical environment that could be caused by global warming. These include, an increase in the intensity and duration of heat waves, the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snow pack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

On August 24, 2007, California also enacted legislation (Public Resources Code §§ 21083.05 and 21097) requiring the state Resources Agency to adopt guidelines for addressing climate change in environmental analysis pursuant to the California Environmental Quality Act. By July 1, 2009, the Governor's Office of Planning and Research (OPR) is required to prepare

guidelines for the mitigation of greenhouse gas emissions, and transmit those draft regulations to the Resources Agency. The Resources Agency must then certify and adopt the guidelines by January 1, 2010.

The recently-released update of the Urbemis computer model (used by the City of Fresno Planning and Development Department for environmental assessments, pursuant to a specific MEIR mitigation measure) does provide data on the amounts of CO₂ and oxides of nitrogen (NOX) potentially generated by development projects. However, at this point in time, neither CARB nor the SJVAPCD has determined what the 1997 baseline or current “inventory” of GHGs is for the entire state nor for any region or jurisdiction within the state. No agency has adopted GHG emission limits and emission reduction measures, and because CEQA guidelines have not been established for the evaluation and mitigation of greenhouse gas emissions (there is an absence of regulatory guidance). Therefore, the City is unable to productively interpret the results of the Urbemis model with regard to GHGs, and there is currently no way to determine the significance of a project’s potential impact upon global warming.

The 2025 Fresno General Plan provides an integrated combination of residential, commercial, industrial, and public facility uses allowing for proximate location of living, work, educational, recreational, and shopping activities within Fresno metropolitan area. This combination of uses has been identified as a potential mitigation measure to address global warming impacts in a document published by the California Attorney General's Office entitled, *The California Environmental Quality Act Mitigation of Global Warming Impacts* (updated January 7, 2008). Specifically, this document describes this mitigation measure as follows, "Incorporate mixed-use, infill and higher density development to reduce vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods"—echoing objectives and policies of the 2025 Fresno General Plan adopted in late 2002.

The General Plan contains a mix of land uses would be expected to generate fewer vehicle miles traveled per capita, leading to reduced emissions of greenhouse gases from engine emissions. It provides for overall denser development with high-intensity enclaves, associated with increased public transit use. The plan fosters mixed use and infill development (being implemented by mixed-use zoning ordinances added to the Fresno Municipal Code, as directed by 2025 Fresno General Plan) policies. The urban form element distributes neighborhood-level and larger commercial development, public facilities such as schools, and recreational sites throughout the metropolitan area, reducing vehicle trips.

Any manufacturing activities that would generate SF₆, HFCs, or PFCs would be subject to subsequent environmental review at the project-specific level, as would any uses which would generate methane on site. The City of Fresno has adopted an ordinance prohibiting installation of any woodburning fireplaces or woodburning appliances in new homes, which would reduce CO₂ and N₂O from wood combustion.

Through updates in the California Building Code and statewide regulation of appliance standards, City development projects conform to state-of-the art energy-efficient building, lighting, and appliance standards as advocated in the California Environmental Protection Agency’s publication *Climate Action Team / Proposed Early Actions to Mitigate Climate Change in California* (April 2007) and in CARB’s *Proposed Early Actions to Mitigate Climate Change in California* (April 2007). The City has further incentivized “green” building projects by providing subsidies for solar photovoltaic equipment for single-family residential construction, by reducing development standards (including reductions in required parking spaces, which further reduces

air pollutant and GHG emissions), and by improving its landscape and shading standards (a topic included in the Design Guidelines adopted with the 2025 Fresno General Plan).

Updated engine and tire efficiency standards would apply to residents' vehicles, as well as the statewide initiatives applicable to air conditioning and refrigeration equipment, regional transportation improvements, power generation and use of solar energy, water supply and water conservation, landfill methane capture, changes in cement manufacturing processes, manure management (methane digester protocols), recycling program enhancements, and "carbon capture" (also known as "carbon sequestration," technologies for capturing and converting CO₂, removing it from the atmosphere).

Due to the lack of data or regulatory guidance that would indicate the 2025 Fresno General Plan had a significant adverse impact upon global climate change, the relatively small size of the Fresno Metropolitan Area in conjunction with the worldwide scope of GHG emissions, and the emphasis in the 2025 Fresno General Plan upon integrated urban design and air pollution control measures, it could not be concluded in 2002 nor at present that the 2025 Fresno General Plan would have a significant adverse impact on global climate change.

As to potential impacts of global warming upon the 2025 Fresno General Plan: the city is located in the Central Valley, in an urbanized area on flat terrain distant from the Pacific coast and from rivers and streams. It is outside of identified flood prone areas. Based on its location we conclude that Fresno is not likely to be significantly affected by the potential impacts of global climate change such as increased sea level and river/stream channel flooding; nor is it subject to wildfire hazards. While Fresno does contain areas with natural habitat (the San Joaquin Bluffs and Riverbottom), a change in these areas' biota induced by global warming would not leave them bereft of all habitat value—it would simply mean a change in the species which would be encountered in these areas. The 2025 Fresno General Plan preserves this habitat open space area for multiple objectives (protection from soil instability and flood inundation; conservation of designated high-quality mineral resources), so any natural resource species changes in those areas would not constitute a significant adverse impact to the city or a loss of resource area.

