## TA

## **CORRESPONDENCE**

July 11, 2019

(as of 6/26/2019)

 From:
 Snoitulos LLC

 To:
 Board (@smcta.com)

 Cc:
 Snoitulos LLC

**Subject:** \*\*\* New Traffic Management System - SMCTA

**Date:** Monday, June 17, 2019 3:17:19 PM

Attachments: BML Intro.docx

BML Benefits.docx
BML Classic.docx
BML Phases.docx
BML Savings.docx

Dear San Mateo County Tranportation Authority Board of Directors,

Attached are documents which introduces and describes a new traffic management system called the Bypass Merge Lanes to reduce traffic congestion on highways.

Please review following documents:

- 1) BML\_Intro
- 2) BML\_Benefits
- 3) BML\_Classic
- 4) BML\_Phases
- 5) BML\_Savings
- 6) BML\_Signage
- 7) BMLP1

Does the San Mateo County Transportation Authority have interest in using the Bypass Merge Lanes to reduce traffic congestion?

Sincerely, Robert Brasher Snoitulos, LLC

#### BYPASS MERGE LANES INTRODUCTION

Traffic congestion is a problem in many areas on highways. Traffic congestion increases other problems such as, travel time, pollution, fuel consumption and danger.

Therefore, a system was created to inexpensively address these problems. It is called the Bypass Merge Lanes (BML). The BML is a highway traffic management system which is specifically designed to reduce traffic congestion in worst congested traffic areas.

Usually, congestion is created when traffic on a roadway meets traffic entering the roadway which exceeds the allowable capacity for the conditions. The effect starts where one entrance lane meets a lane on the roadway which is unable allow traffic into the lane without maintain speed causing the lane to slow. When one lane on a highway becomes slow, a ripple effect occurs, in that, the adjacent lanes reduce speed until all lanes are slow.

The BML operates by separating the cause of the traffic congestion away from free flowing traffic. It does not attempt to avoid congestion. It simply cuts through the problem areas. The system reduces traffic congestion, travel time, pollution, fuel consumption, and danger by increasing the efficiency of a highway. In most cases, traffic congestion and travel time will be reduced approximately 20%.

The BML can be implemented inexpensively. In that, in most cases, lane striping and signs are the only items necessary. A component of the BML is a Separator. A Separator can be anything used to divide any two lanes on a roadway. The BML is most useful in the root cause of a congestion area. Some examples of a Separator are painted lane striping or vertical barrier. In most cases, a Separator will be two parallel solid white lines with a capital letter "B" in between the lines to signify a BML Separator. Separators are usually placed in strategic areas where traffic congestion occurs.

Separators can be placed anywhere between two lanes on a roadway. The placement and the length of the Separators will be determined by the design to manage traffic. In most cases, the Separators are less than two miles and placed two lanes from the outside edge of a roadway to accommodate traffic entering or exiting.

The BML has the ability to reduce traffic congestion and travel time approximately 40% in an area. In addition, the BML has the ability to compliment other systems, such as SMART Corridors HOV/HOT Lanes or Express Lanes, where traffic congestion and travel time can be reduced an additional 20%.

In some cases, where lanes are added to the roadway in order to increase traffic flow, other problems may occur elsewhere in the roadway system, which create undesirable effects. The BML increases traffic flow and has minimal adverse effects elsewhere in the roadway system.

For additional benefits, refer to Bypass Merge Lanes Benefits.

## **BYPASS MERGE LANES BENEFITS**

#### **Current and Future:**

Improves highway system performance by increasing highway efficiency for the current and future traffic needs as well as enhancing other concepts such as Metering Lights, Express Lanes, SMART Corridor, etc...

#### **Reduces Traffic Congestion:**

Reduces traffic congestion by reducing merging traffic and creating through lanes by using a separator in problematic areas.

#### **Reduces Travel Time:**

Reduces travel time by reducing the delay time in the problematic areas.

#### **Safety Improvement:**

Increases safety by reducing lane interactions caused by merging and weaving traffic. Also, reduces the distance necessary to exit a roadway.

#### **Pollution Reduction:**

Reduces pollution by reducing idling and acceleration in traffic congestion.

#### **Fuel Consumption Reduction:**

Reduces fuel consumption by reducing idling and acceleration as well as less time traveling.

#### **Minimal Education:**

Minimal education is necessary, since drivers are used to following lane markings on the road and looking at signage for direction.

#### **Ease of Adjustments:**

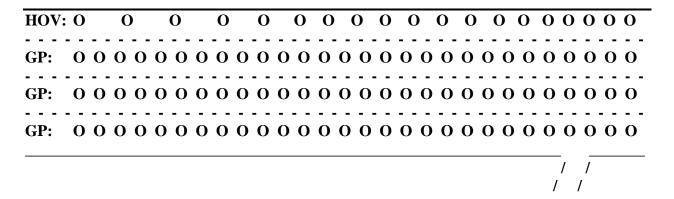
Adjustments could be as simple as restriping the roadway and changing some signage overnight.

#### **Construction Cost Reduction:**

Reduces construction cost more than other costly alternatives, which in most cases, uses only Lane Striping and Signage.

## **BYPASS MERGE LANES CLASSIC**

#### **CURRENT**



Currently, when vehicles (**O**) enter a roadway with a high volume of traffic, all traffic lanes General Purpose (**GP**), High Occupancy (**HOV**) and such become impeded creating congestion.

To reduce the congestion, a separtator is strategically placed to reduce the number of impeded lanes.

#### **PROPOSED**

HOV	: C	0	0	O	0	0	0	O	0	O	O	(	О		0		O		0		O		O		0	
GP:	C	0	0	o	o	o	o	o											_		0	•	0	- -	0	
GP:	C	0	0	o	o	o	o	o				=														<u>BBBBB</u>
GP:	C	0	0	0	o	0	o	o	o	o	o	0	 М:	o	o	0	0	0	0 0	o	0	o	0	o	0 (	)
																							/ / <u>I</u>	<u>E</u> /	/	

The Bypass Lane (**BP**) is a General Purpose Lane (**GP**) that is on the opposite side of a Separator (**BBB...**) in an area of lanes, (**M**) Merge Lanes, that impede traffic where entering vehicles (**E**) create traffic congestion on a roadway.

A Separator could be a solid line striping, an upright barrier, or any other divider.

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## **BYPASS MERGE LANES PHASES**

PHASE1	PHASE 2	PHASE 3
HOV: O O O O	HOV: 0 0 0 0 0 0 0 0	HOV: O O O O O
GP: O O O O	GP: 000000000	BP: O O O O O O
GP: O O O	GP: 000000000	M: 0000000000
GP: O O O	GP: OOOOOOOO	M: 0000000000
		/ <u>E</u> / / <u>E</u> /

Currently, when vehicles (**O**) enter a roadway with a high volume of traffic, all traffic lanes General Purpose (**GP**), High Occupancy (**HOV**) and such become impeded creating congestion.

To reduce the congestion, a separtator is strategically placed to reduce the number of impeded lanes.

The Bypass Lane (**BP**) is a General Purpose Lane (**GP**) that is on the opposite side of a Separator (**BBB...**) in an area of lanes, (**M**) Merge Lanes, that impede traffic where entering vehicles (**E**) create traffic congestion on a roadway.

A Separator could be a solid line striping, an upright barrier, or any other divider.

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## **BYPASS MERGE LANES SAVINGS**

MPH	Mi	nutes/Mile	
60		1	
30		2	
20		3	Note: Exponential increase in delay time as speed decreases.
15		4	
12		5	
10		6	

#### **EXAMPLE:**

PROPOSED

Lane	Type	MPH	Minu	ıtes/Mile	Lane	Type	MPH	Minu	tes/Mile
1	HOV	60		1	1	HOV	60		1
2	All	15		4	2	BP	60	1	1
3	All	15		4	<<<<	<< <sep< td=""><td>arator&gt;</td><td>&gt;&gt;&gt;&gt;&gt;</td><td>&gt;&gt;&gt;&gt;</td></sep<>	arator>	>>>>>	>>>>
4	All	15		4	3	All	15	1	4
					4	All	15	1	4
		Total:		13					
							Total:		10

#### **REDUCTION:**

13 Minutes - 10 Minutes = 3 Minutes/Mile Saved

3 Minutes / 13 Minutes = 23% Overall Time Savings

#### **ADDITIONAL BENEFITS:**

Decreases Construction Cost.

Increases Safety.

Reduces Pollution.

Reduces fuel consumption.

Minimal education is needed.

Minimal adverse effect on the roadway downstream.

Ease of adjustments.

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A STREET 34

B STREET 1½

1½

1½

ASTREET 3/4
BSTREET 11/2

ASTREET 3/4
BSTREET 3/4
BYPASS 1/2

BRASHER HTS RESERVED



## US 20170362787A1

## 19) United States

# 12) Patent Application Publication (10) Pub. No.: US 2017/0362787 A1

Brasher

(43) Pub. Date:

Dec. 21, 2017

#### **BYPASS MERGE LANES** (54)

Applicant: Robert C. Brasher, Fremont, CA (US)

Inventor: Robert C. Brasher, Fremont, CA (US)

Appl. No.: 15/428,588

Filed: Feb. 9, 2017

## Related U.S. Application Data

Provisional application No. 62/352,987, filed on Jun. 21, 2016.

## **Publication Classification**

Int. Cl.

E01F 13/04 (2006.01)

E01F 9/608 (2006.01)

E01F 9/588 (2006.01)

(2006.01)G09F 7/00 (2006.01)E01F 15/00

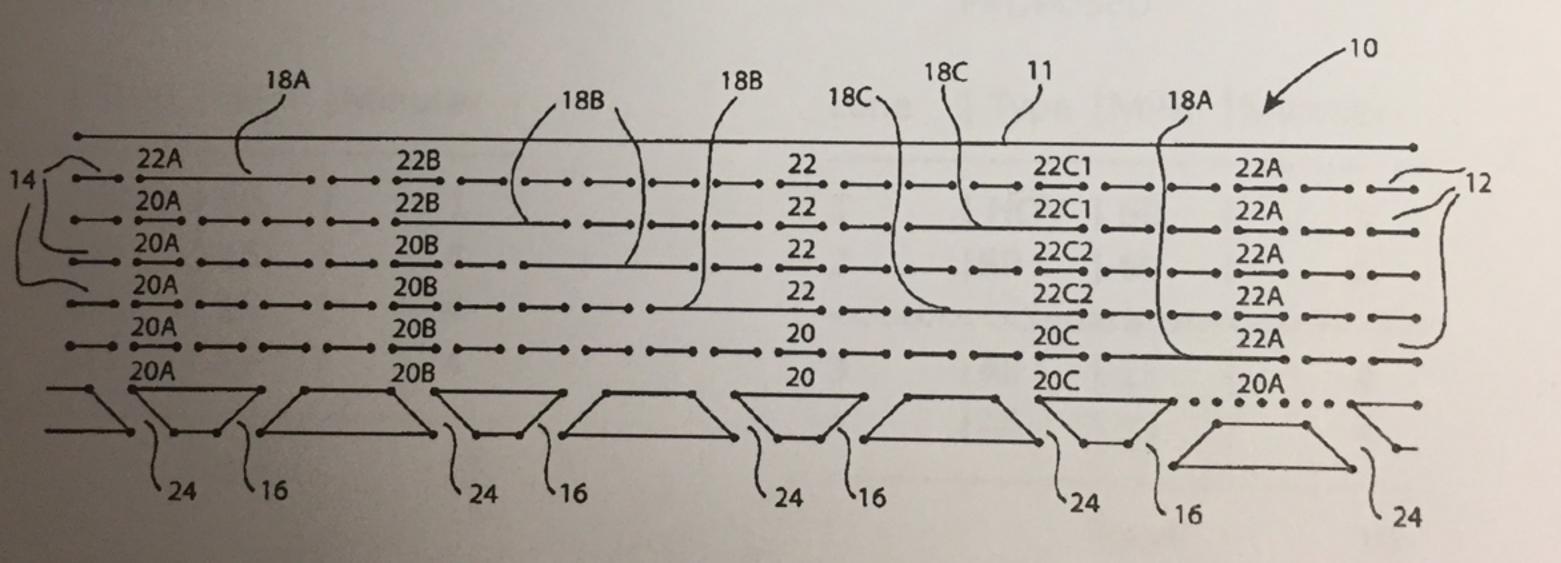
U.S. Cl. (52)

CPC ..... E01F 13/046 (2013.01); G09F 7/00 (2013.01); E01F 15/006 (2013.01); E01F 9/588 (2016.02); E01F 9/608 (2016.02); E01F

*13/04* (2013.01)

#### **ABSTRACT** (57)

A system to improve the management of through traffic and vehicles entering and exiting a multilane roadway. The lanes are separated by at least one lane separator which should not be crossed by traffic along a designated portion of the roadway, such as within a predetermined distance from a roadway entrance or exit. The at least one lane separator may be any lane marking, barrier, or the like. The at least one lane separator can be any length and located anywhere with respect to the lanes.



From: Shawn Mooney

To: Sandy Wong; Groom, Carole [cgroom@smcgov.org] Cc: Board (@smcta.com); Jeff Moneda FC Manager; Drew Corbett

Subject: Hi Sandy Wong "Notice of Exemption" City of Foster City project name "Temporary Extention of Traffic Relief

Pilot Program"

Monday, June 10, 2019 2:01:41 PM Date:

#1) Foster City Erronious CEQA Exemption TRPP via deception.pdf Attachments:

#2) FC May 20 2019 staff report traffic relief pilot program.pdf

Hi Sandy Wong, please incorporate my attached complaint at the next public meeting of the County Transit board.

Please consider agenizing the underlying issue.

Is it appropriate for Foster City to seek a CEQA exemption when known adverse impacts have not been mitigated?

Was Foster City required to give notice of the TRPP to Mariners Island neighborhood? Is Foster City required to mitigate traffic impact the City causes to a neighboring, abutting neighborhood?

Said different, Can one jurisdiction create an adverse traffic impact to an abutting community that is outside the causing jurisdiction without mitigation?

Can a Foster City, silent's Mariners Island community by seeking exemption status the CEQA, thereby the City of Foster City does not need to address and mitigate adverse impacts?

Sandy Wong, could you please help? Foster City and Mariners Island are intertwined from a land use, traffic circulation and safety perspective and Foster City is effectively undermining Mariners Island voice to protest adverse conditions imposed upon Mariners Island without any notices to Mariners Island neighbors.

Shawn Mooney 6-10-2019 Mariners Island Resident

From: Shawn Mooney

Sent: Monday, June 10, 2019 11:59 AM To: 'suzanne.hague@opr.ca.gov'

Cc: Norm Dorais; Jeff Moneda FC Manager; FC Clerk Priscilla Tam; Drew Corbett; FC Planning Commission

(Planning@fostercity.org); council@fostercity.org; LAFC Poyatos (mpoyatos@smcgov.org) **Subject:** Suzanne Hague Deputy Director: Planning and Community Development "Notice of Exemption" City of Foster City project name "Temporary Extention of Traffic Relief Pilot Program"

Deputy Director Suzanne Haque, Planning and Community Development State of California.

Please deny the City of Foster City, CEQA Exemption status application to Traffic Relief Pilot Program (TRPP).

Attached is my formal complaint to Foster City TRPP. Foster City has not provided adequate public notice to the abutting community of Mariners Island in San Mateo. Foster City TRPP is causing significant adverse traffic condition to the neighboring community of Mariners Island, without any mitigation effort.

