



Scope of Work: Oceanside Coast Highway Corridor

Task 1: Project Management

Objective:

To effectively manage the study work plan and to deliver the appropriate deliverables and study recommendations as outlined in this scope of work.

Key Issues:

The management and administration of this study will be the primary responsibility of IBI Group's Project Manager, Steve Schibuola. Mr. Schibuola will be the primary contact for City staff and responsible for all work products developed under this project. Selected key issues associated with the project management effort include:

- Maintain communication between the City project manager and the IBI Group Team's project manager
- Maintain the established project schedule
- Manage the subconsultants and quality of their work
- Effective presentation of study findings and recommendations to City staff and management

Approach:

The IBI Group Team will initiate the project management effort after the receipt of the notice to proceed with a Project Kick-Off Meeting. This meeting will allow for discussion and finalization of the project scope of work and schedule, identification of data that is needed from the City, establishing lines of communication and procedures/protocol, and setting forth the immediate action items for the IBI Group Team to initiate. Key members of the IBI Group Team will participate in this meeting.

Project management will continue throughout the duration of the study effort. IBI Group has an established project management philosophy that is centered on the following components:

- **Communication** – Open lines of communication between IBI Group's project manager and the City of Oceanside's project manager are an essential component to successful project completion. At minimum, bi-monthly meetings will be held with City's project manager to review study progress, study deliverables, and the study schedule. Additional coordination meetings can be held as necessary, and may be beneficial before City consultation meetings to ensure that the project team is on the same page with regard to the study process and findings.
- **Schedule Tracking** – Maintaining the project schedule is an important aspect of any study. IBI Group will provide the City of Oceanside with timely and effective recommendations from the consultant team within the timeframe established for this study.

- **Quality Assurance/Quality Control** – Following the completion of this study effort, the City of Oceanside will have the ability to move towards the phased implementation of the Coast Highway Corridor preferred alternative. Given this, the documentation of the study efforts and the communication of the study recommendations to stakeholders and the City will be important to ensure that all study participants understand their roles and responsibilities, and how to move study recommendations forward towards reality. IBI Group’s review procedures for deliverables and work products prepared as part of this study effort will help to ensure that the study methodology, findings, recommendations, and next steps will be clearly communicated so that the City and other responsible agencies can proceed towards implementation of the project. In addition, IBI Group has assigned a QA/QC staff, Dennis Wahl, to ensure that our quality control standards are applied before any deliverable is submitted.

As part of the project management effort, the IBI Team will assist City staff in the preparation for and attendance to all Planning Commission and City Council meetings. The effective communication of the data, findings, and recommendations of this study to the Planning Commission and City Council is an integral part of the success of the project and the ultimate implementation of the Road Diet improvements to Coast Highway. The IBI Team is well qualified to assist in this communication effort. We understand the process of collaboratively working with the City to develop a concise and informative presentation that allows the Commission and Council to make informed decisions on study findings and recommendations.

Deliverables:

- Meeting Minutes for project team working group meetings involving City of Oceanside and the IBI Team
- Bi-weekly Status Reports (includes project progress, schedule, & pending items tracking)
- Monthly Progress Reports and Invoicing summarizing project process, key issues, and outstanding concerns

Task 2: Project Area Profile

Objective:

To provide a meaningful summary of prior and ongoing studies as they relate to Coast Highway that can be referenced throughout the duration of the project.

Key Issues:

There are several prior studies that have been completed within the City of Oceanside that are relevant to the Coast Highway Corridor study. The key issues associated within this task are to identify the opportunities and constraints for Coast Highway and utilize that information to help shape the development of the alternatives and public outreach process for Coast Highway.

Approach:

The initial task in this study will be to conduct a complete review of the documents listed below. The Coast Highway Corridor study alternatives and recommendations will be built on the primary objectives of the Coast Highway Vision and Strategic Plan as well as the other relevant documents to promote a vibrant, livable community, encouraging non-motorized transportation, protecting neighborhoods, and managing a multi-modal corridor.

- Coast Highway Vision and Strategic Plan
- Coast Highway Corridor Traffic Impact Study
- City of Oceanside Zoning Ordinances
- City of Oceanside Downtown Area Zoning Ordinance
- City of Oceanside Circulation Element
- City of Oceanside Bicycle Master Plan
- City of Oceanside Pedestrian Master Plan
- Mission Avenue One-Way Couplet Traffic Impact Study
- Complete Street Policy AB 1358
- City of Oceanside Neighborhood Traffic Calming Program
- SANDAG Smart Growth Program
- Caltrans Public Works Plan
- Caltrans I-5/SR-78 Interchange EIR
- Walk San Diego documents
- 2050 Regional Transportation Plan

IBI Group was the prime consultant on several of the above referenced documents and therefore already has existing knowledge and background on the opportunities and constraints for Coast Highway. However, these documents along with the other referenced documents would be summarized in a

meaningful manner to highlight key aspects of each plan/document and its relevance the Coast Highway Corridor Study. Any conflicting recommendations, polices, and zoning between the various documents would also be noted with recommendations on how to address the conflicts during the planning process. The resulting document would be one that the IBI Team and City would utilize and reference throughout the duration of the project.

Deliverable:

- Technical Memorandum that includes:
 - Summary of pertinent information from each document as it relates to Coast Highway
 - Initial assessment of various components proposed for Coast Highway under the Coast Highway Vision and Strategic Plan
 - Identification of conflicting policies and recommendations on how to address them throughout the planning process

Task 3: Community Involvement

Objective:

To provide a public outreach plan that seeks to engage a various community members and stakeholders in an interesting and thoughtful approach to garner public support for the project.

Key Issues:

The public outreach plan for this project will be co-lead by Arellano and Associates and IBI Group. The Coast Highway Corridor study involves various technical aspects that require the focus and attention of the experts to ensure the proper communication of materials to the public. Selected key issues that our Team expects this effort to include are:

- Providing meaningful and informative public outreach meetings
- Providing meetings that are convenient in location, time, and date
- Providing public outreach and the opportunity for community input in various formats
- Understanding the history of the community and sentiment concerning Coast Highway

These are just a few of the key issues related to public outreach for this project. Our approach below details how our Team intends to engage the community throughout the planning process.

Approach:

The IBI Team consists of project team members and a public outreach firm, Arellano Associates, that specialize in developing public outreach programs for transportation, planning and public infrastructure projects throughout Southern California. Our combined expertise in these areas enables us to develop outreach programs that reflect a technical understanding of the issues presented, which enhances our Team's commitment to inform and engage communities in the public planning process.

Our Team differentiates itself from other firms through our tailored and specialized approach to public outreach. We believe that every project and community is unique and deserves a thoughtful approach to communicating project needs and issues while soliciting the community's preferences and input. Throughout the public engagement process, the IBI Team will adhere to these guiding principles:

- Being respectful and sensitive to the community by tailoring our outreach approach to address the community's concerns
- Simplifying complex content to encourage broad participation
- Using graphics to depict complicated issues in a simple manner through conceptual renderings and visual simulations
- Minimizing the use of jargon and acronyms
- Making it easy for people to participate by offering project information electronically
- Capitalizing on strong public sentiment about safety, planning and design concerns

- Helping stakeholders recognize the value of participating in the project, and the importance of having a voice in process that will shape the alternatives and outcome
- Making it easy for all stakeholders to get and understand information about the project
- Making materials accessible in the language(s) that represent the community
- Being proactive and anticipating the technical issues that will be of concern to the community
- Integrating outreach with the work of the technical team members in a seamless manner
- Providing ongoing feedback to the Team on how best to frame the issues and information to be presented to the community

The IBI Team proposes to provide the following tasks to support an engaging and effective public outreach plan:

3.1 Develop Public & Private Stakeholder List and Establish Steering Committee

STAKEHOLDER LIST

Over the course of the study, the IBI Team will keep track of a myriad of project stakeholders, elected officials and staff representatives, public agencies, media contacts and other interested parties. Our Team has significant experience with developing, managing and utilizing a comprehensive stakeholder database. The database will be maintained on Microsoft Access and provided to the City in hard or electronic copy on an ongoing basis and/or as needed. To maximize efficiency, we will begin by providing a compiled stakeholder listing from our previous efforts on projects within the City of Oceanside and build upon that list with any City-provided lists and/or updates. It is anticipated that the stakeholder database will have additions and updates throughout the life of the project.

