-----Original Message-----
From: Dana
Sent: Tuesday, September 20, 2016 8:13 PM
To: Craig Chalfant
Subject: SEASIP

I rarely write emails of this nature but I feel like I must have a say in this matter. I have enjoyed living in Long Beach my entire life and my parents have lived in Naples since the 1940's. I would like to voice my concern over the SEASIP projects.

The intersection at 2nd and PCH is already congested. I realize that a right hand turn lane was added on PCH a few years ago, and that has helped slightly, but it is still so busy that any added development will only contribute to the problem. In addition, any development will negatively impact the surrounding wetlands and wildlife. Adding several stories for housing will also give our neighborhood a different feel and look that isn't desired by the local residents here. I know that this potential development has been an ongoing issue for years with the city and developers with countless hours and money involved. It seems like we could find a solution to have the smallest impact on our environment and traffic congestion. L1-1

Thank you for your time,

-Dana Brounstein

From: Amber Chitty
Sent: Tuesday, September 20, 2016 9:33 AM
To: Craig Chalfant
Subject: DEIR/SEASP

Dear Mr. Chalfant,

I am writing to urge support for the Draft Environmental Impact Report (DEIR) on the proposed Southeast Area Specific Plan update. As a local resident and Jaycee, I was really excited to learn of the City's plans for the area.

As a young professional residing in this community, I really appreciate any forward thinking measures that take into account our growing population and offer a vision for the future. The proposed plan would create a way for developers and businesses to really transform the area.

Having the option to create a more pedestrian friendly commercial corridor along the waterfront where locals can live, eat and play really appeals to me. Young professionals like myself are always looking for new and interesting places to meet and mingle. The proposed update would really go a far way in helping to make that a reality right here in Long Beach. L2-1

The DEIR really does and excellent job of outlining any potential impacts of this project, and to me it is clear that the benefits far outweigh any concerns.

Thank you for allowing me an opportunity to comment on the proposed update and be a part of this process. Please approve the DEIR and move the proposed SEASP plan forward.

Many thanks,

Amber Chitty

Amber Chitty
CSU Fullerton
www.fullerton.edu
Rising TIDE @ the Marguerite Kiefer Education Center
www.risingtideatmkec.org
Long Beach Junior Chamber
www.facebook.com/lbjuniorchamber

LETTER L3

From: Julie Dean
Sent: Tuesday, September 20, 2016 12:22 AM
To: Craig Chalfant; Suzie Price; Suzie Price; Mayor; Council District 1; Council District 2; Council District 3; Council District 4; Council District 5; Council District 6; Council District 7; Council District 8; Council District 9; LBDS
Subject: SEASP DEIR Comments

Dear Mayor Garcia, Councilwoman Suzie Price, Long Beach City Council, Craig Chalfant and Long Beach Development Services,

I'm writing to advise you of my concerns regarding the SEASP DEIR as it stands today. The Mixed Use portion of the plan worries me quite a bit. I've detailed my concerns below. L3-1

1. The increase of density in the area based on the new allowances of the Plan would cause heavy impacts to the number of cars in the Southeast corridor, especially at PCH & 2nd, PCH & Studebaker and PCH & Channel.
2. The increase in dwelling units by up to more than 5000 and population by more than 8500 people are simply not logical choices for this already dense area and 'E' rated intersection of PCH & 2nd Street. L3-2
3. The increase in height allowance of up to 7 stories, would allow for additional people, dwelling units and commercial business that cannot be accommodated in that small and tight area without disrupting existing residents lives. The buildings should not be allowed to go any higher than already designated by SEASP (3 stories). L3-3
4. The increase in height allowance of up to 7 stories will also affect the birds of the Pacific Flyway as they travel from Alaska to the tip of South America. Many of the birds rest during their migration in Los Alamitos Bay and the Los Cerritos Wetlands, flying back and forth between the two locations. The 7 stories will be directly in their path and many of them will die. No matter how high the buildings are constructed (even if they stay at 3 stories), the best possible bird safety glass should be used. L3-4
5. The Plan allows for building to occur in close proximity to the Wetlands, up to 100 feet and with permission, up to 25 feet from the Wetland. This proximity is dangerous for the flora and fauna of the Wetlands, which is an important part of our eco-system. We MUST pay more attention to these things. L3-5
6. There should be no loss of Wetlands and no road extensions through the Wetlands. L3-6

7. I've attended several native plant training sessions and have consistently heard that native trees and plants are the only safe bet. Planting drought-resistant trees and plants that are not native to our area can result in horrible consequences of overgrowth, invasiveness and aggression and can impact native insects and animals by choking out native plants that sustain them, as well as by disease. L3-7
8. The impact to traffic will be overwhelming to all residents of: Marina Pacifica, Naples, the Peninsula, Belmont Shore, Belmont Heights and more. This poorly rated intersection cannot handle the additional traffic that the current plan is recommending. L3-8
9. Nothing should be done that will impact traffic until the Cal Trans traffic light system and the Long Beach traffic light system communicate better with one another. The existing issues that occur at PCH & 2nd already affect residents and visitors alike. Residents have paid a lot of money for their homes to live in Long Beach and deserve better treatment. We care about our property values, our living circumstances and the traffic we have to deal with on a daily basis. Existing Long Beach residents' needs should not be shunned in order to appease the commercial property owners, builders and developers. L3-9
10. The increase in traffic will also bring bad air quality and pollution for humans, the Wetlands, local birds and birds of the Pacific Flyway. L3-10
11. The "Residential Benefits" are not fully defined and will not absolutely be instigated/created, nor is there a timeline for them. If we get them, we might not see them for years and years. L3-11
12. I attended a good number of SEASP community meetings where many residents spoke up about these issues, including me. It appears as if residents' concerns were heard but not dealt with and are not reflected in the DEIR. L3-12

Sincerely, Julie Dean

Julie Dean
julz.travels@yahoo.com
714-402-9967
215 Pomona Ave
Long Beach, CA 90803

LETTER L4

From: Laura L Greco
Date: September 23, 2016 at 9:09:39 AM PDT
To: Christopher Koontz
Subject: Land Use question and comments.

Christopher,

A question that was not answered. To clarify my question, hopscotch or total wipe-out??

Will the area see a gradual change as people sell there properties to developers? or will the city be declaring blocks obsolete and tearing down/building at one time?

I must comment on your statement that "Alamitos Beach is not an area of major change". If passed this plan calls for a lot more density and destruction of character homes and four flats.
16 stories along Alamitos St.
6 stories where there are single family homes. That's 5 more stories.
6 stories where there are two story apt bldgs. That's 4 more stories.
When I think of great cities, most have kept their historic homes. More than just keeping a few areas like Bluff Hts and Cal Hts.
I am not in favor of wiping out interesting architecture for boxes with no character and no light. How marginal and boring, a vertical suburbia.

Begin forwarded message:

From: Christopher Koontz
Date: August 17, 2016 at 6:43:47 PM PDT
To: Laura L Greco
Subject: RE: Gen Land Use Plan questions for Alamitos Beach area

Laura,

Thank you for the email and interest in the General Plan update. All of the documents can be found at http://www.lbds.info/planning/advance_planning/lb_2030/default.asp and it sounds like you have reviewed at least the height map.

