



SUBJECT: Status of the Hollister Redesign Project and Proposed Bike Lane Modifications

DATE: August 6, 2013

BACKGROUND:

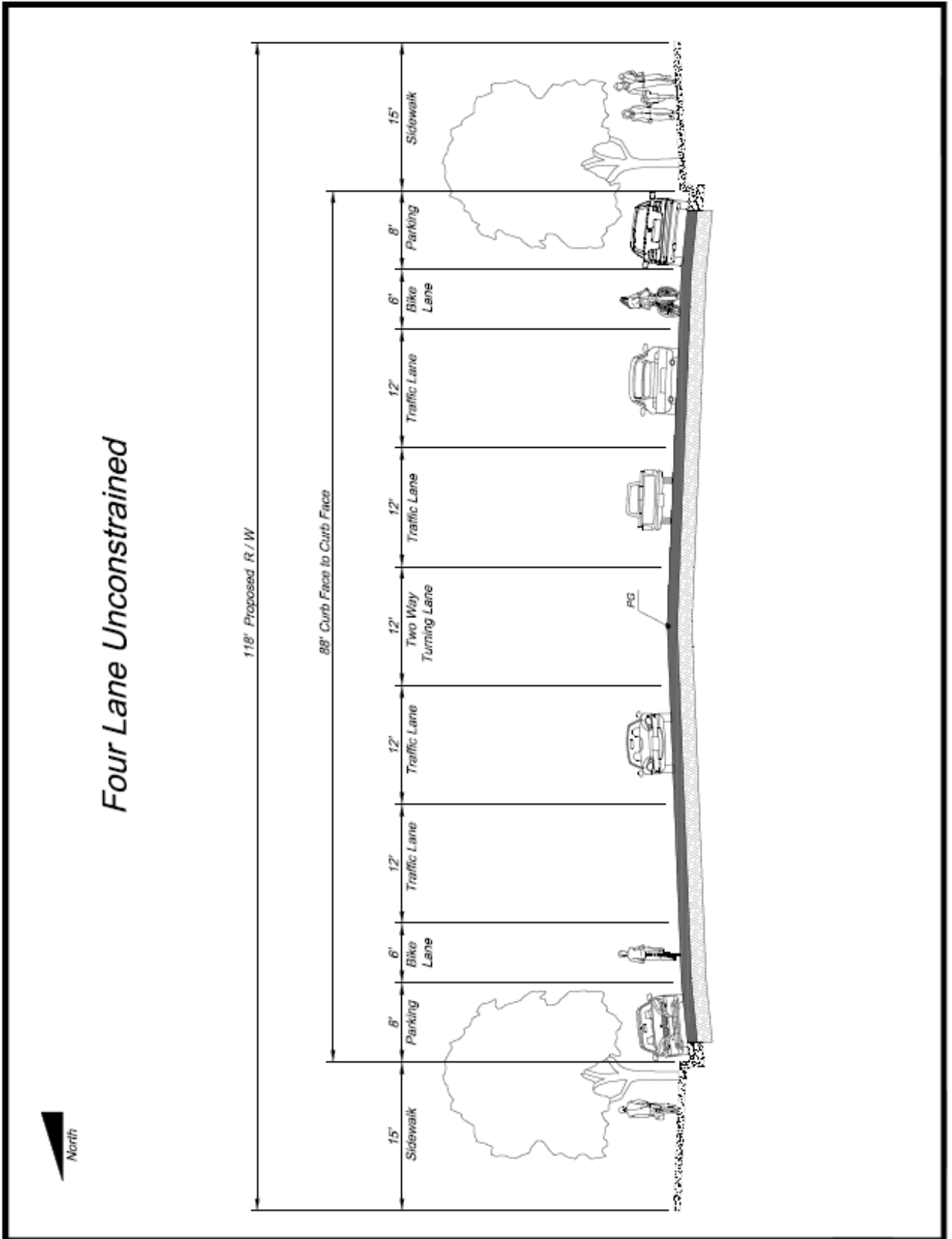
The purpose of this report is to provide an overview of what will be presented to the City Council by staff at the August 20, 2013 Council Meeting. The purpose of that presentation and staff report will be to update the Council on the status of the Project since the dissolution of the Redevelopment Agency, and to provide the Council with an overview of the various alternative alignments for Hollister Avenue that would provide for the installation of Class II bike lanes on Hollister Avenue between Fairview and Kellogg Avenues.

This paper has been produced to maximize the time for the public to consider some rather dense technical material. This paper will be followed by the attachments which are also heavy with data and other information. The goal of early dissemination of information is to garner meaningful input and public opinion based on scientific data to inform policy decision making. Additional issues may be identified in the staff report as other aspects that need to be revised or added in the final staff report. The final staff report will also include staff recommendations.