STEERING COMMITTEE

A steering committee is an effective method to gather diverse stakeholders to provide guidance throughout the development of the project and to provide community guidance on key issues that may arise throughout the project. IBI Group has effectively developed and worked with steering committees on the Oceanside Bicycle Master Plan and Pedestrian Master Plan as well as other projects in Southern California. While public outreach meetings and workshops are aimed to include participation from all community stakeholders, the steering committee helps garner community support prior to the Team presenting any concepts to the public. These committees also aide in the public inclusionary process and deflect the notion that the City and consultant team are developing alternatives without community input. The members of the steering committee could consist of a Council member, general public member, business owner, special advocacy group member, transportation staff person, & planning staff person.

3.2 Collateral/Communication Materials

The IBI Team will develop a set of collateral and communication materials that will be used at all project/public meetings, posted on the website for public access and transmitted to stakeholders as needed. Collateral materials will be developed to educate and inform project stakeholders. Our public

outreach firm, Arellano Associates, will develop a project fact sheet in both English and Spanish. The IBI Team will develop all materials needed for public meeting notification and website development working from the fact sheet design template. All collateral materials will be created with a uniformed look to help create a project identity within the community. The use of photo simulation and/or 3D renderings will be utilized, as appropriate, in collateral materials.

3.3 Public Meetings

The IBI Team has extensive experience implementing a wide range dynamic and interactive planning workshops. These meeting formats have involved open houses, small group exercises, and electronic preference surveys allowing participants to vote in real time using Turning Point software. In addition, our Team can make the meetings available via webcast and create online MetroQuest software engagement tools to encourage additional stakeholder participation. These established meeting formats and dynamic online tools are proven to develop creative and interactive outreach process that will prove invaluable to achieve wide-ranging stakeholder participation.

The IBI Team will develop public outreach meeting parameters and provide recommendations to the City in our efforts to conduct a series of public meetings. The focus of these parameters will be to provide uniformity in presenting information, facilitating dialogue, garnering input and fostering consensus. The public outreach schedule should correlate to the progression of the project study.

Based on the RFP, there would be a minimum of six public outreach meetings. Based on our experience with previous projects, we propose four standard public outreach meetings that follow the progression of the project. The two additional public outreach meeting would have content similar to previous public outreach meetings but available under a different format and time than normal public outreach meetings. We propose that these meetings consist of the following:

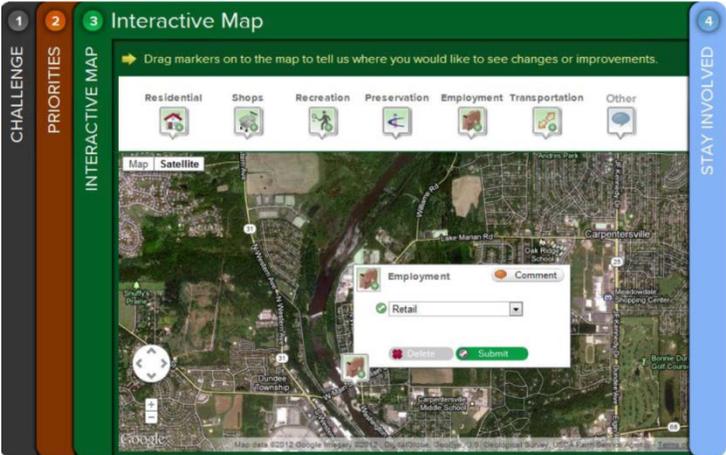
Public Meeting #1	<ul style="list-style-type: none"> • Introduction of the Project • Review of Existing Project Challenges • Learn Community Concerns & Gain Initial Public Comments/Feedback • Interactive Visual Preference Survey – Turning Point
Public Meeting #2	<ul style="list-style-type: none"> • Present Concepts to Move Forward Into Alternative Development Stage based on Public Input & Research • Interactive Design Exercise with Groups • Gain Community Input and Comments
Public Meeting #3	<ul style="list-style-type: none"> • Presentation of Alternatives • Use of Illustrative Drawings for Each Alternative • Present Initial Findings on Alternatives • Gain Community Input and Comments with focus on priorities for Phasing/Implementation Plan • Interactive Voting Exercise – Turning Point
Public Meeting #4	<ul style="list-style-type: none"> • Present Recommended Alternative and Phasing Plan • Present Findings on Preferred Alternative • Use of Visual Simulations and 3D renderings

	<ul style="list-style-type: none"> Note Additional Community Input
<p>Supplemental Public Meeting #1 Walking Audit and Bike Tour</p>	<ul style="list-style-type: none"> Brief Presentation/Introduction of the Project Walking Audit and Bike Tour of the Corridor to assess non-motorized access issues and solutions along the corridor <ul style="list-style-type: none"> Typically done at the beginning of the project
<p>Supplemental Public Meeting #1 Pop-Up Event</p>	<ul style="list-style-type: none"> Project Booth at the MainStreet Sunset Market Presentation Boards allowing community to select preferred transportation elements or alternatives Gather additional community feedback and comments from those not able (or interested) to attend public workshops <ul style="list-style-type: none"> Comment forms and fact sheets made available

As mentioned in the public outreach meeting content, IBI Group proposes to supplement the public meeting presentations with Turning Point software, as appropriate. Turning Point is designed to work on top of Microsoft PowerPoint. Participants are given a credit card size infrared voting device that allows them to anonymously vote on issues, survey questions and ranking/prioritization questions. Results appear immediately as a compiled bar or pie chart on the slide. Because voting is anonymous, it prevents a vocal person from dominating the meeting with their ideas and gives “one voice one vote.” It also enables the meeting facilitator to have a more dynamic discussion as follow-up to the results. It is envisioned that the use of Turning Point would be most helpful in soliciting community input on the preferred elements for the corridor. Our Team has successfully used Turning Point in other public outreach settings and feel confident it would be the proper tool for this project.

Value Added Option (not included in scope)

MetroQuest is a public engagement software that can be used to supplement the Public Outreach Program with a cost effective and dynamic online stakeholder engagement tool that links directly to a project website. This innovative and proven software tool has the ability to educate the community about the project, conduct surveys, gather input on ranking and prioritization of issues, utilize mapping tools that allow for geocoding comments, set-up scenario building exercises that show real time results and capture demographic data of participants. It is also designed to be flexible and easily configured to meet the project objectives, including the ability to provide the information in both English and Spanish. The IBI Team has previously incorporated the use of MetroQuest at community meetings and in the field at survey intercept locations with high-volume activity. The MetroQuest tool allows our Team to bring public engagement to the public at where they are at in the community.