Alamitos Beach is not an area of major change in the plan. You are correct that the multifamily areas roughly bound by Broadway, Ocean, Cherry and Bonito is proposed at 6-stories. The height south of Ocean Boulevard continues the current restrictions which are 16 stories east of 10th place and 45 feet to the west.

The General Plan, including this proposed General Plan Land Use Element update, does not establish parking regulations. The parking regulations are found in the individual more-detailed zoning district ordinances. You are correct that PD-5 requires 2 spaces per unit plus 0.25 guest spaces per unit. Different parking requirements existing in different parts of the City, such as Downtown (PD-30) or Midtown (Midtown Specific Plan). PD-5 is not being updated at this time.

L4-1

The General Plan document and update does not establish parking regulations.

Thank you,

Christopher Koontz, AICP
Advance Planning Officer

Long Beach Development Services I Planning Bureau
T 562.570.6288 F 562.570.6068
333 West Ocean Blvd., 5th Floor I Long Beach, CA 90802 I www.lbds.info

-----Original Message-----
From: Laura L Greco
Sent: Monday, August 15, 2016 4:09 PM
To: Christopher Koontz
Subject: Gen Land Use Plan questions for Alamitos Beach area

L4-1
(cont.)

Hello Christopher,
Couldn't make it to the presentation on 8/11 but was filled in on some of the details. A few questions:

I heard that the six stories in Alamitos Beach is now going to be only 4 stories. True or False. Because on the website link it still shows in two places, 6 stories in the most parts and 16 stories along some of Ocean Blvd.

How was the 1.25 parking arrived at? An average guess or is there any backup data, study for this number?
the number 1.75 was discussed as the old parking requirement per unit. Is there a study session to discuss this more.
I live in PD-5 is that still 2.25 per unit? or was that adjusted also?
Will the area see a gradual change as people sell there properties to developers? or will the city be declaring blocks obsolete and tearing down/building at one time?

Many thanks,
Laura Greco
818-486-5991

Members of the Long Beach Planning Commission:

LETTER L5

I would like to express my utmost support for the Southeast Long Beach specific plan update and urge the certification of the Environmental Impact Report. There are many benefits that this update will bring to City, including economic development, added convenience to residents, and creating a sense of place in Southeast Long Beach.

As a local business owner, I understand how sorely this update is needed. I am a lifelong resident of Long Beach and love the location of my businesses along the water. However, more can be done to activate the waterfront.

By increasing the allowable density and heights, this plan will give property owners and developers the incentive they need to reinvest here. Updated developments along the water along with the updated design guidelines proposed in the EIR, will entice new businesses to move in and will help drive foot traffic through the corridor.

L5-1

Additionally, revitalization of our shopping centers will give business owners like me the opportunity to expand. The expansion of preexisting businesses along with new businesses will generate more sales tax for our city and give residents new local shopping options. Promoting business growth will advance the job market as well, generating a large increase in tax revenue for the city.

In addition to all of the economic benefits, the SEASP update will help enhance the overall look and feel of our neighborhood. It will help create a sense of place so that folks driving though can recognize this gateway into our city.

I am confident that this EIR will result in a more prosperous Long Beach and will improve the quality of life for residents if passed. For these reasons, I urge you to approve this plan without delay.

Thank you,

Denny Lund

Dear Mr. Chalfant,

LETTER L6

I am a Long Beach resident writing to urge your support for the proposed Southeast Area Specific Plan Update (SEASP). It is a thoughtful plan update that allows for mixed use-developments along our waterfront and the opportunity to create a more design centric and visitor friendly area – something Long Beach could really benefit from.

This update is long overdue as the current plans make little use of all the natural beauty of the area and the opportunities it offers to create some truly memorable public spaces and entertainment options.

There are also numerous economic benefits associated with the plan update as noted within the Draft Environmental Impact Report. The SEASP update will not only enhance the area and quality of life for residents like myself but it will also give members of our business community the ability to reinvest in necessary infrastructure. Hopefully this will bring in new and interesting stores, as well as provide additional revenue for Long Beach. L6-1

I'm happy to see that the team selected by the City to prepare this update worked closely with the community to revise and refine this blueprint until it is what we see before us today.

Our community and region needs this update, and I hope that you will act quickly in approving the Draft Environmental Impact Report for SEASP. Thank you for your dedication and time – it is much appreciated.

Respectfully,

Jeff Severson

City of Seal Beach

CITY OF SEAL BEACH INCORPORATED OCTOBER 27, 1915 ORANGE COUNTY CALIFORNIA

CITY HALL · 211 EIGHTH STREET
SEAL BEACH, CALIFORNIA 90740
(562) 431-2527 · www.sealbeachca.gov

LETTER L7

October 13, 2016

Christopher Koontz, AICP
Dept. of Development Services
333 W. Ocean Blvd., 5th Floor
Long Beach, CA 90802

RE: CITY OF SEAL BEACH COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT PREPARED FOR LONG BEACH SOUTH EAST AREA SPECIFIC PLAN

Mr. Koontz,

Pursuant to Public Resources Code Sections 21091 and 21092, and California Environmental Quality Act (CEQA) State Guidelines Sections 15105 and 15087, this letter is written in response to the Draft Environmental Impact Report (SEIR), State Clearinghouse No. 2015101075, for the Southeast Area Specific Plan (SEASP) prepared by the City of Long Beach.

The project location is identified as 1,481 acre area on the southeast edge of the City of Long Beach, California, within Los Angeles County and bordering Orange County. The Orange County city that borders the southeast edge of the City of Long Beach is the City of Seal Beach. As an immediately adjacent neighboring city, the impacts of a fully implemented SEASP, as proposed, would have a direct impact on the City of Seal Beach. The items identified below outline areas of concern for the City of Seal Beach that must be provided with further explanation or additional analysis to ensure that all potential impacts are fully identified and addressed. L7-1

Section 5.16 of the DEIR evaluated the potential for the implementation of the proposed Project to result in transportation and traffic impacts in the City of Long Beach and its sphere of influence. This evaluation included the analysis of 21 intersections within the vicinity of the project area; only one of which was located in the City of Seal Beach. Page 5.16-56 of this section identifies recommended mitigation for the Seal Beach intersection located at Seal Beach Boulevard and 2nd Street/Westminster Boulevard. The DEIR indicates that prior to issuance of occupancy permits an applicant/developer will be required to make a fair-share payment to the City of Seal Beach toward construction of traffic improvements. These improvements include modifying the northbound approach from have one left turn lane, two L7-2

through lanes, and one shared through-right turn lane, to having one left turn lane, three through lanes and one right turn lane. Page 5.16-60 later describes that these improvements may require encroachment upon the adjacent wetlands area, require median modification, or require removal of a bicycle lane. The City of Seal Beach has already discussed and come to an agreement with the City of Long Beach that any fair-share contribution must be required prior to issuance of building permits not building occupancy. The Final EIR must reflect this along with the agreement between the City of Long Beach and the City of Seal Beach that a separate agreement will be prepared and executed to identify appropriate improvements and fair share payments. L7-2 (cont.)