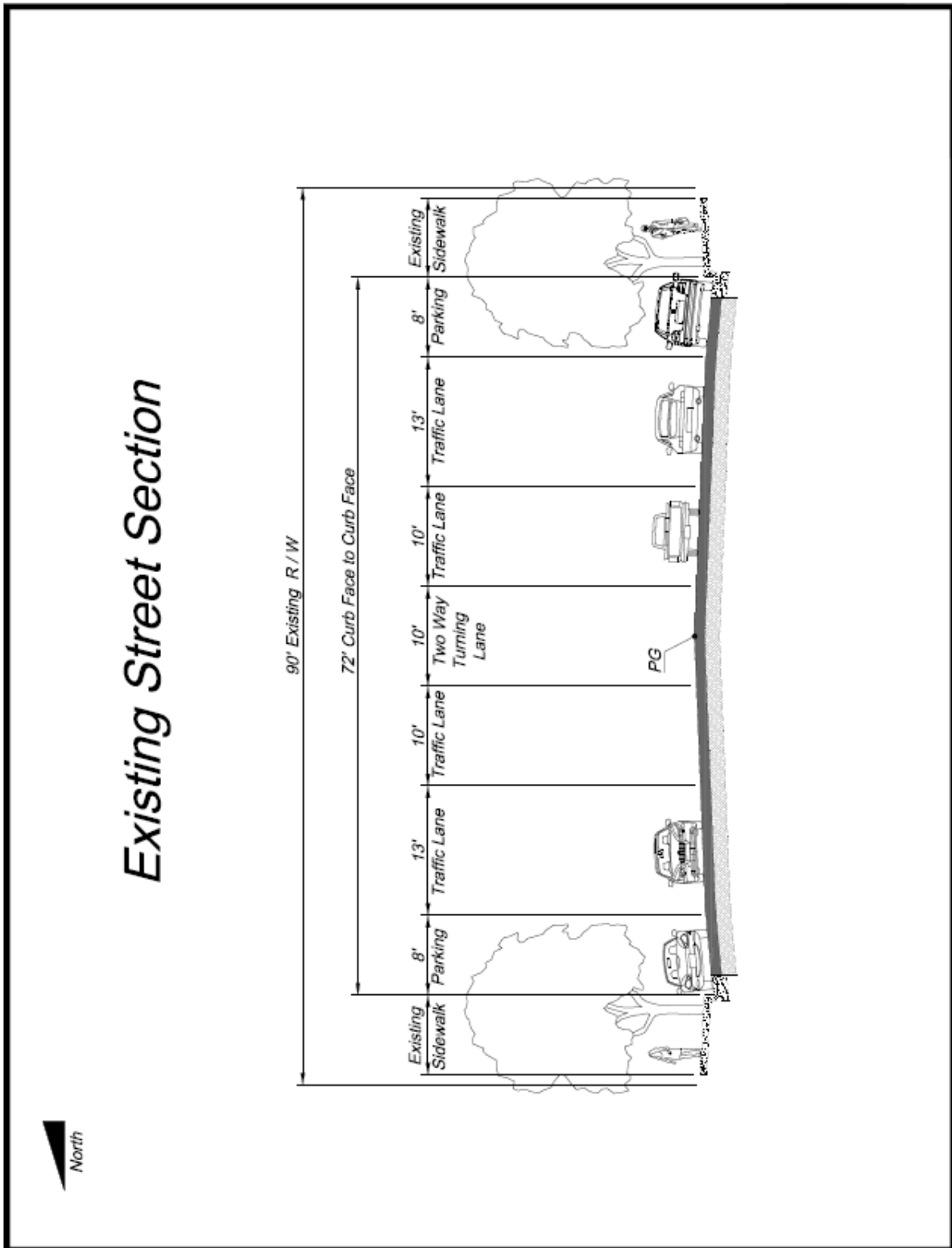
DISCUSSION:

The purpose of the Hollister Avenue Redesign project as stated in the Revitalization Plan was to “foster a more appealing downtown village atmosphere to help stimulate economic development.” The project scope included four travel lanes, Class II bike lanes, landscaped center medians, center turn lanes, 15-20 foot wide sidewalks and on street parking. The above street section is referred to as “unconstrained” since the widths are based on approved design standards without regard to the right of way width available. The “unconstrained” street width, curb to curb is 88 feet and 118 feet from back of sidewalk. The existing right of way along Hollister Avenue in old town is approximately 90 feet.

A typical street section that includes all of the identified improvements is show on the following page.



Compare that to the existing typical street section for Hollister Avenue shown below.



As shown on page 2, the total width of the street improvements identified in the Revitalization Plan (Unconstrained width 118 feet) exceeds the available right of way (90 feet) by 28 feet. As such, construction of the street improvements called for in the Revitalization Plan to current standards could not be completed without acquiring additional right of way. Since many of the adjacent buildings along Hollister are located at the edge of (or partially in) the existing road right of way, street widening to the unconstrained requirements couldn't be done without removing and/or relocating existing businesses. The removal and/or relocation of businesses along Hollister Avenue was not contemplated or planned for as part of the Revitalization Plan.

This discrepancy between the width of the desired street improvements and width of the available right of way created the need to consider various street improvement alternatives since some part or parts of the desired street section would have to be deleted or reduced in order to fit the remaining street improvements within the available right of way.

Various street section alternatives that fit within the available right of way have been developed. These alternatives have been evaluated based on numerous criteria to determine the opportunities and challenges associated with each, as well as to compare them to one another. Some of the alternatives require additional technical studies due to the type and/or magnitude of potential impacts generated. A brief description of the alternatives considered follows.

