

11.0 REVISIONS TO DRAFT EIR

Subsequent to the public release of the Draft EIR, revisions have been made to the EIR as a result of staff-initiated changes and comments received. Those pages with revisions are identified below and follow this list of errata pages.

Page 1-6	Revision to bulleted list.
Page 2-9	Addition of text.
Page 2-19	Addition of text.
Page 4.4-18	Text amended.
Page 4.4-19	Text amended.
Page 4.4-21	Text amended. New Mitigation Measure AQ3. Remaining mitigation measures renumbered.
Pages 4.4-23 and 4.4-24	Addition of text. New Mitigation Measure AQ5.
Page 4.4-30	Text amended.
Page 4.4-32	Text amended.
Page 4.4-33 to 4.4-34	Text amended.
Page 4.4-35	New Mitigation Measure AQ7.
Page 4.4-36	Text amended.
Page 4.4-39	Addition of text.
Pages 4.4-40 to 4.4-41	Text amended. New Mitigation Measure AQ8.
Page 4.7-12	Text amended.
Page 4.7-14	Text amended.
Page 4.12-13	Correction to paragraph.
Page 4.14-10	Text amended.
Page 4.14-40	Figure 4.14-7b revised.
Pages 4.14-70 to 4.14-71	Text amended. Revisions to Mitigation Measures TR16 and TR17.
Page 5-2	Revision to percentage.

Page 5-6 Text amended.

Page 6-9 Deletion of extra period.

Page 6-33 Addition of text.

Appendix F New appendix added to provide diagram of Ramp Relocation Project Alternatives.

- Hydrology and Water Quality
- Noise
- Population and Housing
- ~~Recreation~~
- Public Services, Utilities and Service Systems
- Recreation
- Transportation/Traffic

The NOP was sent to trustee and responsible agencies, and the State Clearinghouse for a 30-day public review period, extending from May 31 to July 2, 2007. The NOP and comments received from public agencies are contained in Appendix A (Notice of Preparation and Public Comments) of this EIR.

1.5.2 PUBLIC REVIEW AND SCOPING MEETING

On June 19, 2007, two public scoping meetings were held, one in the afternoon for public agencies and one in the evening for members of the public. A public notice of the meetings was sent to members of the public and interested parties. At the meetings, members of the public had the opportunity to identify issues of special concern and to suggest additional issues to be considered in the EIR. Representatives of WestCAT attended the first meeting and no members of the public or interested parties attended the second meeting.

1.5.3 CONTENTS OF DRAFT EIR

All of the environmental issues determined to have potentially significant impacts and the issues identified during the NOP public review period have been incorporated into this EIR. For each environmental issue, the EIR describes the environmental setting (current conditions), then discusses and analyzes the potential related impacts that could be caused by project implementation.

For each potentially significant impact, the EIR specifies ways to minimize or avoid the impact, including implementation of one or more of the following mitigation measures:

- Existing goals, objectives, policies and programs of the City of Hercules *General Plan (General Plan)*
- Applicable mitigation measures of the *Draft and Final EIR for the General Plan*
- Project-specific mitigation measures designed to mitigate one or more project impacts, as described in this EIR

The project sponsor must implement all mitigation measures identified in the EIR or their environmental equivalent. “Environmental equivalent” means any mitigation measure and/or timing thereof, subject to the approval of the City, that, when compared to the mitigation measure identified in the EIR, would have the same or superior result and would have the same or superior effect on the environment. The Community Development Department, in conjunction with appropriate agencies or other City departments, would

projected noise increase is considered less than significant. Therefore, noise levels resulting from development within the planning area would be less than significant.

The 65 dBA noise contour lines under with project and no project scenarios studied in the EIR would extend beyond the planning area. Thus, future residential uses introduced to the planning area could be exposed to mobile source noise levels that exceed the City's established maximum acceptable exterior noise level of 60 dBA for residential uses. Mitigation has been recommended requiring subsequent noise studies to demonstrate that noise levels have been properly accounted for and attenuated in accordance with established City standards. The analysis would verify that residences are adequately shielded and/or located at an adequate distance from mobile noise sources. In addition, proper noise attenuation such as Title 24 (Noise Insulation Standards), sound walls, and proper building orientation would help meet the interior and exterior noise standards. As such, operational noise impacts would be considered less than significant. Railroad noise levels along the Union Pacific Railroad are approximately 70 dBA to 77 dBA at 100 feet from the railway centerline. Prior to approval of building permits for developments located near the Union Pacific Railroad, preparation of an acoustical analysis would be required to fully analyze and develop standards to ensure that the exterior and interior noise levels would be attenuated. With implementation of Mitigation Measure NOI13, railroad noise impacts would be considered less than significant.

Implementation of future development could result in an increase in ambient noise levels due to the generation of on-site noise associated with mixed-use projects. The NTC land use designation and zoning district would allow development of mixed-use projects in areas where noise levels may be appropriate for commercial uses but either "conditionally acceptable" or "normally unacceptable" for residential uses. However, compliance with City's noise standards set forth in the General Plan would reduce the potential for noise compatibility conflicts in the mixed-use developments to a less than significant level. Noise resonating from parking areas, mechanical equipment (e.g., heating, ventilation and air conditioning units) and slow-moving trucks would also be reduced given compliance with the noise standards set forth in the General Plan. Nevertheless, mitigation measures are required to further reduce impacts to a less than significant level.

2.2.10 POPULATION AND HOUSING

The HNTC planning area currently consists of undeveloped parcels, the existing Hercules Transit Center, equipment storage lots, an on- and off-ramp, and industrial uses. There are no current residential uses in the planning area and no housing would be displaced with project implementation. As such, implementation of the proposed project would not displace a substantial amount of existing housing or people, necessitating the construction of replacement housing of replacement housing elsewhere. There would be no impact.

The proposed amendments to the General Plan and Zoning Ordinance would result in an incremental increase in population but would be within the growth estimates identified in the General Plan. Therefore, the impact would be less than significant. Future development within the HNTC planning area would be consistent with Policies 2C and 4A of the General Plan Land Use Element, which encourage employment-generating development. Therefore, the project's impacts on local and regional employment would be considered beneficial to the City. Last, future development within the HNTC planning area would provide a significant

2.6 SUMMARY OF ALTERNATIVES EVALUATED

Chapter 6 of this EIR evaluates alternatives to the proposed project in accordance with the CEQA Guidelines Section 15126.6. These alternatives include:

- Alternative 1 - No Project/No Build (Status Quo) With No Ramp Relocation Project
- Alternative 2 - No Project/Future Development Under Existing General Plan With Ramp Relocation Project
- Alternative 3 - No Project/Future Development Under Existing General Plan With No Ramp Relocation Project
- Alternative 4 - Development of HNTC Program With No Ramp Relocation Project
- Alternative 5 - Development of HNTC Program With No Relocation of BART Park-And-Ride Lot/Market Town Project
- Alternative 6 - Market Town Project Only

2.6.1 ALTERNATIVE 1 - NO PROJECT/NO BUILD (STATUS QUO) WITH NO RAMP PROJECT

The No Project/No Build (Status Quo) With No Ramp Relocation Alternative (Alternative 1) would not result in any physical or operational changes to the planning area. The existing undeveloped parcels, parking lots, storage lots, off-ramp for I-80, on ramp for SR 4, and industrial uses would remain unchanged with implementation of this alternative. Amendments to the General Plan and Zoning Ordinance and the re-designation and rezoning of the project site to the NTC land use designation and zoning district would also not occur under Alternative 1. This alternative would not satisfy the project objectives stated in Chapter 3 (Project Description), which are re-stated above in [2.1.3](#).

2.6.2 ALTERNATIVE 2 – NO PROJECT/FUTURE DEVELOPMENT UNDER EXISTING GENERAL PLAN WITH RAMP RELOCATION PROJECT

Alternative 2 assumes that the proposed General Plan and Zoning Ordinance Amendments are not adopted and future development of the planning area occurs under the direction of the existing General Plan and Zoning Ordinance. Accordingly, the Market Town project would not be developed under Alternative 2. The purpose of this alternative is to provide a comparison between the project's impacts with those that may occur from future development of the planning area anticipated by the General Plan. This alternative assumes that the Ramp Relocation project would take place; therefore, the existing I-80 off ramp and SR 4 on-ramp would be relocated further east along SR 4 from their current location.