3.4 One-on-One Interviews/Meetings

IBI Group proposes to conduct individual one-on-one meetings with key stakeholders. The purpose of these meetings is to gain specific knowledge and input in a setting that allows the individuals to freely express their concerns for the project. These meetings would be held with stakeholders such as NCTD, Caltrans, MainStreet Oceanside, Oceanside Bike/Ped Committee and Oceanside Police and Fire Departments. Ideally, a representative from these various agencies or associations would be a part of the project steering committee as well. At a minimum, IBI Group would conduct two of these one-on-one meetings with the Downtown Business Groups and one meeting with Caltrans, NCTD, and Oceanside Police and Fire Departments, independent of each other.

IBI Group has utilized this format of stakeholder inclusion in other projects and found it to be important in order to reach out and gain insight from specific groups such as Police and Fire who do not regularly attend public outreach meetings. We are currently employing this outreach method in a project we're conducting at the San Ysidro Port of Entry where law enforcement officials do not want to highlight their needs and concerns in a public setting. Based on our experience with the San Ysidro project and several others, we find this to be an important aspect of public outreach.

3.5 Website Support and Social Media

IBI Group and Arellano Associates will coordinate with the project team and the City in providing collateral materials content for the project website. In addition, Arellano Associates will support the project with an appropriately scaled social media program, using tools such as Facebook and Twitter to establish an online presence that increases public awareness and participation. With a large segment of the population preferring to receive information and project updates electronically vs. paper copies, Arellano Associates will design, develop and distribute project e-blasts that provide project updates and relevant project details to the community. These communication pieces and be posted to the City's project webpage and linked to the project's Facebook page to further expand the communication reach for the project.

3.6 City Council and Planning/Transportation Commission Workshops and Meetings

COMMISSION AND COUNCIL WORKSHOP

Based on our experience working with public agencies, we have learned the importance of including the deciding body in the process for projects that are highly controversial or shape the nature of the City's image or a community. Therefore, IBI Group recommended conducting a workshop with the Planning/Transportation Commission and City Council during the development stage of the alternatives. This workshop would include a formal presentation of the project, present initial input from the community, and provide an overview of potential corridor alternatives and associated strengths and weaknesses associated with the alternatives.

The purpose of this workshop would be to gain support from the Planning/Transportation Commission and City Council through the development. These bodies are a representation of the public and

Oceanside and share a common desire to see a project that meets the needs of its residents, visitors and the City.

COMMISSION AND COUNCIL PRESENTATIONS

The IBI Team will provide two presentations to the Planning/Transportation Commission. The first presentation will be to provide an overview of the project, the initial community concerns, and the list of potential alternatives. It is expected that the Planning/Transportation Commission will provide guidance to City staff on the preferred alternative that should be presented at the second Commission meeting. The second presentation will present the recommended alternative and findings associated with it. We will take the feedback from the Planning/Transportation Commission and make adjustments to the presentation and/or preferred alternative, as necessary.

The IBI Team will also conduct two presentations for the City Council. The first presentation will be to present the various alternatives and community input on the alternatives, and the second will be to present and receive approval of the final recommendations of the Corridor Study. The first presentation to City Council will allow Council to make comments on the proposed alternatives and assist City staff in selecting the most preferred final alternative for Coast Highway, if the alternative is deemed viable based on the environmental, engineering, and traffic analysis. The second presentation to City Council will reflect the community input on the final recommendation and allow Council to review and approve the findings and recommendations of the Corridor Study. This second meeting with City Council can be held after the project has been completed.

3.7 Town Information Modeling

Torti Gallas will use its proprietary Town Information Modeling (TIMSM) system that unites two and three-dimensional visualizations with multiple databases in a single user-friendly platform. Utilizing the City's GIS database, and property records, they will create a digital, three-dimensional base model showing topography and street information, and then add the existing buildings along the corridor, as well as selected larger neighborhood areas (totaling up 600-acres). This base line digital model and database of building area, will serve as the jumping off point for future scenarios.

After creation of the database and existing conditions digital model, Torti Gallas will provide a theoretical buildout of the corridor utilizing their TIMsm methodology; this task includes the development of two (2) scenarios. Utilizing Building Information Modeling (BIM) Technology and the NavisWorks program, a user-friendly software program that allows the navigation of three-dimensional models in plan and in static and dynamic three-dimensional views, the TIMSM process provides users with a visual model of both existing and future "designed" conditions. Model visualizations are linked to associated databases which reflect "before and after" impacts associated with planned physical changes, and will include building area and floor area ratio calculations as well as projected population. Because the model is accurately linked to topography, they will provide view corridor analysis simultaneously. And because this accurate digital model is 'smart' i.e. is linked to data, it provides the accurate information on which our traffic models or simulations can be based. The ability to manipulate the digital model and its associated building area quickly will allow the team, to make changes to build-out assumptions in real-time in response to traffic simulations and/or feedback. As part of this effort, Torti Gallas will provide hands on training for staff on use of the model.

It is assumed that the information provided from this model can be directly used for input into the Series 11 CNCSA model for use by IBI Group to model the land use alternatives.

Deliverables:

- Detailed Public Outreach Plan
- Development of Stakeholder List and Steering Committee
- Draft and Final Public Meeting Materials
- Meeting Minutes/Summary for Public Meetings and Individual Interviews/Workshops
- Project Fact Sheet in English and Spanish
- Development and Management of Project Facebook Page (optional)
- TIM Base Model
- Two TIM Modeled Scenarios

Task 4: Market Analysis

Objective:

To evaluate current and future market trends and the potential market conditions for Coast Highway.

Key Issues:

This task will be lead by KMA to assess the existing and future market conditions of downtown Oceanside and specifically Coast Highway. The key issue for this task is to understand the future market trends and potential for new development opportunities.

Approach:

KMA will prepare a limited market overview regarding the potential new development opportunities in the Corridor. The objective of this task is to review both existing and historical market trends and to better understand future development potential. KMA will review the available background documents and plans including (but not limited to) the documents listed in Attachment 1. KMA will assess near- and long-term market demand for four major land use categories: retail; residential (single-family and multi-family), office, and lodging (hotels/motels).

KMA will undertake the following:

- Review the market analysis completed in 2008 as part of the Coast Highway Vision and Strategic Plan.
- Review key demographic trends for the major trade areas surrounding the Corridor. KMA will draw information from the San Diego Association of Governments (SANDAG), the U.S. Census, and data profiling sources such as Claritas, Inc.
- Evaluate key market factors such as inventory, absorption, vacancy, and value indicators for each major land use category based on readily available third party data sources. These are likely to include CoStar Group Inc., LoopNet Inc., real estate brokerage firms, and industry data sources for specific land uses.
- Review regional and local market conditions, including major value indicators and development trends by land use.

Based on this research, KMA will prepare a matrix summarizing market demand factors for each land use category addressing the following:

- Principal assets and constraints affecting development potential for each land use category.
- Market position relative to existing and anticipated development within the market area.
- Near-term and long-term development potential for specific land uses and/or product types.

Deliverable:

- Technical Memorandum Summary Report (administrative draft, draft & final versions)

Task 5: Coast Highway Corridor Analysis

Objective:

To accurately model and analyze the multi-modal corridor and provide the City with confidence in selecting a preferred alternative for the Road Diet on Coast Highway that will reflect the goals and objectives of the Coast Highway Vision and Strategic Plan (CHVSP) while also carefully considering the goals of the Traffic Engineering Division of the City of Oceanside.