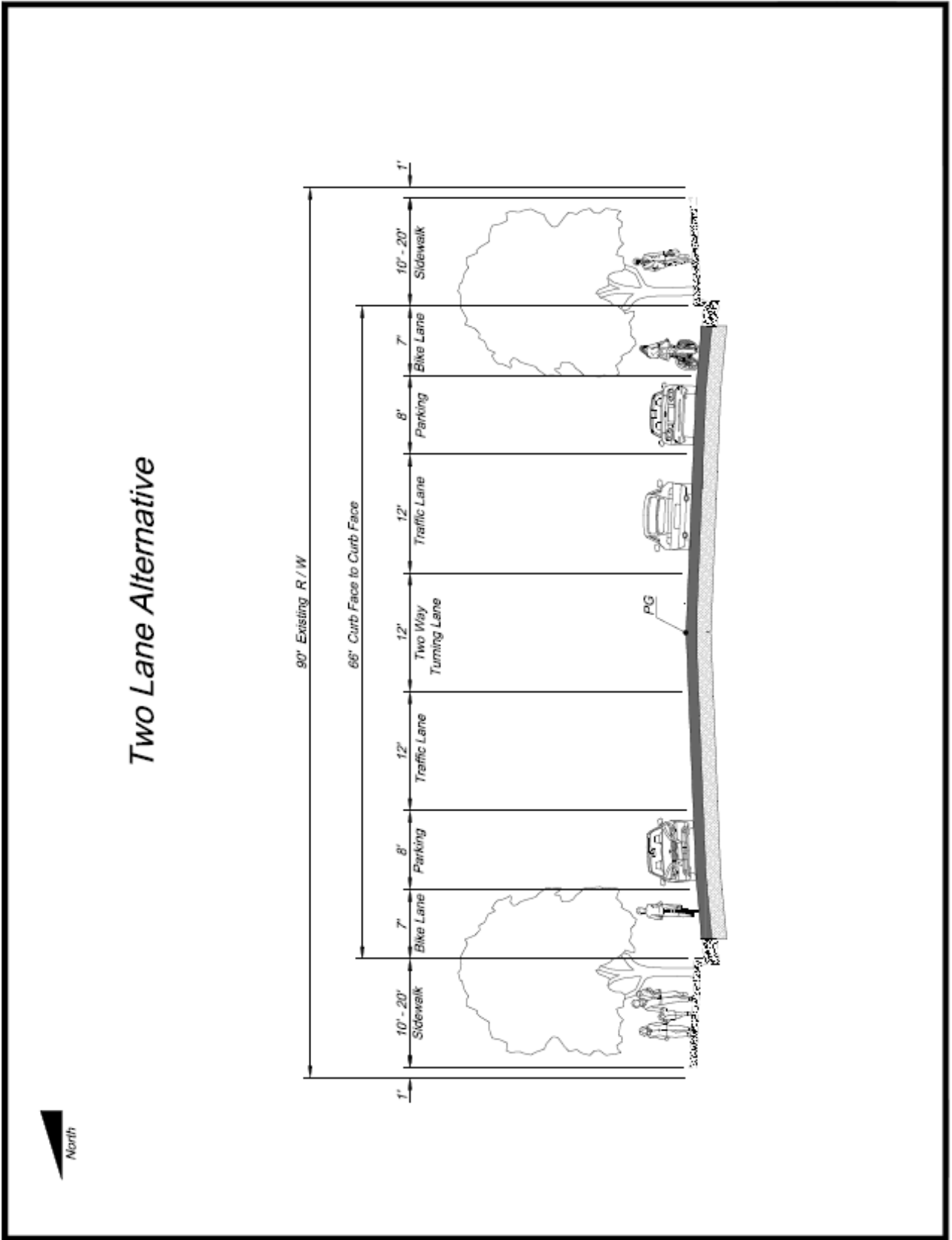
Project Alternatives Considered

In consideration of the existing right of way width available, staff has conducted preliminary evaluations of three alternative street sections. These alternatives are described below.

Two Lane Alternative: This alternative assumes the removal of one travel lane in each direction reducing the existing vehicle lanes from 4 to 2 from Kellogg Avenue to Fairview Avenue. The Two Lane Alternative includes the following street improvements:

- One 12 foot wide travel lane in each direction
- A 14 foot wide continuous center turn lane.
- 8 foot wide Class II bike lanes on both sides of the street
- 8 foot wide parking areas on both sides of the street.
- Existing curbs and sidewalks remain

The Two Lane Alternative is shown on the following page.