The PNR parcel has a General Plan land use designation and zoning district of Commercial Public (CP). Under this alternative, the types of uses that could potentially be developed on the PNR parcel consist of transit-related uses (park and ride lots, etc.) that could combine with commercial development comprised of retail, wholesale (open to the public), offices

vibrant economy. To achieve these goals, we need a coordinated policy, not a piecemeal approach dictated by litigation.

OPR has begun the process of formulating the guidelines called for in SB 97. Part of that effort included a survey of existing climate change analyses performed by various lead agencies under CEQA. OPR's effort revealed many questions surrounding such analyses, including, among others, what is a "new" greenhouse gas emission, what is the appropriate baseline for a climate change analysis, and when would emissions become significant under CEQA.

POTENTIAL IMPACTS AND MITIGATION MEASURES: GENERAL PLAN AND ZONING ORDINANCE AMENDMENTS

Short-Term (Construction) Impacts

- ◆ ***SHORT-TERM AIR QUALITY IMPACTS COULD OCCUR DURING SITE PREPARATION AND PROJECT CONSTRUCTION ASSOCIATED WITH FUTURE DEVELOPMENT IN THE HNTC PLANNING AREA CONSISTENT WITH THE NTC LAND USE DESIGNATION AND ZONING DISTRICT.***

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Construction-related emissions are generally short-term in duration, but may still cause adverse air quality impacts. Particulate matter is the pollutant of greatest concern with respect to construction activities. PM₁₀ emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction-related emissions can cause substantial increases in localized concentrations of PM₁₀. Particulate emissions from construction activities can lead to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces. Construction emissions of PM₁₀ can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions and other factors. The BAAQMD's approach to CEQA analysis of construction impacts is to emphasize implementation of effective and comprehensive control measures rather than detailed quantification of emissions. Implementation of Mitigation Measures AQ1 and AQ2 would reduce impacts from particulate emissions to less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project area, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to/from the project area. Emitted pollutants would include CO, VOCs, NO_x, SO_x, PM₁₀, and PM_{2.5}. To minimize construction equipment exhaust emissions, sStandard BAAQMD regulations and Mitigation Measure AQ3 would be adhered to, such as maintaining all construction equipment in proper tune and shutting down equipment when not in use for extended periods of time.

Reactive Organic Gas and Volatile Organic Compound Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are ozone precursors. Implementation of Mitigation Measure AQ34, which would require future development within the planning area to adhere to BAAQMD Regulation 8 (Organic Compounds), Rule 3 (Architectural Coatings) would reduce impacts from ROG emissions to less than significant.

Odors

Potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. BAAQMD Regulation 8 (Organic Compounds), Rule 3 (Architectural Coatings) limits the amount of volatile organic compounds from architectural coatings and solvents. Implementation of Mitigation Measure AQ34, which would require future development within the planning area to adhere to BAAQMD Regulation 8 (Organic Compounds), Rule 3 (Architectural Coatings) would reduce impacts from construction related odors and emissions to less than significant

Overall Construction Emissions

Implementation of projects within the HNTC planning area would occur over several years, with a buildout date of 2035. At this point, detailed construction assumptions have not yet been developed. Additionally, the BAAQMD does not require quantification of construction-related emission. Thus, per the BAAQMD CEQA Guidelines, a qualitative analysis was performed to disclose the anticipated impacts and mitigation measures. For construction sites larger than four acres, as would typically occur within the HNTC planning area, the BAAQMD recommends adoption of both basic and “enhanced” measures, including watering exposed soils, covering truck loads, sweeping, soil stabilization, limiting traffic speeds, and others; refer to Table 4.4-5 for the applicable BAAQMD control measures. With implementation of recommended mitigation measures, a reduction in construction related criteria pollutants would occur. Additionally, with implementation of BAAQMD control measures construction-related air quality impacts would be less than significant.

Mitigation Measures:

- AQ1 The project sponsor shall submit a grading plan to the City’s Engineering Services Manager for review and approval. The grading plan shall include measures to reduce emissions from construction equipment and wind blown soils and shall be followed for all construction activities for the project. The following measures shall be incorporated into the grading plan:
- Water all active construction areas at least twice daily.
 - Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
 - Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.

AQ3 The following construction equipment exhaust reduction measures shall be incorporated into the grading plan:

- Maintain properly tuned engines
- Minimize the idling time of diesel powered construction equipment to two minutes
- Use alternative powered construction equipment (i.e., hybrid, compressed natural gas, biodiesel, electric) when possible
- Use add-on control devices such as diesel oxidation catalysts or particulate filters
- All contractors shall use equipment that meets CARB's most recent certification standard for off-road heavy duty diesel engines

AQ34 The construction contractor shall adhere to BAAQMD Regulation 8, Rule 3 (Architectural Coatings) which limits the VOC content of architectural coatings used in the BAAQMD. The construction contractor shall not allow the averaging of such coatings to exceed the allowable emissions specified in BAAQMD Regulation 8, Rule 3. Coatings applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs shall adhere to this BAAQMD Rule. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purpose of this rule.

Level of Significance After Mitigation: Less Than Significant Impact.

Long-Term Operational Impacts

- ◆ ***LONG-TERM AIR QUALITY IMPACTS COULD OCCUR DURING PROJECT OPERATIONS ASSOCIATED WITH FUTURE DEVELOPMENT IN THE HNTC PLANNING AREA CONSISTENT WITH THE NTC LAND USE DESIGNATION AND ZONING DISTRICT***

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Long-term air quality impacts would consist of mobile source emissions generated from project-related traffic and from stationary source emissions. It is anticipated that development of the New Town Center would occur over several years. For analysis purposes, a buildout year of 2035 is used. As stated in Section 3.0 (Project Description), Table 4.4-6 (Hercules New Town Center Development Plan Buildout Summary) lists the anticipated development that would occur within the planning area.

**Table 4.4-7
Hercules New Town Center Year 2035 Air Emissions**

Project	Pollutant (pounds/day) ¹		
	ROG	NO _x	PM ₁₀
<ul style="list-style-type: none"> ▪ Area Source Emissions ▪ Vehicle Emissions 	96.49 62.39	16.91 48.12	0.04 351.05
Total Operational Emissions	158.88	65.03	351.09
BAAQMD Threshold	80	80	80
Is Threshold Exceeded? (Significant Impact?)	Yes	No	Yes
ROG = reactive organic gases; NO _x = nitrogen oxides; CO = carbon monoxide; SO ₂ = sulfur dioxide; PM ₁₀ = particulate matter; up to 10 microns;			
Notes: 1. Based on URBEMIS 2007 version 9.2.2 modeling results, worst-case seasonal emissions for area and mobile emissions have been modeled.			

Toxic Air Contaminants

In addition to area source emissions, such as ROG, NO_x and PM₁₀, a potential source of toxic air contaminants (TACs) includes perchloroethylene (perc), which is a solvent most commonly used by the dry cleaning industry. CARB and other public agencies have identified perc as a cancer-causing compound. Perc persists in the atmosphere long enough to contribute to both regional air pollution and localized exposures. In co-residential buildings such as those proposed for the project, studies have shown that dry cleaners can cause a wide range of exposures depending on the type and maintenance of dry cleaning equipment. Should any dry cleaning facility be located in or near the proposed project, Mitigation Measure AQ5 would be required to reduce impacts from TACs to less than significant.

Total Hercules New Town Center Project Operational Emissions

The total project operational emissions are described in terms of area source and mobile source (vehicle) emissions. Transportation control measures and design features can be incorporated into the project to reduce emissions from mobile sources. Mitigation Measure AQ46 has been recommended to reduce area source emissions and potential sources of ROG emissions. However, as indicated in Table 4.4-7, operational emissions would still exceed the BAAQMD thresholds for PM₁₀ and ROGs due to the net increase in daily trips. Thus, the project would result in significant and unavoidable impacts for long-term operations under Year 2035 conditions.