Foster City application for permanent CEQA Exception status seeks to silent's and avoid mitigation by eliminating CEQA requirements thereby avoiding to respond and address identified adverse traffic complaints caused by the TRPP.

Attachment #1 is my Protest/Complaint to the TRPP, Foster City has not responded, and has not mitigated the traffic impact that the TRPP has created on the neighboring community.

The two communities Foster City and Mariners Island are located on an Island whereby bridges are the only way to access both communities.

The two communities are uniquely intertwined from a traffic circulation, land use and safety perspectives.

Foster City seeks to eliminate CEQA requirements to not address protest and complaints involving the TRPP.

Attachment #2 is Foster City staff report on the TRPP and at the very end of the document is Foster City application for permanent CEQA exemption status via sections 15301, 15306,15305, and 15262. As stated within attachment #1 these code section are intentionally deceptive in meeting the requirements for exemption status.

Deputy Director Suzanne Hague, please deny this application for permanent exemption status for the reasons stated in the complaint/protest. Please require the City of Foster City to give proper notice to Mariners Island in San Mateo.

Please require Foster City to mitigate the identified adverse traffic impacts. Please require Foster City to do a comprehensive EIR that includes Mariners Island in San Mateo, as Foster City is intimately intertwined with from a land use, traffic circulation and public safety perspectives.

Deputy Director Suzanne Hague, can you please provide any examples or case law on how intertwined jurisdictions typically resolves "city border lines squalls" involving mutual jurisdiction capital improvement benefits projects for traffic Improvement mitigation and uses of traffic impact fees collected by both jurisdictions to Mitigate traffic impacts created by massive resend redevelopment project(s) in the immediate area of Foster City TRPP. As previously stated, both community are on a "island" in the San Francisco Bay, whereby that communities can only access their community by crossing "BRIDGES". Foster City TRAPP, adversely impacts a critical bridge crossing to both communities.

The critical bridge is located on Fashion Island Blvd. and provides only one lane traffic crossing the bridge, that causes a massive bottleneck traffic congestions, that has a tricking effect into other interactions nearby. This critical bridge is a critical access point to highway 101 in both directions.

Deputy Director Suzanne Hague, Foster City's TRPP adversely impacts San Mateo's General Plan and more specifically Mariners Island Specific Plan, without any mitigation or any public notice to Mariners Island Neighborhood. Ms. Hague, please take notice that the "Island" is composed of 80% Foster City jurisdiction and 20% San Mateo jurisdiction.

Please deny Foster City's CEQA Exemption application, and please provide information on how these types of land sprawls are typically resolved.

Lastly, our local LAFC declines jurisdiction on this matter, do you agree?

Sincerely, Shawn Mooney Mariners Island San Mateo

### "Notice of Exemption",

City staff has determined that the TRPP, and the proposed temporary three-month extension of the TRPP, is statutorily and categorically exempt from CEQA pursuant to

#### the following

CEQA Guidelines Sections: § 15262 (Feasibility and Planning Studies); § 15301 (Existing Facilities); § 15306 (Information Collection); § 15305 (Minor Alterations in Land Use Limitations). Prior to considering any permanent implementation of the program, additional data collection and analysis will be conducted to confirm whether permanent implementation of the program is exempt from CEQA (under § 15301 (Existing Facilities) and/or § 15305 (Minor Alterations in Land Use Limitations) or requires additional environmental analysis in the form of a negative declaration, mitigated negative declaration or environmental impact report".

- 1) Is Foster City willing to expend traffic mitigation impact fees towards Fashion Island Blvd to the 101 Freeway, regardless that the traffic improvements are located in the City of San Mateo?
- 2) Does Foster City take the position that the Fashion Island Blvd traffic Improvements are not in its jurisdiction therefor not responsible for traffic improvement cost sharing, regardless of mutual benefits to both FC & SM communities?





22) From: Shawn Mooney

Sent: Friday, June 7, 2019 12:38 PM

To: Jeff Moneda FC Manager; council@fostercity.org; FC Planning Commission; FC Clerk Priscilla Tam

Cc: Norm Dorais; Drew Corbett; Marlene Subhashini; SM City Clerk Patrice Olds

Subject: Jeff Moneda Protest "Notice of Exemption" - Mariners Island adverse traffic impacts caused from TRPP no mitigation protest is hereby amended protest CEQA Exemption status and Negative Impact determination

Hi Foster City Manager Jeff Moneda,

Attached is my protest to the TRPP it does not appear to be getting the urgent attention it deserves.

Also attached is FC Staff report dated May 20, 2019 that **erroneously justifies a CEQA exemption status for the TRPP permanently**.

The staff report is erroneous because the report fails to recognize traffic impact on Mariners Island and the lack of CEQA notification to Mariners Island businesses and residents, thereby seeking CEQA Exemption Status to negate Foster City's responsibility to address my complaint (Exh#1) and Foster City responsibility to mitigate my complaint.

Effectively Foster City seeks permanent Exemption status to <u>eliminate the publics voice</u> as being adversely affected by the TRPP.

Mariners Island in San Mateo is being adversely impacted by Foster City Traffic Relief Pilot Program (TRPP) as described in attached formal protest filed in April 2019 attachment #1. Foster City has not addressed these adverse impacts, <u>yet erroneously claims exemption to CEQA standards and the Mitigation Act</u>.

Jeff, please advise me what is the grievance process to complain if the complainer does not live in the City limits of Foster City.

Mariners Island neighborhood <u>abuts</u> to Foster City jurisdiction, however because both communities are <u>uniquely intertwined</u> with <u>traffic circulation and land use and safety</u> because <u>both communities originated from a manmade island</u> formally known as Brewer Island. This unique demographic landscape Brewers Island derived from an Island surrounding by water and bisected by SR 92 and the bridge landing of a San Mateo/Hayward Bay Bridge creates a highly unusual conditions that requires a <u>collaborated efforts</u> from both Foster City and San Mateo's Mariners Island to maintain <u>traffic circulation and land use and safety as the two community are uniquely intertwined</u>.

It appears Foster City has intentionally excludes Mariners Island neighborhood from any participation in the TRPP, yet Mariners Island is being significantly and adversely impacted, this is not fare or appropriate to ignore the adverse traffic impacts that have been timely identified. Once the adverse impacts were identified it is outrageous for Foster City to ignore the adverse traffic impacts identified and seek exemption status to CEQA mitigation standards.

Jeff, on April 15, 2019, I specially requested the City Manager to exercise its authority to terminate the pilot program for <u>the same safety concerns that the City recognizes on Foster City Blvd</u>.

Jeff, I have complained that Mariners Island is being adversely impacted on South Norfolk, Fashion Island Blvd, Mariners Island Blvd and the Edgewater Overpass crossing SR92.

The Foster City TRPP is diverting its Hillsdale Blvd traffic to South Norfolk, causing an increased traffic levels on an already insufficient one lane bridge crossing on Fashion Island Blvd.

I protest the continuation of the TRPP until mitigation is studied, funded and implemented.

Further, I protest the Foster City's "Notice of Exemption" status.

Mariners Island Residents and Business have not been invited to participate in the process including the opportunity to voice comments and request mitigation.

Jeff, Foster City TRPP is adversely impacting "Mariners Island Specific Plan" and thus impacting San Mateo's General Plan and traffic circulation models and land use restrictions/limitations. Jeff, as stated in my April formal complaint attachment #1, Foster City and Mariners Island both evolved for Brewer's Island, the operative word is "Island".

Said different, Brewer Island is an "Island" which is surrounded 100% by water by the SF Bay and the Marina Lagoon; therefore Foster City and Mariners Island can only be access by crossing bridges.

That said, Mariners Island Neighborhood and Foster City have mutual benefit interest in Fashion Island Blvd that is a significant traffic thoroughfare road to and from 101 Freeway for both Foster City and Mariners Island, yet the Mariners Island Bridge only provide one lane traffic to the 101 freeway. Foster City TRPP adversely impacts this one lane bridge crossing at Fashion Island Blvd.

Jeff, given these <u>unusual circumstances</u> whereby both communities are derived from one Island (Frank Brewer's dairy farm island) therefore, both community are related and over-lap, especially involving traffic circulation, land use density and safety.

Foster City's TRPP adversely impact Mariners Island neighborhood, yet Foster City seeks "Exemption" without any mitigation or property notice to Mariners Island.

Jeff, I protest that Foster City seeking <u>exemption from CEQA standards</u> when identified adverse impacts on Mariners Island have been identified and are now known, yet Foster City claims only "minor alteration" in land use limitations, when in fact the TRPP creates a <u>major</u> alteration to land use limitations to Mariners Island.

Foster City's **narrow interpretation** of CEQA exemption standards is erroneous when adverse traffic impacts have been identified is outrageous in the immediate area.

Foster City cannot ignore identified adverse impacts and erroneously seek exemption status or a negative declaration of impact, when impacts have been timely identified.

Foster City is negligent in claiming "minor" alteration to land use restrictions by excluding Mariners Island neighborhood from being part of approval process.

Foster City is negligent in extending the TRPP without any mitigation efforts or even addressing the concerns raised in the April 3, 2019 TRPP complaint/protest attached, yet FC seeks permanent exemption status.

Further, Foster City has not provided requested <u>Public Records that identifies traffic impact</u> <u>fees that are dedicated toward traffic improvements on Mariners Island Blvd and Fashion</u> <u>Island Blvd to the 101 Freeway.</u>

The Gilead Science massive redevelopment project is still under construction includes a massive parking garages on Mariners Island Blvd yet Foster City has not disclosed traffic mitigation improvements or traffic impact fees to mitigate the Gilead Science project on the Mariners Island Blvd to Fashion Island Blvd to access the 101 freeway, instead seeks exemption status is fraud.

Jeff, it is my understanding that the Mitigation Act requires mitigation fees collected to be used near the affected areas to mitigate the impact that created the impact fees with identified capital improvement projects, regardless of City boundary destinations.

The Gilead Science redevelopment project is situated right on the Foster City border limits with Mariners Island in San Mateo.

The Gilead Science campus creates thousands of vehicle traffic to the surrounding area including Mariners Island Blvd to Fashion Island Blvd, yet there are no traffic mitigation fees dedicated to traffic improvements for Mariners Island Blvd to Fashion Island Blvd, this is not sustainable as the Gilead Science has substantially increased the volume of traffic Mariners Island Blvd to Fashion Island Blvd to access the 101 Freeway.

The Mitigation Act requires traffic mitigation fees collected from Gilead Science project to go towards traffic improvement needed to mitigate the traffic impact nearby the Gilead Science redevelopment, including Mariners Island Blvd and Fashion Island Blvd to the 101 Freeway.

The Mitigation Act required Traffic Impact Fees collected to identify the traffic improvement to which the impact fees are being used, those funds must be held in separate bank accounts and dedicated to a specific traffic improvement projects that is being funded.

Effectively, Foster City's TRPP and the Gilead Science redevelopment dumps adverse traffic conditions onto Mariners Island neighborhood without any traffic mitigation improvement on Fashion Island Blvd to and from the 101 Freeway entrance.

Foster City cannot unilaterally claim Exemption Status to CEQA standards to avoid responsibility to mitigate the Fashion Island Blvd to access the 101 Freeway.

Foster City Manager Jeff Moneda, the **material two questions** that must be answered to move forward?

Is Foster City willing to expend traffic improvements mitigation impact fees towards Fashion Island Blvd to the 101 Freeway, regardless that the traffic improvements are located in the City of San Mateo?

Does Foster City take the position that the Fashion Island traffic Improvements are not in its jurisdiction therefor not responsible for traffic improvement cost sharing?

Jeff, I request an answer to these two question above, these questions are <u>pivotal</u> to mitigating the increasing traffic congestion Fashion Island Blvd that bottle necks at the one lane bridge crossing the Marina Lagoon to access the 101 freeway.

Jeff, I protest the May 20, 2019 staff report **misguided interpretation** that the Foster City TRPP is Exempt from CEQA standards and standards in the Mitigation Act standards.

Jeff, there are many <u>unusual conditions</u> that are not typical when an "Island" is divided into two jurisdictions whereby the access to the Island has mutual benefits to both communities. That said, Foster City's unilateral determination and interpretation of Exemption status to CEQA

standard is false as Mariners Island neighborhood is adversely affected and Foster City has not studied that impact imposed on Mariners Island.

Therefore, the justifications stated in the May 20, 2019 Staff report for exemption status are simple not true as the "Island Effect" created a highly unusual traffic circulation conditions, intertwined land use conditions and safety concerns.

Jeff, Foster City staff report May 20, 2019 claims to have reached out the City of San Mateo citing minimal effects; this is outrageous justification for Exemption status; when considering my timely filed Mariners Island protect complaint to the TRPP. The City of San Mateo has not studied the effects of the TRPP on South Norfolk neighborhood and intersection impact at Norfolk and Fashion Island Blvd and Edgewater Blvd at the 92 overpass for Fashion Island Blvd and Mariners Island Blvd.

Further, Foster City seek to use this **unverified** "minimal effect" sound bite to seek permanent CEQA exemption status when there is <u>currently a massive building boom under construction</u> whereby the traffic impacts have not yet materialized until construction is completed and the new buildings are occupied.

Jeff, it is outrageous for Foster City to rely upon this unverified off the cuff quote from the City of San Mateo to justify a permanent Exemption status.

"Foster City staff also checked with the City of San Mateo staff on the issue of the potential for increased traffic through San Mateo as a result of the TRPP. The traffic counts indicated a <u>minimal effect</u> on the <u>streets adjacent</u> to the East Hillsdale Boulevard corridor".

#### "Notice of Exemption",

City staff has determined that the TRPP, and the proposed temporary three-month extension of the TRPP, is statutorily and categorically exempt from CEQA pursuant to the following CEQA Guidelines Sections: § 15262 (Feasibility and Planning Studies); § 15301 (Existing Facilities); § 15306 (Information Collection); § 15305 (Minor Alterations in Land Use Limitations). Prior to considering any permanent implementation of the program, additional data collection and analysis will be conducted to confirm whether permanent implementation of the program is exempt from CEQA (under § 15301 (Existing Facilities) and/or § 15305 (Minor Alterations in Land Use Limitations) or requires additional environmental analysis in the form of a negative declaration, mitigated negative declaration or environmental impact report".

21) From: Shawn Mooney

Sent: Tuesday, May 28, 2019 1:54 PM To: 'Jeff Moneda'; Drew Corbett

Cc: 'trafficrelief@fostercity.org'; 'Foster City Planning Department'; 'City Council'; 'Deputy City Attorney'

Subject: RE: Hi Jeff Moneda- traffic relief program is over- yet traffic signs remain causing confusion - please cover the traffic signs

or remove them

Hi City Managers Jeff Moneda and Drew Corbett, during the next three months of the extended traffic relief pilot program, can we please commence the discussion of widening the Marina Lagoon Bridge and traffic improvements on Fashion Island Blvd to and from Freeway 101.

This traffic mitigation project is desperately needed and has great benefits to both Foster City and Mariners Island.

<u>Traffic Migration funds must identified from both Foster City and San Mateo and dedicated to this project from nearby development projects.</u>

Please commence a collaborated effort from both Cities to improve traffic and beatification to this Gateway to both "Brewers Island" communities including the Edgewater 92 overpass.

The traffic medians on the Edgewater 92 overpass and Fashion Island Blvd to and from 101 freeway have a ghetto appearance like Oakland underpasses.