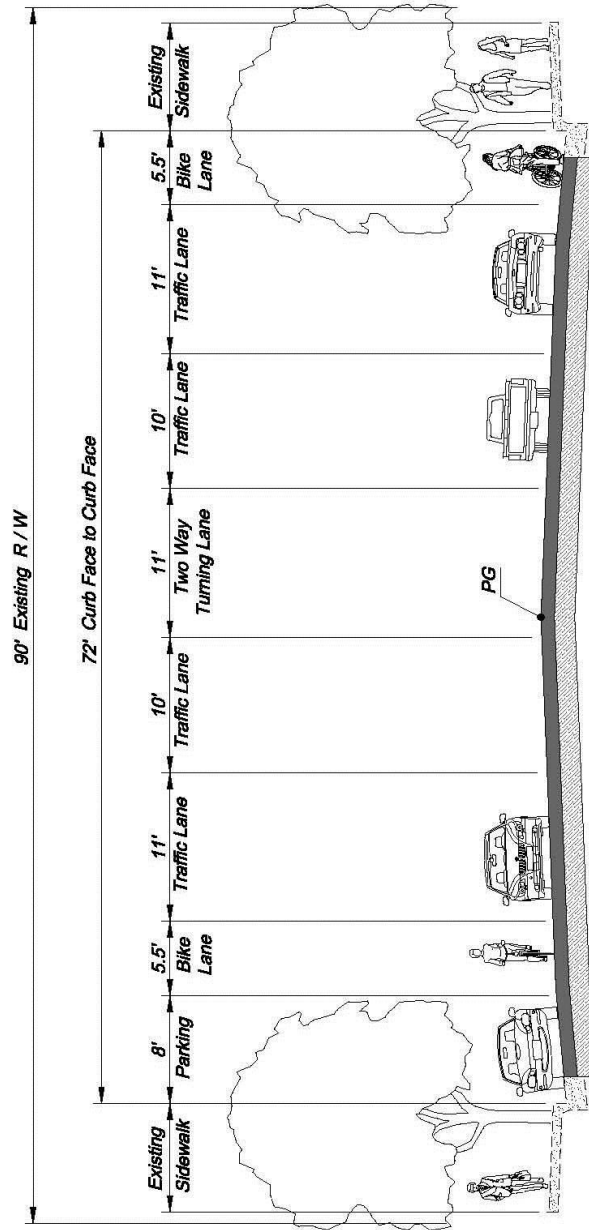


Four Lane Reduced Parking Alternative: This alternative maintains four travel lanes but eliminates the parking on one side of the street to allow for the installation of Class II bike lanes. This alternative includes the following street improvements:

- Two travel lanes in each direction
- A center turn lane
- No parking on south side of the street
- Five and a half foot wide Class II bike lanes
- Existing curbs and sidewalks remain

The Four Lane Reduced Parking Alternative is shown on the following page.

Four Lane Reduced Parking Alternative

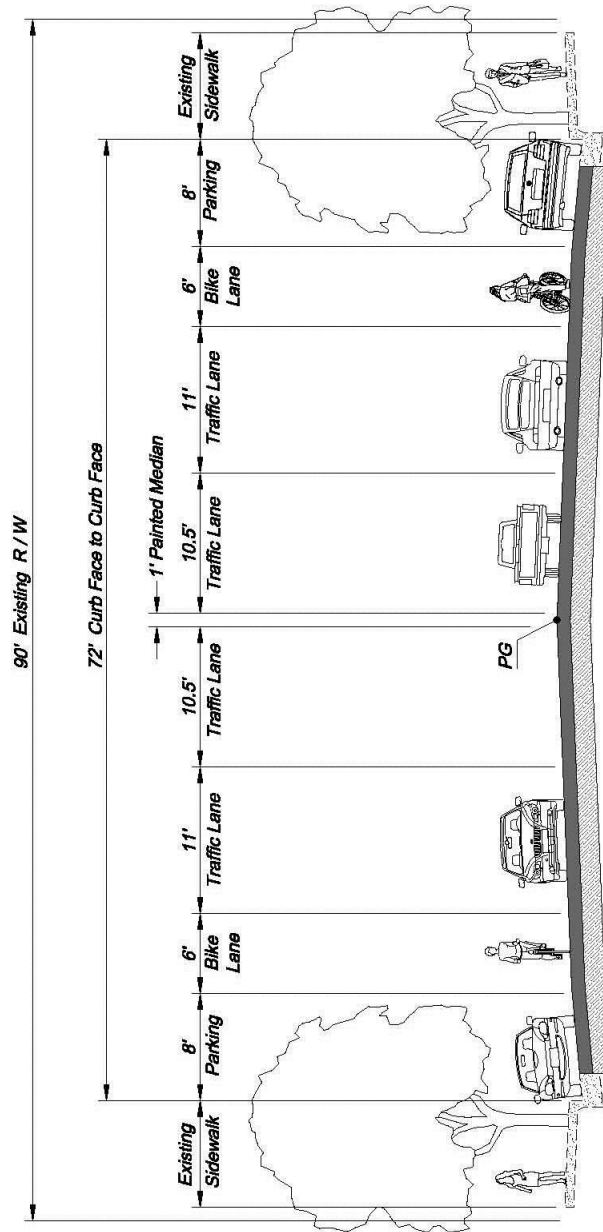


Four Lane Reduced Center Turn Lane: This alternative maintains four travel lanes but eliminates portions of the center turn lane. It includes the following street improvements:

- Two travel lanes in each direction
- No center turn lane except at signalized intersections
- Parking on both sides of the street
- Six to eight foot wide Class II bike lanes
- Existing curbs and sidewalks remain