Mitigation Measure:

AQ5 Prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development within the Hercules New Town Center incorporates the following measures to reduce project exposure to TACs:

- Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines provide 500 feet. For operations with three or more machines, consult with the local air district.

- Do not site new sensitive land uses in the same building with perc dry cleaning operations.

AQ46 Prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development within the Hercules New Town Center incorporates measures to reduce project operational emissions, which may include but are not limited to the following:

- Use solar or low-emission water heaters in the residential buildings
- Each appliance (i.e., washer/dryers, refrigerators, stoves, etc.) provided by the builder must be Energy Star qualified if an Energy Star designation is applicable for that appliance
- Low flow appliances (i.e., toilets, dishwashers, shower heads, washing machines) shall be installed if provided by the builder/applicant
- Require that residential landscapers providing services at the common areas of a project site use electric or battery-powered equipment, or other internal combustion equipment that is either certified by the California Air Resources Board or is three years old or less at the time of use, to the extent that such equipment is reasonably available and competitively priced

Level of Significance After Mitigation: Less than Significant impact for TACs. Significant and Unavoidable Impact for total project operational emissions.

Localized Carbon Monoxide Impacts

- ◆ ***DEVELOPMENT CONSISTENT WITH THE NTC LAND USE DESIGNATION AND ZONING DISTRICT COULD CONFLICT WITH THE LOCAL AIR QUALITY MANAGEMENT PLAN.***

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: The BAAQMD requires that proposed projects are analyzed for the potential to cause localized CO hotspots. Per the BAAQMD CO screening guidelines, a project would have CO impacts if the following were to occur:

- Project traffic would impact intersections or roadway links operating at level of service (LOS) D, E or F or would cause LOS to decline to D, E or F
- Project traffic would increase traffic volumes on nearby roadways by 10 percent or more
- Project would contribute to CO concentrations exceeding the State Ambient Air Quality Standard of 9 parts per million (ppm) averaged over 8 hours and 20 ppm for one hour

Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hot spots are typically produced at intersections. Based on the traffic

**Table 4.4-10
Health Risk Analysis Results**

	Cancer Risk (number in 1 million)	Chronic Hazard Index	Acute Hazard Index
MICR – 30-year exposure	1.0	0.001	0.0005
MICR – 70-year exposure	1.8	0.001	0.0005
Threshold	10	1.0	1.0

Source: LSA Associates, Inc., *Health Risk Assessment, Hercules New Town Center*, February 2008.

Mitigation Measures: No mitigation is required.

Level of Significance After Mitigation: Not applicable.

POTENTIAL IMPACTS AND MITIGATION MEASURES: MARKET TOWN PROJECT

Short-Term (Construction) Impacts

- ◆ **THE PROPOSED MARKET TOWN PROJECT WOULD RESULT IN SHORT-TERM AIR QUALITY IMPACTS DURING SITE PREPARATION AND PROJECT CONSTRUCTION.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The Market Town project would develop the PNR parcel located within the HNTC planning area. Development associated with the project would result in the same potentially significant impacts as those for future development associated with the General Plan and Zoning Ordinance Amendments. Corresponding mitigation measures for potentially significant impacts associated with construction of the Market Town project would be the same as those identified for future development facilitated by the General Plan and Zoning Ordinance Amendments. With implementation of recommended mitigation measures, a reduction in Market Town construction related criteria pollutants would occur.

Mitigation Measures: Implement Mitigation Measures AQ1, AQ2, AQ3 and AQ34.

Level of Significance After Mitigation: Less Than Significant Impact.

Long-Term Operation Impacts

- ◆ **THE PROPOSED MARKET TOWN PROJECT WOULD RESULT IN LONG-TERM AIR QUALITY IMPACTS DURING PROJECT OPERATIONS.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Operational impacts are the long-term emissions that would occur indefinitely as a result of the activities associated with the Market Town project operations. “Project operations” are the full range of activities that can or may generate pollutant emissions when the development is functioning in its intended use. For a majority of indirect

Total Market Town Project Operational Emissions

The Market Town project operational emissions are described in terms of area source and mobile source (vehicle) emissions. Transportation control measures and design features can be incorporated into the project to reduce emissions from mobile sources. According to Table 4.4-11A, operational emissions would still exceed the BAAQMD thresholds for PM₁₀ due to the net increase in daily trips under the IPDP. Under the FPDP, operational emissions would not exceed BAAQMD thresholds. However, since the proposed project is being analyzed under IPDP assumptions, the Market Town project would result in significant and unavoidable impacts for long-term operations.

Mitigation Measure: Implement Mitigation Measures AQ5 and AQ46. No other feasible mitigation measures are available.

Level of Significance After Mitigation: Significant and Unavoidable Impact.

- ◆ **THE PROPOSED MARKET TOWN PROJECT COULD CONFLICT WITH THE LOCAL AIR QUALITY MANAGEMENT PLAN.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: Long-term air quality impacts would consist of mobile source emissions generated from project-related traffic and from stationary source emissions. For purposes of this air quality emissions analysis, operation-related air quality impacts were analyzed for the cumulative (2035) project buildout conditions since the Market Town project would be included in the project buildout. As indicated in Table 4.4-9, CO concentrations would be well below the State and Federal standards. Impacts in regards to CO hot spots would be less than significant.

Mitigation Measures: No mitigation is required

Level of Significance After Mitigation: Not applicable.

CUMULATIVE IMPACTS

Plan Consistency Impacts

- ◆ **THE PROPOSED PROJECT COULD CONFLICT WITH THE LOCAL AIR QUALITY MANAGEMENT PLAN.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: According to the BAAQMD *CEQA Guidelines*, for any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impacts should be based on an evaluation of the consistency of the project with the local general plan and of the general plan with the regional air quality plan. If a project is proposed in a city or county with a general plan that is consistent with the AQMP, then the project would not have a significant cumulative impact.

The BAAQMD uses population projections from the Association of Bay Area Governments (ABAG) for planning purposes. ABAG produces a biannual report on regional population and employment trends. The ~~2000 Clean Air Plan 2005 Ozone Strategy~~ used population projections from the ~~1998 2007~~ annual report (*Projections '98 2007*) to estimate emission inventories from 2000 through ~~2006 2035~~. *Projections '98 2007* predicts that the population in the ~~nine Bay Area counties~~ Contra Costa County would increase from ~~6,824,200 948,816~~ to ~~7,142,800 1,300,600~~ between 2000 and ~~2005 2035~~; for an average ~~annual~~ five year increase of ~~about 318,600~~ approximately 50,255 residents, ~~or a 0.9 percent annual population growth rate.~~

Based on the General Plan, the City's population at buildout would be 29,927 residents. Development within the HNTC planning area would result in approximately 1,650 multi-family residential units and an increase in population of 3,482 residents.¹⁵ This would represent incremental increase in population and would be within the growth estimates identified in the General Plan.

Currently, the PNR parcel has a General Plan land use designation and zoning district of Commercial Public (CP). All other parcels in the HNTC planning area currently have a General Plan land use designation and zoning district of General Commercial (CG). With project implementation, the land use designation and zoning district would change to "New Town Center" (NTC), which would allow a mix of residential and non-residential uses. The change in land use designation and zoning would result in a population growth in the planning area. However, the City has anticipated this growth in the Housing Element of the General Plan. Therefore, there would not be an impact as a result of population growth.

Proposed amendments to the General Plan and Zoning Ordinance would increase the number of people residing in Hercules; however, this increase would be consistent with General Plan Housing Element Policies 1.1, 1.2, 2.1, 2.2, and 5.1. Policy 1.2, Adequate Sites, promotes rezoning properties to high densities or non-residential land to residential or mixed use to meet the City's housing needs and create adequate development opportunities. Policies 1.1, 2.1, and 2.2 encourage the development with a variety of housing types, density, and price, which are in keeping with community design goals and standards. Policy 5.1 encourages residential uses in commercial areas.

The proposed project would focus growth in the HNTC planning area such that it would be conveniently located near to transit and other City services. However, the proposed project would have significant operational air quality impacts and would, therefore, conflict with the local air quality management plan.