Even, artificial turf on these median islands would greatly improve its visual appearance.

City Managers Jeff Moneda and Drew Corbett, please make the "92 Corridor Alliance" a meaningful joint venture project for the benefit of both communities.

#### **Shawn Mooney**

20) From: Jeff Moneda

Sent: Tuesday, May 28, 2019 11:08 AM

To: Shawn Mooney

Cc: 'trafficrelief@fostercity.org'; Foster City Planning Department; City Council; Deputy City Attorney

Subject: RE: Hi Jeff Moneda- traffic relief program is over- yet traffic signs remain causing confusion - please cover the traffic signs

or remove them

Hello Mr. Mooney,

The program has been authorized by the Council to continue for 3 more months.

Jeff

Jeff Moneda, PE
City/District Manager
City of Foster City/EMID
610 Foster City Boulevard
Foster City, CA 94404
(650) 286-3288
jmoneda@fostercity.org

19) From: Shawn Mooney

Sent: Friday, May 24, 2019 11:44 AM To: 'Priscilla Tam'; 'Foster City Clerk's Office'

Cc: 'Jeff Moneda'; 'City Attorney'; 'Deputy City Attorney'; Drew Corbett; council@fostercity.org; FC Planning Commission Subject: FC Clerk Priscilla Tam Public Records Requested Traffic Impact Fees Gilead Science and Pilgrim Dive housing development

Hi Priscilla, I am more specifically requesting the traffic impact fees collected be identified with the traffic improvement project?

Per the Mitigation Act, impact fees must be identified to the improvement project they are funding. I would like a description of the traffic impact fees that is dedicated to specific traffic improvements. For example, below is San Mateo City Manager Drew Corbett, describing the train overpass at 25<sup>th</sup> avenue as an appropriate use of traffic impact fees near SR92.

#### San Mateo City Manager Drew Corbett further states,

"The City of San Mateo owns the Fashion Island Bridge over Marina Lagoon. In its history, the bridge has had an earthquake seismic upgrade – funded both federally and locally – that resulted in the expanded columns for structural support. There are no plans for widening of the bridge. If a widening plan were under consideration, it would be a City of San Mateo project with funding assistance requested from Caltrans and Foster City".

The Gilead Science project is located on Mariners Island Blvd, and creates traffic impacts on Fashion Island Blvd and the bridge over Marina Lagoon. This bridge is only one lane traffic to and from the 101 Freeway.

Drew Corbett states. "If a widening plan were under consideration, it would be a City of San Mateo project with funding assistance requested from Caltrans and Foster City".

Priscilla, I am specifically seeking traffic impact funds that are **available or dedicated** to traffic improvements on Fashion Island Blvd Bridge and ingress and egress to the 101 Freeway. In my opinion this **traffic improvement has been over-looked because of its geographic location between two cities**.

That said, it is my goal and mission to bring "consideration" to both San Mateo and Foster City to **start the discussions** about widening the Marina Lagoon Bridge to and from the 101 Freeway, which is a significant Gate Way to both communities. With the recent massive building explosion there will never be as much traffic improvement funds available as there is now, therefore traffic impact fees must be **dedicated** to this specific traffic improvement project. Notable the City of Foster City has reported a surplus of funds. Please make this traffic improvement a priority and "consideration" as it will increase the quality of life to both communities.

If not now, when?

Kind Regards, Shawn Mooney 18) From: Priscilla Tam

Sent: Friday, May 24, 2019 10:40 AM
To: Shawn Mooney; Foster City Clerk's Office
Cc: Jeff Moneda; City Attorney; Deputy City Attorney

Subject: RE: FC Clerk Priscilla Tam Public Records Requested Traffic Impact Fees Gilead Science and Pilgrim Dive housing

development

Dear Mr. Mooney,

This letter is in response to your Public Records Act request emailed on May 24, 2019. Please note that we did not interpret your previous correspondence as a request for records. From reviewing this request, I understand you are seeking the following documents:

- traffic impact fees collected from the Pilgrim Drive housing projects and the Gilead Science redevelopment projects
- 2. all development traffic impact fees collected for the past five years from all development projects with a two mile radius of SR 92

Please advise if I have misinterpreted your request.

The City is in the process of gathering documents to respond to your request for records as interpreted above. The City will contact you by June 3, 2019, pursuant to California Government Code 6253.

Regards,

#### Priscilla Tam. CMC

Communications Director/City Clerk

17) From: Shawn Mooney

Sent: Monday, May 20, 2019 9:01 AM

To: 'Jeff Moneda'

Subject: RE: FC Clerk Prisilla Tam & Jeff Moneda public comments City Council meeting Protest Traffic Relief Program attached San Mateo Response to PRA request April 5 and April 8 emails traffic Complaint

Hi Jeff, what is the status of the traffic relief pilot program? Will it continue? Or terminated? It appears from your response that because the Freeway 101 ingress/egress is in San Mateo, Foster City does not want to participate in traffic and beautification improvements despite this is a major gateway link to Foster City? Is that your position?

Shawn Mooney

16) From: Jeff Moneda

Sent: Monday, May 20, 2019 8:49 AM

To: Shawn Mooney; City Council; Foster City Planning Department; Foster City Clerk's Office

Cc: Curtis Banks; Foster City Public Works Department; Foster City Traffic Relief; Deputy City Attorney; Marlene Subhashini;

Jennifer Phan; Dante Hall; Brad Underwood; Drew Corbett

Subject: RE: FC Clerk Prisilla Tam & Jeff Moneda public comments City Council meeting Protest Traffic Relief Program attached San Mateo Response to PRA request April 5 and April 8 emails traffic Complaint

#### Hello Mr. Mooney,

- Thank you for your comments regarding the Traffic Relief Program.
- Regarding the 92 Corridor Alliance, I am forwarding your e-mail to Dante Hall, our Assistant City Manager, to include you in the distribution to the community.
- Regarding the 92/101 interchange and Fashion Island Blvd., both are in the City of San
   Mateo. I am forwarding your e-mail to Brad Underwood and Drew Corbett, with the City of San Mateo.

Regards, Jeff

Jeff Moneda, PE
City/District Manager
City of Foster City/EMID
610 Foster City Boulevard
Foster City, CA 94404
(650) 286-3288
jmoneda@fostercity.org

15) From: Shawn Mooney

Sent: Monday, May 20, 2019 8:01 AM

To: council@fostercity.org; FC Planning Commission; FC Clerk Priscilla Tam; Jeff Moneda (Foster City)

Cc: Foster City Curtis Banks; Foster City Public Works; 'trafficrelief@fostercity.org'

Subject: FC Clerk Prisilla Tam & Jeff Moneda public comments City Council meeting Protest Traffic Relief Program attached San Mateo Response to PRA request April 5 and April 8 emails traffic Complaint

Foster City Manager Jeff Moneda and City Clerk Priscilla Tam, attached is the City of San Mateo response to my April 5<sup>th</sup> and 8<sup>th</sup> emails addressed to both San Mateo and Foster City requesting public records and public information.

Clerk Tam, please provide a status of the requested public records equivalent to San Mateo response.

Please incorporate this email and all attachments and responses from the City San Mateo into the City Council meetings involving Foster City Traffic Relief Program, public comments.

City Manager Moneda, I desire to represent Mariners Island on Foster City "92 Corridor Alliance" with the intent to bridge communications and identify common goals and common benefits from improving traffic congestion on Fashion Island Blvd to and from Highway 101 to Edgewater/Mariners Island Blvd. I desire to improve traffic condition including widening the existing bridge crossing the Marina Lagoon to Highway 101.

Further, improve the beatification between Fashion Island Blvd and the 101 Freeway entrance (under the 92/101 interchange).

This area is a major <u>Gateway</u> into Foster City and Mariners Island, yet <u>it look very ghetto, undermining</u> to both communities.

Caltrans has an ugly green fence beneath the 92/101 interchange with stray painted gang symbols is enabling this area to look like Oakland underpasses.

This ugly green fence is to hide ugly construction lay down yards that are not need any longer. Beneath the 92/101 interchange is public owned land, that can be utilized for a higher purpose and greater good. This area can be landscaped with Art and other beatifications to change its existing ghetto appearance. The center divides on Fashion Island Blvd are ugly, artificial turf on the center divider would be a significant improve its appearance.

Mariner Island is only a small fraction of San Mateo, however Fashion Island Blvd, and the Marina Lagoon Bridge predominantly sever Foster City residents compared to Mariners Island residents. City Manager Jeff Moneda, there is substantial benefits to both communities to improve this significant Gateway entrance to "Brewer Island".

Kind Regards,

Shawn Mooney 5-20-2019

14) From: Shawn Mooney

Sent: Friday, April 19, 2019 9:06 AM

To: Drew Corbett; Jeff Moneda (Foster City)

Cc: Tracy Scramaglia ; council@fostercity.org; FC Planning Commission (Planning@fostercity.org); Mayor Rick Bonilla ; Sandy Wong; Carole Groom; 'trafficrelief@fostercity.org'; FC Clerk **Priscilla Tam** 

Subject: Drew Corbett & Jeff Moneda - Protest FC Traffic Relief Program adverse traffic impact on Fashion Island Blvd intersection at Norfolk and Marina Lagoon Bridge

City Manager Drew Corbett and Jeff Moneda,

The pictures below show the exact traffic bottleneck interception on the approach to Mariners Island Bridge one lane traffic approach.

There are many problems at this intersection per the pictures below.

Traffic heading east on Fashion Island Blvd has <u>two turning lanes (right and left)</u> that interferes with traffic going straight towards the Fashion Island Blvd bridge.

The problem is when the left turn lanes back up with a mere four vehicles at a red light the fifth vehicle consumes the middle lane going straight over the bridge as the **center island divide curves inward into the center** lane preventing traffic going straight approaching the bridge.

The approach to this intersection going east is only one that expands into three lanes right at close proximity to the intersection thereby the turning lanes left and right onto Norfolk back up into the center lane thereby interfering with traffic going straight over the bridge into Mariners Island.

Foster City Traffic Relief pilot program diverts traffic from Hillsdale Blvd to Norfolk thereby increasing addition traffic at this already dysfunction intersection as this traffic seeks to access SR 92 freeway entrance on Edgewater Blvd. The traffic diversion pilot program creates additional traffic congestion on the one traffic lane bridge thereby interfering with this critical thoroughfare into Mariners Island and Foster City.

The picture below shows a black pickup truck turning right with multiple vehicles also waiting to turn right heading over the one land bridge.

Since right turns are only required to briefly stop then go the vehicles turning right towards the bridge interferes with the predominant flow of traffic coming from southbound 101 freeway exit on to Fashion Island Blvd.

For traffic heading <u>west</u> towards highway 101 going from Mariners Island the backup problem is even worse as the left turning lane from Fashion Island Blvd to South Norfolk towards Bayside lumber can only accommodate <u>three vehicle</u> turning left before <u>the center divider causes</u> addition vehicles greater than three vehicles awaiting for a green light to consume the center traffic lane going straight towards Highway 101 South and North entrances on Fashion Island Blvd.

In other words, a mere three vehicles waiting for a green light to turn left on Norfolk interferes with the predominant traffic going straight causing 20+ cars backing up over the Fashion Island Bridge. This causes traffic heading to the 101 freeway to await multiple traffic lights to cross the Norfolk/Fashion Island intersection because this left turn lane cannot accommodate more than three vehicles before blocking the center lane from going straight to towards 101 freeway entrances. To make matters worse when the left turning lane clears and traffic is allowed to go straight addition some of 20+ vehicles back up over the bridge are awaiting to use the left turn lane to Norfolk thereby again blocking traffic going straight on a green light. This dysfunction intersection often only allows a few vehicles at a time to proceed to the 101 freeway entrances before the intersection becomes a red light.

City Managers Drew Corbett & Jeff Moneda as shown in the pictures this intersection is a predominant <u>"Gateway"</u> to both Mariners Island and Foster City yet it looks Ghetto and Ugly.

The RV storage yard next to the bridge is an eye sore and degrades the area. This RV storage yard blocks the eye pleasing view of the Marina Lagoon; therefore this storage yard should be open space allowing views of the lagoon. The RV Storage yard is on public land leased privately on a temporary basis that said, its time the temporary use is returned to the public as open space.

Further, Foster City and San Mateo should jointly obtain all of the Caltrans "public land" airspace on Fashion Island Blvd to maximized traffic lanes capacity whereby turning lanes does not interfere and blockage traffic ability head towards Foster City and Mariners Island. Currently, Caltrans has put up ugly degrading green fences for private contractor lay down yards; this creates an ugly, ghetto appearance to the "Gateway" to the surrounding areas.

Fashion Island Blvd. is a very valued <u>ASSET</u> to both Foster City and San Mateo and we must join efforts via <u>"92 Corridor Alliance"</u> to improve traffic, widen the bridge and beautifying the Gateway to Mariners Island and Foster City with <u>Art</u> and open lands space. It is foreseeable that if Foster City and San Mateo do not come together to form a meaningful <u>"92 Corridor Alliance"</u> with meaning goals in a collaborated effort to avoid Fashion Island Blvd from becoming a homeless refugee tent camp like in Oakland.

https://www.cityofsanmateo.org/2073/Traffic



#### Below from SM website:

"Public Works staff introduced a <u>corridor study</u> for 19th Avenue/Fashion Island Boulevard with an online survey and a community meeting in the neighborhood. There, citizens provided input to help staff identify short-, medium-, and long-term solutions to mitigate congestion".

Drew Corbett, there is no traffic study available on the city web page for Mariners Island, instead the web page states "To Be Studied".



13) From: Shawn Mooney

Sent: Thursday, May 16, 2019 12:00 PM

To: 'trafficrelief@fostercity.org'

Subject: Norm Dorais, Public Works Director - status of mitigation and status of the continuation of the pilot program?

Norm Dorais, Public Works Director,

Could you please provide the current status of my attached protest and the mitigation requested at Norfolk @ Fashion Island Blvd? And the Fashion Island Blvd Bridge? Is the pilot program still active?

I am a interested party, please advise me on future meetings regarding the pilot program. I am also an interest party to all meeting regarding the "92 Corridor Alliance".

Shawn Mooney 650-345-1144

12) From: Drew Corbett

Sent: Thursday, May 9, 2019 6:00 PM

To: Shawn Mooney

Subject: RE: City Managers Drew Corbett & Jeff Moneda "Protest" & Public Records Act Request --Traffic Mitigation Marina Lagoon Bridge - Norfolk intersection @ Fashion Island Blvd --Protest FC traffic relief program no mitigation adverse impacts Mariners Island

#### Mr. Mooney-

Laurie let me know that you called today; sorry that I missed you. I understand you were calling to ask about the pilot project going on in Foster City on Hillsdale. Our Public Works Department is still working on this in order to get you a thorough answer to your questions. I spoke with the director of the department yesterday and he said they were close, so please expect something soon. If you want to discuss further, please give me a call.

Drew Corbett 650-522-7002

11) From: Shawn Mooney

Sent: Monday, April 15, 2019 11:15 AM

To: Jeff Moneda (Foster City)

Cc: FC Clerk Priscilla Tam; FC Planning Commission (Planning@fostercity.org); council@fostercity.org; Foster City Curtis Banks; Foster City Public Works; Drew Corbett; Mayor Rick Bonilla; SM City Clerk Patrice Olds; Sandy Wong; Carole Groom Subject: Formal Protest Foster City Traffic Relief Program - Mitigation needed safety concerns

#### City Manager Jeff Moneda,

Formal Protest is hereby made to abort the traffic relief program for safety concerns and adverse traffic diversion impacting freeway 101 south bound at Fashion Island Blvd., mitigation requested.