The SEASP area directly borders the City of Seal Beach and thus, has a high potential of impacting more than just the intersection studied at 2nd Street/Westminster and Seal Beach Boulevard. Pacific Coast Highway is a State Highway that runs through both the City of Long Beach and the City of Seal Beach. The DEIR identified that the intersection at Pacific Coast Highway and 2nd Street would be impacted by the proposed SEASP. The congestion caused at this intersection and along Pacific Coast Highway has a high potential of affecting traffic within the City of Seal Beach. Increased congestion at the Pacific Coast Highway and 2nd Street intersection could lead to increased congestion at the Pacific Coast Highway and Seal Beach Boulevard intersection. Similarly, the College Park Drive and 7th Street/22 FWY Westbound offramp intersection could be impacted by the proposed Project. The City of Seal Beach has already noted a pattern of vehicles that attempt to bypass Pacific Coast Highway by utilizing the Marina Bridge into the Long Beach Marina. For this reason, the intersection at Marina and 1st Street should be included in the traffic impact analysis. L7-3

The City of Seal Beach has included traffic information for these three intersections as an attachment to this letter. This information should be incorporated into the Final EIR analysis as well as in the Mitigation Monitoring and Reporting Program. Level of Service calculations must be analyzed for each intersection based on the City of Seal Beach's Traffic Impact Study Guidelines, also attached for your reference.

Section 5.16.3 of the DEIR identified that project-related trip generation would significantly impact levels of service for the existing area roadway system. This determination was made utilizing the Los Angeles County Congestion Management Plan Guidelines but did not utilize Orange County Transportation Authority standards which regulate roadways in the nearby community of Seal Beach. The City of Seal Beach has provided traffic counts at nearby intersections for inclusion of the impacted intersections within the Final EIR. The EIR analysis and evaluation of any intersections or roadways within the City of Seal Beach must reflect OCTA standards. L7-4

Section 5.16.3, pages 5.16-43 and 5.16-44, discuss that the South East Area Specific Plan includes design standards adopted by the City of Long Beach and the Long Beach Fire Department (LBFD) to preclude the construction of unsafe design features. The DEIR specifies that proposed Project roadway and circulation improvements will be required to adhere to Long Beach's Standards Engineering Plans and LBFD's design standards. The City of Long Beach maintains a Joint Mutual Assistance agreement with the Orange County Fire Authority (OCFA) which necessitates OCFA to respond to emergencies within the project area from Fire Station 44 located in the City of Seal Beach. The Final EIR should reflect this agreement and include in its analysis that OCFA design standards should also be maintained by any future development in the project area. The development review process should also involve coordination with OCFA to ensure that roadway and circulation improvements in the project area do not conflict with future potential response from OCFA. L7-5

Please note that there is a correction to the project description identified on page 5.16-33. The DEIR referred to a "28-home residential subdivision southwest of 1st Street and Pacific Coast Highway." This project has since been revised to accommodate conditions placed by the California Coastal Commission. The project is now a 30 unit residential subdivision. L7-6

This letter identified specific pages and sections to provide examples of items that must be evaluated, addressed or corrected, and it is understood that the Final EIR will reflect these comments in any area where these items are discussed. L7-7

Respectfully,

Jim Basham
Community Development Director/Interim Director of Public Works

Attachments (4): L7-8

1. Traffic Counts: College Park Drive and 7th Street/22 FWY Offramp
2. Traffic Counts: Seal Beach Boulevard and Pacific Coast Highway
3. Traffic Counts: 1st Street and Marina Drive