Key Issues:

IBI Group has the experience, local knowledge and understanding to effectively manage this task. Our knowledge of the existing corridor constraints both operationally and physically gives us the advantage to manage the alternatives development and operational analysis of the project. The Coast Highway corridor has several key issues associated with the development and operations of a Road Diet, but below are a list of selected key issues:

- Developing a Road Diet alternative that works for the goals and vision of the CHVSP and also enables manageable traffic flow for all modes of transportation
- Including the proposed series of roundabouts that can be accommodated both physically and operationally on the corridor
- Accurately assessing the diversion traffic to parallel and adjacent streets due to a Road Diet on Coast Highway
- Gaining community support for one the preferred alternatives
- Developing a Road Diet alternative that corresponds with the adjacent land use plans
- Developing a multi-modal level of service methodology that can be applicable to other projects within the City

Approach:

5.1 Existing Conditions Review and Analysis

TRAFFIC OPERATIONS FIELD REVIEW

IBI Group has reviewed the study area for previous work conducted for the City for the Circulation Element update and the Coast Highway Corridor TIS. IBI Group will revisit these studies and the CHVSP study area to confirm existing conditions with respect to existing local area development, roadway striping, speed limits, curb-to-curb widths, and observing traffic patterns/areas of congestion in order to verify our overall understanding of traffic conditions in the localized area.

IBI Group will conduct a field assessment of the corridor and adjacent parallel streets to confirm the existing conditions related to community character, roadway widths, speed limits, parking, and observed travel behavior. IBI Group will take special note and considerations for residential streets that might be affected by cut-through traffic from a Road Diet alternative implemented on Coast Highway.

MULTI-MODAL ASSESSMENT

Concurrent with the previous subtask, the IBI Team will review the corridor and adjacent streets to identify the constraints and opportunities for multi-modal operations on Coast Highway. This effort will assess the pedestrian environment and bicycle environment and supporting infrastructure for non-motorized transportation to include landscaping, streetscape, lighting signage and wayfinding design, tree planting, sidewalks, crosswalks and walkways, bicycle facilities, and the condition of bicycle parking and amenities. The existing bus stops and transit routes will be reviewed and opportunities for enhancements assessed.

The IBI Team will build on the existing conditions assessment of the area based on the work previously conducted for the Oceanside Bicycle and Pedestrian Master Plans. These plans identify existing impediments to non-motorized circulation and land use access. This information would be reviewed and the entire corridor assessed for new issues not identified under either Plan. The multi-modal assessment of the corridor and adjacent streets will be documented in an existing conditions report.

DATA COLLECTION

IBI Group will collect existing summer AM and PM peak hour turning movement volumes at up to 35 intersections to include pedestrian and bicycle counts on the Coast Highway corridor and the adjacent streets. In addition, IBI Group proposes to include the Mission Avenue one-way couplet in the operational analysis to fully understand the operations of the two roadway projects together.

At a minimum, IBI Group will collect 48-hour segment counts at 40 locations on Coast Highway and the adjacent parallel streets during the summer. The 48-hour segment counts will include speed survey data to assist in recommendations for potential traffic calming features on neighborhood streets. IBI Group will also collect a one-day parking supply and utilization count for a 12-hour period of the on-street parallel parking on Coast Highway to be used to evaluate parking requirements for the corridor and recommendations for the inclusion of the proposed alternatives.

As part of the MMLOS analysis, the IBI Team anticipates the need to collect the following data in addition to standard automobile traffic counts in accordance to the HCM 2010:

To calculate the Bicycle LOS:

- volume and speed of auto traffic in the outside lane
- % volume of heavy vehicle traffic
- Number and width of all lanes in the direction of travel
- Average Bicycle speed
- Presence of bicycle lanes
- Space and buffer space available to bicyclists
- On-Street parking and occupancy
- Pavement condition
- Intersection signal timing

To calculate the Pedestrian LOS:

- Average pedestrian space available on sidewalk
- Average pedestrian speed walking
- Number of auto lanes in roadway
- Volume and speed of auto traffic
- Circulation area (pedestrian flow and sidewalk space availability)
- Pedestrian travel speed
- Space and buffering available to pedestrians on sidewalks
- Crossing difficulty at intersections and midblock
- Intersection signal timing

In addition to Bicycle and Pedestrian LOS measurements, Transit LOS will be measured as part of the MMLOS evaluation. To calculate a Transit LOS score, the following data will be collected:

- Transit vehicle running time
- Transit vehicle delay at intersection
- Pedestrian LOS score
- Transit frequency/headways
- Stop amenities
- Average passenger trip length
- Passenger load factor (ie. The number of passengers + number of seats)
- Time spent waiting for the transit vehicle past the scheduled departure time
- Passenger expectation of travel time, based on whether trip is passing through a CBD
- Transit travel speed
- Intersection Signal timing

It is understood that some of the above data may not be available; however, the majority of the data should be available, allowing for proper analysis using the MMLOS.

EXISTING CONDITIONS ANALYSIS

Following the field assessment and data collection efforts for the corridor and surrounding study area, IBI Group will perform an existing conditions analysis for the corridor using Synchro software. Because of our prior work on the Coast Highway Corridor Traffic Impact Study, IBI Group already has the base network established but will enhance the Synchro network to include the additional intersections, adjacent streets and the Mission Avenue one-way couplet. In addition to the traditional traffic impact analysis, the IBI Team will establish and conduct an existing conditions Multi-Modal LOS (MMLOS) analysis for the study area. The MMLOS analysis will be based on methodology developed in Highway Capacity Manual 2010 and will include data collection, data entry and analysis for existing conditions along the corridor.

EXISTING + CUMULATIVE ANALYSIS

In addition to the existing analysis, IBI Group will work with the City of Oceanside to identify projects within the study area that should be included as part of the cumulative projects analysis. This analysis will be performed using Synchro software and documented within the mobility report.

ESTABLISH VISSIM NETWORK

Due to the complexity of the Coast Highway corridor, the possible inclusion of a series of roundabouts and multi-modal aspect of the project, it is proposed to analyze the corridor and the Mission Avenue one-way couplet in Vissim. Vissim is the microscopic simulation tool for modelling multi-modal traffic flows and it provides ideal conditions for testing different traffic scenarios and for providing realistic results.

IBI Group has utilized Vissim on many multi-modal projects to realistically simulate multi-modal processes prior to project implementation. It is recommended that Vissim be utilized for this project for the proposed alternatives to visually simulate the multi-modal interactions and particularly to simulate the operations of the roundabouts and queuing effects on the corridor.

Deliverables:

- Graphics that depict existing intersection and street segment configurations and traffic volumes
- Documentation of existing multi-modal conditions of the corridor and study area
- Documentation of existing + cumulative analysis for the corridor and study area
- Technical Memorandum with summary of analysis results with appropriate tables and appendices

5.2 Land Use Review and Modeling

REVIEW OF EXISTING LAND USES AND ADOPTING ZONING REGULATIONS

Under Task 2, the IBI Team will have reviewed the existing prior documents related to the Coast Highway Corridor and Downtown Oceanside. The Team will build upon the knowledge and information gained through Task 2 to review the existing land use and zoning regulations in place and how the land uses and zoning regulations shape the alternatives developed from the land use perspective. The market analysis performed under Task 4 will also be used in understanding the existing land use environment under the adopted zoning regulations and for recommendations to carry forward into the alternatives development process.

VERIFICATION/MODIFICATION TO SERIES 11 COMBINED NORTH COUNTY SUB-AREA (CNCSA) MODEL LAND USES

The IBI Team will work with the City and SANDAG to review the existing and proposed land use tables for the CHVSP study area. First, the IBI Team will utilize the land use tables previously updated from the Coast Highway TIS. As part of the transportation planning modeling process, the land use tables are used to estimate trip generation within the model. Using those estimates, traffic assignments for the study area's roadway network are developed. This process identifies roadway capacity overloads and areas of future possible congestion which could dictate the intensity of development allowed to occur on Coast Highway.