Below are 10 emails describing my formal protest to Foster City Traffic Relief Program that restricts left turns on Edgewater Blvd for safety concerns and adverse traffic impacts at Fashion Island @ Norfolk and on the one traffic lane at the former SR 92 Freeway Bridge # **35C0160**.

Additionally, there are <u>significant safety concerns that are exactly the same safety</u> <u>concerns that were identified by Foster City as to why the City did not restrict left turns on Foster City Blvd at Hillsdale Blvd.</u>

Foster City recognizes safety concerns at Foster City Blvd that are equally safety concerns at Edgewater Blvd at Hillsdale Blvd. That said, the <u>City Manager is empowered to stop the</u> <u>traffic relief pilot program for safety concerns</u>, request is hereby made to discontinue the pilot program for safety concerns and until traffic mitigation improvements can be implemented.

As described in the 10 emails below the traffic pilot program, effectively diverts traffic from East Hillsdale Blvd to South Norfolk intersection at Fashion Island Blvd causing increased adverse traffic impacts to Highway 101 ingress and egress from Fashion Island Blvd that serves both Foster City residents and Mariners Island, San Mateo.

Foster City's traffic diversion program causes an adverse traffic to Mariners Island in San Mateo as the right turn from Norfolk to Fashion Island Blvd is only a **one lane bridge** crossing that is already at grid lock before the pilot program commenced.

Foster City Traffic Relief Program has not mitigated this right turn to cross the bridge as the increased right turn traffic interfere with **the <u>predominant traffic flow coming from the</u> 101 freeway off ramp** at Fashion Island Blvd and from **southbound 101** freeway traffic. In other words, the pilot program is causing an adverse traffic impact a prominent freeway off ramp that is vital to Mariners Island.

The Marina Lagoon Bridge east bound crossing is **only one traffic lane** that is a vital traffic thoroughfare for both Mariners Island and Foster City Residents and commercial developments. The pilot program interferes with Mariners Island established traffic circulation plan that is part of the City of San Mateo's General Plan.

Effectively, the pilot program did not consider the adverse traffic at Norfolk and Fashion Island Blvd as no mitigation was implements to reduce the adverse traffic bottleneck to cross the Marina Lagoon Bridge.

Had Foster City realized this adverse impact they would have realized the <u>Marina Lagoon</u> <u>Bridge on Fashion Island Blvd is predominantly used by Foster City residents</u>.

In other words, Foster City's traffic relief program on East Hillsdale only benefit Foster City residents that commute to the South Bay, thus heading north bound on the 101 freeway existing Hillsdale Blvd in the evening commute.

However, the pilot program adversely affects Foster City resident that commute home from the North Bay thereby commuting south bound 101 existing Fashion Island Blvd towards the one lane bridge over the Marina Lagoon to access Edgewater Blvd to enter Foster City.

City Manager Jeff Moneda, my additional protest is Mariners Island residents did not get proper notice of the adverse traffic impact on Norfolk at Fashion Island.

Foster City only gave public notices in a 500 feet radius of the left turn at Hillsdale and not at the 500 ft radius of the adverse traffic impact at Norfolk and Fashion Island intersection. Further, public notice should have occurred at 500 ft radius of the right turn at Edgewater Blvd. from Fashion Island.

Further notice should have incorporate 500 ft radius of the left turn from Edgewater Blvd onto the East bound SR 92 freeway entrance that backs up traffic into Mariners Island Blvd.

City Manager Jeff Moneda, the said adverse traffic conditions must be mitigated as they <u>cause</u> <u>the increased safety concerns</u> on Mariners Island Blvd and Fashion Island Blvd are the exactly same safety concerns the City Council foresee on Foster City Blvd., thereby allowing left turns on E. Hillsdale Blvd.

That said, the city manager must abort the traffic relief program as it is **causing safety concerns** to Mariners Island in San Mateo without any traffic mitigation.

City Manager Jeff Moneda, the City of Foster City has recently collected massive amounts of **development traffic impact fees** from the Gilead Science campus which abuts to Mariners Island Blvd.

Mariners Island Blvd is right on the City Borders between Foster City and San Mateo. In fact Mariners Island Blvd was originally named Beach Park Blvd, as a continuation of Foster City's bay front perimeter road "Beach Park Blvd".

City Manager Jeff Moneda, as you know the Mitigation Act requires impact fees collected be used for the impacts related to the development. In fact the Mitigation Act requires the collected impact fees to be held in a separate account and each identified capital improvement projects which the fees are to pay for the mitigation improvement.

In other words, some of the traffic impact fees from the Gilead Science project must be allocated to traffic impact on Mariners Island Blvd and Fashion Island Blvd including widening the former State Route 92 Bridge over pass to Highway 101.

The Mitigate Act requires impact fees are required to be used localized to the development project impact to the immediate surrounding are regardless of the city boundaries lines.

City Manager Jeff Moneda, Foster City in promoting the traffic relief program claims the City of Foster City is steering a <u>"92 Corridor Alliance"</u> this allegiance does not have any neighborhood representation in the <u>"92 Corridor Alliance"</u> from Mariners Island neighborhood and Mariners Island commercial developments.

City Manager Jeff Moneda, to have a <u>meaningful</u> <u>"92 Corridor Alliance" it must first start with have a Joint Powers Agreement</u> for capital improvement on Fashion Island Blvd to the Highway 101 freeway to improve traffic flows in the 92 Corridor.

The Mitigation Act requires the development traffic impacts fees collected must be use to mitigate the addition traffic the Gilead Science project impacts the Fashion Island Blvd ingress and egress to the Highway 101 underneath SR 92 overpass. This would require widening the former SR 92 Bridge over the Marina lagoon on Fashion Island Blvd.

City Manager Jeff Moneda, the City of San Mateo has also recently obtained significant redevelopment traffic impact fees that are now available. That said, the time is now to form a meaningful "92 Corridor Alliance" with a "Joint Powers Agreement" to take immediate actions.

City Manager Jeff Moneda, to increase the quality of life that has been greatly diminished by traffic from over development without any traffic mitigation to the former 92 bridge at Fashion

Island Blvd. The time is ripe to widen the bridge while traffic mitigation fees are available and before the under developed land adjacent to the former 92 bridge get redeveloped. See Caltrans emails below.

Shawn Mooney Mariners Island Resident

10) From: Drew Corbett

Sent: Tuesday, April 9, 2019 11:00 AM

To: Shawn & Snicker

Subject: RE: City Managers Drew Corbett & **Jeff Moneda "Protest"** & Public Records Act Request –No Traffic Mitigation Marina Lagoon Bridge - Norfolk intersection @ Fashion Island Blvd --**Protest FC traffic relief program no mitigation adverse impacts Mariners Island** 

#### Shawn

I am working with City staff to provide you with a response. I will get something to you as soon as I am able.

Thanks, Drew

9) From: Shawn Mooney

Sent: Monday, April 8, 2019 3:08 PM

To: Drew Corbett; Jeff Moneda (Foster City); SM City Clerk Patrice Olds; FC Clerk Priscilla Tam

Cc: FC Planning Commission (Planning@fostercity.org); council@fostercity.org; Mayor Rick Bonilla; LAFC Poyatos

(mpoyatos@smcgov.org); Sandy Wong; Carole Groom

Subject: City Managers Drew Corbett & **Jeff Moneda "Protest"** & **Public Records Act Request** —No Traffic Mitigation Marina Lagoon Bridge - Norfolk intersection @ Fashion Island Blvd --**Protest FC traffic relief program no mitigation adverse**impacts Mariners Island

City Managers Drew Corbett & **Jeff Moneda**, I am a native Foster City resident for 20+ years and Mariners Island resident for 30+ years.

That said, I am a historian expert on both Foster City and Mariners Island.

Before the 92/101 interchange overpass that was built in the mid 1980's, the Marina Lagoon Bridge was SR 92.

That said who owes the Marina Lagoon Bridge today?

Logic indicates when the Marina Lagoon Bridge was SR 92 the State owned the Bridge. How owns the bridge today?

Therefore the million dollar question is what jurisdiction maintains the bridge? The State?, the County?, City of San Mateo? Estero Municipal Improvement District (EMID)?

More than 20 years ago the bridge had an earthquake seismic retrofit for the Bridge foundation pier column, who paid for this bridge improvement?

What jurisdiction approved the seismic earthquake retrofit project?

The bridge pier columns where **expanded 5 feet wider than the bridge on each side**, logically this was done for a future bridge widening project.

What are the plans for widening the Marina Lagoon Bridge deck?

What jurisdiction is tasked with widening the bridge?

Who pays for the widening of the bridge?

Both Foster City and San Mateo have collected massive development traffic impact fees, how much of those fees are dedicated to widen the bridge and traffic improvement to the 101 freeway at Fashion Island Blvd and 19<sup>th</sup> Avenue?

By all accounts the expanded bridge deck is <u>desperately needed now</u>, to mitigate the right turn lane from Norfolk to Fashion Island Blvd at the foot of the bridge that interferes with the predominate traffic coming from the south bound 101 exit onto Fashion Island Blvd.

Effectively, vehicles making a right turn from Norfolk towards the Marina Bridge need to stop for a second then proceed to jump into oncoming traffic sharing this one traffic lane to cross the Marina Bridge, thereby interrupting predominant traffic flow.

At the East side of the Marina Bridge **traffic lanes gradually expand to four lanes**, however do to the increased traffic volume making a right turn on Edgewater Blvd caused from Foster City's traffic relief plan, traffic backs up to make a right turn on Edgewater Blvd back up all the way to the bridge before the one traffic lane expands in four lanes.

The Marina Lagoon Bridge is **only one lane for east bound traffic**, with the prominent traffic coming from 101 Freeway, yet there is **only one traffic lane** for east bound traffic crossing the Marina Lagoon bridge heading into Mariners Island and Foster City.

This one traffic lane to cross the Marina Lagoon bridge serves traffic from multiple directions thereby the **bottle neck of traffic congestion** as traffic back up in all directions caused by traffic not moving thereby traffic cannot get cross the Norfolk/Fashion Island Intersection because there nowhere to go do to backed up traffic on the bridge.

The backed up traffic at the Marina Bridge causes adverse traffic congestion all the way to South Delaware via 19<sup>th</sup> Avenue and Fashion Island Blvd.

During peak traffic it takes me 25 minutes to travel from South Delaware (Arco Gas Station) to Mariners Island Blvd because it often take two or three red lights to cross each of the three interceptions to travel this mere two miles as interception cannot be crossed because there is nowhere to cross as traffic backs up into the interceptions allowing just a couple vehicles to cross.

Foster City's new traffic relief program divert from Hillsdale Blvd to Norfolk to the one lane Marina Lagoon bridge that is already impacted before the pilot program commenced. This adverse impact on the Marina Lagoon bridge must be mitigate by Foster City as the pilot program is causing additional adverse traffic impacts to an existing dysfunction traffic circulation problem.

The problem is, it appears neither Foster City or San Mateo have budget money or collected traffic impact fees for widening the Marina Lagoon Bridge because jurisdiction is unknown, because the bridge was formally SR 92.

The next problem is the bridge predominately serves Foster City yet located in San Mateo. Mariners Island by land size and population is only a fraction in size and population compared to Foster City, therefore it is vital that a **cost splitting agreement** is establish between Foster City and San Mateo for traffic improvement on Fashion Island Blvd to the 101 freeway.

Foster City, notice of it traffic relief program neglects to give Mariners Island residents notice of its plans to divert traffic on to Norfolk thereby adversely impacting the Marina Lagoon Bridge. Please identify how Foster City plans to mitigate this adverse traffic impact on the **one lane bridge overpass**.

Further attachement #2 Foster City claims there is a <u>"92 Corridor Alliance"</u> yet know body was heard of such "Alliance" and no documents are notices are available on the internet. Request is hereby made to provide all documents related to the "92 Corridor Alliance" including identified funding sources from development traffic impact fees and a description of all

proposed traffic improvements that is directly related to the Fashion Island Blvd and the Norfolk intersection and the Marina Lagoon Bridge.

Please also provide a copy of any existing **cost sharing agreements** between Foster City and San Mateo related to the said traffic improvements.

Please identify each member of the <u>"92 Corridor Alliance"</u>. Are meeting open to the public for the **"92 Corridor Alliance"**? Are meeting notices announced? Can the public participate in the <u>"92 Corridor Alliance"</u>?

Traffic studies and Traffic Circulation Plans must be updated to adjust for the recent building explosion at Gilead Science in Foster City and redevelopment projects in San Mateo East of El Camino as the <u>current traffic problems is not sustainable and undermines the quality of life.</u>

Redevelopment projects generate millions in traffic impact fees and are required per the Mitigation Act to be used on related adverse impact mitigation. In fact the Mitigation Act requires traffic impact fees to identify the improvement project and a fund held is a separate account for that traffic improvement project.

Please provide an accounting of all development traffic impact fees collected for the past five years collecting from all development project within a two mile radius of SR 92 including known redevelopment projects that have not commenced for example Charter Square in Foster City and Ross/TJ Max shopping center in San Mateo.

Please specifically identify the traffic improvement fees that are dedicated to widening the Marina Lagoon Bridge?

Please provide a method of notification for interested parties to participate in the "<u>92 Corridor</u> <u>Alliance"</u>.

In summary, the bottle neck traffic congestion in Foster City and Mariners Island, Fiesta Garden is primarily caused at the Marina Lagoon Bridge which is the former SR 92 freeway. Please improve the quality of life by fixing this bottle neck traffic problem as the "92 Corridor Alliance" highest priority.

I hereby **protest** the Foster City Traffic Relief Pilot Program as it adversely impact Mariners Island and surrounding neighborhoods in San Mateo <u>without any traffic mitigation</u> efforts at Fashion Island Blvd Bridge. The requested documents and the asked questions herein are requested from Foster City, EMID and San Mateo equally.

Shawn Mooney Mariners Island Resident 8) From: Shawn & Snicker

Sent: Friday, April 5, 2019 12:35 PM

To: Drew Corbett; Jeff Moneda (Foster City); council@fostercity.org

Cc: LAFC Poyatos (mpoyatos@smcgov.org); SM City Clerk Patrice Olds; Mayor Rick Bonilla; FC Planning Commission

(Planning@fostercity.org); Foster City Clerk Doris Palmer; Sandy Wong; Greg White; Foster City Curtis Banks

Subject: Drew Corbett & Jeff Moneda traffic complaint What are the traffic improvements? Fashion Island Blvd - widen Marina Lagoon Bridge @ Norfolk

City Manager Drew Corbett, the Foster City traffic relief program has raised many concerns for San Mateo residents.

As you know San Mateo has recently redeveloped many large projects in a concentrated area next to SR 92 between the rail road tracks and South Grant Street.

People in this area are very concern about traffic is already at grid lock and desire to know

#### What are the additional traffic improvements to mitigate this traffic explosion?

Specifically at:

- 1) East Bound 92 Delaware freeway off ramp?
- 2) 19<sup>th</sup> Avenue?
- 3) South Grant?
- 4) South Delaware?
- 5) Fashion Island Blvd?
- 6) Interception at Norfolk and Fashion Island Blvd?
- 7) Marina Lagoon Bridge widening?