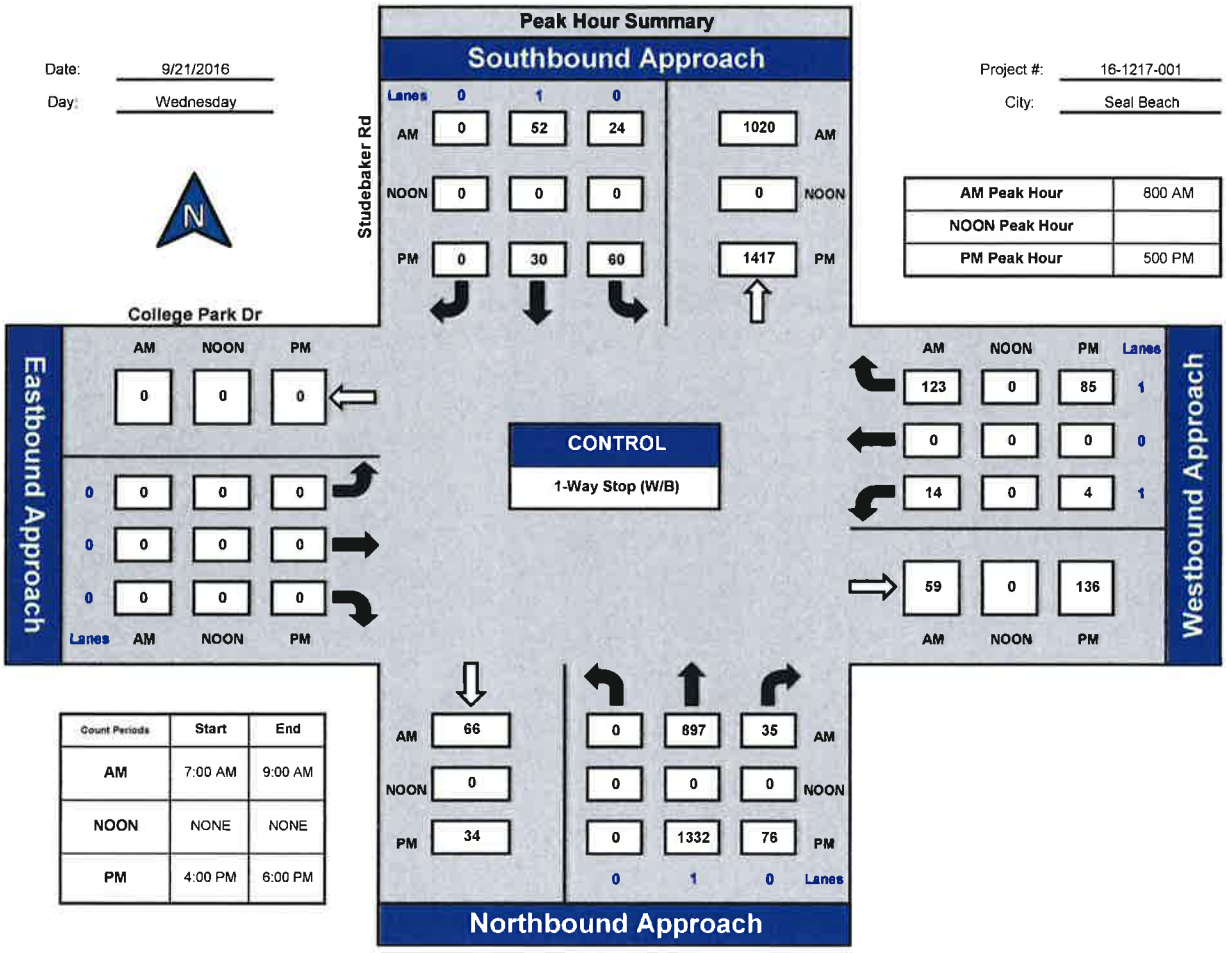
C: Jill Ingram, City Manager

ITM Peak Hour Summary

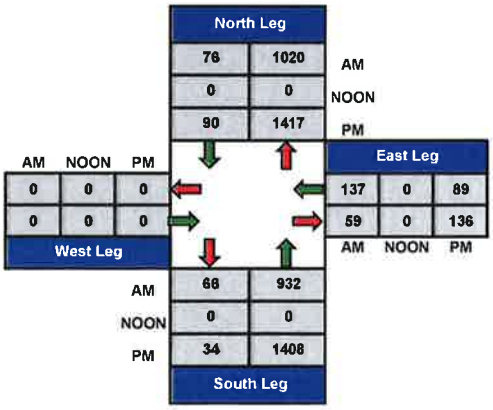
Prepared by:

National Data & Surveying Services

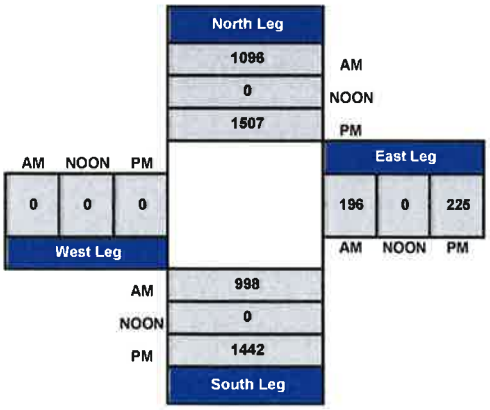
Studebaker Rd and College Park Dr , Seal Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

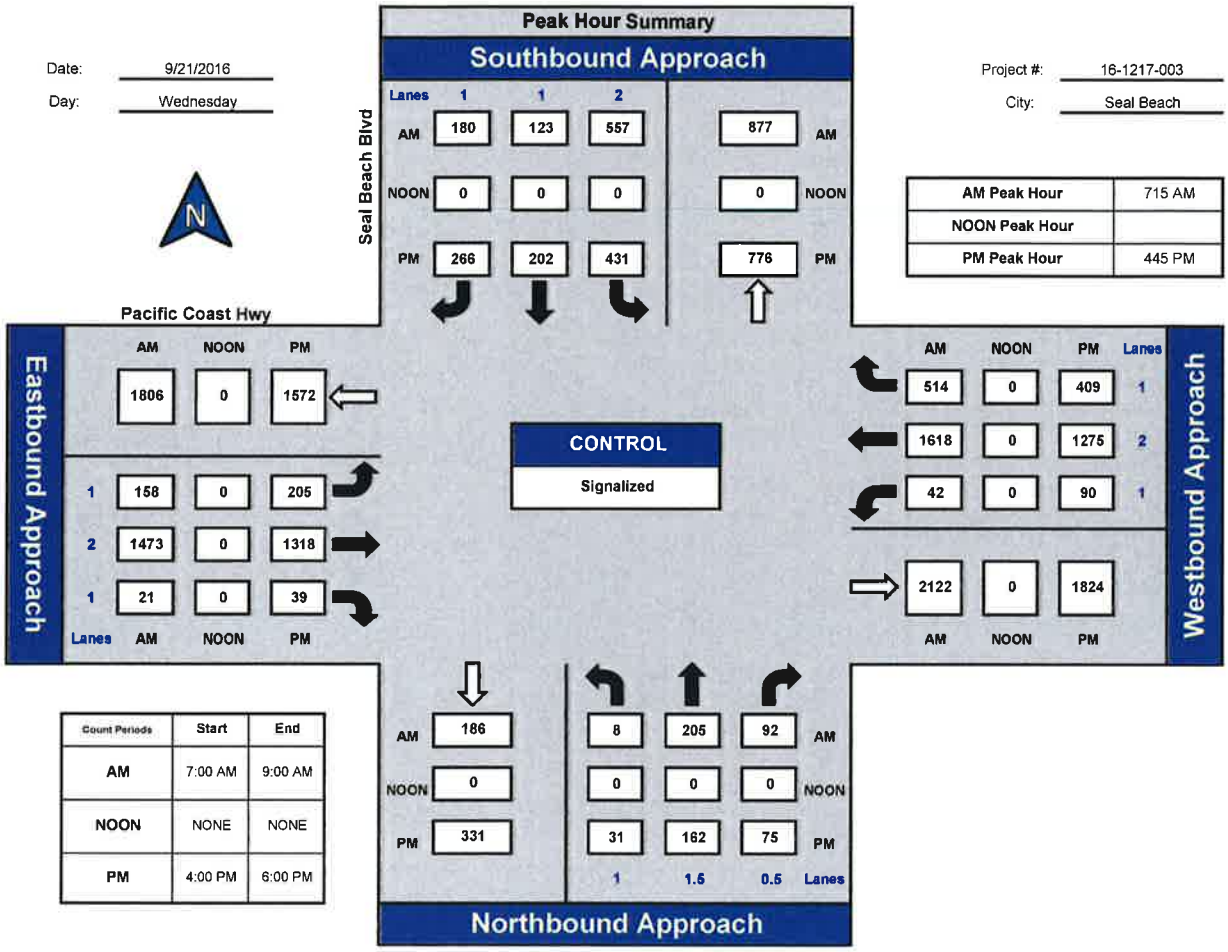
National Data & Surveying Services

Seal Beach Blvd and Pacific Coast Hwy , Seal Beach

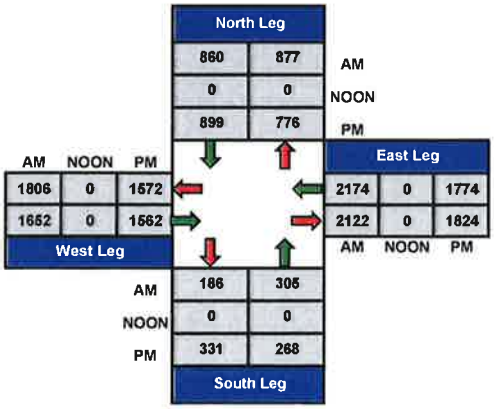
Date: 9/21/2016
Day: Wednesday

Project #: 16-1217-003
City: Seal Beach

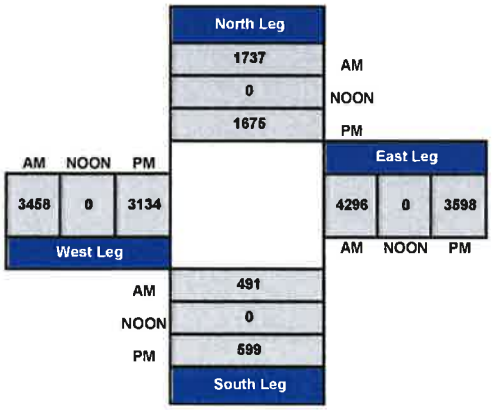
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	445 PM