Deliverables:

- Technical Memorandum that provides:

- Documentation for the Series 11 CNCSA model land uses and adopted zoning regulations noting correlation to the market analysis; and
- Recommendations for land uses to be carried forward into the Alternatives Development Process

5.3 Alternatives Development

The IBI Team will utilize the efforts through the public outreach process to develop alternatives for the Coast Highway Corridor Road Diet. A large part of the alternatives development will be based on community input, prior research and analysis, and the CHVSP. The IBI Team will take all information available to provide Road Diet alternatives that will accommodate the inclusion of on-street angled parking, bicycle and pedestrian facilities, roundabouts (where feasible), potentially revised land use assumptions, transit accommodations/enhancements and the ability to accommodate a future Bus Rapid Transit route on Coast Highway or a shuttle program, landscaping treatments/options, etc.

As requested within the RFP, the alternatives development will include a minimum of three alternatives to include:

- Existing Conditions and Current Zoning with First Road Diet Alternative
 - Road Diet Based on CHVSP recommendations
- Existing Conditions and Current Zoning with Second Road Diet Alternative
 - Road Diet Developed by IBI Team in consultation with City and Community Input
- Year 2030 Conditions with CHVSP Zoning and Road Diet
 - Road Diet Based on CHVSP recommendations

The IBI Team also recommends including an additional alternative that would consist of the Year 2030 Conditions with a variation to the CHVSP Zoning and a Road Diet Alternative. The variation to this alternative will be based on the market assessment study and extensive review and recommendations of the land uses regulations and possibilities. The Road Diet alternative also has the potential to vary from any of the previously recommended alternatives based on community and City input.

Deliverable:

- Technical Memorandum that outlines the four alternatives and process taken to develop each alternative (Illustrative renderings of the alternatives are provided under Task 6.0)

5.4 Alternatives Modeling

IBI Group is familiar with the extensive modeling that was completed by SANDAG and the North County cities to form the Series 11 CNCSA. This model was utilized for both the Coast Highway Corridor Traffic Impact Study and the Circulation Element update performed by IBI Group. We are ready to efficiently advance the work already completed and work with SANDAG to incorporate the proposed alternatives into the SANDAG model to be used in the alternatives analysis process. As soon as the development of

the alternatives has been completed, the IBI Team will work with SANDAG to initiate the alternatives modeling process.

LAND USE AND ROAD DIET MODEL ADJUSTMENTS

In coordination with the Planning department at the City, the IBI Team will work to refine and update the land use tables within the model to ensure they accurately reflect the proposed four alternatives and the CHVSP goals.

The IBI Team will work with SANDAG to incorporate the necessary roadway alternative changes to the Series 11 CNSA model for each of the four alternatives. In addition to the land use modifications, changes to the model will include, but are not limited to, lane reductions, intersection geometric modifications, intersection control modifications, addition of roadways, and possibly additional zone connectors/splitting of traffic analysis zones (TAZs).

SELECT ZONE/LINK ASSIGNMENTS

Due to the potential for cut-through traffic on adjacent streets to Coast Highway, IBI Group will work with SANDAG to include additional local streets not currently in the model. This effort will build upon work previously done for the Coast Highway TIS that showed incremental increases in traffic volumes on Cleveland, Tremont, Fremont and Ditmar Streets with a Road Diet on Coast Highway. Under the Coast Highway TIS, IBI Group performed two select zone assignments (one from northern portion and one from southern portion of the study area).

For this analysis, IBI Group proposes to conduct three select zone assignments (northern portion of the corridor, middle of the corridor, and southern end of the corridor) for each alternative to determine the extent of cut-through traffic on adjacent streets. In addition, IBI Group will request SANDAG to include additional local streets that are not currently included in the model to determine the full affect of cut-through traffic. This might involve splitting some TAZs to avoid the possibility of having some streets with zero volumes assigned to them.

Deliverables:

- Meeting with the City to review and discuss up to four alternatives to be modeled and analyzed
- Memo outlining the alternatives to be modeled and analyzed and the select zone assignments to be performed (including additional streets added to model network)

5.5 Alternatives (Project) Traffic Analysis

SEGMENT ANALYSIS

IBI Group will provide segment analysis for the Coast Highway corridor and adjacent streets based on the City's roadway level of service standards. In addition, the IBI Team will evaluate roadway level of service standards for MMLOS using the HCM 2010 methodology.

SYNCHRO/VISSIM ANALYSIS

IBI Group will evaluate the current and forecasted traffic volumes focusing on the key study area intersections and segments as identified with the City for the four selected alternatives. The Series 11

Subarea model is calibrated using year 2003 traffic counts. Traffic volumes obtained from the model will be post-processed for each segment within the study area to ensure reasonableness for use within the traffic impact analysis. Post processing will be conducted using similar methodologies to the NCHRP-255 technical report published by the Transportation Research Board.

These volumes will then be input into Synchro to determine delay and level of service at each intersection. Synchro analysis will be conducted for existing plus cumulative plus project for the preferred alternative. After analysis in Synchro has been conducted, the Coast Highway corridor and Mission Avenue couplet will be further analyzed in Vissim. Vissim is a microscopic, time step and behavior based simulation model developed to model urban traffic and multi-modal operations. With the presence of transit stops on Coast Highway and the proposed Road Diet with a multi-modal aspect, Vissim will allow IBI Group to develop a network that shows the interaction of bus operations on the corridor, travel time (vehicular and bus), intersection delays, analysis of merging on roundabouts, pedestrian and bicycle intersections, queuing, and much more.

ROUNDAABOUT ANALYSIS

The proposal to implement roundabouts at several of the major intersections along Coast Highway poses an interesting question regarding the compatibility of this type of intersection with non-motorized modes. The issue has been object of research in the United States and abroad. Results indicate that roundabouts, when implemented correctly, improve the general safety of an intersection. As we indicated in our Coast Highway Corridor TIS, there are two major challenges to be faced with the implementation of roundabouts. The first one is related to the replacement of the pedestrian crossing signals with a crossing where the pedestrian has to judge if he has enough time to cross the street, and the second one is associated to the potential conflicts of the vehicle flow with bicyclists

IBI Group will utilize the roundabout analysis performed under the Coast Highway Corridor TIS in Synchro updated for each alternative proposed. We propose modeling the roundabouts for each alternative in Vissim along with our recommendation to analyze the entire Coast Highway corridor and Mission Avenue one-way couplet. IBI Group has modeled roundabouts in Vissim for several projects throughout the country and North America, including but not limited to, SR41/SR235 Roundabout in Clark County, Ohio, Highway 40 Roundabout in Chatham, Ontario, and Charlotte Area Transit System/Center City Streetcar Roundabout in Charlotte, North Carolina. As stated above, Vissim is a powerful multi-modal simulation tool that will allow the City and community to understand the level of operational detail and complexity related to installation of roundabouts on the corridor. Vissim allows the ability to accurately model each roundabout on the corridor based on engineering design standards or to model any variations proposed to typical roundabout design standards to assess the roundabout operations on the corridor.

DIVERSION AND TRAVEL TIME ANALYSIS

As IBI Group identified under the Coast Highway Corridor TIS, the potential diversion of traffic to parallel streets would be expected to occur because of two primary factors. The first factor is that Coast Highway would be reconfigured to operate at a lower speed, making the travel times along parallel streets almost the same as the travel times on Coast Highway. With this change, traffic produced or

attracted in the neighborhoods east and west of Coast Highway may choose to remain on parallel local streets to reach the Downtown Oceanside area or particular cross streets instead of entering Coast Highway and using the corridor as part of their chosen route.