City Manager Drew Corbett, the seven areas above is in desperate need of major traffic improvements to mitigate the recent new developments in this area.

Further, the seven areas above will have addition massive traffic impacts from many large redevelopment project that have not broken ground including the Ross/TJ Max shopping center, the former City corp. yard next to the R/R tracks, the Smart and final shopping center on Norfolk.

These new projects including the projects recently developed in this area have generate millions dollars in development impact fees and as you know these impact fees per the Mitigation Act are required to be use specifically to mitigate the traffic impacts created by the new developments.

In other words, mitigations fees collected from development projects between the R/R tracts and Norfolk must be spent on improvement in the same corridor east of the R/R tracts.

In other words, the impact fees collected from these massive re-development projects can only be used to mitigate the actual adverse impacts that are created from the new developments.

That said, there should be substantial funding available for traffic improvements to the seven areas above.

Please identify the proposed and approved traffic improvements to the seven areas above that are all east of the Rail Road tracts.

Please limit your response to the seven areas above, as my neighbors and I are primarily concerned with traffic circulation improvements below the SR 92 interchange overpass, whereby the nearby redevelopment is occurring. Please also Include pedestrian (green surface) bike lanes improvements and visual improvement as this area looks ghetto and visually unappealing for such a wealthy area Gateway. The airspace land under 92 interchange overpass must be beautified as this area is a prominent Gateway to both Foster City and Mariners Island and a Regional Shopping Center and Gilead Science Headquarter.

City Manager Drew Corbett, the Marina Lagoon bridge piers were seismically earthquake retrofitted more than a decade ago.

The seismic retrofit project contemplate the <u>bridge would be widen</u> at some point as the <u>improved</u> <u>bridge piling extent wider</u> than the existing bridge pilings on both sides.

#### Please provide the status of widening this bridge?

It appears there is no better time than now, because adjacent to the bridge on the north side next to the Fish Market is an undeveloped project, that will be developed soon.

On the East side of the bridge is a temporary RV storage yard in public Caltrans "air space".

Therefore, the **time is ripe to widen the bridge now** as this under sized bridge is the bottle neck of existing traffic impacts in the area.

City Manager Drew Corbett, the Marina Lagoon bridge is a critical and vital traffic thorough fare for Mariners Island, however it is even more critical for Foster City residents as Mariners Island is a fraction of the size and population compared to Foster City.

Therefore, Foster City development impact fees must also be utilized for widening this bridge and traffic improvements under the 92 interchange overpass.

Foster City has collected many millions of dollars from development impact fees from the massive redevelopment of Gilead Science Headquarters that is located in Mariners Island, north of SR 92. For clarity Foster City is predominately located south of SR 92.

Further, Foster City's traffic relief program diverts from Hillsdale Blvd on the South Norfolk that further adversely impact the Norfolk @ Fashion Island interchange at the right turn from Norfolk over the Marina Lagoon Bridge. Foster City must mitigate this traffic impact of diverting traffic seeking to access the Edgewater Blvd 92 east freeway entrance, which has been traditionally accessed from both Hillsdale Blvd and Fashion Island Blvd.

By Foster City unilaterally eliminating Hillsdale Blvd as a access to 92 east freeway entrance, Foster City has doubled the demand on the San Mateo Fashion Island to access the 92 east freeway entrance that is located smack dead center on the Foster City/ San Mateo boarder line.

It is not equitable for Foster City to eliminate Hillsdale Blvd as a 92 East freeway entrance access because it adversely impacts Mariners Island, therefore mitigation must be forthcoming.

## City Manager Drew Corbett and City Manager Jeff Moneda, the Mitigation Act requires impact fee collected must be utilized for directly related impacts.

It's time for the two Cities to work together in a collaborated effort to implement traffic improvements that have <u>mutual benefits to both communities</u>.

The Fashion Island corridors including the Marina Lagoon Bridge are in critical need of traffic improvements.

The corridor has been neglected because the two City are not working together because the projects are located in San Mateo, however the needed improvements primarily benefit Foster City the most.

Both Cities have collected historical high development impact fees recently, yet the desperately needed traffic improvements at the Fashion Island Gateway are not forthcoming.

Are development impact mitigation fees be diverted outside the impact areas whereby the impact fees were collected? If so this violated the Mitigation Act.

City Manager Drew Corbett and City Manager Jeff Moneda, please come together to right the sinking ship. Foster City and San Mateo must figure out a improvement benefit analysis thereby establishing a percentage analysis as to the traffic improvement cost. Without such a cost splitting agreement, the traffic improvements are not being forthcoming or budgeted.

There will never be in the future a higher amount of development impact fees available to the Fashion Island corridor as there has never been such a building explosion in this particular area. That said, traffic improvement must be implements to protect the quality of life in this specific area.

Shawn Mooney
Mariners Island Resident

7) From: Shawn Mooney

Sent: Thursday, **April 4, 2019** 9:25 AM To: Drew Corbett; **Jeff Moneda (Foster City)** 

Cc: FC Planning Commission (Planning@fostercity.org); council@fostercity.org; Mayor Rick Bonilla

Subject: #7 Left @ Edgewater Blvd main arterial thoroughfare to San Mateo Mariners Island Adverse impact is at Norfolk & Fashion Island intersection back up traffic Fiesta Gardens -South Grant & South Delaware

Foster City Manager Jeff Moneda & San Mateo City Manager Drew Corbett,

The adverse impact of Foster City pilot program causes a bottle neck at the intersection of Norfolk and Fashion Island Blvd at the Marina Lagoon Bridge.

The battle ground is traffic access to the 92 east bound freeway entrance on Edgewater Blvd that is right on the City border between Foster City and San Mateo.

Foster City pilot program eliminates access to the 92 east freeway entrance from Hillsdale in Foster City, thereby diverting the traffic to South Norfolk towards Fashion Island Blvd by then a turning right on Edgewater Blvd to access 92 east freeway entrance.

The problem is the intersection at the Marina Lagoon Bridge intersection on Norfolk cannot support this traffic diversion, thereby restricting the number of cars that can cross the bridge from all directions as traffic backs up on the Marina Lagoon bridge thereby restricting the number of vehicle that can cross the Norfolk/Fashion Island intersection as there is nowhere to go.

In other words, it can take two or three red lights to cross the Norfolk/Fashion Island intersection because of the backed up traffic on the Marina Lagoon Bridge making it impossible to cross the intersection.

For example, traffic is backed up in Fiesta Garden area at South Grant and South Delaware all because of the bottle neck traffic at Norfolk/Fashion Island intersection. It takes multiple red lights to cross interception at 19<sup>th</sup> Avenue and S. Grand and S. Delaware all because of the backed up traffic at **Norfolk/Fashion Island intersection.** 

This traffic problem is only going to get worse as San Mateo is redeveloping nearby projects with high density housing including the TJ Max, Rite Aide, and Ross shopping center.

San Mateo's traffic circulation models are adversely impacted by Foster City traffic relief program on Hillsdale Blvd (see attachment). Notable, the Norfolk/Fashion Island intersection is a critical link for both Foster City and Mariners Island residents, therefore Foster City efforts to eliminate traffic on Hillsdale Blvd in Foster City is only shifting the traffic problem to Norfolk/Fashion Island intersection.

By this complaint, I request traffic mitigation at Norfolk/Fashion Island intersection to off-set the adverse impacts from Foster City's pilot program that eliminates left turns at Edgewater Blvd that blocks access to the SR 92 east freeway entrance. San Mateo is requested to update it traffic circulation

models to address the adverse traffic impacts caused by Foster City traffic relief program that imposed adverse impact on San Mateo.

It is not equitable for Foster City to relief traffic on Hillsdale Blvd by diverting the traffic impact to San Mateo. I suggest consideration to restricting the hours of use of the 92 east freeway entrance on Edgewater Blvd instead of restricting use of Edgewater Blvd to accomplish Foster City's same goal of relieving traffic on Hillsdale Blvd. Edgewater Blvd is a critical and vital thoroughfare for Mariners Island residents, whereby decades of development traffic circulation models are base on Edgewater Blvd as a corner stone of traffic circulation. For Foster City to <u>unilaterally</u> restrict use of Edgewater Blvd without mitigation to Mariners Island and mitigation efforts at **Norfolk/Fashion Island intersection is only** shifting Foster City traffic problem elsewhere impacting San Mateo residents, this is not equitable.

#### Shawn Mooney Mariners Island Resident

6) From: Drew Corbett

Sent: Wednesday, April 3, 2019 6:25 PM

To: Shawn Mooney

Cc: Jeff Moneda (Foster City)

Subject: #6 RE: Left @ Edgewater Blvd main Arterial thoroughfare to San Mateo Mariners Island

#### Shawn-

Thank you for bringing your concerns to my attention. These left turn restrictions are occurring in Foster City, so this pilot program is not something that San Mateo has the ability to compel Foster City to terminate.

When Foster City was contemplating this pilot program, San Mateo expressed its concerns about the impact of these left turn restrictions on San Mateo residents. Ultimately, however, this was Foster City's decision to make. We will continue to be in communication with Foster City about the results of the pilot program and its future plans related to restricting left turns.

Thanks, Drew

5) From: Shawn Mooney

Sent: Wednesday, April 3, 2019 10:27 AM

To: Drew Corbett

Cc: 'jmoneda@fostercity.org'

Subject: #5 Left @ Edgewater Blvd main Arterial thoroughfare to San Mateo Mariners Island

City Manager Drew Corbett, attached is Foster City notice of proposed traffic pilot program, which includes a map.

The Map shows Edgewater Blvd is a main arterial thoroughfare that connects Foster City and Mariners Island in San Mateo.

Foster City and Mariners Island is bisected by State Route 92, thereby Edgewater Blvd between Hillsdale and Mariners Island Blvd is a critical link to both FC & SM.

Foster City residents rely upon make a right turn on to Edgewater Blvd from Fashion Island Blvd and Mariners Island residents rely upon making a left turn on Edgewater Blvd from Hillsdale Blvd. For the reasons stated in the three emails below the attached pilot plan must be aborted due to the adverse impacts to San Mateo's Mariners Island.

Per the attached notice the Foster City Manager has the <u>authority to terminate the program anytime</u> for "Safety".

My complaint does not raise safety concerns; however it does raise material equitable concerns.

City Manager Drew Corbett, please confirm with FC City Manager Jeff Moneta that Foster City will terminate the pilot program.

See email below from Vice Mayor Herb Perez.

4) From: Herb Perez [mailto:hperez@fostercity.org]

Sent: Tuesday, April 2, 2019 12:13 PM

To: Shawn Mooney

Cc: City Council; Foster City Planning Department; Drew Corbett; Deputy City Attorney

Subject: Re: Foster City Complaint Left turn on Hillsdale Blvd restricted hours ADVERSE EFFECT on Mariners Island

#### Thank you for your note.

Actually a good question and interesting problem.

Sent from my iPhone

Www.goldmedalmembers.com

3) From: Shawn Mooney

Sent: Tuesday, **April 2, 2019** 12:58 PM

To: council@fostercity.org; FC Planning Commission (Planning@fostercity.org)

Cc: Drew Corbett

Subject: #3 Foster City Complaint Left turn on Hillsdale Blvd restricted hours ADVERSE EFFECT on Mariners Island

Foster City Council and Planning Commission, the restricted hours to make a left turn on Hillsdale Blvd, has an adverse effect on Mariners Island traffic circulation plan. Mariners Island Specific Plan incorporated a traffic circulation plan, the City of Foster City new pilot program that restrict left turns toward Mariners Island adversely impacts San Mateo's traffic circulation plans without any mitigating consideration to Mariners Island residents and commercial developments.

Therefor, Foster City is adversely impacting San Mateo's general plan.

Mariners Island is fully developed and the traffic models that allowed the existing density included access from Hillsdale to Edgewater Blvd.

For Foster City to Change the established traffic circulation without consenting the City of San Mateo or Mariners Island residents and Commercial uses is outrageous and violates CEQA requirements.

There is a long term adverse traffic impact on San Mateo circulation plan, thus adverse impacts on San Mateo's general plan.

Please eliminate this adverse impact until traffic models in San Mateo can support this impact. Mariners Island Resident

#### Cc: Drew Corbett, City Manager San Mateo

2) From: Shawn Mooney

Sent: Tuesday, April 2, 2019 12:08 PM

To: council@fostercity.org; FC Planning Commission (Planning@fostercity.org)

Cc: Drew Corbett

Subject: #2 Foster City Complaint Left turn on Hillsdale Blvd restricted hours ADVERSE EFFECT on Mariners Island

Foster City Council and Planning Commission,

Question:

Would it be fare for the City of San Mateo to restrict right turns at Fashion Island Blvd at Edgewater?

Thereby eliminating Edgewater Blvd as a means for Foster City residents to access their homes? This example is exactly what Foster City is doing to Mariners Island residents in San Mateo.

Shawn Mooney Mariners Island Resident

1) From: Shawn Mooney

Sent: Tuesday, April 2, 2019 10:44 AM

To: council@fostercity.org

Cc: FC Planning Commission (Planning@fostercity.org)

Subject: #1 Complaint Left turn on Hillsdale Blvd restricted hours ADVERSE EFFECT on Mariners Island

Foster City Council and Planning Commission, a complaint/protest is hereby made, the restricted hours to make a left turn on Hillsdale Blvd, has an adverse effect on Mariners Island residence.

It is not fair that Foster City created an adverse traffic condition on San Mateo residence in Mariners Island.

Protest is hereby made that requesting mitigation on left turn from Hillsdale to Edgewater, thereby allowing Mariners Island residents to access their homes on public streets Edgewater from Hillsdale Blvd.

It is not fair or equitable for Foster City to mitigate traffic in Foster City by causing adverse traffic on San Mateo residents.

Shawn Mooney
Mariners Island Resident

From: Carle, Heidemarie@DOT [mailto:heidemarie.carle@dot.ca.gov]

Sent: Thursday, April 11, 2019 2:10 PM

To: moondoggg@sbcglobal.net

Cc: Freer, Marcy@DOT; Stoll, Kendra@DOT Subject: CPRA R002101-041119 Shawn Mooney

Hello Shawn,

It was very nice talking to you earlier. As per our conversation, I've entered your request into the Public Records Center under the account you opened yesterday (well done!).

Attached is the Local Agency Bridge List for San Mateo CA. The bridge is highlighted near the bottom of page 1. I looked at the <a href="mailto:as-built plans from 1993">as-built plans from 1993</a> and they seem to indicate that the seismic retrofit/earthquake damage project was completed for and by the City of San <a href="Mateo">Mateo</a>. I will look at them more closely on Monday when I will have a chance to download them. I will also check the Right-of-Way maps to see if there is any indication of when the bridge was transferred to the City.

I've copied Caltrans Librarian Kendra Stoll on this email. I will work with her in the event the Library has information helpful to your research.

I will be in touch next week. Please let me know if you have any questions in the meantime.

Sincere regards,

# Heidi

Heidemarie Carle
CPRA Public Records Request Coordinator
Office of Public Affairs
Caltrans District 4
Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, San Mateo, Solano, Sonoma Counties
510-622-0799 Desk
510-286-6445 Public Affairs

From: Weiss, Jeffrey A@DOT [mailto:Jeffrey.Weiss@dot.ca.gov]

Sent: Friday, April 12, 2019 3:44 PM

To: Shawn Mooney

Subject: RE: Jeff Weiss -- Assistance Requested District 4 Caltrans San Mateo County (510) 286-5543

Hi Shawn -

I've received your request for information. It will take some time to gather the information that you request. I'm letting you know that I've started the process, and I'll update you as we go along. Feel free to contract me if you need an update along the way.