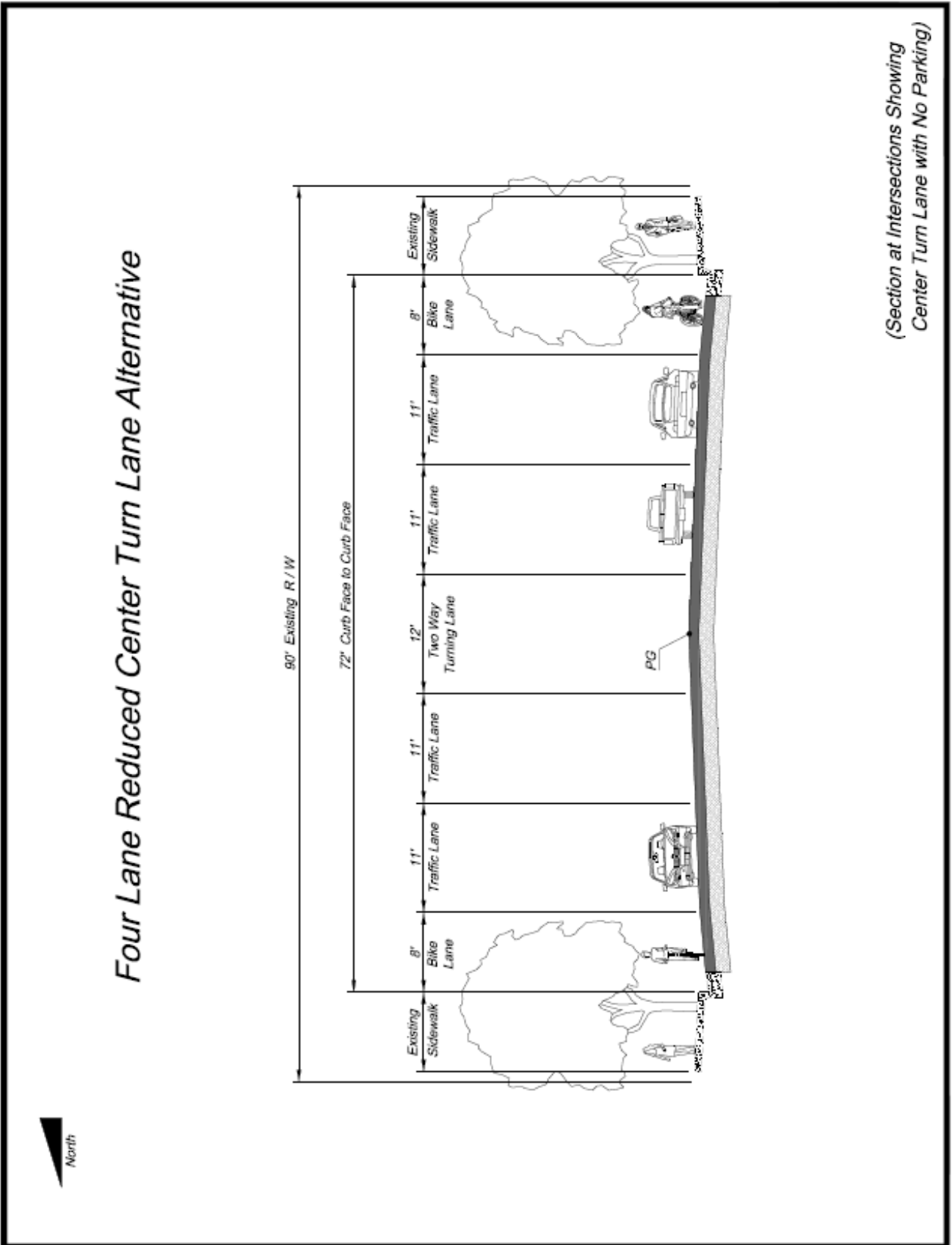
The two different typical sections for the Four Lane Reduced Center Turn Lane Alternative are on the following pages.

Four Lane Reduced Center Turn Lane Alternative



(Mid-Block Section Showing No Center Turn Lane with Full Parking)





Other Treatments considered

Staff has also considered the inclusion of other treatments into the above alternative sections, such as diagonal or angled parking. However, given the number of side streets and driveways along Hollister Avenue and the amount of clearance required when angled parking is used in this application, angled parking would result in an overall reduction in parking spaces when compared to parallel parking. Angled parking works well in areas that have long blocks with no driveways. In that environment parking is maximized. Because of this, the typical section in our two lane alternative assumes parallel parking.

Evaluation of Alternatives

In order to evaluate and compare the above project alternatives, the following technical studies for the Hollister Redesign Project were completed:

- Goleta Old Town Parking Study
- Hollister Avenue Two Lane Operational Study
- Hollister Avenue Green House Gas Emissions Analysis

These types of studies are typically required as part of the environmental review process. A copy of each study will be available prior to the August 20 Council meeting. A summary of the various studies follows.

The Goleta Old Town Parking Study

This study was completed in June of 2011 by Walker Parking Consultants (Walker). The study area included Hollister Avenue and a few blocks north and south from Highway 217 to Fairview Avenue. The purpose of the study was to identify existing parking conditions in the study area, conduct a parking inventory and needs assessment, and consider ways to mitigate existing and future parking deficiencies. While the study did not recommend specific mitigation measures for the project alternatives, it does provide the baseline information by which parking mitigation measures for the alternatives can be developed.

The study considered input gathered through public workshops and a survey instrument. There were two public workshops conducted at the Goleta Valley Community Center. Business owners were also interviewed by City staff to determine what was most important to them. As expected, parking along Hollister Avenue was a main concern of the business owners.