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

1st St and Marina Dr , Seal Beach

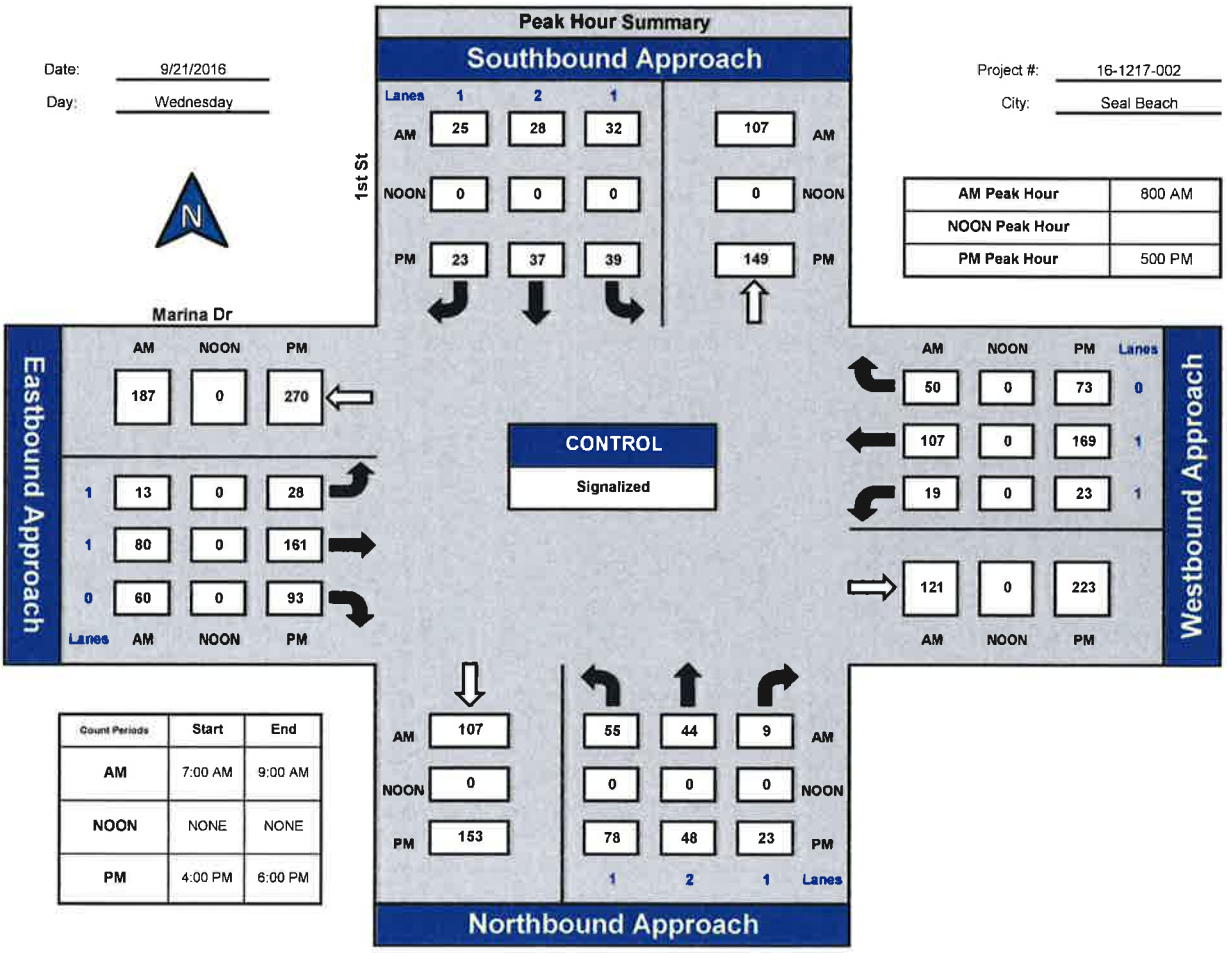
Date: 9/21/2016

Day: Wednesday

Project #: 16-1217-002

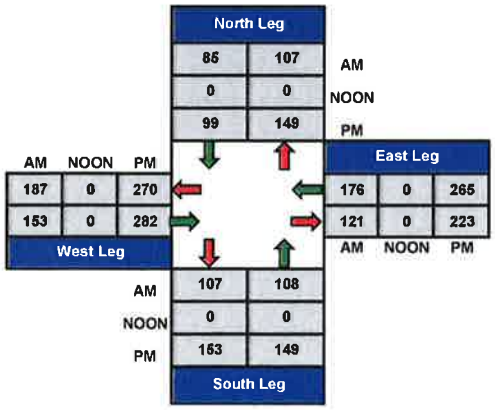
City: Seal Beach

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM



Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



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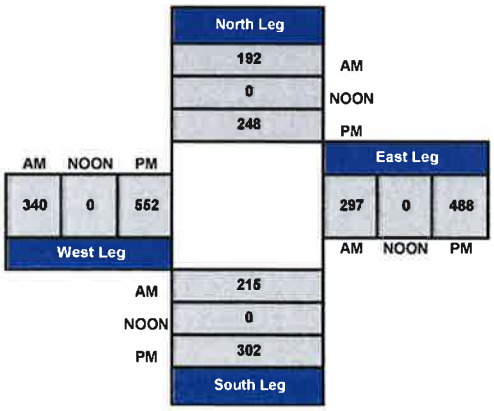

City of Seal Beach

TRAFFIC IMPACT STUDY GUIDELINES

Prepared by the City of Seal Beach
Engineering Division

Michael Ho, PE
City Engineer

March 2010

TRAFFIC IMPACT STUDY OVERVIEW

The following are minimum requirements for a Traffic Impact Study for submittal to the City of Seal Beach, California. In order to maintain consistency with the traffic reports submitted by various applicants, these requirements must be fulfilled in addition to any other special requirements, as will be discussed later in this document, before a Traffic Study Report can be reviewed and/or accepted by the City. While a considerable amount of details are presented below, the following will serve as a general overview of the City's current Traffic Study Report requirements. It should be noted that the City reserves the right to modify these guidelines as necessary.

The City Engineer or his designee, in conjunction with these guidelines, will make a determination on the need for a Traffic Impact Study. Once this need is determined, the City will formally notify the applicant. At this point, the applicant is required to have a professional traffic engineer conduct the traffic study and prepare the report.

Once a Traffic Engineer has been selected, the selected traffic engineering shall contact the City Engineer or his designee at (562) 431-2527 to define the scope and the parameters of the traffic study. Any special requirements and elements to be studied beyond the scope of the minimum requirements will be determined at this point. It is again noted that these minimum requirements must be met before the report is deemed complete.