Determining Local Plan Consistency With Clean Air Plan Transportation Control Measures

Determining consistency of local plans with the Clean Air Plan involves assessing whether the ~~2000 Clean Air Plan 2005 Ozone Strategy~~ transportation control measures (TCMs) for which local governments are implementing agencies are indeed being implemented. The ~~2000 Clean Air Plan 2005 Ozone Strategy~~ identifies implementing agencies/entities for each

¹⁵ Calculation: 1,650 dwelling units x 2.11 persons per household = 3,482 residents.

of the TCMs. Cities and counties are identified among the implementing agencies for some of the TCMs. Local plans that do not demonstrate reasonable efforts to implement TCMs in the ~~2000 Clean Air Plan~~ 2005 Ozone Strategy would be considered to be inconsistent with the regional air quality plan and, therefore, have a significant air quality impact.

The ~~2000 Clean Air Plan~~ 2005 Ozone Strategy is an update of the ~~original Clean Air Plan~~ 2000 Clean Air Plan adopted by the BAAQMD in 1991. The ~~1991~~ 2000 Clean Air Plan proposed ~~230~~ Transportation Control Measures (~~which have been subsequently amended and revised to the current 22 measures~~) to be implemented in an effort to reduce ozone. The BAAQMD guidelines list seven measures that local governments should implement as part of area plans. These are as follows:

- TCM 1: Support voluntary employer-based trip reduction programs
- TCM 9: Improve bicycle access and facilities
- TCM 12: Improve arterial traffic management
- TCM 15: Local clean air plans policies and programs should incorporate measures to reduce the number and length of single-vehicle occupant trips
- TCM 17: Conduct demonstration projects which will reduce vehicle emissions
- TCM 19: Promote pedestrian travel
- TCM 20: Promote traffic calming

The Hercules Transit Center is currently located on the Market Town project site (PNR Parcel) and would be relocated to a more central location within the HNTC planning area. The Hercules Transit Center is a terminal for express bus service to the El Cerrito del Norte Bay Area Rapid Transit (BART) station. The secondary function of the Transit Center is as the hub for local Western Contra Costa County Transit Authority (WestCAT) routes, which serve the City and nearby communities.

As noted above, the PNR parcel has a General Plan land use designation and zoning district of CP. The CP land use designation and zoning district allows transit-related uses with the potential to combine transit uses with commercial development. The overall intent of the NTC land use designation and zoning district is to create a "Transit-Oriented Town Center" that has a pedestrian- and transit-friendly mix of residential, commercial, office, and public and quasi public uses, designed in a more urban pattern of development with buildings set close to defined streets in the center of town. Second, the Market Town project would redevelop the PNR parcel with a mixed-use, transit-oriented development. Key objectives of the proposed project are to provide transit users with opportunities to reduce vehicle travel through the provision of goods and services at or near transit stations and to work with BART to develop both short-term and long-term transit facility uses. As a result, the proposed project would comply with the TCMs within the ~~2000 Clean Air Plan~~ 2005 Ozone Strategy by facilitating transit-oriented development that intends to reduce vehicle trips and miles traveled. Thus, the proposed project would be in conformance with the ~~2000 Clean Air Plan~~ 2005 Ozone Strategy. However, as stated in the discussion above, the proposed project would exceed BAAQMD thresholds for operational emissions. As a result, the proposed project would not be in conformance with the local air quality management plan.

Mitigation Measures:

AQ7 Prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development incorporates the following transportation control measures:

- TCM 1: Support voluntary employer-based trip reduction programs – Support and encourage voluntary efforts by employers to promote the use of commute alternatives by their employees
- TCM 9: Improve bicycle access and facilities – Expand bicycle facilities serving employment sites, residential areas, shopping districts and other activity centers
- TCM 12: Improve arterial traffic management – Coordination of signals on major arterial routes
- TCM 15: Local land use planning and development strategies – Local clean air plans policies and programs should incorporate measures to reduce the number and length of single-vehicle occupant trips
- TCM 17: Conduct demonstration projects – Develop innovative approaches to reduce mobile source emissions
- TCM 19: Improve Pedestrian Access and Facilities – Promote pedestrian travel
- TCM 20: Promote traffic calming – Improve conditions for pedestrians and bicyclists in residential and retail areas

In addition to the transportation control measures, prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development incorporates measures to reduce air quality emissions from transportation, which may include but are not limited to the following:

- Unbundling parking costs from rents
- Providing transit subsidies to future employees
- Implementing traffic calming measures
- Preferential parking for ridesharing

Level of Significance After Mitigation: Significant and Unavoidable Impact.

Cumulative Construction Impacts

- ◆ ***DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND RELATED CUMULATIVE PROJECTS COULD RESULT IN SIGNIFICANT SHORT-TERM CUMULATIVE AIR QUALITY IMPACTS.***

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The BAAQMD recommends that for any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impact should be based on an evaluation of the consistency of the project with the local general plan and of the general plan with the regional air quality plan. Individual development projects that generate construction-related or operational emissions that exceed the BAAQMD recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions. As stated in the Short-Term (Construction) Impacts discussion, with implementation of BAAQMD control measures, construction-related air quality impacts would be less than significant. Therefore, construction of the proposed project would not result in a cumulatively considerable impact.

Mitigation Measures: Implement Mitigation Measures AQ1 through AQ34.

Level of Significance After Mitigation: Less Than Significant Impact.

Cumulative Operational Impacts

- ◆ ***REGIONAL AIR QUALITY EMISSIONS RESULTING FROM OPERATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD IMPACT EXISTING REGIONAL AIR QUALITY LEVELS ON A CUMULATIVE BASIS.***

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: As previously stated, the BAAQMD recommends that for any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impact should be based on an evaluation of the consistency of the project with the local general plan and of the general plan with the regional air quality plan.

As indicated previously in the Plan Consistency Impact discussion and Section 4.1 (Land Use and Planning), the proposed project would comply with the General Plan. Additionally, the proposed project would not exceed the mobile source (carbon monoxide) standards and would not result in a significant health risk impact. However, based on the Long-Term Operational Impacts analysis, the proposed project would exceed the BAAQMD's thresholds of significance for ROG and PM₁₀ at project buildout. Therefore, cumulative operational impacts associated with the proposed operation of the project would be significant and unavoidable.