The study found that while much importance is placed on the on-street parking along Hollister Avenue, these spaces account for only 4% of the spaces used or available to serve Old Town businesses. Furthermore, parking spaces along the south side of the Hollister Avenue are only 1.7% of the spaces in the study area. The study also found that the most critical impact to parking along Hollister Avenue is the lack of turnover, which shows that employees or residents of the area may be using a great number of available on-street parking spaces.

The Parking Study also included a stakeholder survey to determine the community's desires and needs related to parking uses. The survey was available online and hardcopies were placed in various locations like the Goleta Valley Community Center and Santa Cruz Market. The survey was distributed in both English and Spanish and was conducted between June 26 and October 26, 2010. Over 400 people responded. The entire survey and discussions of the results are included in the study. Of those who responded, 131 lived on Old Town, which suggests a high level of interest by people who drive through or frequent Old Town. 267 of the respondents lived within the Goleta City Limits.

One question asked respondents if they would be willing to have fewer parking spaces directly on Hollister Avenue if it meant wider sidewalks, bike lanes, improved lighting and landscaping. 65% said yes. A follow up question asked people to rank their preferences for various attributes that could potentially be related to Hollister Avenue. The list in order of preference was:

1. Improved lighting (ranked significantly higher than the rest)
2. More landscaping
3. Better traffic flow
4. Bike lanes
5. Wider sidewalks
6. More on-street parking

Having better traffic flow was followed closely by a desire for bike lanes. Also, the fact that additional on-street parking came in last on the list of desired improvements coupled with the existing parking inventory information leads to the conclusion that some reduction in parking on Hollister Avenue could be considered and mitigated.

Hollister Avenue Two Lane Operational Study

The City's traffic model was used to determine how drivers might respond to reducing Hollister Avenue from four lanes to two lanes through Old Town. The model was calibrated based on actual vehicle counts and was run with both current and anticipated future conditions based on the General Plan. The future conditions run included Ekwil and Fowler Roads as already constructed. A comparison of the model results were then used to determine changes in Levels of Service (LOS) at various study locations. A more in-depth discussion of the results of the Hollister Two Lane Operational Study can be found in the Evaluation Findings section of this paper.

The results of the traffic model were then input to visual simulation programs (Synchro and Sim Traffic) to simulate traffic flow conditions. The visual simulations are useful in demonstrating modeled traffic queuing (backup) and delays that would result. The model "optimized" all signal timing to allow for the smoothest traffic flow and least delay possible. This is the same process the City and other public agencies use to model future developments and construction detours. Portions of the simulation may be included in the presentation, although it has not been updated with the most recent traffic counts.

Hollister Avenue Four Lane Reduced Center Turn Lane Operational Study

The analysis of this alternative is mentioned in the Two Lane Operational Study. The method of analysis was similar in that the same traffic model parameters were used as with the four lane Hollister Avenue study. The center turn lane was then removed except for three locations which were Fairview, Pine and Kellogg Avenue. The remainder of the corridor was allowed to make permissive left turns, but did not have a dedicated left turn lane.

The results showed that the operation of the corridor and the side streets was not negatively affected. This alternative would not impact traffic flow, and in a couple of areas might even improve traffic flow. More analysis would need to be done to confirm these results. Given that the initial results were positive there was no need to do further analysis at this time. Had the results been negative, staff would have tried making various adjustments to determine whether improvements could be made.

Green House Gas (GHG) Analysis

A GHG analysis was performed on the City's traffic model to determine the amounts of carbon produced by the various project alternatives. GHG studies are now a required part of the environmental review process in California. The baseline condition model assumed the existing roadway configuration (four lanes of traffic). A second model run was developed based on the two lane configuration and the two lane model results were compared to the baseline model. This analysis was performed to determine difference in carbon generation between the four lane and two lane alternatives.

The calculation for emissions used information provided by the California Air Resources Board (CARB). CARB maintains the Emission FACTors (EMFAC) model, which is used to develop on-road motor vehicle emission inventories in California. More detail on the assumptions and the calculations is included in the GHG analysis which is included as Attachment 3.

Evaluation Findings

A summary of staff's evaluation of project alternatives based on the results of the above mentioned studies is present below. The evaluation findings for each alternative will also be presented in a summary table that will be included as an attachment to the staff report.

Two Lane Alternative

This alternative provides the most flexibility in design because it frees up the most space. The elimination of two travel lanes allows for wider Class II bike lanes, wider sidewalks and enhanced landscaping without impacting any on-street parking. However, while this alternative allows the most flexibility and doesn't impact parking, it creates significant offsite traffic impacts that are very costly to mitigate. Currently there are approximately 20,000 to 24,000 vehicles passing through the corridor on a daily basis. This number of vehicles is expected to grow to as high as 28,000 in some sections by 2030. Given the number of vehicles, four travel lanes is appropriate for this stretch of Hollister Avenue. The capacity of a four lane arterial is approximately 34,000

per day. A two lane arterial has a capacity of approximately 14,300 per the General Plan. Removing two travel lanes as proposed would significantly reduce the capacity of Hollister Avenue. This reduction would cause significant queuing (backup) and delays for vehicles trying to get through. This would also cause significant diversion as drivers would find other routes to get through. Unfortunately for Goleta, there isn't a gridded street system in place for cars to divert to. Drivers would be forced to divert to Highway 101 or Calle Real in order to avoid the queuing and delays along Hollister. The diversion of vehicles would significantly impact several other City intersections. The queuing and delays through the corridor would also impact the adjacent residential neighborhoods, impact delivery times for transit systems and increase response times for emergency vehicles.