From: Shawn Mooney

Sent: Wednesday, April 10, 2019 10:19 AM

To: Weiss, Jeffrey A@DOT < Jeffrey. Weiss@dot.ca.gov>

Subject: Jeff Weiss -- Assistance Requested District 4 Caltrans San Mateo County (510) 286-5543

Hi Jeff Weiss, could you please provide any records for the former 19<sup>th</sup> Avenue Freeway in San Mateo (today call SR 92).

I am specially looking for information regarding the 19<sup>th</sup> Ave bridge crossing the Marina Lagoon (formerly call Seal Slough).

This bridge on the west side lands at Norfolk Ave in San Mateo.

The Bridge Road crossing the Marina Lagoon today is call Fashion Island Blvd which serves a freeway ingress/egress to HWY 101.

This <u>one lane</u> bridge each way is a critical traffic thoroughfare in Mariner Island San Mateo and Foster City. However nobody knows who owns the bridge today.

Any documents on the History of this Bridge would be very much appreciated and share with both Foster City and San Mateo.

Approximately 20 years ago this Bridge (hereafter call the Marina Lagoon Bridge) was earthquake seismically retrofitted.

If you have any records, documents, pictures related to who undertook this project, how was it funded it would be greatly appreciated.

The seismically retrofitted project widen the bridge pier foundation by 5 feet on each side of the bridge for a anticipated future widening of the bridge, the prize goal is to specially find plans, documents or anything relevant to a future plan to widen the bridge.

If the bridge was dedicated to another jurisdiction like the County of San Mateo, Estero Municipal Improvement District, the City of Foster City, or the City of San Mateo those documents records would also gratefully appreciated.

Many Thanks, Shawn Mooney



DATE: May 20, 2019

TO: Mayor and Members of the City Council

VIA: Jeff Moneda, City Manager

FROM: Norm Dorais, Public Works Director/City Engineer

SUBJECT: TRAFFIC RELIEF PILOT PROGRAM - NO LEFT TURNS ON EAST

HILLSDALE BOULEVARD AT THE INTERSECTIONS OF EAST HILLSDALE BOULEVARD/EDGEWATER BOULEVARD AND EAST

HILLSDALE BOULEVARD/SHELL BOULEVARD

# RECOMMENDATION

It is recommended that the City Council, by Minute Order, provide policy direction on the Traffic Relief Pilot Program (TRPP) to either (1) extend the program for an additional three (3) months and conduct any additional environmental review under CEQA necessary to permanently implement the program; or (2) terminate the program.

# **EXECUTIVE SUMMARY**

The City Council voted to implement a three-month trial of the TRPP at the December 17, 2018 Council Meeting. The pilot program officially began on February 11, 2019. During the last three (3) months, the TRPP has been implemented on a daily basis during the work week from 4:00 PM-7:00 PM. Before and during the trial period, traffic counts were performed, a survey was conducted, and operational adjustments were made.

Based on City staff's observations, input received, and unintended improvements to eastbound California State Route 92 (SR 92) on-ramps, it appears the TRPP is functioning well.

# BACKGROUND

Following over a year of discussions with the community and the City Council, a TRPP restricting left turns at two (2) intersections began on February 11, 2019. The TRPP restricted left-turn (and U-turn) movements while traveling eastbound on East Hillsdale Boulevard at the intersections of East Hillsdale Boulevard/Edgewater Boulevard and East Hillsdale Boulevard/Shell Boulevard. The restrictions have been in effect during the peak evening commute hours from 4:00 PM-7:00 PM, Monday to Friday, major holidays excluded, since the start of the three-month trial period.

The TRPP and survey results were discussed at the December 17, 2018 City Council Meeting. Consistent with City staff's concerns, the City Council also raised reservations on the impacts this TRPP would have on its residents. However, it was decided this attempt to alleviate traffic congestion would be worthwhile rather than keeping the status quo. The City Council approved 5-0-0 for the TRPP to move forward in implementation as described.

During the program, should any safety concerns arise, authority has been given to the City Manager to terminate at any time. Additionally, efforts were made to make this transition as smooth as possible: through engagement of impacted homeowner associations/properties, ensuring proper signage and notification prior to and during the pilot period, and coordination with the navigation apps.

# **ANALYSIS**

East Hillsdale Boulevard is primarily a six-lane arterial roadway with recently-installed dedicated bike lanes and speed limits ranging from 40 mph, from the City limits to Edgewater Boulevard, to 35 mph, from Edgewater Boulevard to Shell Boulevard. Both intersections, East Hillsdale Boulevard/Edgewater Boulevard and East Hillsdale Boulevard/Shell Boulevard, are controlled by traffic signals. Edgewater Boulevard varies from four (4) to six (6) lanes in each direction and is an arterial roadway with a 40 mph posted speed limit approaching East Hillsdale Boulevard in both directions. Shell Boulevard is also a four-lane arterial roadway with a posted speed limit of 35 mph approaching East Hillsdale Boulevard in both directions.

Traffic counts indicate that peak hour traffic (5:00 PM-6:00 PM) has increased by as much as 30% since 2015.

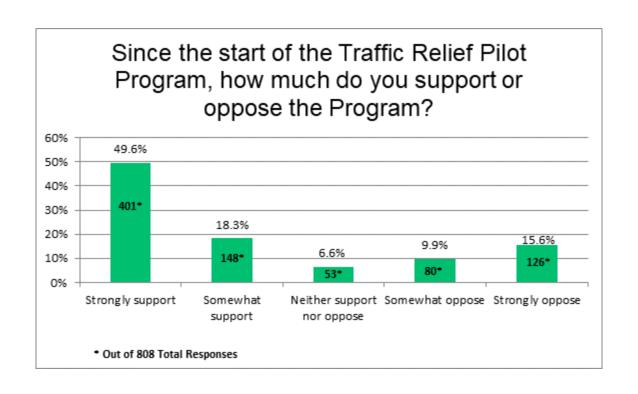
# Traffic Volume Comparison 2015 to 2018 along East Hillsdale Boulevard 5:00 PM-6:00 PM Peak Hour:

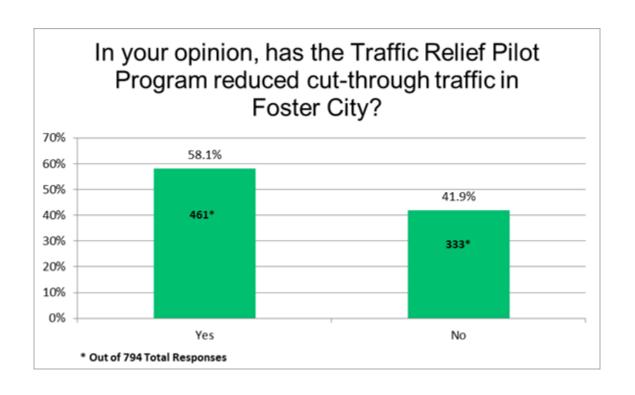
Count Location		2015			2018		Change %
	E/B	W/B	Total	E/B	W/B	Total	
East Hillsdale Boulevard, East of Altair Avenue	1,572	1,234	2,806	1,977	1,273	3,250	+16%
East Hillsdale Boulevard, West of Shell Boulevard	1,246	740	1,986	1,538	953	2,491	+25%
East Hillsdale Boulevard, West of Foster City Boulevard	891	709	1,600	1,313	774	2,087	+30%

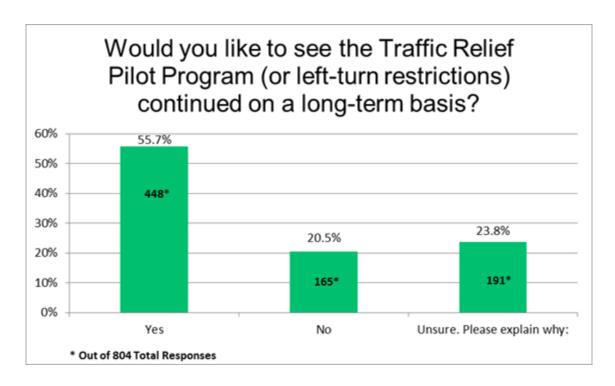
Subsequent to the start of the TRPP, baseline traffic counts were conducted in mid-March 2019. During the pilot program, TRPP intersections showed an approximately 3% traffic volume decrease during the trial time period (4:00 PM-7:00 PM). While overall traffic volumes along East Hillsdale Boulevard increased by approximately 5% from 5:00 PM-6:00 PM, the TRPP elimination of the left turn phase resulted in more "green time" for through-traffic, thus improving traffic flow due to signal efficiency and resulting in decreased travel times. This efficiency is highlighted by three (3) of the nine (9) study intersections showing an improvement to the Level of Service, with only one (1) intersection (East Hillsdale at Center Park Lane) showing a reduction in the Level of Service. The remaining five (5) intersections maintained the same Level of Service. The complete traffic report is included in Attachment 1.

City staff also checked with the City of San Mateo staff on the issue of the potential for increased traffic through San Mateo as a result of the TRPP. The traffic counts indicated a minimal effect on the streets adjacent to the East Hillsdale Boulevard corridor.

In order to gauge public sentiment about how the program is being received, City staff prepared an online survey during March about how people felt the TRPP was working. The survey was sent to prior participants in the previous TRPP survey, advertised in the local paper, and links to the survey were displayed at City facilities and included on the City website. The survey was open for three (3) weeks from March 11 through March 31 and over 800 responses were received. The survey questions and the results are summarized in the three (3) tables below.







As was done with the initial survey in October of 2018, the full March 2019 survey results, including the complete list of questions and detailed responses, are available for review at the following web link: <a href="https://www.fostercity.org/TRPPFeedbackSurvey">www.fostercity.org/TRPPFeedbackSurvey</a>\*.

Besides using traditional traffic counts, City staff is working with a vendor to provide origin and destination information. Tracking vehicles entering Foster City and leaving Foster City via the SR 92 on-ramps (Edgewater Boulevard and Metro Center Boulevard) provides data for estimating the number of vehicles using East Hillsdale Boulevard to "cut-through" Foster City. Staff did not learn of the vendor's product until after the start of the program, so there is only data since one (1) week after the start of the TRPP. Based on the data collected and analyzed to date, the average "cut-through" rate ranges between 15-20%. There does not appear to be a pattern to the "cut-through" traffic patterns (e.g. worse on Wednesday at 5:00 PM-5:15 PM). Rather, the percentages are random and do not present a consistent pattern. City staff continues to work with the vendor to improve the data collection and reporting strategy.

## TRANSPORTATION SUBCOMMITTEE

The Transportation Subcommittee, consisting of Mayor Sam Hindi and Councilmember Sanjay Gehani, has reviewed the staff report.

#### **ENVIRONMENTAL REVIEW**

As further explained in the attached Notice of Exemption (Attachment 2), City staff has determined that the TRPP, and the proposed temporary three-month extension of the

TRPP, is statutorily and categorically exempt from CEQA pursuant to the following CEQA Guidelines Sections: § 15262 (Feasibility and Planning Studies); § 15301 (Existing Facilities); § 15306 (Information Collection); § 15305 (Minor Alterations in Land Use Limitations). Prior to considering any permanent implementation of the program, additional data collection and analysis will be conducted to confirm whether permanent implementation of the program is exempt from CEQA (under § 15301 (Existing Facilities) and/or § 15305 (Minor Alterations in Land Use Limitations) or requires additional environmental analysis in the form of a negative declaration, mitigated negative declaration or environmental impact report.

#### **FUTURE STEPS**

Should the TRPP be implemented on a permanent basis, the following options will be pursued:

1. Comparing the Cost of Contracting the Daily Installation and Removal of the Traffic Control Devices Against Using City Staff.

Contract services may be more cost effective and have the benefit of allowing transit vehicles to use the left turn at the restricted intersections in order to continue using their assigned routes.

2. Traffic Signal Modifications to Implement Turn Restrictions.

In lieu of using City or contract staff, traffic signal modifications can be made to "OMIT" left turns by time of day. This option does not allow for transit vehicles to use the intersection, thus requiring them to change their routes. Emergency vehicles could still proceed through the intersection using lights and sirens. The option potentially requires the elimination of the interior left turn lane in order to prevent vehicles from getting trapped in the left turn pocket without a means to safely get out.

3. Time-of-Day Dynamic Signage.

Another implementation strategy using City or contract forces is the use of "Time-of-Day" dynamic LED signage which activates during the turn restriction period. This option would be used in conjunction with Option 2 (two) above.

## FISCAL IMPACT

The fiscal impact of the TRPP through April 30, 2019 is provided below.

Pilot Program Expenses	
Staff Costs (~\$700/day)	\$ 37,500
Material Costs	\$ 3,200
Traffic Study (Before/After)	\$ 8,471
Cal-West Support costs	\$ 2,956
Total to-date	\$ 52,127

# Attachments:

- Attachment 1 Traffic Study dated April 24, 2019
- Attachment 2 Notice of Exemption

\*Link to detailed responses for the March 2019 survey, including information about the Traffic Relief Pilot Program is available on the project page at <a href="https://www.fostercity.org/trafficreliefpilotprogram">https://www.fostercity.org/trafficreliefpilotprogram</a>.



April 24, 2019

Norm Dorais City of Foster City 610 Foster City Boulevard Foster City, CA 94404

Subject: Hillsdale Blvd – Eastbound Left Turn Restrictions to Hwy 92 Ramps

Before vs After Study

# Introduction and Executive Summary

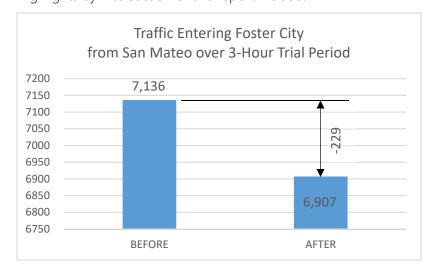
The City of Foster City implemented a Pilot Project in February 2019 to restrict left turn access along E Hillsdale Blvd (eastbound) towards the Highway 92 Ramps. The project, still on-going, includes Time-of-Day (4pm to 7pm) left turn restrictions at the following intersections:

- E Hillsdale Blvd & Edgewater Blvd
- E Hillsdale Blvd & Shell Blvd

The Pilot Project includes using City staff to close down the eastbound left turn lanes at these intersections. Left turn access is provided manually only for emergency response and transit vehicles.

The purpose of the Pilot Project is to deter cut-through traffic through the City of Foster City to help prioritize local streets for residents. This Before vs. After Study provides a comparison of traffic conditions on and along E Hillsdale Blvd and Metro Center Blvd.

Highlights by Intersection of this report include:

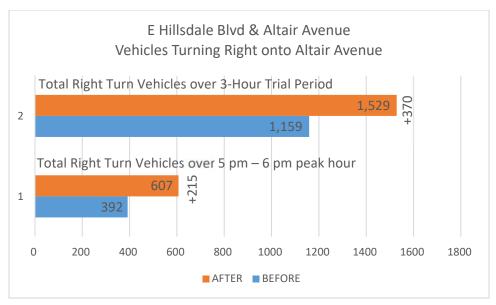


There are 229 less cars entering the City of Foster City over a 3-Hour Period as a result of the Trial Project.