WHEN IS A TRAFFIC IMPACT STUDY REQUIRED?

The determination of whether a Traffic Impact Study will be required is based on five basic factors. These factors are:

1) A Traffic Impact Study is required for new developments or for the expansion of existing developments which are forecast to generate a minimum of 50 vehicles per hour (total two-way) during the greater of the A.M. or P.M. peak hours. In general, this lower limit includes:

    - Single family residential developments of 20 or more dwellings.
    - Multi-family residential developments of 30 or more swellings.
    - Commercial developments of 5,000 square feet or more building area[1].
    - Office developments and industrial developments of 5,000 square feet or more.
    - All mixed use developments.

[1] All commercial developments, regardless of size, which include any type of restaurant, will require a TIS.

- All car washes of any type.
- Gas stations/convenience stores.

2) A Traffic Impact Study will also be required for all developments, regardless of size, located within 300 feet of the intersection of two arterial streets as defined in the General Plan or for any developments fronting on two different streets, regardless of classification.

3) The presence of an existing or future traffic safety problem will require a Traffic Impact Study.

4) The location of the developments in an environmentally or otherwise sensitive area, or in an area that generates controversy will require a Traffic Impact Study.

5) The presence of a near-by sub-standard intersection or street will require a Traffic Impact Study. The sub-standard condition is normally considered to be level of service "D" or worse.

Note that other developments at or below these thresholds may be required by the City Engineer or his designee to submit a letter analysis.

TYPICAL TRAFFIC IMPACT STUDY OUTLINE

Each Traffic Impact Study submitted to the City of Seal Beach shall contain each of the following elements unless the topic is entirely not applicable:

1. Executive Summary
2. Introduction
3. Area Development
4. Existing Street Systems
5. Project Description and Location
6. Traffic Generation Forecast
7. Traffic distribution and Assignment
8. Traffic Impact Study
9. On-Site Parking and Circulation
10. Truck Service Impacts
11. Construction Period Impacts
12. Mitigation Measures

Detailed descriptions of the above elements are presented below.

Executive Summary

This portion of the report should present factual and concise information relative to the major issues. Pertinent information in this regard will include a brief overview of the project, a short discussion of the projects traffic generation potential, the expected impacts of the project and a summary of measures necessary to mitigate resultant project impacts.

Introduction

A detailed description of study procedures, plus a general overview of the proposed project site and study area boundaries, existing and proposed site uses, and existing and proposed roadways and intersections within in the defined study area (defined study area to be determined by City Engineer or his designee). Exhibits required for this section includes a regional map showing the project vicinity and a site layout map.

Area Development

A specific description of existing and proposed land uses surrounding the proposed project site need to be provided. If the land uses differ from the general plan designation for a particular parcel, it needs to be indicates in this section.

Existing Street System

This section will contain a definition of Regional and Local access roadways including any CMP roadway which will serve the proposed project. This includes all major access routes to the site with descriptions of the most likely routes to be utilized.

Minimum information in this section shall include generalized geometric descriptions, i.e. the particular roadway as classified by the Seal Beach General Plan with the pavement and the right-of-way widths. A description is also required of existing traffic volumes that use the particular facility (include the source of your traffic count information).

An exhibit showing the various roadways in the study area and presenting peak hour traffic count information, as well as a table showing daily (24-hour) volumes and Master Planned roadway configurations, is required. All traffic counts used need to have been surveyed within 12 months of the traffic study completion date unless otherwise approved by the City Engineer or his designee.

Project Description and Location

This section shall expand on information presented in the introduction giving a detailed development scenario and specific project location. Exhibits in this section shall include, at a minimum, a clear illustration of the project in terms of a site plan, its density, adjacent roadways, on-site parking supply, proposed traffic circulation within the project, gross square footage, number of rooms/units, phasing and other descriptions as appropriate. Any changes in these descriptors during the permitting and construction processes will require an amendment to the study report.

Traffic Generation Forecast

The traffic generation section of the report will include trip generation estimates for the project based on standard trip generation values established by the City Engineer or his designee. Typically, these values will be derived from Trip Generation, latest Edition, published by the Institute of Transportation Engineers (ITE), but can be modified if the applicant proposes specific and permanent measures that will reduce the traffic generation potential of the project.

However, to achieve reductions in estimated generation factors, the applicant must describe, accurately and completely, the proposed measure, the estimated reduction in trip generation that will result, and the basis for the estimate. It is not sufficient to state that information is based on "past studies" without first presenting and reviewing these studies with the City Engineer or his designee prior to preparing the report. The applicant's Traffic Engineer should submit the proper documentation to prove the proposed reduction.

In all cases, the generation values must be displayed in terms of A.M., P.M. and afternoon peak hour volumes as well as daily (24-hour) volumes. Some uses may require traffic counts and studies during hours other than the peak hours, as determined by the City Engineer or his designee. Documented reductions to generated values as discussed above or for "passer-by" and transit trips must be presented in the generation forecast as well.

Traffic Distribution and Assignment

Traffic distribution shall be consistent with the distribution patterns currently being used in the City. On that basis, the prospective applicant should consult with the City Engineer or his designee for this information particularly in regard to the different distribution patterns for uses such as commercial, industrial, and residential. The City Engineer or his designee prior to starting the study must approve any deviations from this concept.

The section is to include a description of the utilization of study area roadways by site-generated traffic. An exhibit must be supplied with this section which presents projected daily link volumes between intersections, as well as morning and afternoon peak house turning movement volumes at intersections. All of this information is usually presented on two exhibits: one presenting daily link volumes between intersections and the second illustrating morning and afternoon peak hour turning movement volumes within the study area. However, with concurrence from the City, one exhibit could be acceptable depending on the size of the report.

Traffic Impact Study

The traffic study will be the key to the report. Unless directed otherwise by the City Engineer or his designee, all reports will include a study of intersection operation as well as midblock operation. The intersection analysis will be performed via the Intersection Capacity Utilization (ICU) procedure as outlined in the appendix "B" to this document. The link analysis shall follow the highway capacity manual method.

In all cases, the analysis of intersection operation must be formulated for existing conditions, and existing plus project conditions. Cumulative conditions need to be addressed and will be utilized to assess impacts relative to development of additional approved or in the process of being approved projects.

Three time frames will be addressed in the TRAFFIC IMPACT STUDY. These are:

- Existing year
- Project completion year (One for each completed phase for multi-phase project)
- General Plan target year (20 years in the future)

Additional time frames as designated by the City Engineer or his designee may be required for large multi-phased developments.

Also, a table is to be included which identifies the forecast Level of Service (LOS) for each intersection within the defined study area. This summary table shall present LOS for both the background and background plus project conditions for all scenarios.

Regardless of the location (i.e. either at or removed from the project location), specific mitigation measures must be clearly identified in the text with supporting information presented in the above table as well as on exhibits. These exhibits

will show proposed lane configurations, modified right-of-way requirements, signal modifications, and other measures as required.