Neighborhoods would be impacted by drivers "cutting through" to avoid the congestion on Hollister Avenue. The side streets would become backed up so that drivers would not have a gap in the traffic on Hollister Avenue to allow them to merge on Hollister Avenue. These drivers would likely cut through neighborhoods out of frustration at feeling "pinned in."

The traffic model study on this alternative revealed the following traffic impacts:

- The Highway 217 southbound off-ramp would back up beyond the beginning of the ramp creating "spill back" onto the outside lane of the freeway itself under existing and future traffic volumes.
- Westbound Hollister Avenue from Kinman Avenue west:
 - Queue would extend to west of Highway 217 with existing traffic volumes,
 - The 2030 queue would extend past Sumida Gardens Lane.
- There will be traffic cutting through the neighborhoods north of Hollister Avenue.
- Eastbound Hollister Avenue would back up from Fairview to David Lopez
- Along Hollister Avenue in Old Town:
 - Some queues would spill back past driveways and side streets dropping Levels of Service to F under existing traffic volumes
 - Queuing would create gridlock by 2030.
- Patterson Avenue would be bumper to bumper:
 - From Overpass Road north to Highway 101 and Parejo Drive south to Highway 101 with existing traffic volumes.
 - From Hollister Avenue north to Highway 101 and Cathedral Oaks Road south to Highway 101 in 2030.

- The Southbound Patterson Avenue off ramp:
 - Queue would extend halfway down the ramp with existing traffic volumes
 - The 2030 queue would backup for approximately 3,000 feet and onto the outside lane of the Highway 101
- The Northbound Patterson Avenue off ramp:
 - Spill back to the edge of the outside lane of Highway 101 with existing traffic volumes
 - Under 2030 volumes queue would extend significantly onto the outside lane of Highway 101
- The Southbound Fairview Avenue off ramp:
 - Queue would extend halfway down ramp with existing traffic volumes
 - Spill back to edge of the outside lane of Highway 101 under 2030 volumes
- Fairview Avenue would be stop and go from:
 - Calle Real to the northbound off-ramp under existing traffic volumes
 - Encina Road to Carson Street under 2030 traffic volumes
- Kellogg Avenue would queue up from Kellogg Place north to Hollister Avenue and southbound from 500 feet north of Hollister Avenue.
- Kinman Avenue would be queued up past Gato Avenue under a two lane scenario in the existing and future conditions.
- Northbound Orange:
 - Would experience no backups under existing traffic volumes
 - Would be backed up to Gaviota Street under 2030 volumes
- The Fairview Avenue and Patterson Avenue Interchanges would “fail” to operate at an acceptable Level of Service and would need to be redesigned and rebuilt.
- The scenario where Highway 101 becomes jammed due to an accident or road work, or roadways shut down due to construction or accidents were not analyzed.
- Response time for emergency vehicles would be impacted.

The above items are a partial list of the traffic impacts associated with the Two Lane Alternative. A more detailed description of impacts can be found in the study that will be included as an attachment to the staff report.

GHG impacts

As far as GHG impacts associated with the Two Lane Alternative, the analysis showed that the range of increases in GHG emissions would be between 32 and 37 tons of additional carbon per day emitted into the environment. Using only weekdays, this amounts to between 8,320 and 9,620 additional tons per year. Our General Plan Conservation Element and the Regional Transportation Plan both seek to reduce greenhouse gases. The engineering philosophy is to design projects to do just that. This amount far exceeds our available reductions and would likely result in a class I CEQA impact, requiring further study and mitigation.

General Plan Consistency

This alternative would require a General Plan Amendment since the General Plan currently shows Hollister Avenue as a four lane arterial. The Average Daily Traffic (ADT) limit for a two lane road under the General Plan is 14,300. With a current average of 20,000 which exceeds that in certain segments, a two lane alternative of Hollister Avenue would not be consistent with the General Plan. The deliberate increasing of GHG emissions would also be inconsistent with the General Plan.

Section TE 15.3 of the Transportation Element of the General Plan designates Hollister Avenue as a “Critical Transportation Facility” for emergency vehicle access and emergency evacuation. The deliberate reduction in capacity of Hollister Avenue would require a General Plan Amendment.

Attachments showing the queue lengths will be included with the staff report.

Loss of Developer Impact Fees

The Goleta Transportation Improvement Program (GTIP) is funded by Developer Impacts Fees (DIFs). The exaction of these fees is allowable by law in order to mitigate the capacity impacts of future development. If an intersection is operating at a Level of Service (LOS C) and if the traffic model shows that new development will generate enough new traffic to reduce that LOS to a D or worse, that new development can be charged a DIF to restore that intersection to an LOS of C or better. The City uses the GTIP for many of the improvements we do and we leverage small amounts to apply for grants that will allow us to make that money go even farther.

If the City undertakes a project that will purposefully increase congestion, it cannot charge developer impact fees to mitigate that congestion. The City would have to fund improvements to offset that congestion as an “impact” of the Two Lane Alternative project.

Environmental Review Required

Each alternative will require a full California Environmental Quality Act (CEQA) analysis, and the document for this alternative would likely be an Environmental Impact Report (EIR). This is due to the significant impacts that would result from this alternative.