The second factor is related to forecasted congestion on Coast Highway, which impacts travel times. Longer travel times may cause some through traffic to deviate to parallel streets. This second case's impact to parallel streets will be less than the first factor, because the traffic that deviates from Coast Highway will have to return to the corridor if the trip origin or destination is not inside the study area, as Coast Highway is the only continuous roadway west of Interstate 5. Diversion of through traffic to parallel streets usually occurs only when an alternative route results in travel time benefits.

IBI Group will request select zone assignments from SANDAG for the corridor for the four Road Diet alternatives. Using the data from the select zone assignments, IBI Group will assess the impact(s) of the Road Diet to the parallel streets.

In addition, IBI Group will also perform a travel time analysis for existing conditions for Coast Highway and potential paths of diversion on the parallel streets. The travel time analysis performed under existing conditions will be updated to reflect future conditions based on proposed speed limits and estimated vehicular delay on Coast Highway.

MULTI-MODAL LOS ANALYSIS

The IBI Team has recent hands-on experience applying the MMLOS analysis methodology. Because we know this is a new methodology for the City of Oceanside, our Team would first meet with the City of Oceanside Transportation Engineering staff to explain how the MMLOS and HCM 2010 methodologies would be incorporated into the project alternatives analysis. Our Team believes this one-on-one session with the City is critical in order to give the City the tools needed to review and properly assess the MMLOS analysis results for each alternative.

The IBI Team will utilize all the data collected under Task 5.1.3 to conduct the MMLOS analysis for each of the four alternatives.

Deliverable:

- Technical Memorandum report summarizing analysis results for the proposed alternatives.

MITIGATION RECOMMENDATIONS

After completion of the various analyses, the IBI Team will identify areas where significant impacts would occur and potential mitigation for the specified locations or the overall corridor. A list of mitigation plan alternatives will be presented to the City in the form of a matrix for discussion and review for each of the four alternatives. The IBI Team will conduct a Strategic Planning Session with the City to present the list of mitigation alternatives to determine which alternatives would be most desirable and capable of implementation and meet the City's goals for overall network performance as well as achieving the goals of the CHVSP.

The list of potential mitigations for the four alternatives will help the City and community in selecting the preferred alternative. After the preferred alternative is selected, the IBI Team will perform a detailed mitigation analysis and provide a summary of the results and associated mitigation required to achieve the multi-modal goals for the City. It is assumed that this subtask will include analysis and information related to subsequent tasks for traffic calming, parking and considerations for a new level of service standard for Downtown Oceanside.

Deliverable:

- Technical Memorandum report summarizing potential mitigation recommendations.

5.6 Traffic Calming Review and Recommendations

Based on the diversion analysis results, the IBI Team will review adjacent streets to determine which ones would benefit from traffic calming techniques. The Institute of Transportation Engineers has defined traffic calming as, “the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users.”

The adjacent streets to Coast Highway need to be reviewed for traffic calming recommendations not just based on typical traffic calming features to reduce speeding but based on limiting cut-through volumes. The IBI Team will work with the City staff and the affected neighborhoods to develop a menu of recommendations for traffic calming features that would be appropriate to reduce cut-through traffic as a result of a Road Diet alternative being implemented on Coast Highway. These recommendations would also be discussed with Oceanside’s Police and Fire Departments for evaluation on emergency response times and delays that could be caused by traffic calming devices. These recommendations could also be vetted through members of the Traffic Calming Steering Committee that was formed in 2009 to update the City’s Neighborhood Traffic Calming Program. Any traffic calming recommendations put forth as part of the Coast Highway Corridor study would be recommended as part of this project and not subject to the Oceanside Neighborhood Traffic Calming Program process. Implementation of traffic calming features could be phased in over time, as necessary, based on the Road Diet phasing and overall growth in traffic volumes.

The engineering design for site specific traffic calming recommendations will be provided under Task 6.
Typical design

Deliverable:

- Technical Memorandum detailing recommended traffic calming features for individual streets

5.7 Parking Assessment

PARKING SUPPLY AND DEMAND

IBI Group has performed numerous parking studies and created parking strategies for various municipalities in Southern California. IBI Group will perform an existing inventory of on-street parking

supply and demand for Coast Highway. The off-street parking supply and demand will be evaluated from the existing field review and prior parking studies provided by the City. Both the existing on-street and off-street supply and demand will be evaluated to assess the level of parking needed under future conditions for the Road Diet with the assumption that on-street parking will be modified from parallel to angled parking.

Based on the future land uses proposed for the Coast Highway Corridor or variations proposed under the alternatives development process, IBI Group will document if there is a sufficient parking supply for each alternative and proposed location(s).

PARKING MANAGEMENT STRATEGIES

The IBI Team will work with the City of Oceanside and Downtown Business Groups to develop appropriate parking management strategies and requirements for Coast Highway. Parking strategies must consider pros and cons of each individual strategy and the possible upstream and downstream implications of the parking management strategies on the parking demand on the Coast Highway Corridor and surrounding neighborhoods. Parking strategies could include, but are not limited to, user information/signage, pricing strategies, payment method technologies, and dedicated parking stalls for carshare programs or environmentally friendly vehicles.

Deliverable:

- Technical memorandum details the parking supply and demand for Coast Highway and potential parking management strategies.

5.8 Level of Service Standards

Multi-modal level of service is revolutionizing standard traffic engineering practices. Level of service performance indicators that rate a roadway as F to identify a system that is failing and requires improvements has mainly only considered automobile travel conditions. This conventional analysis has resulted in a roadway system that while improves roads for more capacity at higher speeds degrades the facility for walking and cycling conditions. And since public transit trips often begin and end with a walking trip, it can negatively affect public transit as an alternate mode of transportation. Cities and municipalities around the country are starting to adopt level of service standards that reflect a network that prioritizes walking, bicycling and transit over the automobile.

The Coast Highway Corridor Road Diet is a principal example of where a multi-modal level of service standard should be considered. The City of Oceanside currently accepts level of service D at roadways and intersections throughout the City including Downtown Oceanside. Based on the analysis results from the intersection, segment and multi-modal analysis performed for each alternative, the IBI Team will develop a proposed multi-modal level of service standard that can be applied for the Coast Highway corridor and possibly used and adopted for other projects in Downtown Oceanside.

The new multi-modal level of service standard recommendations could be adopted during the process of a General Plan Amendment for the Coast Highway Corridor Road Diet. The new level of service

requirements will emphasize the importance of prioritizing pedestrian, bicycle and transit level of service standards while accepting a lower level of service standard for automobiles. The IBI Team will provide documentation on the development of the methodology drawing upon experience working with MMLOS and a literature review of other cities that currently have a MMLOS standards adopted.

Deliverable:

- Technical memorandum documenting multi-modal level of service standards recommended for Coast Highway

5.9 Mobility Report

The IBI Team will compile a detailed report of Task 5 with the appropriate tables, figures, and appendices for submittal to the City for review. The IBI Team will prepare a summary of the analysis results to be presented to City staff and/or the Planning/Transportation Commission. Upon City review, Team will make the appropriate revisions to the report and submit final hard copies and an electronic copy to the City.

Deliverables:

- Draft and Final Report Copies (electronic version and up to 15 hard copies)
 - Information contained within the Mobility Report (*and all technical memorandum reports*) will include information needed for the CEQA Review process to include the existing, existing plus cumulative, and existing plus cumulative plus project scenarios, appropriate tables, figures and appendices.