**Table 4.4-13
Applicable Global Climate Change Strategies**

Strategies for Reducing Greenhouse Gas Emission Reduction ¹	Project Conformance
<u>Vehicle Climate Change Standards.</u> AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB in September 2004.	Following a phase-in period, the majority of the vehicles that access the project would be expected to be in compliance with any vehicle standards that CARB adopts.
<u>Other Light Duty Vehicle Technology.</u> New standards would be adopted to phase in beginning in the year 2017 model year.	Following a phase-in period, the majority of the vehicles that access the project would be expected to be in compliance with any vehicle standards that CARB adopts.
<u>Diesel Anti-Idling.</u> In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	All vehicles, including diesel trucks accessing the project site, would be subject to the CARB measures and would be required to adhere to the 5-minute limit for vehicle idling.
<u>Hydrofluorocarbon Reduction.</u> 1) Ban retail sale of HFC in small cans; 2) Require that only low GWP refrigerants be used in new vehicular systems; 3) Adopt specifications for new commercial refrigeration; 4) Add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs; 5) Enforce federal ban on releasing HFCs.	This measure applies to consumer products. When CARB adopts regulations for these reduction measures, any products that the regulations cover would comply with the measures.
<u>Heavy-Duty Vehicle Emission Reduction Measures.</u> Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	These are CARB enforced standards; vehicles that access the project that are required to comply with the standards would comply with the strategy.
<u>Achieve 50% Statewide Recycling Goal and Zero Waste – High Recycling -</u> 1) Design locations for separate waste and recycling receptacles; and 2) Utilize recycled components in the building design.	Pursuant to Assembly Bill 939, all development projects within the City of Hercules (including the proposed project) would be required to divert 50 percent of their solid waste stream.
<u>Appliance Energy Efficiency Use.</u> Use of energy efficient appliances (i.e., washer/dryers, refrigerators, stoves, etc.).	In October 2006, the State of California adopted Appliance Efficiency Regulations, which include standards for both Federally regulated appliances and non-Federally-regulated appliances. These regulations would apply to the proposed project.
<u>Measures to Improve Transportation Energy Efficiency.</u> Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.	The project promotes fuel conservation through design features, which promote pedestrian traffic, and proximity to mass transit, which encourages public transportation use.
<u>Smart Land Use and Intelligent Transportation.</u> Transportation Systems Encourage high-density residential and commercial mixed use.	The proposed project would include high-density residential and commercial mixed uses that would be considered a smart land use.
<u>Water Use Efficiency Features.</u> To increase water use efficiency include use of both potable and non-potable water to the maximum extent practicable and use of low flow appliances (i.e., toilets, shower heads, washing machines, etc).	The proposed project would be required to comply with California Health and Safety Code (HSC) section 17921.3, which sets efficiency standards for bathroom fixtures. Additionally, California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4, Section 1605.3 sets standards for washing machines and commercial pre-rinse spray valves.
<u>Afforestation/Reforestation.</u> Clustering residential development to preserve forest/woodland resources, increasing density, and preserving and restoring open space would comply with this strategy.	The proposed project would be a mixed-use development located near developed areas in the Bay Area. The proposed project would not remove woodland resources. Additionally, the mix of uses would represent an increased density of dwelling units, minimizing impacts on open spaces and reducing commuter traffic.
<u>Achieve 50 percent Statewide Recycling Goal.</u> In multi-family housing, separate recycling and waste receptacles should be planned.	The City of Hercules is required to meet the 50 percent Statewide recycling goal, and would continue to implement solid waste reduction measures.
<u>Green Buildings Initiative.</u> Green Building Executive Order, S-20-04, sets an ambitious goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels.	<u>The proposed project intends on obtaining certification as LEED for New Construction, LEED for Neighborhood Development or certification from another similar, recognized rating system. The project sponsor is committed to incorporating green building practices and meeting the goals of sustainable development.</u>
<u>LEED Certification.</u> LEED buildings have lower energy usage and lower GHG emissions.	<u>The proposed project intends on obtaining certification as LEED for New Construction, LEED for Neighborhood Development or certification from another similar, recognized rating system.</u>
Notes: ¹ - Only the applicable strategies for reducing greenhouse gas emissions were included.	
Source: California Environmental Protection Agency, <i>Climate Action Team Report to Governor Schwarzenegger and the Legislature</i> , March 2006.	

Global Climate Change impacts are a result of cumulative emissions from human activities in the region, the state, and the world. A reduction in vehicle miles traveled results in a decrease in fuel consumption and a decrease in greenhouse gas emissions. Based on an investigation of compliance with local air quality thresholds and resultant future long-term operational impacts, the proposed project would still have the potential to result in emissions associated with greenhouse gas emissions and global climate change. To help reduce impacts, Mitigation Measure AQ8 would be implemented. However, there is significant uncertainty involved in making predictions regarding the extent to which the operations of mixed-use developments, such as the proposed project, would affect greenhouse gas emissions and global climate change. Therefore, a conclusion on the significance of the environmental impact of climate change cannot be reached. Section 15145 of the *CEQA Guidelines* provides that, if after a thorough investigation a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impacts.

The proposed project, in combination with other cumulative projects, would increase air emissions within the surrounding areas, thereby decreasing ambient air quality. The contribution of the proposed project has been compared to emissions from anticipated projects within the area. Cumulative impacts resulting from the proposed project would be significant and unavoidable for ROG and PM₁₀ emissions.

Mitigation Measures: Implement Mitigation Measure AQ45 and AQ8. ~~No other feasible mitigation measures are available.~~

AQ8 Prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development incorporates measures to reduce project greenhouse gas emissions and global climate change, which may include but are not limited to the following:

Efficiency:

- Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.
- Install efficient lighting and lighting control systems
- Install light colored “cool” roofs, cool pavements, and strategically placed shade trees
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems
- Limit hours of operations for outdoor lighting

Renewable Energy:

- Consider renewable energy such as solar and wind powered systems, solar or tankless hot water heaters, and energy efficient heating ventilation and air conditioning

Water Conservation and Efficiency:

- Create water efficient landscapes
- Install water efficient irrigation systems and devices
- Use reclaimed water for landscape irrigation
- Design buildings to be water efficient. Install water efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff

Solid Waste:

- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers in public areas.

Transportation and Motor Vehicles:

- Limit idling time for commercial vehicles, including delivery and construction vehicles
- Promote ride sharing programs. Designate a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides.
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations).

Level of Significance After Mitigation: Significant and Unavoidable Impact for cumulative long-term operational impacts. As previously stated, a significance determination cannot be made for global climate change impacts.

Mitigation Measure:

- GS1 Prior to issuance of grading permits for parcels within the HNTC planning area, final geotechnical investigations, including additional subsurface exploration and laboratory testing, shall be performed. The recommendations of these investigations shall include final building footprints, building loads, estimated site grades, and allowable settlement tolerances to be implemented in the final project design.

Level of Significance After Mitigation: Less Than Significant Impact.

Soils Impacts

- ◆ **DEVELOPMENT CONSISTENT WITH THE NTC LAND USE DESIGNATION AND ZONING DISTRICT COULD RESULT IN SUBSTANTIAL SOIL EROSION OR THE LOSS OF TOPSOIL.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: Site soils within the planning area consist of highly erodable soil types and, thus, erosion could result from project construction, when stabilizing vegetation would be removed and soils exposed to construction equipment and the elements, especially wind and rain. Erosion can be controlled using standard construction practices, based on the site-specific geotechnical studies that would be performed as per Mitigation Measure GS1. In addition, implementation of Mitigation Measures WQ1 through WQ6 compliance with the State Water Resources Control Board (SWRCB) General Permit and preparation of a Stormwater Pollution Prevention Plan (SWPPP) set out described in Section 4.9 (Hydrology and Water Quality) would also ensure that impacts associated with construction-related soil erosion would be less than significant.

Development at the sites would cover currently pervious ground surfaces with impervious materials. This could increase stormwater runoff, which would have the potential to erode soils. Methods to reduce stormwater runoff impacts to less-than-significant levels are described in Section 4.9.

Mitigation Measures: No mitigation required.

Level of Significance After Mitigation: Not applicable.

- ◆ **DEVELOPMENT CONSISTENT WITH THE NTC LAND USE DESIGNATION AND ZONING DISTRICT COULD BE LOCATED ON A GEOLOGIC FORMATION UNIT OR SOIL THAT IS UNSTABLE, OR THAT WOULD BECOME UNSTABLE AS A RESULT OF THE PROJECT, AND POTENTIALLY RESULT IN SUBSIDENCE.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: Specific soil conditions on all the parcels within the planning area are currently unknown. However, the C1 parcel has heterogeneous fills comprised of both stiff

- ◆ **THE PROPOSED MARKET TOWN PROJECT COULD EXPOSE PEOPLE OR STRUCTURES TO POTENTIALLY SUBSTANTIAL ADVERSE EFFECTS, INCLUDING THE RISK OF LOSS, INJURY, OR DEATH INVOLVING STRONG SEISMIC GROUND SHAKING OR SEISMIC-RELATED GROUND FAILURE (INCLUDING LIQUEFACTION) OR LANDSLIDES.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: The mixed-use development proposed for the Market Town project (PNR parcel) would involve construction in a seismically active zone. The 2007 Treadwell & Rollo preliminary geotechnical study for the PNR parcel found that ground shaking at the site was likely to be strong depending on the characteristics of the generating fault, distance of the project to the earthquake epicenter, and magnitude and duration of the earthquake. With the exception of one location, all borings taken at the site during the preliminary soils investigation concluded that the upper 31.5 to 36.5 feet of soil was of cohesive composition and not prone to liquefaction. However, one boring revealed a silty sand layer at a depth of 12-16 feet deep. This silty sand layer has the potential to liquefy during a seismic event potentially inducing settlement of about $\frac{3}{4}$ of an inch. However, because this layer is not continuous the potential for lateral spreading is considered low. Implementation of Mitigation Measure GS3 would reduce potential seismic impacts to less than significant.