If the applicant wishes to propose quantifiable improvements or changes to the circulation system, which may not appear to be strictly consistent with the Circulation Element, or special assumptions as a basis for the traffic study, he shall provide a description of such proposals in writing to the City, along with supporting data justifying their use.

Unless otherwise defined by the City Engineer or his designee, the following intersections will be analyzed:

- All signalized intersections within 1/2 mile of the project.
- All intersections on arterial streets within 1 mile of the project where project traffic represents 1% or more of the peak hour critical volumes entering the intersection.
- All project site driveways

The capacity of individual lane type to be used in the ICU calculations are as shown below.

* Left Turn Lanes	1600 vehicles per hour
* Through Lanes	1700 vehicles per hour
* Right Turn Lanes	1700 vehicles per hour
* Shared Lanes	1600 vehicles per hour

Yellow clearance/lost time should always be 0.100.

Link analysis shall be performed on all sections of arterial highways and collector streets within the project area where the daily project traffic after distribution to the street system represents 1% or more of the total directional volume. For the purposes of this report, links will be started and ended at each traffic signal and project entrance. High accident locations significantly impacted by the project are to be analyzed and mitigated. For the purpose of the high accident location, the level of significance is as defined for the links and intersections.

On-Site Parking and Circulation

This section will assess the on-site parking supply versus the parking required per City codes. If the proposed development is of mixed-use type, a table shall be included presenting each land use, its size and the code parking requirement.

This table should clearly indicate how the code parking was calculated and include the proposed on-site parking supply together with the resultant surplus or deficit from code requirements.

Should the on-site parking supply be less than required by the City code, a detailed explanation justifying a reduction to the code requirement must be included. Note that this does not eliminate the need for any zoning code variance.

A discussion of on/off-site circulation shall be included in this section complete with descriptions of the proposed access points, turn prohibitions, number of lanes proposed, proposed bus stop locations, deceleration or acceleration lanes provided, turn pocket requirements, vehicle storage length requirements, and any other applicable circulation issues.

Truck Service Impacts

A discussion of on/off-site delivery truck circulation shall be included in this section complete with descriptions of the proposed access points, turn prohibitions, number of lanes proposed, deceleration or acceleration lanes provided, turn pocket requirements, vehicle storage length, most probably routes to the site requirements, and any other applicable circulation issues.

This section will also address the on-site delivery docks versus the requirement based on City code. This discussion should clearly indicate how the code requirement was calculated.

Should the number of docks be less than required by the City code, a detailed explanation justifying a reduction to the code requirement must be included. Note that this does not eliminate the need for any zoning code variance.

Construction Period Impacts

This section shall include a discussion of any unusual circumstances anticipated during construction. Proposed roadway lane closures, construction signage, safety features, and detours shall be included. Note that the City of Seal Beach, in general, requires that all lanes on arterial roads shall be open to traffic during the periods from 6 to 9 AM and from 4 to 7 PM.

At no time will any street capacity be reduced or closed without written permission of the City Engineer or his designee.

Mitigation Measures

All measures required to mitigate intersection or roadway links with a significant impact on the Level-of-Service or high accident rate must be presented in this section. A table presenting resultant Level-of-Service for existing plus project conditions with and without mitigation shall be included. Appropriate text along with the sketches must be provided detailing each mitigation measure assumed in the study and method(s) of implementing those measures described. Unless otherwise prescribed by the City Engineer or his designee, the following increases in Intersection Capacity Utilization (ICU) shall be deemed as "significant" and require mitigation:

Existing ICU	Project Related Increase in ICU
0.00 – 0.69	0.06
0.70 – 0.79	0.04
0.80 – 0.89	0.02
0.90+	0.01

After analysis of the links using the HCM methods, unless otherwise prescribed by the City Engineer or his designee, the following decreases in the speed of vehicular traffic on the impacted links shall be deemed as "significant" and require mitigation:

Existing Links LOS	Project Impact Percent Decrease in Existing Roadway Link Speed
A	3.5%
B	3.0%
C	2.5%
D	2.0%
E	1.5%
F	1.0%

Unless otherwise prescribed by the City Engineer or his designee, intersections or roadway links having five or more reported accidents within the most recent 12 month period within significant influence of the project shall be analyzed and will require mitigation. The level of significance is as listed above. This figure of five accidents is a generalized figure used by the City as an indication of potential problems. The requirement for mitigation will depend on the location, i.e. intersection or midblock, and configuration, i.e. roadway width, number of lanes, sight distance, signalization, and the like.

Sketches illustrating proposed mitigation must be included, either in this section, the appendix, or accompanying the report. These sketches shall include, as a minimum, the existing intersection geometrics, striping, right-of-way and building locations (as applicable) and the proposed modifications.

Recommended signal phasing shall be provided for suggested mitigation measures, which will affect existing traffic signals as well as new traffic signal locations.

It should be noted that traffic improvements necessary as a result of project-related impacts could become conditions of approval for the subject development. Improvement of the roadways adjacent to the project, to at least half-width configuration, could also be a condition of approval. Additional off-site traffic related improvements may be required as determined by the City Engineer or his designee on a project by project basis.

APPENDICES

Detailed appendix material is to be supplied as part of the report. If the main report is too large to include an appendix, such material shall be provided under a separate and identifiable cover. Typical material in this regard includes traffic counts, ICU calculation work sheets, HCM Link Analysis worksheets, fully completed signal warrants, accident diagrams at high accident locations, sketches of proposed mitigation measures, and other information necessary for the City's review of the report.

APPENDIX A

LEVEL OF SERVICE DEFINITIONS

For intersections, Level of Service is described in terms of Intersection Capacity Utilization (ICU). This ICU calculation, shown in Appendix B, quantifies the delay experienced by drivers at the intersection.

Table 1 – Intersection Level of Service Definitions

LEVEL OF SERVICE	OPERATING CONDITION	ICU VALUE
A	Free flowing, virtually no delay. Minimal traffic	<0.60
B	Free low and choice of lanes. Delays are minimal. All cars clear intersection easily.	0.60-0.69
C	State flow. Queue at signal starting to get relatively long. Delays starting to become a factor but still within "acceptable" limits.	0.70-0.79
D	Approaching unstable flow. Queues at intersection are quite long but most cars clear intersection on their green signal. Occasionally, several vehicles must wait for a second green signal. Congestion is moderate	0.80-0.89
E	Severe congestion and delay. Most of the available capacity is used. Many cars must wait through a complete signal cycle to clear the intersection.	0.90-0.99
F	Excessive delay and congestion. Most cars must wait through more than one on one signal cycle. Queues are very long and drivers are obviously irritated.	>1.00

For areas of roadways situated between intersections, LOS is described via a "mid-block roadway link" analysis. Highway capacity manual-Chapter 15 is used to find the Level-of-Service provided under section "Mitigation Measures' and duplicated here for quick reference. The impact of the project is measured in terms of the projected reduction in speed of traffic on the segment being analyzed.