Task 6: Design Guidelines

Objective:

To confirm the limits and nature of the proposed alternative improvements and prepare illustrative drawings, plans, specifications, and cost estimates.

Key Issues:

The development of the alternative depends not just on operational analysis, but it also depends heavily on the ability to construct the preferred Road Diet alternative. Selected key issues associated with the design guidelines effort include:

- Right-of-way constraints for roundabouts
- Cost Estimates
- Phaseability of the project

Approach:

6.1 Existing Infrastructure Documentation

This subtask includes both the research and review of previously prepared documentation and field reviews of the site.

OBTAIN AND REVIEW PROJECT DOCUMENTATION

IBI Team will coordinate with the City to obtain any available as-built drawings within the project limits. Copies will be made of all project documents, and the originals will be returned to the City. The documents will be distributed to the appropriate members of the IBI Design Team for use and reference during alternative development and conceptual design.

CONDUCT FIELD REVIEW

The IBI Team will invite representatives from the City to participate in a field walk of the project site to review and document existing site conditions and to discuss the corridor's strengths and weaknesses. All IBI Team discipline managers will participate in the field walk.

Deliverables:

- Matrix identifying corridor infrastructure and strengths/weaknesses
- Log of as-built plans and other project documents obtained

6.2 Surveying

After a review of available as-built drawings, a boundary and topographic survey of Coast Highway will be performed within the City of Oceanside boundary, and a base map will be prepared for use in engineering design. The limits will be half block east and west of Coast Highway. The survey will include

items within the public right-of-way only; surveying of private property is not included. It is understood that prevailing wage rates apply to this project.

RESEARCH

Research, compile and review existing engineering, existing utilities, survey and mapping data from the City for boundary and infrastructure information relevant to the project's design.

BOUNDARY SURVEY

Perform limited boundary survey to establish right-of-way on Coast Highway from record mapping. Includes calculations, monument search and recovery, and ties to NAD83 coordinates.

AERIAL MAPPING SURVEY

Perform field ground control for aerial mapping to be used for engineering design using City of Oceanside horizontal and vertical control. The aerial topo will be prepared at 1"=40' scale.

BASE MAP PREPARATION

Prepare a base map showing the topography, surface features and underground utilities for approximately 3.2 miles of Coast Highway and adjacent streetscape to the east and west. A Base map will be prepared from the aerial topography; utilities will be depicted based on available record and as-built data.

Deliverable:

- Base Map for Coast Highway Corridor

6.3 Illustrative Drawings

Streets are the most visible, heavily used and often the most costly public spaces in neighborhoods and communities. They require a design approach that acknowledges the role they play in not only enabling circulation and making connections between important destinations, but in encouraging and defining a vibrant neighborhood or community.

DESIGN GUIDELINES

As authors of the Vision Plan, team member Torti Gallas will create a set of design guidelines for building typologies, spaces and landscapes to ensure that future development along the Coast Highway, contributes to the making of a great place, or in reality, a set of great places. The design guidelines will inform private investors what the public views as important design components in the project. These design guidelines will guide development activity to encourage and support the evolution of a pedestrian friendly thoroughfare. To this end, Torti Gallas will provide Frontage Standards or Guidelines to guide the development of streetscape conditions, and to relate these conditions to the ground floor building fronts.

PHOTO REALISTIC SIMULATIONS

Torti Gallas will prepare up to three (3) photo-simulations for four locations in the corridor. The purpose of these photo-simulations is to demonstrate how the proposed corridor alternatives might look.

These illustrative design concepts will also be capable for use at public meetings.

Deliverables:

- Urban Design Guidelines
- Photo Simulations (up to 3 at four locations)

6.4 Prepare 30% Plans for Preferred Alternative

ROADWAY/CIVIL

A draft set of conceptual street improvements plans for the selected alternative will be prepared consistent with a 30% level of design development. The plans will include the following:

- Existing and proposed (if applicable) street center lines
- Proposed curb lines, sidewalks, and parkway features
- Proposed curb, gutters and sidewalks, plan view
- Proposed parking and loading zones
- Proposed lane geometrics and medians
- Proposed traffic controls, corner pop outs, bus stops, and pedestrian and bicycle facilities
- Identification of impacted surface and subsurface utility features. Items requiring relocation will be identified (the proposed relocation will not be designed as part of this study)
- Conceptual storm drainage improvements
- Conceptual LID design locations
- Plan border and title block
- North Arrow, scale

All of the above information will be shown on a single set of layout and profile sheets. Sheets will be D sized sheets on the City border prepared at 40 scale. Typical street sections showing the proposed cross section at points along the route will also be provided. For each signalized intersection to be modified, an exhibit showing the proposed curbs, striping, pole and head locations, and signal phasing will be provided.

UTILITY RELOCATION REQUIREMENTS

The IBI Team will identify the existing utilities that are within the right-of-way and may be affected by the potential alternatives. We will coordinate with the franchise utility companies for input regarding the feasibility of relocating any existing utility lines or boxes that conflict with the preferred alternatives. The Team will prepare a letter report outlining the utility relocation options and summarize the input from the agencies owning each utility. The issues pertaining to prior rights will be deferred to the City for legal analysis. All utilities found will be shown on the 30% civil plans.

DETAILED COST ESTIMATE – 30% PLAN

A draft Engineer's Estimate of probable roadway construction costs will be prepared using either a standard costing template provided by the City or one prepared for the project by the IBI Team. The

estimate will be based on the pay items and quantities identified within the plan set. A draft construction cost template will be prepared listing all pay items and associated unit costs. Unit costs for applicable pay items will be obtained from recently completed similar design projects, the most current version of the Caltrans Cost Data Book, and other resources. This draft construction cost template will be submitted to the City's Project Manager for review and comment. The IBI Team will solicit input from the City regarding unit prices for pay items based on recent bids for similar construction projects completed within the City. Any comments received will be reviewed, and the cost estimate template will be revised accordingly.

Quantities will be calculated based upon the design included within the 30% plans, and backup quantity worksheets will be prepared for the individual pay items on a sheet by sheet basis. These backup quantity calculation worksheets will be furnished to the City upon request as part of the review of the Draft Engineer's Estimate.

Deliverables:

- Conceptual Street Improvements Plans for 30% Design of Preferred Alternative
- Detailed Cost Estimate for Preferred Alternative (assumes 2 rounds of revisions)

Task 7: Corridor Development and Budget

Objective:

To understand the financial implications of each alternative which will aid in the selection of the preferred alternative and ultimately create a prioritization and phasing plan.

Key Issues:

This task's purpose is to mainly provide information on the alternatives that will aid in the selection of the preferred alternative and the development of a phasing plan. The key issues associated with this task are:

- Understanding the Fiscal Implications of a Road Diet
- Developing a Prioritization and Phasing Plan that has the Support of Both the City and Community

Approach:

7.1 Alternatives Cost Estimate Analysis

ORDER OF MAGNITUDE COST ESTIMATES FOR EACH ALTERNATIVE

The IBI Team will provide an order of magnitude cost estimate associated with each alternative proposed. Order of magnitude cost estimates are appropriate after the development of each alternative as there is limited design information available. The IBI Team will utilize various techniques to determine these estimates, including experience and professional engineering judgment, historical data, and knowledge of each alternative's constructability and timing.