Mitigation Measure: Implement Mitigation Measure GS1.

Level of Significance After Mitigation: Less Than Significant Impact.

Soils Impacts

- ◆ **THE PROPOSED MARKET TOWN PROJECT COULD RESULT IN SUBSTANTIAL SOIL EROSION OR THE LOSS OF TOPSOIL.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: Site soils at the PNR parcel consist of erodible soil types and, thus, erosion could result from project construction, when stabilizing vegetation would be removed and soils exposed to construction equipment and the elements, especially wind and rain. Erosion can be controlled using standard construction practices, based on the follow-up site-specific geotechnical studies that would be performed at the site as required per Mitigation Measure GS1. In addition, ~~implementation of Mitigation Measures WQ1 through WQ6~~ compliance with the SWRCB's General Permit and preparation of a SWPPP set out described in Section 4.9 (Hydrology and Water Quality) would also ensure that impacts associated with construction-related soil erosion would be less than significant.

Development of the PNR parcel would cover currently pervious ground surfaces with impervious materials. This could increase stormwater runoff, which would have the potential to erode soils. Methods to reduce stormwater runoff impacts to less-than-significant levels are described in Section 4.9.

Solid Waste

According to Shawn Moberg, Potrero Hills Landfill has sufficient capacity to accommodate waste generated by the proposed project. Therefore, no additional facilities would need to be constructed and impacts would be less than significant.

Mitigation Measures: No mitigation required.

Level of Significance After Mitigation: Not applicable.

Wastewater Impacts

- ◆ **THE PROPOSED MARKET TOWN PROJECT WOULD NOT EXCEED WASTEWATER TREATMENT REQUIREMENTS OF THE APPLICABLE RWQCB; NOR WOULD THE PROJECT RESULT IN A DETERMINATION BY THE WASTEWATER TREATMENT PROVIDER THAT SERVES OR MAY SERVE THE PROJECT THAT IT HAS INADEQUATE CAPACITY TO PROVIDE THE PROJECT'S PROJECTED DEMAND IN ADDITION TO THE PROVIDER'S EXISTING COMMITMENTS.**

Level of Significance Before Mitigation: Less Than Significant Impact.

Impact Analysis: Wastewater generated by Market Town would be treated at the Pinole-Hercules Wastewater Treatment Plant. Table 4.12-6 (Market Town Estimated Wastewater Generation) summarizes estimated wastewater that would be generated by the development of Market Town.

**Table 4.12-6
Market Town Estimated Wastewater Generation**

Land Use Type	Quantity	Capita	Wastewater Generation Rate	Wastewater Generation
Residential	400 units	3.0 persons / unit	70 gpd / person-unit	84,000 gpd
Office	80,000 ft ²	200 employees	16 gpd / employee	3,200 gpd
Retail	60,000 ft ²	200 employees	13 gpd / employee	2,600 gpd
Total =				89,800 gpd
<small>gpd = U.S. gallons per day Estimates are based on demand and generation factors from Metcalf & Eddy, Wastewater Engineering: Treatment, Disposal, and Reuse (3rd Edition). Source: RBF Consulting, 2008</small>				

According to the Erwin R. Blancaflor, sewer flow and capacity has been allocated to serve the PNR parcel. The cities of Pinole and Hercules are in the process of upgrading and planning future capacity. ~~In addition, the project would have to comply with the City's Stormwater Management Plan BMPs, which are required for all new developments.~~ Therefore, the City would be able to accommodate the increase in wastewater and impacts would be less than significant.

entire NTC District represents 1,650 new housing units (38 percent of the total) and ~~1,415~~ 1,425 jobs (32 percent of the total). Thus, a significant amount of new vehicle trips are generated from projects other than the New Town Center.

HERCULES MODEL ROADWAY NETWORK ASSUMPTIONS

The Countywide Model served as the starting point for the development of the Hercules Model base year roadway network. Just as with the zone structure, additional detail was added to the local roadway network to reflect more detail at the City level. Roadways that were added include Linus Pauling Drive, Turquoise Drive, and Lupine Road. Centroid connectors were added and adjusted to reflect the greater TAZ detail and to ensure a more realistic loading of traffic onto the roadway network. Additional refinements were made to the base year network to more closely reflect the number of lanes and actual roadway alignments. This process is described in the *Hercules Citywide Traffic Model Development and Validation Report* (Fehr & Peers, October 3, 2007).

The 2035 roadway network is based on the Countywide Model's 2020 "financially constrained" network. This network includes HOV lanes on I-80 and some modest capacity increases on arterials within the City.

DEVELOPMENT OF CUMULATIVE NEAR-TERM (2013) TRAFFIC FORECASTS

Freeway and intersection turning movement forecasts for Cumulative Near-Term (2013) conditions were developed for each study location by interpolating between the existing traffic counts and the Cumulative (2035) forecasts described in the next section. For most facilities, the annual average growth rate is approximately 0.7 percent per year. While the growth was estimated based on a straight line analysis, the Market Town is further along in the project entitlement process than most of the other pending and envisioned projects in the City. Thus, the cumulative analysis for the year 2013 may overestimate the amount of development (and thus traffic) in the City.

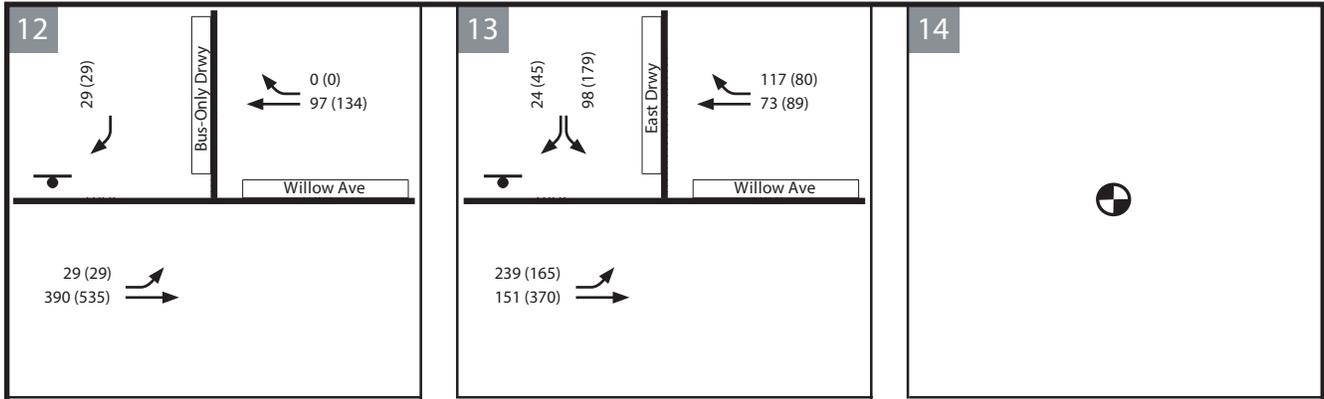
Furthermore, the year 2013 was selected for the Cumulative Near-Term analysis because 2013 is the year that the I-80/SR 4 eastbound off-ramp may be relocated from its current location to Willow Avenue further to the east. This would result in a major shift in local and regional traffic movements in and around the City of Hercules. Conditions with and without the ramp relocation are analyzed in this EIR.