Fresno has historically had high ambient summer temperatures and an historic heat mortality level that is among the highest in the state (5 heat-related deaths annually per 100,000 population). Due to the prevalence of air conditioning in dwellings and commercial buildings, an increase in extreme heat days from global warming is not expected by the California Air Resources Board Research Division to significantly increase heat-related deaths in Fresno, as opposed to possible effects in cooler portions of the state such as Sacramento or Los Angeles areas (reference: *Projections of Public Health Impacts of Climate Change in California: Scenario Analysis*, by Dr. Deborah Dreschler, Air Resources Board, April 9, 2008). Increased summertime temperatures which may be caused by global warming will be mitigated by the City's landscaping standards to provide shade trees, by statewide energy efficiency standards which insulate dwellings from heat and cold, and by urban design standards which require east-west orientation of streets and buildings to facilitate solar gain. Fresno has a heat emergency response plan and provides cooling centers and free transportation to persons who do not have access to air conditioning.

Secondary health effects of global warming could include increases in respiratory and cardiac illnesses attributable to poor air quality. The San Joaquin Valley Air Pollution Control District provides daily advisories and warnings in times of high ozone levels to help senior citizens and

other sensitive populations avoid exposure. The SJVAPCD has committed to attainment of fine particulate matter (PM_{2.5}) standards by Year 2014 and to attainment of oxidant/ozone standards by Year 2023, and would adopt additional Rules and emission controls as necessary to decrease emissions inventories by those target dates. There is insufficient information to indicate that global climate change would prevent attainment of air quality parameters affecting health.

Pursuant to 2025 Fresno General Plan policy and MEIR mitigation measures, the City's Department of Public Utilities and Fire Department are required to affirm that adequate water service can be provided to all development projects for potable and fire suppression uses. The City derives much of its water supply from groundwater, using its surface water entitlements from the Kings and San Joaquin Rivers primarily to recharge the aquifer. A high percentage of Fresno's annual precipitation is captured and percolated in ponding basins operated by Fresno Metropolitan Flood Control District. If global climate change leads to a longer rainy season and/or more storm events throughout the year, groundwater supplies could be improved by additional percolation.

The City of Fresno currently treats and distributes only some 20% of its 150,000 acre-foot/year (AFY) surface water entitlement for the municipal water system, directing another 50,000 to 70,000 AFY to recharge activities via ponding basins. Presently, the City is unable to recharge the full balance of its annual entitlement in average and wet years, and releases any unused surface water supplies to area irrigation districts for agricultural use in the metropolitan area, (which further augments groundwater recharge through percolation of irrigated water).

Future surface water plant construction projects envisioned by the 2025 Fresno General Plan would account for less than 120,000 acre-feet per year of the surface supply. The General Plan direction for future Metropolitan Water Resource Management Plans includes exploring the use of recycled treated wastewater for non-potable uses such as landscape irrigation, which would further effectively extending the City's water supply..

If the global climate change were to cause a serious and persistent decrease in Sierra snowpack, some of Fresno's water supply could be affected. However, historic records show that the very long-term prevailing climatic pattern for Central California has included droughts of long (often, multi-year) duration, interspersed with years of excess precipitation. Decades before global climate change was considered as a threat to California's water system, state and local agencies recognized a need to augment water storage capacity for excess precipitation occurring in wet years, to carry the state through the intervening dry years.

The potential for episodic and long-term drought is considered in the city's Metropolitan Water Resource Plan and in its the Urban Water Management Plan Drought Contingency component, to accommodate reductions in available water supplies. In times of extended severe regional or statewide drought, a reprioritization of water deliveries and reallocation for critical urban supplies vs. agricultural use is possible, but it is too speculative at this time to determine what the statewide reprioritization response elements would be (the various responses of statewide and regional water agencies to these situations are not fully formulated and cannot be predicted with certainty). Because the true long term consequences of climate change on California's and Fresno's water system cannot be predicted, and, it is too speculative at this time to conclude that there could be a significant adverse impact on water supply for the 2025 Fresno General Plan due to global climate change.

As noted above, it is theorized that global warming could lead to more energy in the atmosphere and to increased intensity or frequency of storm events. Fresno's long-term weather pattern is that rainfall occurs during episodic and fairly high-intensity events. The Fresno Metropolitan Flood Control District (FMFCD) drainage and flood control Master Plan, which sets policies for drainage infrastructure and grading in the entire Fresno-Clovis area, is already predicated on this type of weather pattern. FMFCD sizes its facilities (which development potentiated by the 2025 Fresno General Plan will help to complete) for "two-year storm events," storms of an intensity expected in approximately 50 percent of average years; however, the urban drainage system design has additional capacity built into the street system so that excess runoff from more intense precipitation events is directed to the street system. The City's Flood Plan Ordinance and grading standards require that finished floor heights be above the crowns of streets and above any elevated ditchbanks of irrigation canals. FMFCD project conditions also preserve "breakover" historic surface drainage routes for runoff from major storms. Ultimately, drain inlets and FMFCD basin dewatering pumps direct severe storm runoff into the network of Fresno Irrigation District canals and pipelines still extant in the metropolitan area, with outfalls beyond the western edge of the metropolitan area.

Scientific information, analytical tools, and standards for environmental significance of global warming and green house gases were not available to the Planning and Development Department in 2002 when the 2025 Fresno General Plan and its MEIR were formulated and approved--and at this point, there is still insufficient data available to draw any conclusions as to the potential impacts, or significance of impacts, related to global climate change for the 2025 Fresno General Plan. Similarly, there is insufficient information to conclude that global warming may have a potentially significant adverse impact upon the 2025 Fresno General Plan. In a situation when it would be highly speculative to estimate impacts or to make conclusions as to the degree of adversity and significance of those impacts, the California Environmental Quality Act allows agencies to terminate the analysis. In that regard, there is no material change in status from the degree of environmental review on this topic contained in the 2025 Fresno General Plan MEIR.