RIGHT OF WAY COSTING

IBI Team will identify those properties which will require a full take or partial take acquisition based information provided by the City for the preferred alternative, if necessary. The area of the parcels or partial parcels to be acquired will be determined. In consultation and information provided by the City, an estimated per acre value for the parcels will be established, and utilized to create a rough preliminary estimate of right-of-way costs for the alternatives. The right-of-way costs for the preferred alternative will be further refined under the 30% design cost estimates. This information will be summarized within the Preliminary Engineering Report with all backup information included in the report appendix.

ANNUAL MAINTENANCE COSTING

The IBI Team will identify any infrastructure improvements that require annual maintenance. We will identify replacement costs and work with the City of Oceanside to identify the appropriate departments with an estimated fee for maintenance based on staff hours to determine the appropriate costs for annual maintenance. The annual maintenance costs for the preferred alternative will be further refined under the 30% design cost estimates. This information will be summarized within the Preliminary Engineering Report with all backup information included in the report appendix.

Deliverable:

- Preliminary Cost Estimates for Each Alternative

7.2 Fiscal Impact Analysis

KMA will prepare a fiscal impact model to measure the recurring annual impacts of the plan prepared by the IBI Team. The objective of the analysis is to determine the probable fiscal impact to the City's General Fund resulting from the land use concepts proposed in the development plan. The preliminary KMA model will assess the "pure" fiscal impact of the plan without considering the offsetting benefit of financing mechanisms that could absorb a portion of the municipal service costs. The KMA analysis will not address the annual fiscal impact resulting from existing uses within the Corridor.

Deliverable:

- Technical Memorandum that summarizes the results of the fiscal impact analysis

7.3 Prioritization Phasing Plan and Financial Strategy

After the selection of the preferred alternative, the IBI Team will review the corridor and propose logical a segmented approach to implementing the corridor. The preliminary recommended phasing of the project will be determined based on several factors, which are highlighted in the list below. This list will help the IBI Team and City staff to determine the prioritization of specific elements of the project and implement the corridor improvements in the segmented phased approach. This list can be modified or added upon based on input from the community and City staff or results from fiscal impact analysis.

- City Identified Priority Areas
- Safety Issues
- Public Input/Priority Areas
- Funding Availability
- Utility Relocations / Undergrounding and Timing Associated with Relocations/Undergrounding
- Right-of-Way Needs and Timing Associated with Acquisition
- Continuity of the Street Network Through an Area
- Lowest Cost to Implement /Avoidance of Temporary Improvements when Possible

As noted above, the funding availability can impact the prioritization and phasing of the project. KMA will prepare a menu of potential funding sources/mechanisms available to fund the backbone infrastructure improvements required to serve the Corridor. KMA will prepare a matrix reviewing each potential funding source, its applicability to the Corridor, and any relevant issues or constraints.

These factors will be utilized in a prioritization ranking matrix to help determine the appropriate initial phasing plan. It is anticipated that the development of the priority funding matrix and scoring mechanism will be developed in collaboration with the Steering Committee (described under Task 3) and/or in consultation with City staff. It will also serve as a useful tool to present to the community to help them understand the reasons behind the phased approach for project implementation.

IBI Group believes this process will result in a collaborative and successful prioritization and phasing plan for the Coast Highway Corridor. We have implemented similar strategies for other projects to narrow down project alternatives (ex. SR-15 MidCity BRT Project and I-805/47th Street BRT Project) or determine the top priority projects for implementation (ex. Oceanside Pedestrian Master Plan). This method has proven successful and well received by the client and community.

Deliverables:

- Prioritization Process Matrix Organized By Proposed Improvements As Well As By Potential Funding Sources
- Technical Memorandum Report That Outlines The Draft Phasing Recommendations For The Preferred Alternative

Task 8: Implementation Plan and Financing Strategy

Objective:

To determine the action items necessary to implement the goals of the Road Diet on Coast Highway by the City and its appropriate departments.

Key Issues:

The IBI Team will build upon the Prioritization and Phasing Plan developed under Task 7 to develop a refined Implementation Plan and Financing Strategy for the Coast Highway Corridor. While most of the key issues related to Implementation would have been vetted through the prior tasks, there are select key issues that the Team feels should be particularly focused on during Task 8:

- Establishing responsible roles between departments based taking into consideration each departments roles, responsibilities and funding
- Creating an annual review process that is simple yet aggressive enough to push the project towards full implementation

Approach:

8.1 Implementation Plan and Financing Strategy

This task will refine the work conducted under Task 7.3 and involves KMA working with the IBI Team to support the Team's preparation of an implementation strategy. A focus for this task will be to refine the priority matrix to develop a "sources and uses" table that (1) identifies public improvements at targeted locations by phase so they are tied to development potential so the public investment can leverage the maximum private investment; and (2) shows the cost estimates by phase prepared by the IBI Team ("uses") and the recommended funding sources used to cover those costs ("sources"). IBI and KMA's work on this portion of the implementation and financing strategy will be coordinated with City staff to provide a road map on which improvements to pursue, in what order, and how they will be funded.

Deliverable:

- Technical Memorandum Report that Provides a Phased "Sources and Uses" Summary of Projects and Financing Sources to be Used

8.2 Action Item Implementation List

To supplement the Prioritization and Phasing Plan and the Implementation Plan and Financing Strategy, the IBI Team will develop an action items list that will outlines the action items for each phase of the project to be used as a guide for implementation by the City. The action item matrix will include information related to cost estimate, potential funding sources, estimated timeframe, necessity of policy changes, and the responsible agency and division/department. The IBI Team will carefully review each action item and ensure that the appropriate governmental agency with ownership/approval

responsibility is assigned (ex. Improvements that might affect SR-76 on/off-ramp would need Caltrans review/approval).

The action item implementation matrix will serve as the “cliff notes” version of the implementation plan for the City to use for a quick reference to identify the requirements for each phase of project implementation. If there are opportunities to include the local community or other formal organizations support to move towards implementation, it will be documented in the matrix. The IBI Team will particularly focus on specific groups that have shown interest throughout the duration of the planning process and have a financial interest in the project.

Deliverable:

- Action Item Implementation Matrix

8.3 Annual Review Process

Separate from the matrix, the IBI team will document the mechanism needed for the annual review of the implementation process and prioritization plan in the form of a flow chart that can be used by the City annually to determine the progress of the project. It is envisioned that this flow chart would entail questions/responses that lead the user to the next appropriate step that should be taken based on their response to each question. Any existing reporting mechanisms used by the City can be incorporated into the flowchart process to minimize the duplication of efforts. This flowchart would be provided for each department based on the action item implementation matrix prepared under Task 8.2 allowing the individual departments to assign staff to specific action items and incorporate it into their departmental budget review process. In addition, an overarching flowchart will be provided that can be reviewed by department heads to ensure compliance and implementation by all responsible departments/divisions for the implementation of the Road Diet on Coast Highway.

Deliverable:

- Annual Review Plan for Project Implementation Flow Chart(s)

Task 9: Land Use Policy Amendment(s)

Under a separate contract, ESA will lead the development of land use policy and zoning modifications that could attract and reward developments projects. ESA will consider appropriate amendments to parking standards, Transfer Development Rights (TDR) programs, a streamlined review for priority projects/uses/opportunity sites, and/or fee reduction incentive programs. Torti Gallas will support ESA this task, being available to provide input and review proposed changes. This task assumes that changes will be limited to the zoning ordinance, and that amendments to the Local Coastal Plan will not be pursued.

Task 10 CEQA Review

All CEQA Review will be performed under separate contract with ESA. The IBI Team will provide the necessary documentation to ESA to conduct CEQA analysis including a full traffic impact study report that includes analysis for existing, existing plus cumulative, and existing plus cumulative plus project for the preferred alternative including mitigation analysis (as needed).