DEVELOPMENT OF CUMULATIVE (2035) TRAFFIC FORECASTS

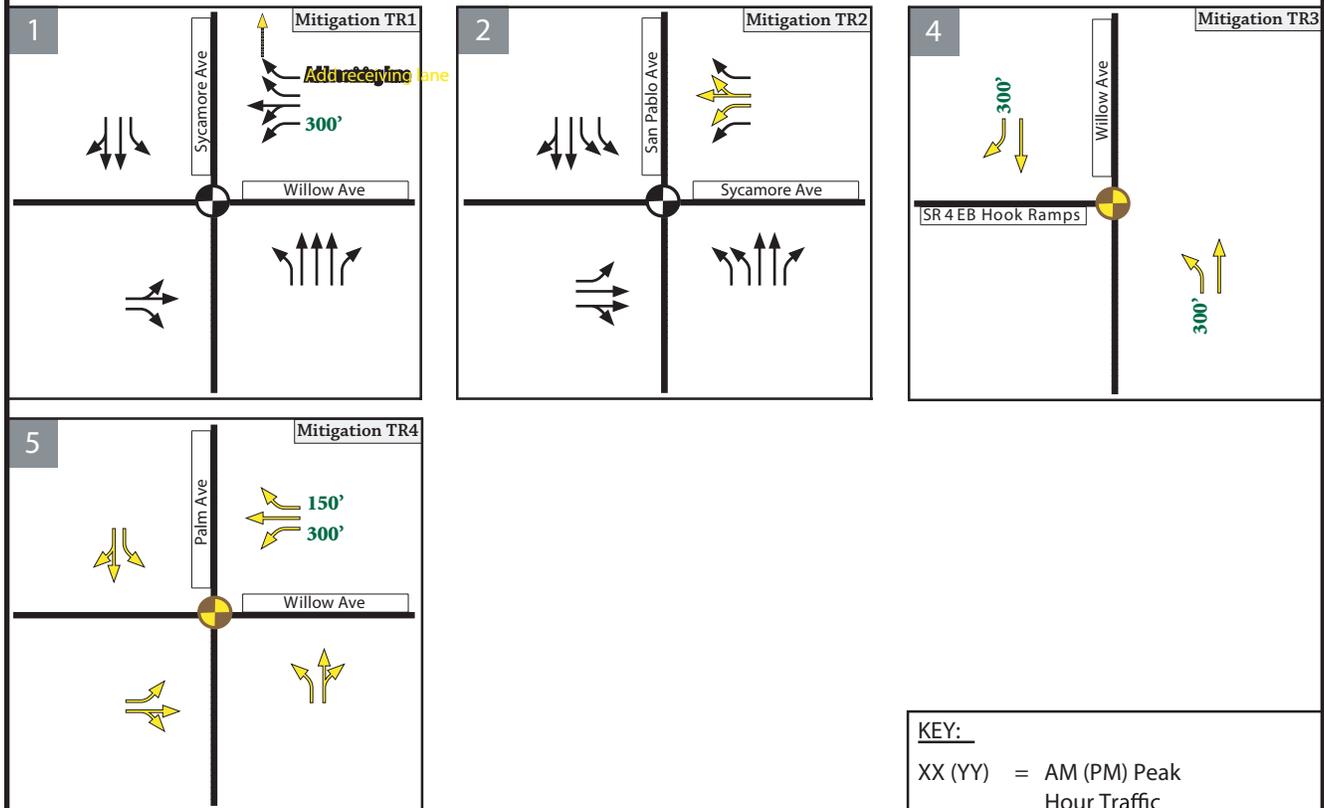
Freeway and intersection turning movement forecasts were developed for Cumulative (2035) conditions using the methodology summarized below.

The raw travel demand forecasts from the Hercules Model were adjusted to correct for differences between the base year model and existing traffic counts. A typical adjustment method is the "difference method," which involves the following formula:

$$\text{Adjusted Forecast Volume} = \text{Base Year Count} + (\text{Model Forecast Volume} - \text{Model Base Year Volume})$$



MITIGATION MEASURES



KEY:

- XX (YY) = AM (PM) Peak Hour Traffic Volumes
- = Signalized Intersection
- = Stop Sign
- = Mitigated Lane Geometry
- YYY' = Turn Pocket Storage Length
- = Mitigated Traffic Signal

Hercules New Town Center EIR
LANE CONFIGURATIONS, TRAFFIC CONTROL,
AND PEAK HOUR VOLUMES NEAR TERM (2013)
CUMULATIVE-NO RAMP RELOCATION
AM AND PM PEAK HOUR

Mitigation TR15: Implement Mitigation Measure TR8.

Level of Significance After Mitigation: Less Than Significant Impact.

Freeway Facilities Impacts

- ◆ ***DEVELOPMENT OF THE HNTC PROGRAM WOULD INCREASE TRAFFIC ON REGIONAL FREEWAY FACILITIES UNDER CUMULATIVE (2035) CONDITIONS.***

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: Table 4.14-20 (Cumulative (2035) Freeway Operations) presents the freeway traffic operations for Cumulative (2035) Conditions. Figure 4.14-13 (I-80/SR 4 Interchange – Cumulative (2035) Conditions) presents the freeway assumptions and peak hour volumes for the No Project and Plus Program scenarios. While HOV lanes on EB and WB I-80 north of SR 4 are assumed constructed in the freeway analysis, the freeway analysis does not include the HOV demand volumes or lane capacity in the calculations. Only mixed-flow demand and lane capacity are considered. Potentially Significant Impacts to the regional freeway system are identified by comparing the No Project to the Plus Program scenario.

The analysis indicates that the addition of traffic from the HNTC Program would result in significant impacts to two segments of the freeway system. These are listed below.

Impact, Mitigation, and Significance Statements: The analysis indicates that the addition of traffic from the HNTC program would result in significant impacts to two segments of the freeway system. These freeway impacts are listed as TR16 and TR17.

Impact TR16: The addition of traffic from the HNTC program would exacerbate unacceptable (LOS F) traffic operations on the I-80 WB weave section from the SR 4 on-ramp to the Pinole Valley Road off-ramp. This is considered a Potentially Significant Impact.

Mitigation TR16: There are no feasible mitigation measures that can be recommended at this time. Possible options to mitigate this impact include increasing the segment's capacity by adding lanes or managing the traffic demand to reduce the volumes. Adding lanes is considered infeasible due to the lack of available right-of-way (and associated cost and impacts of purchasing additional right-of-way); moreover there would be operational constraints to adding lanes near the SR 4/I-80 interchange. The traffic demand could be managed by increasing use of alternative modes (e.g., transit, bicycles, etc.) in the corridor or through ramp metering, and indeed, these are key elements of the County's plan for the I-80 corridor. However, a system-wide ramp metering program would need to be in effect to sufficiently reduce the volumes to better than LOS F, and this would likely cause unacceptable LOS F conditions on adjacent surface streets. Enhancements to transit service would

not be likely to adequately alleviate the projected cumulative traffic increases. No other feasible mitigation was identified to reduce this impact to less than significant levels. Thus this cumulative impact would remain significant and unavoidable.

Level of Significance After Mitigation: Significant and Unavoidable Impact.

Impact TR17: The addition of traffic from the HNTC program would exacerbate unacceptable (LOS F) traffic operations on the I-80 EB mainline freeway segment from Pinole Valley Road to the SR 4 EB connector ramp. This is considered a Potentially Significant Impact.

Mitigation T17: ~~There are no feasible mitigation measures that can be recommended at this time.~~ Possible options to mitigate this impact include increasing the segment's capacity by adding lanes or managing the traffic demand to reduce the volumes. Adding lanes is considered infeasible due to the lack of available right-of-way (and associated cost and impacts of purchasing additional right-of-way); moreover there would be operational constraints to adding lanes near the SR 4/I-80 interchange. The traffic demand could be managed by increasing use of alternative modes (e.g., transit, bicycles, etc.) in the corridor or through ramp metering, and indeed, these are key elements of the County's plan for the I-80 corridor. However, a system-wide ramp metering program would need to be in effect to sufficiently reduce the volumes to better than LOS F, and this would likely cause unacceptable LOS F conditions on adjacent surface streets. Enhancements to transit service would not be likely to adequately alleviate the projected cumulative traffic increases. No other feasible mitigation was identified to reduce this impact to less than significant levels. Thus this cumulative impact would remain significant and unavoidable.

Level of Significance After Mitigation: Significant and Unavoidable Impact.

- 7,192 single-family homes (0%)
- 6,592 multifamily homes (25%)
- 6,618 retail and office jobs (~~17~~21%)
- 1,888 industrial/trade jobs (0%)

Overall, development within the HNTC planning area represents a relatively small percentage of overall growth in the City through 2035.