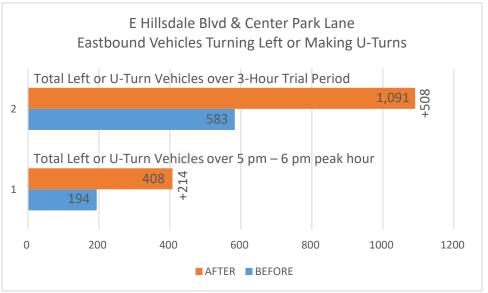
Subject: Hillsdale Blvd – EB Left Turn Restrictions to Hwy 92, Before vs. After Study

Date: April 24, 2019

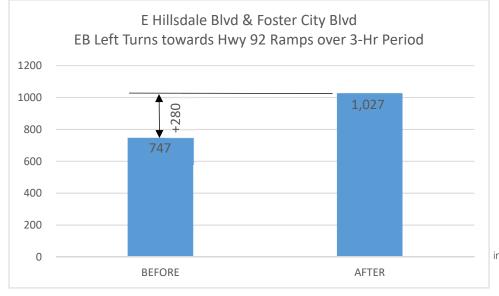
Page: 2 of 10 (Not Including Exhibits)



Altair Avenue is realizing an increase in vehicle traffic over the 3-Hour Trial Period.



Some motorists are making U-Turns at Center Park Drive and heading back towards Edgewater Drive to access Hwy 92 Ramps.



An increase in left turn traffic onto Foster City Blvd was anticipated.

info@trafficpatterns.net

Subject: Hillsdale Blvd – EB Left Turn Restrictions to Hwy 92, Before vs. After Study

Date: April 24, 2019

Page: 3 of 10 (Not Including Exhibits)

# Methodology

Traffic data comparisons were the primary analysis tool used to estimate the effectives of the left turn restrictions pilot project implemented to help detour cut-through traffic through the City of Foster City. The traffic volumes were used to do immediate traffic volume comparisons for before vs after scenarios and to help determine changes in intersection Level of Service (LOS) in the before and after scenarios. Travel time runs along eastbound E Hillsdale Blvd were provided during the pilot project scenario between S Norfolk St in San Mateo to Foster City Boulevard.

Figure 1 provides a map of intersections analyzed as part of this study and it shows the locations where eastbound left turns along E Hillsdale Blvd are implemented as part of the pilot project.

Figure 1

Map of Study Intersections and Turn Restrictions along E Hillsdale Blvd



Subject: Hillsdale Blvd – EB Left Turn Restrictions to Hwy 92, Before vs. After Study

Date: April 24, 2019

Page: 4 of 10 (Not Including Exhibits)

# **Analysis**

# Traffic Data Comparison

Pre-pilot project traffic data was collected in the Fall 2018 on November 7, 2018. 3-hour turning movements were collected between 4:00pm - 7:00pm. Trial implementation traffic data was collected on February 28, 2019 during the same time period and approximately two weeks after the start of the trial. At the Edgewater Blvd & Hwy 92 Ramps intersection, the traffic count equipment failed on February 28, 2019 and was reset on March 5, 2019. Table 1 compared the traffic volumes along E Hillsdale Blvd by intersections.

Table 1

E Hillsdale Boulevard Before vs. After Pilot Project Implementation

Hillsdale Blvd & Altair Ave-Sea Spray Ln

		Hillsdale (EB)		Н	lillsdale (Wi	3)	Altair (NB)				Sea Spray (SE	3)
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	129	5848	1159	142	3068	45	421	12	131	17	17	52
AFTER	210	5168	1529	121	3188	34	437	18	99	18	12	44
Δ	81	(680)	370	(21)	120	(11)	16	6	(32)	1	(5)	(8)
%	62.8%	-11.6%	31.9%	-14.8%	3.9%	-24.4%	3.8%	50.0%	-24.4%	5.9%	-29.4%	-15.4%

#### Hillsdale Blvd & Edgewater Blvd

	1	Hillsdale (EB)	sdale (EB) Hillsdale (WB)		)	E	dgewater (N	В)	Edgewater (SB)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	1333	3401	1058	582	2067	332	726	784	320	564	1477	696
AFTER	22	4066	1269	549	1810	594	814	1207	229	549	1485	682
Δ	(1311)	665	211	(33)	(257)	262	88	423	(91)	(15)	8	(14)
%	-98.3%	19.6%	19.9%	-5.7%	-12.4%	78.9%	12.1%	54.0%	-28.4%	-2.7%	0.5%	-2.0%

#### Hillsdale Blvd & Center Park Ln

		Hillsdale (EB	)	Hillsdale (WB)			Center Park (NB)			Center Park (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	583	3837	2	(Sec	2087	213	=	-	¥	530	141	283
AFTER	1091	3815	_	-	2069	201	=	-	2	519	-	249
Δ	508	(22)		20	(18)	(12)	12	100	2	(11)	020	(34)
%	87.1%	-0.6%	-	150	-0.9%	-5.6%		-		-2.1%	-	-12.0%

#### Hillsdale Blvd & Shell Blvd

		Hillsdale (EB	)	H	Hillsdale (WB	)	Shell (NB)			Shell (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	537	2568	1123	277	1461	182	675	342	272	260	514	230
AFTER	24	2930	1263	262	1342	199	672	497	243	272	510	187
Δ	(513)	362	140	(15)	(119)	17	(3)	155	(29)	12	(4)	(43)
%	-95.5%	14.1%	12.5%	-5.4%	-8.1%	9.3%	-0.4%	45.3%	-10.7%	4.6%	-0.8%	-18.7%

#### Hillsdale Blvd & Foster City Blvd

		Hillsdale (EB	)	Н	Hillsdale (WB)		F	oster City (N	В)	Foster City (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	747	1164	1140	314	672	279	448	1223	82	603	1353	495
AFTER	1027	1342	1089	204	652	269	466	1185	95	622	1350	428
Δ	280	178	(51)	(110)	(20)	(10)	18	(38)	13	19	(3)	(67)
%	37.5%	15.3%	-4.5%	-35.0%	-3.0%	-3.6%	4.0%	-3.1%	15.9%	3.2%	-0.2%	-13.5%

Subject: Hillsdale Blvd – EB Left Turn Restrictions to Hwy 92, Before vs. After Study

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Table 2 provides a comparison of Before vs After Trial Project for traffic data along Metro Center Blvd.

Table 2

Metro Center Blvd - Before vs. After Pilot Project Implementation

Traffic Volume Comparisons by Intersection, 3-Hour Trial Period on 2-28-2019

## Metro Center Blvd - Edgewater Blvd

	Me	Metro Center (EB)			Metro Center (WB)			Edgewater (NB)			Edgewater (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
BEFORE	526	1945	33	67	1884	602	31	22	15	769	24	578	
AFTER	565	1891	41	65	1584	380	61	73	27	774	34	528	
Δ	39	(54)	8	(2)	(300)	(222)	30	51	12	5	10	(50)	
%	7.4%	-2.8%	24.2%	-3.0%	-15.9%	-36.9%	96.8%	231.8%	80.0%	0.7%	41.7%	-8.7%	

# Metro Center Blvd & Vintage Park Dr

	Me	tro Center (	(EB)	Metro Center (WB)			Vintage Park (NB)		VB) Vintage Park (NB)			Vintage Park (SB)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
BEFORE	382	878	86	72	408	911	60	506	175	693	341	468			
AFTER	306	897	81	90	407	955	47	550	267	747	308	450			
Δ	(76)	19	(5)	18	(1)	44	(13)	44	92	54	(33)	(18)			
%	-19.9%	2.2%	-5.8%	25.0%	-0.2%	4.8%	-21.7%	8.7%	52.6%	7.8%	-9.7%	-3.8%			

## Metro Center Blvd & Hwy 92 Off-Ramp-Shopping Center

	Me	tro Center (EB) Metro Center (WB)			WB)	Shop	ping Center	(NB)	Hwy 92 Off-Ramp (SB)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	1370	590	25	27	288	2490	14	134	47	435	15	188
AFTER	1255	637	4	31	337	2905	11	93	49	558	10	190
Δ	(115)	47	(21)	4	49	415	(3)	(41)	2	123	(5)	2
%	-8.4%	8.0%	-84.0%	14.8%	17.0%	16.7%	-21.4%	-30.6%	4.3%	28.3%	-33.3%	1.1%

Table 3 provides a comparison of Before vs After Trial Project for the Edgewater Blvd & Hwy 92 Ramp intersection.

Table 3

Edgewater Blvd - Before vs. After Pilot Project Implementation

Traffic Volume Comparisons by Intersection, 3-Hour Trial Period on 3-5-2019

## Edgewater Blvd-Mariners Island Blvd & Hwy 92 Ramps-Emerald Bay

	Mar	iners Island	(EB)	Edge	water Blvd	(WB)	En	nerald Bay (N	NB)	Hwy 92 Ramps (SB)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
BEFORE	1404	1835	44	38	1858	854	9	26	20	607	7	338	
AFTER	1000	1770	18	26	1737	563	13	2	13	861	7	449	
Δ	(404)	(65)	(26)	(12)	(121)	(291)	4	(24)	(7)	254	0	111	
%	-28.8%	-3.5%	-59.1%	-31.6%	-6.5%	-34.1%	44.4%	-92.3%	-35.0%	41.8%	0.0%	32.8%	

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Analyzing Table 1 notes a decrease of -229 vehicles continuing entering Foster City from San Mateo at E Hillsdale Blvd at Altair Avenue during the 3-hour trial period, a decrease of -3.2%. It should be noted though that during peak hour between 5:00 pm to 6:00 pm the traffic entering Foster City from San Mateo increased by +129 vehicles, +5.4%. The minor discrepancies within 5% are considered normal as traffic data collection is a one-time snap shot in time and various factors can influence changes such as roadway conditions on Hwy 92 or personal drive times of motorists.

Note: The trial project did not result in a significant decrease in traffic entering Foster City from San Mateo.

Table 1 also notes an increase in eastbound left turn (observed U-Turns) at the E Hillsdale Blvd & Park Center Lane (shopping center) intersection. While some motorists do appear to be heading back westbound towards Edgewater Blvd to making a right turn back towards towards the Hwy 92 ramps, there is no noticeable left turn traffic observed to be cutting through the shopping center towards Metro Center Boulevard.

Lastly, Table 1 notes that eastbound left turns at E Hillsdale Blvd & Foster City Blvd increased by +280 vehicles during 3-hour trial period, a +37.5% increase. This is anticipated as it is the only direct left turn access movement towards the Hwy 92 ramps from E Hillsdale Blvd.

Table 2 notes a -115 vehicle (-8.4%) decrease in the eastbound left turn movement onto Hwy 92 from Metro Center Blvd during the 3-hour trial period, but an increase in the westbound right turn movement onto Hwy 92 during the same period, +415 vehicles (+16.7%) does occur. This notes that the left turn restrictions along E Hillsdale Blvd are effective in reducing cut-through traffic along Metro Center Blvd and that motorists are using Foster City Blvd as the only route back towards Hwy 92. This reduction in eastbound approach traffic along Metro Center Blvd notes a drop in the use of Metro Center Blvd is a cut-through route towards Hwy 92 between Edgewater Blvd and the Hwy 92 ramps.

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Along E Hillsdale Blvd though, the two intersection movements being most impacted by the turn restrictions include:

- 1) E Hillsdale Blvd & Center Park Lane Eastbound Left/U-Turn
- 2) E Hillsdale Blvd & Foster City Blvd Eastbound Left

# Level of Service (LOS) Analysis

LOS provides a quantitative method of analyzing performance of an intersection in terms of vehicle delay. Intersections with high capacity and near zero delay conditions provide an LOS-A experience for motorists. Intersections that experience congestion with more demand than capacity provide an LOS-F experience for motorists with significant delays.

For the nine intersections studies as part of the Pilot Project, Table 4 provides a comparison of the LOS conditions at each of the intersections both before and during implementation of the Pilot Project.

Table 4
Study Intersections – Existing Conditions Level of Service (LOS)

No	Intersection Name	Before	After
No.	Intersection Name	LOS	LOS
1	E Hillsdale Blvd & Foster City Blvd	Е	D
2	E Hillsdale Blvd & Shell Blvd	Е	Е
3	E Hillsdale Blvd & Center Park Dr	В	D
4	E Hillsdale Blvd & Edgewater Blvd	F	F
5	E Hillsdale Blvd & Altair Ave-Sea Spray Ln	F	F
6	Metro Center Blvd & Hwy 92 Ramps-OSH	F*	C
7	Metro Center Blvd & Vintage Park Dr	D	D
8	Metro Center Blvd & Edgewater Blvd	D	D
9	Edgewater Blvd & Hwy 2 Ramps-Emerald Bay Ln	F	Е

<sup>\*</sup> Manually adjust from LOS-C to LOS-F during Pre-Trial Analysis based on field observations while traffic model shows more efficient operations.

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Since LOS is driven by traffic volume data, it would be reasonable to assume initially that the overall decrease in traffic volumes along each of the study corridors (E Hillsdale Blvd, Metro Center Blvd, and Edgewater Blvd) an improvement in LOS at the study intersections should follow. Table 4 confirms this assumption.

At Metro Center Blvd & Hwy 92 Ramps-OSH, Table 4 notes an improvement in intersection LOS but this is because of a manual adjustment in the pre-trial analysis. Taking the adjustment into consideration, the intersection LOS analysis has no change in the traffic model but significant improvements based on field observations.

At the Edgewater Blvd & Hwy 92 Ramps intersection the intersection realized an improvement from LOS-F to LOS-E from the pre-trial project to trial project conditions respectively.

The intersection of E Hillsdale Blvd & Foster City Blvd also improved from LOS-E to LOS-D. This is an interesting finding because the total volume of traffic entering Foster City from San Mateo is within an allowable variation of 5% compared to the pre-trial analysis.

The only intersection seeing a substantial impact due to the Pilot Project is the E Hillsdale Blvd & Center Park Lane intersection, LOS-B to LOS-D.

# Travel Time Runs

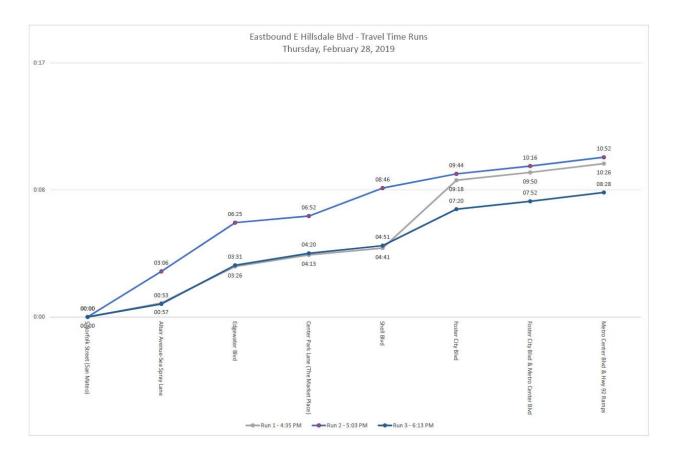
Travel Time Runs include using a floating car that moves with traffic to estimate the amount of time it takes to travel along a corridor. As part of this study, floating car studies were conducted during the Pilot Project implementation phase. Travel Time Runs were conducted the same day as the traffic volume data collection (2-28-2019) for the eastbound direction of E Hillsdale Blvd between S Norfolk St in San Mateo to Foster City Boulevard. Several runs were conducted during the 3-hour pilot project period, Figure 2 shows the Travel Time Run findings.