Existing Link LOS	Project Impact Percent Decrease in Existing Roadway Link Speed
A	3.5%
B	3.0%
C	2.5%
D	2.0%
E	1.5%
F	1.0%

APPENDIX B
SAMPLE ICU CALCULATIONS

INTERSECTION CAPACITY UTILIZATION WORKSHEET

PROJECT:[A] Any Project

N-S STREET[B] Any Street E-W STREET[C] Any Avenue

TIME[D] ☐AM PEAK HOUR ☐PM PEAK HOUR ☐_____ ANALYST[E] Semore Green

DATE[F] February 28, 2003

TRAFFIC:[G] ☐BACKGROUND ☐PROJECT ☐_____ TIME FRAME:[H] ☐CURRENT ☐BUILDOUT ☐YEAR_____

APPROACH DIRECTION	MOVEMENT	VOLUME[I] (VPH)	LANES[J]	CAPACITY[K]	V/C RATIO[L]	CRITICAL VALUE[M]	
NB	LEFT	242	2	3200	0.076	***	N
	THRU	830	2	3400	0.258		
	RIGHT	47	0				
SB	LEFT	138	2	3200	0.043		
	THRU	871	2	3400	0.345	***	
	RIGHT	302	0				
EB	LEFT	280	1	1600	0.175	***	O
	THRU	286	2	3400	0.084		
	RIGHT	237	1	1700	0.139		
WB	LEFT	149	1	1600	0.093		
	THRU	548	2	3300	0.232	***	
	RIGHT	217	0				
SUM OF CRITICAL MOVEMENTS[P]						0.827	
YELLOW CLEARANCE[Q]						0.1	
ICU VALUE[R]						0.927	
LEVEL OF SERVICE						E	

A Enter the name of the development being studied at the location.

B Enter the name of the North-South street of the intersection being analyzed.

C Enter the name of the east-west street of the intersection being analyzed.

D Enter an "X" to indicate the time being analyzed. If the time is other than the AM or PM peak period, enter the time period being analyzed.

E Enter the name of the person doing the analysis at this intersection.

F Enter the date on which the traffic count was taken. Note that this is not the date that the analysis was performed.

G Enter an "X" to indicate the type of traffic being used in the study. If the traffic type is not listed, indicate the type.

H Enter an "X" to indicate the time frame of the traffic listed. If the time is for some year other than the current year or build out year, indicate the year.

I Use this column to enter the traffic volume for each turning movement on each approach for the time period being analyzed.

J Enter the number of lanes for each movement on each approach. Do not use "1/2" lanes to indicate shared lanes. For example, the westbound approach in the example CU worksheet has three lanes. The left lane is an exclusive left-turn lane, the center lane is a through movement only lane, and the curb lane is a shared through/right turn lane. This column indicates 1 for the left turn lane, 2 as the number of through lanes and no right turn lanes. Traffic volumes for the right turns would be added to the through movement in the calculations.

K Enter the capacity for each movement as the sum of the lane capacity for that type of movement times the number of lanes. Use the following capacities:

Left turn lanes – 1600 vehicles per lane per hour
Through lanes – 1700 vehicles per lane per hour
Right turn lanes – 1700 vehicles per lane per hour
Shared lanes – 1600 vehicles per lane per hour

Referring to the westbound approach in the example, you will note that the capacity for the through movement is 3300 vehicles per hour, reflecting 1700 for the exclusive thorough lane, and 1600 for the shared through/right turn lane.

L Enter the Volume to Capacity ratio (V/C) for each movement in this column. In the sample problem, the V/C ratio of the northbound through movement is (830+47) divided by 3400, or 0.258. The V/C ratio of the westbound through movement is (548 + 217) divided by 3400, or 0.225.

M Indicate if the V/C ratio is the critical V/C ratio for this approach.

N The critical V/C ratios for the north-south street are determined by comparing the sum of the northbound left turn V/C ratio plus the larger of the southbound through movement V/C ratio or the south bound right turn V/C ratio to the sum of the south bound left turn V/C ratio plus the larger of the northbound through movement V/C ratio or the northbound right turn V/C ratio and determining the greater. In this case, 0.076 + 0.345 = 0.424 which is greater than 0.043 + 0.258 = 0.301, meaning that the former V/C ratios are the critical movements. Note that since the through movements and the right turn movements can be made at the same time, only the larger of these two is critical.

O The critical V/C ratios for the east-west street are determined by comparing the sum of the eastbound left turn V/C ratio plus the larger of the westbound through movement V.C ratio or the westbound right turn V/C ratio to the sum of the westbound left turn V/C ratio plus the larger of the eastbound through movement V/C ratio or the eastbound right turn V/C ratio and determining the greater. In this case, 0.232 + 0.175 = 0.408 which is greater than 0.093 + 0.139 = 0.232, meaning that the former V/C ratios are the critical movements. Note that since the through movements and the right turn movement can be made a the same time, only the larger of these two is critical.

P Sum the critical movement values determined above. In the sample, this would be 0.076+0.345+0.175+0.232=0.828.

Q Add in the time allowance for lost time/yellow clearance. This will always be 0.100.

R Sum the critical movement values and the yellow clearance and indicate the level of service. In the sample, 0.828 + 0.100 = 0.928. This would be a level of service "E".

INTERSECTION	CY W/OUT PROJECT				CY WITH PROJECT				CHANGE IN ICU		CY+ PROJECT+ACCUMALATIVE PROJECTS				CHANGE IN ICU		SIGNIFICANT IMAPCT?
	AM PEAK		PM PEAK		AM PEAK		PM PEAK				AM PEAK		PM PEAK				
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	ICU	LOS	ICU	LOS	AM	PM	
ALTNTIC AT																	
HELLMAN																	
W/OUT IMPRMT																	
WITH IMPRMT																	
GARVEY																	
W/OUT IMPRMT																	
WITH IMPRMT																	

INTERSECTION	PCY W/OUT PROJECT				PCY WITH PROJECT				CHANGE IN ICU		PCY+ PROJECT+ACCUMALATIVE PROJECTS				CHANGE IN ICU		SIGNIFICANT IMAPCT?
	AM PEAK		PM PEAK		AM PEAK		PM PEAK				AM PEAK		PM PEAK				
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	ICU	LOS	ICU	LOS	AM	PM	
ALTNTIC AT																	
HELLMAN																	
W/OUT IMPRMT																	
WITH IMPRMT																	
GARVEY																	
W/OUT IMPRMT																	
WITH IMPRMT																	

INTERSECTION	GPTY W/OUT PROJECT				GPTY WITH PROJECT				CHANGE IN ICU		GPTY+ PROJECT+ACCUMALATIVE PROJECTS				CHANGE IN ICU		SIGNIFICANT IMAPCT?
	AM PEAK		PM PEAK		AM PEAK		PM PEAK				AM PEAK		PM PEAK				
	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM	ICU	LOS	ICU	LOS	AM	PM	
ALTNTIC AT																	
HELLMAN																	
W/OUT IMPRMT																	
WITH IMPRMT																	
GARVEY																	
W/OUT IMPRMT																	
WITH IMPRMT																	

CY CURRENT YEAR
PCY PROJECT COMLETION YEAR
GPTY GENERAL PLAN TARGET YEAR