Analysis of cumulative impacts requires estimation in many cases, because specific quantification of impacts is not always possible, due to variations in the status and timing of projects and environmental conditions that may exist when cumulative projects are developed. CEQA notes that the discussion of cumulative impacts should be guided by standards of practicality and reasonableness (*CEQA Guidelines* Section 15130 (b)). As such, this analysis addresses impacts that might compound or interrelate with those of the proposed project.

5.3 ANALYSIS OF CUMULATIVE IMPACTS

5.3.1 LAND USE AND PLANNING

Implementation of the proposed project would amend the General Plan and Zoning Ordinance to create a "New Town Center" (NTC) land use designation and zoning district that would apply to the HNTC planning area. The proposed project would not result in any cumulative land use impacts, as future development within the planning area would undergo the City's project review process in order to preclude potential land use compatibility issues and planning policy conflicts. Development within the HNTC planning area would progress in accordance with the criteria outlined in the NTC land use designation and zoning district, which would ensure that the goals, objectives, and policies outlined for the planning area are consistently upheld.

5.3.2 AESTHETICS

Aesthetic impacts are typically project-specific in nature. Section 4.3 (Aesthetics) of this EIR identified one significant construction-related aesthetic impact associated with the future development of the HNTC planning area (which includes the Market Town project). However, implementation of a mitigation measure that would require construction sites within the HNTC planning area to be maintained, cleaned, and screened would reduce potential impacts to a less than significant level. Under full buildout of the General Plan, new development could occur adjacent to the HNTC planning area, but these potential developments would be visually separated from the planning area by terrain, existing structures, and vegetation, as well as surrounding urban development. The proposed project would result in less than significant cumulative aesthetic impacts.

5.3.13 TRANSPORTATION/TRAFFIC

Section 4.14 (Transportation/Traffic) analyzes cumulative traffic impacts that would occur with the implementation and buildout of the proposed planning area. Refer to Section 4.14 for a discussion of cumulative transportation/traffic impacts.

5.4 GROWTH INDUCING IMPACTS

As stated in the introduction, CEQA requires an EIR to address the “growth-inducing” effects of a proposed project. According to Section 15126.2(d) of the *CEQA Guidelines*, the growth-inducing effects of a project are:

- Fostering economic or population growth, or the construction of additional housing
- Removing obstacles to population growth
- Taxing existing community services or facilities, requiring the construction of new facilities that could cause significant environmental effects
- Encouraging and facilitating other activities that could significantly affect the environment, either individually or cumulatively

As such, this section of the EIR analyzes the potential environmental consequences of the foreseeable growth and development of the surrounding area that would be induced by future development within the HNTC planning area and with implementation of the proposed Market Town project.

5.4.1 FOSTER ECONOMIC GROWTH

After buildout of the HNTC planning area, the retail and office space would provide opportunities for businesses to locate in the City. Attracting and retaining quality jobs and development and preserving the local economy are established goals in the General Plan. These businesses would provide jobs for City residents and individuals residing in the surrounding region.

The proposed HNTC planning area and Market Town project would result in construction of approximately 320,000 square feet of retail space and 196,250 square feet of office space. Using the calculation of one employee per ~~300~~500 square feet of retail space and one employee per ~~400~~250 square feet of office space, the project would result in ~~1,558~~1,425 new jobs. The jobs generated by the project would foster economic growth within the City. In addition, future construction within the HNTC planning area would generate employment opportunities for construction workers, heavy equipment operators, engineers, surveyors, building inspectors, and several other types of workers related to construction activities. The addition of ~~1,558~~1,425 new jobs is consistent with the growth outlined in the General Plan.

5.4.2 POPULATION AND HOUSING GROWTH

Development within the HNTC planning area and implementation of the proposed Market Town project would result in approximately 1,650 multi-family residential units and an increase in population of 3,482 residents. According to the General Plan, full buildout of the

Public Services, Utilities and Service Systems

The proposed project would result in less than significant impacts on public services, utilities and service systems. No physical or operational changes would occur beyond existing conditions with Alternative 1, resulting in no impacts on public services and utilities.

Recreation

Recreational impacts associated with the project would be less than significant. Because Alternative 1 would not result in any physical or operational changes, it would not increase recreational facility use. Thus, Alternative 1 would not have any impacts on recreational facilities.

Transportation/Traffic

The proposed project would reduce intersection LOS; exacerbate conditions on two freeway segments operating below acceptable LOS; and significantly affect public transit travel times in the planning area. Under Alternative 1, there would be no increase in vehicle trips or the potential for multi-modal conflicts. Alternative 1 would not have any traffic impacts.

ALTERNATIVE 2: NO PROJECT/FUTURE DEVELOPMENT UNDER EXISTING GENERAL PLAN WITH RAMP RELOCATION PROJECT

Description of Alternative

Alternative 2 assumes that the proposed General Plan and Zoning Ordinance Amendments are not adopted and future development of the planning area occurs under the direction of the existing General Plan and Zoning Ordinance. Accordingly, the Market Town project would not be developed under Alternative 2. The purpose of this alternative is to provide a comparison between the project's impacts with those that may occur from future development of the planning area anticipated by the General Plan. This alternative assumes that the Ramp Relocation project would take place; therefore, the existing I-80 off ramp and SR 4 on-ramp would be relocated further east along SR 4 from their current location.

The PNR parcel has a General Plan land use designation and zoning district of Commercial Public (CP). Under this alternative, the types of uses that could potentially be developed on the PNR parcel consist of transit-related uses (park and ride lots, etc.) that could combine with commercial development comprised of retail, wholesale (open to the public), offices (business, professional and service), automobile service stations, restaurants and automobile repair services. The Ramp parcel is currently California Department of Transportation (Caltrans) right-of-way and has no General Plan land use designation. It is assumed that the City would designate it with the same land use designation and zoning as the surrounding parcels, General Commercial (GC), and it would redevelop according to the GC designation and zoning. All other parcels in the planning area have a General Plan land use designation and zoning district of General Commercial (GC). Retail, wholesale (open to the public), offices (business, professional and service uses), and other highway-oriented businesses (automobile service stations, restaurants and automobile repair services) could develop on parcels with the GC land use designation and zoning. Buildings in these land use categories would be typical of those found in suburban areas, one or two stories in height with a typical

public services, utilities and service systems, and recreation. Alternative 6 would create a new, but much smaller town center for the City. Additionally, Alternative 6 would not be consistent with the Central Hercules Plan vision for the HNTC planning area, as the area would not redevelop with a pedestrian- and transit-friendly mix of uses, including retail, office and residential. This alternative would also not be consistent with the underlying purpose of the Central Hercules Plan because it would not create a true “town center.” Alternative 6 would not meet all the project objectives.

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an Environmentally Superior Alternative be identified; that is, an alternative that would result in the fewest or least significant environmental impacts. If the No Project Alternative is the Environmentally Superior Alternative, CEQA requires that another alternative be chosen as the Environmentally Superior Alternative.

None of the Project Alternatives, including any of the No Project Alternatives, is clearly environmentally superior to the proposed project. While the No Project/No Build (Status Quo) With No Ramp Relocation Project would reduce all of the potentially significant and significant and unavoidable impacts associated with the project, it would not meet the project objectives. It would also fundamentally conflict with the vision of the Central Hercules Plan for the HNTC planning area, which specifies a pedestrian- and transit-friendly mix of uses, including retail, office and residential. Furthermore, this alternative is not consistent with the underlying purpose of the Central Hercules Plan, which is to enhance the City’s quality of life, increase mobility and to create a true “town center.”

Based on the comparison of alternatives provided in the analysis above, Alternative 6 (Market Town Project Only) would be the environmentally superior alternative. This is because out of all other alternatives, Alternative 6 would have the smallest development potential and, therefore, would construct the least amount of building space and would have the fewest number of people (in particular residents). In turn, it would have the greatest reduction in the severity of project impacts. However, Alternative 6 would create a much smaller town center for the City. Additionally, it would not be consistent with the Central Hercules Plan vision for the HNTC planning area, as the area would not redevelop with a pedestrian- and transit-friendly mix of uses, including retail, office and residential. Nor would it be consistent with the underlying purpose of the Central Hercules Plan because it would not create a true “town center.” Thus, Alternative 6 would not meet all the project objectives.