Ease of Installation/Cost/Timing

This alternative would be the most costly and time consuming of the alternatives. The EIR is estimated to take 18 – 30 months to get to an approved final document.

This alternative would also require significant capital investment, likely in the tens of millions of dollars for projects such as the rebuilding of interchanges and adding auxiliary lanes on Highway 101 as mitigation.

Four Lane Reduced Parking

This alternative would eliminate 27 parking spaces on the south side of Hollister Avenue in order to free up enough space to install Class II bike lanes. Traffic flow would not be altered with this option since all four travel lanes are maintained. This alternative wouldn't result in any diversion of traffic or delays in comparison to the existing conditions. As such no traffic modeling or GHG analysis was performed on this alternative. While this alternative allows for the installation of bike lanes and doesn't impact traffic flow through the corridor, the loss of on street parking has the potential to impact businesses along the corridor.

The loss of these spaces could potentially be mitigated or partially mitigated through the addition of public parking spaces in close proximity to the impacted businesses. This could be accomplished through use agreements with private parking lot owners or by reconfiguring nearby City streets to allow for increased public parking. The mitigation of parking impacts would need to be vetted through the CEQA process and public outreach.

The sidewalks would remain the same width as there would not be any room to widen them. This still allows for new sidewalk to be installed in the future when funding becomes available.

This alternative would be fairly easy to implement since it wouldn't likely require the construction of any offsite traffic mitigation projects or General Plan amendments and could be accomplished by restriping the existing roadway. The CEQA analysis and overall cost would be somewhat limited to the mitigation of parking impacts.

Environmental Review Required

This alternative will require a full CEQA analysis which would focus on the impact of the loss of parking spaces, and the document will likely be a Mitigated Negative Declaration (MND). This is due to the less than significant impacts that would result from this alternative.

Ease of Installation/Cost/Timing

This alternative would be easiest to install of all of the alternatives, with the lowest construction cost and the shortest construction time. The mitigation of lost parking spaces would be accomplished through agreements with the owners of existing parking lots on the south side of Hollister Avenue and perhaps some re-configuring of some side street geometry to increase the number of vehicles that could park. Agreements with these private property owners are estimated to take six months to accomplish. The exact costs are not known at this time.

General Plan Consistency

If the loss of parking is mitigated, this alternative would be consistent with the General Plan.

Four Lane Reduced Center Turn Lane

This alternative is a compromise between impacts to traffic flow and impacts to parking. It would maintain the center turn at three intersections. At these locations there would be a loss of parking on both sides to allow for the turn lane and the Class II bike lanes. The remainder of Hollister Avenue would not have the center turn lane. This combination of turn lane treatments would allow enough space to install Class II bike lanes. The loss of parking spaces would have to be mitigated. Some preliminary engineering would be required to determine the number of parking spaces that would potentially be removed.

This alternative has a little more impact to traffic flow than the existing condition. While the center turn lane would be removed in all but three locations, left turns would still be permitted. In those areas without the center turn lane, there will likely be some delays when a vehicle is sitting in the left lane waiting for the opportunity to make a left turn, because that lane is no longer available for through traffic, reducing traffic flow to that of the two lane scenario, however briefly. Vehicles will be making more lane changes to maneuver around these left turning vehicles. As lane changes increase, so does the potential for collisions. Another potential impact is that vehicles making a left turn from an unsignalized side street would experience longer wait times because they would no longer have the center turn lane to use an intermediate refuge. These wait times could result in diversion through the neighborhoods.

One option is to deny left turns at some of the intersections, but that would increase the diversion through the neighborhoods and also result in more left turns which could create other problems.

Environmental Review Required

This alternative would require a full CEQA analysis, and the document may be a Mitigated Negative Declaration, or it may be more extensive. Until the preliminary engineering is completed the number of lost parking spaces will not be known. Lost parking spaces would need to be mitigated. The impacts of the potential delays must be analyzed further.

Ease of Installation/Cost/Timing

This alternative would require more engineering design work and environmental studies prior to installation which would take longer to complete than the reduced parking alternative. The design work and additional traffic studies would make it more expensive than the previous alternative even though the construction would mainly just be striping.

Since the impacts associated with this alternative are greater than the reduced parking alternative, the environmental document might be more involved than just an MND. This alternative would also require more public outreach than the reduced parking. The mitigation of lost parking spaces would be accomplished through agreements with the owners of existing parking lots on the south side of Hollister Avenue and perhaps some re-configuring of some side street geometry to increase the number of vehicles that could park. Agreements with these private property owners are estimated to take six months to accomplish. The exact costs are not known at this time.

General Plan Consistency

If the loss of parking is mitigated, this alternative would be consistent with the General Plan.

Design Standards and Guidelines

Regardless of which alternative is considered, it is important to understand the importance of following approved engineering design standards. The City follows approved engineering and design standards for the design of all roadway improvements. These standards are in place to ensure that the public can count on a basic level of quality and safety no matter where they are traveling. Utilizing design standards is also cost effective because no one agency has to develop new standards from scratch that may or may not have hidden flaws. This practice also allows even the smallest agency to benefit from the experiences of agencies throughout the country. Finally, following design standards greatly reduces risks and exposure from lawsuits and damage claims.

All designs must also be in conformance with the General Plan.