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Figure 2
Eastbound E Hillsdale Blvd Travel Time Runs



The longest travel time surveyed as part of the Pilot Project implementation is 9 min – 44 sec to get between S Norfolk St in San Mateo to Foster City Boulevard. It takes an average an additional one minute to get to the Hwy 92 Ramps on Metro Center Blvd via Foster City Blvd.

# Findings:

The Trial Project to restrict left turn access along eastbound E Hillsdale Blvd towards the Hwy 92 ramps at Edgewater Blvd and Metro Center Blvd in efforts to reduce cut-through traffic to Hwy 92 through the City does appear to be effective.

Although during the 5:00pm - 6:00pm peak hour, traffic entering the City of Foster City has slightly increased, the additional traffic notes motorists staying in town, likely shopping or residents making it home more quickly. The overall traffic volume entering the City during the three-hour trial period is - 3.2% less.

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At the E Hillsdale Blvd & Altair Avenue-Sea Spray Lane intersection, Sea Spray Lane is seeing an increase in traffic volume. The increase is likely motorists cutting towards Edgewater Blvd. The +81 vehicle increase along Sea Spray Lane during three-hour period represents a three vehicle increase per cycle and should be considered negligible.

The two intersections movements seeing the largest impact from the trial project include E Hillsdale Blvd & Park Center Drive and E Hillsdale Blvd & Foster City Blvd.

Should the project be considered for permanent retention, the following recommendations are provided:

1) Compare the cost of contracting the implementation and take-down of traffic control against using City-forces.

Contract services may be more cost-effective and will continue to allow transit and emergency vehicles to traverse intersections with turn restrictions.

2) Traffic signal modifications to implement turn restrictions.

An alternative to using city or contract staff to implement the turn restrictions is the traffic signal modifications that "OMIT" left turns by time-of-day. This would require transit vehicles to change their routes to avoid the restrictions while emergency vehicles can continue to traverse through the intersections using "Code 3" sirens. The E Hillsdale Blvd & Edgewater Blvd will also require a permanent removal of one of the eastbound left turn lanes to avoid motorists being "trapped" in the existing No. 1 left turn lane when the left turn is omitted.

3) Time-of-Day Dynamic Signage.

An alternative to the on-going use of staff resources to implement the left turn lane closures along E Hillsdale Blvd at Edgewater Blvd and Shell Blvd can be the use of "Time-of-Day" blank-out signs that are activated by the adjacent traffic signals at each intersection. The signs can be set to turn on from the 4pm – 7pm turn restriction period. The signs would operate in conjunction with the "omission" of the left turn movements at the traffic signals.

# List of Exhibits

Exhibit Number	Description
Α	Detailed Intersection Analysis of Traffic Data
В	Traffic Data Calculations – Peak Hour
C	Traffic Data Calculations – 3 Hour Trial Period
D	Synchro Traffic Model Calculations

# Exhibit A Detailed Intersection Analysis of Traffic Data

# 1. E Hillsdale Blvd & Altair Avenue-Sea Spray Lane

Eastbound traffic volumes entering Foster City from San Mateo increased after implementation of the project by approximately +5.4% during the 5:00pm - 6:00pm peak hour. Although during the 3-hour period of the trial period from 4:00pm - 7:00, total traffic entering Foster City decreased by -229 vehicles, or -3.2%.

During the trial period, motorists using the Sea Spray Lane route towards Edgewater Blvd increased by +34 vehicles in the peak hour (83%) and by +81 vehicle during the trial period (63%). While this increase sounds substantial, this increase should be considered negligible as it represents only 3 additional vehicles per traffic signal cycle in the peak hour and trial period.

# 2. E Hillsdale Blvd & Edgewater Blvd

This is the first intersection where eastbound motorists experienced left turn restrictions towards the Hwy 92 ramps. The new eastbound left turn lane closures resulted in a decrease of -457 left turn vehicles during the 5:00pm - 6:00pm peak hour, representing a -98.7% reduction in left turn traffic. During the 4:00pm - 7:00pm trial period, the left turn movements were reduced -1,311 vehicles, or -98.3%.

The eastbound through traffic volumes at the intersection increased by +273 vehicles, or 23.7% (1,152 to 1,425) during the peak hour. During the trial period traffic eastbound through traffic increased by +665 vehicles, or a +19.6% increase.

The westbound right turn approach of the intersection did experience in increase of +97 vehicles, or +79.5% (122 to 219) during the peak hour confirming field observation that vehicles may be making U-Turns at E Hillsdale Blvd & Center Park Lane (Shopping Center) to bypass the turn restrictions. During the trial period, the westbound right turn increased by +262 vehicles, or 78.9%.

# 3. E Hillsdale Blvd & Center Park Lane (Shopping Center)

Field observations noted an increase in left turn movements at this intersection, confirmed in the traffic data noting a +214 increase in left turns at the intersection (194 to 408). Over the three-hour trial period the increase was +508, or +87.1%. The increase in left turns is assumed to be predominantly U-Turn movements head back towards Edgewater Blvd based on field observations.

No noticeable left turns were noted cutting through the shopping center back towards Edgewater Boulevard or towards Metro Center Boulevard.

#### 4. E Hillsdale Blvd & Shell Boulevard

This is the second intersection where eastbound motorists experienced left turn restrictions towards the Hwy 92 ramps. The new eastbound left turn lane closures resulted in a decrease of -185 left turns, representing a -99.5% reduction during the peak hour. During the 4:00 pm - 7:00 pm trial period, the eastbound left turn volumes drop by -513 vehicles, a -96% drop.

The eastbound through traffic volumes at the intersection increased by +72 vehicles, or +7.7% (931 to 1,003).

# 5. E Hillsdale Blvd & Foster City Boulevard

An increase in left turn traffic volumes at E Hillsdale Boulevard & Foster City Boulevard were anticipated and confirmed by both field observations and traffic data. The eastbound left turn traffic volumes increased by +71 vehicles, or +27.1% (262 to 333) during the peak hour. During the 3-hour trial period the eastbound left turn volumes increased by +280 vehicles, or +37.5%.

# 6. Metro Center Blvd & Hwy 92 Ramps-OSH

Along Metro Center Blvd, the largest reduction in traffic volumes occurred at the Metro Center Blvd & Hwy 92 Southbound Ramp-Shopping Center (Former Orchard Supply Hardware) intersection. The eastbound left turn movement onto Hwy 92 reduced -65 vehicles (-12%) during the 5:00pm-6:00pm peak hour and by -115 vehicles (-8%) during the 3-hour trial period. The westbound right turn movement onto Hwy 92 increased by +58 vehicles (6%) during the peak hour and by +415 vehicles (+17%) during the three-hour trial period. The Intersection LOS was manually noted as LOS-F even though the traffic models noted an LOS-C condition during the pre-trial analysis. The manual change was made following field observations that noted excessive queuing in both approaches accessing the Hwy 92 Ramps. During the trial project, the Intersection LOS is again calculated as LOS-C by the model with notable operational improvements during field observations from reduced queues trying to access the Hwy 92 Ramps.

# 7. Edgewater Blvd & Hwy 92 Ramps

At the Edgewater Blvd-Mariners Island Blvd & Hwy 92 Ramps intersection, the northbound right turn movement onto Hwy 92 reduced by -150 vehicles (-43%) during the 5:00pm - 6:00pm peak hour and by -291 vehicles (-34%) during the three-hour trial period. This results in a positive change in the intersection LOS, LOS-E during the trial program compared to LOS-F before. It should be noted though that the traffic counts for this intersection were recounted due to equipment failure. The LOS-E operation is calculated using the recount data approximately one week later.

#### Hillsdale Blvd & Altair Ave-Sea Spray Ln

	I	Hillsdale (EB	)	Hillsdale (WB)			Altair (NB)			Sea Spray (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	41	1958	392	52	1205	14	149	4	52	5	5	14
AFTER	75	1838	607	42	1250	16	154	7	30	1	4	20
Δ	34	(120)	215	(10)	45	2	5	3	(22)	(4)	(1)	6
94	82 0%	-6 1%	54.8%	-10 2%	3 7%	14 3%	3 4%	75.0%	-42.3%	-80 0%	-20.0%	42.0%

#### Hillsdale Blvd & Edgewater Blvd

		Hillsdale (EB	)	Hillsdale (WB)			Edgewater (NB)			Edgewater (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	463	1152	360	240	802	122	242	288	120	206	513	295
AFTER	6	1425	400	221	740	219	284	372	85	186	554	265
Δ	(457)	273	40	(19)	(62)	97	42	84	(35)	(20)	41	(30)
9/	-08 7%	23 7%	11 1%	-7 0%	-7 7%	79 5%	17 /1%	20.2%	-20 2%	-0.7%	8 0%	-10 2%

#### Hillsdale Blvd & Center Park Ln

	ŀ	Hillsdale (EB)	)	Hillsdale (WB)			Center Park (NB)			Center Park (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	194	1359	-	-	836	74	-	-	-	210	-	98
AFTER	408	1305	-	-	849	72	-	-	-	193	-	90
Δ	214	(54)	-	-	13	(2)	-	-	-	(17)	-	(8)
9/	110 3%	-4.0%	_	_	1.6%	-2 7%	_	_	_	-8 1%	_	-8 2%

#### Hillsdale Blvd & Shell Blvd

	ŀ	Hillsdale (EB	)	Hillsdale (WB)		Shell (NB)			Shell (SB)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	186	931	396	123	567	70	252	130	119	102	189	92
AFTER	1	1003	463	110	524	65	266	193	109	109	209	70
Δ	(185)	72	67	(13)	(43)	(5)	14	63	(10)	7	20	(22)
%	-99.5%	7.7%	16.9%	-10.6%	-7.6%	-7 1%	5.6%	48 5%	-8 4%	6.9%	10.6%	-23.9%

#### Hillsdale Blvd & Foster City Blvd

		Hillsdale (EB	)	Hillsdale (WB)			Foster City (NB)			Foster City (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	262	438	426	254	298	122	150	402	35	236	470	189
AFTER	333	495	393	71	257	90	174	411	33	235	498	153
Δ	71	57	(33)	(183)	(41)	(32)	24	9	(2)	(1)	28	(36)
%	27.1%	13.0%	-7.7%	-72.0%	-13.8%	-26.2%	16.0%	2.2%	-5.7%	-0.4%	6.0%	-19.0%

		Hillsdale	& Altair	
	Left	Thru	Right	Total
BEFORE	41	1958	392	2391
AFTER	75	1838	607	2520
Δ	34	(120)	215	129
	82.9%	-6.1%	54.8%	5.4%

#### Metro Center Blvd & Edgwater Blvd

	Me	etro Center (	EB)	Metro Center (WB)			Edgewater (NB)			Edgewater (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	182	693	14	22	717	206	13	4	6	312	12	213
AFTER	189	656	17	25	536	25	22	28	10	321	10	208
Δ	7	(37)	3	3	(181)	(181)	9	24	4	9	(2)	(5)
%	3.8%	-5.3%	21.4%	13.6%	-25.2%	-87.9%	69.2%	600.0%	66.7%	2.9%	-16.7%	-2.3%

# Metro Center Blvd & Vintage Park Dr

	Me	tro Center (I	EB)	Metro Center (WB)			Vintage Park (NB)			Vintage Park (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	168	259	31	27	152	339	29	218	61	269	141	186
AFTER	95	341	33	32	143	331	20	234	100	281	149	189
Δ	(73)	82	2	5	(9)	(8)	(9)	16	39	12	8	3
%	-43.5%	31.7%	6.5%	18.5%	-5.9%	-2.4%	-31.0%	7.3%	63.9%	4.5%	5.7%	1.6%

# Metro Center Blvd & Hwy 92-Shopping Center Dwy

	Me	tro Center (	(EB)	Metro Center (WB)			Shopping Center (NB)			Hwy 92 Off-Ramp (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	525	173	10	12	97	921	7	56	20	79	10	37
AFTER	460	236	0	14	110	979	5	29	26	126	4	44
Δ	(65)	63	(10)	2	13	58	(2)	(27)	6	47	(6)	7
%	-12.4%	36.4%	-100.0%	16.7%	13.4%	6.3%	-28.6%	-48.2%	30.0%	59.5%	-60.0%	18.9%

## Edgewater Blvd-Mariners Island Blvd & Hwy 92 Ramps-Emerald Bay

	Mar	iners Island	(EB)	Edgewater Blvd (WB)			Emerald Bay (NB)			Hwy 92 Off-Ramps (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	569	696	18	15	685	353	1	13	12	316	5	186
AFTER	374	699	9	11	683	203	8	0	2	238	7	103
Δ	(195)	3	(9)	(4)	(2)	(150)	7	(13)	(10)	(78)	2	(83)
0/	24.20/	0.40/	EO 00/	20.70/	0.20/	43 50/	700.00/	100.00/	02.20/	24.70/	40.00/	44.00/

Exhibit B Traffic Data Calculations over Peak Hour, 5pm-6pm

#### Hillsdale Blvd & Altair Ave-Sea Spray Ln

		Hillsdale (EB	)	Hillsdale (WB)			Altair (NB)		Sea Spray (SB)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	129	5848	1159	142	3068	45	421	12	131	17	17	52
AFTER	210	5168	1529	121	3188	34	437	18	99	18	12	44
Δ	81	(680)	370	(21)	120	(11)	16	6	(32)	1	(5)	(8)
0/	C2 00/	11 (0/	21 00/	14.00/	2.00/	24.40/	2.00/	EO 00/	24.40/	E 00/	20.40/	1 - 40/

#### Hillsdale Blvd & Edgewater Blvd

	i	Hillsdale (EB)	)	Hillsdale (WB)			Ed	dgewater (N	B)	Edgewater (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	1333	3401	1058	582	2067	332	726	784	320	564	1477	696
AFTER	22	4066	1269	549	1810	594	814	1207	229	549	1485	682
Δ	(1311)	665	211	(33)	(257)	262	88	423	(91)	(15)	8	(14)
9/	-08 3%	10.6%	10 0%	-5 7%	-12 /19/	78 0%	12 1%	54.0%	-28 4%	-2 7%	0.5%	-2.0%

#### Hillsdale Blvd & Center Park Ln

		Hillsdale (EB)	)	Hillsdale (WB)			Ce	enter Park (N	IB)	Center Park (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	583	3837	-		2087	213	,	-	-	530	-	283
AFTER	1091	3815	-	-	2069	201	-	-	-	519	-	249
Δ	508	(22)	-	-	(18)	(12)	-	-	-	(11)	-	(34)
%	87.1%	-0.6%	-	-	-0.9%	-5.6%	-	-	-	-2.1%	-	-12.0%

#### Hillsdale Blvd & Shell Blvd

	-	Hillsdale (EB	)	H	Hillsdale (WB	)	Shell (NB)			Shell (SB)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
BEFORE	537	2568	1123	277	1461	182	675	342	272	260	514	230	
AFTER	24	2930	1263	262	1342	199	672	497	243	272	510	187	
Δ	(513)	362	140	(15)	(119)	17	(3)	155	(29)	12	(4)	(43)	
%	-95.5%	14.1%	12.5%	-5.4%	-8.1%	9.3%	-0.4%	45.3%	-10.7%	4.6%	-0.8%	-18.7%	

#### Hillsdale Blvd & Foster City Blvd

		Hillsdale (EB	)	Hillsdale (WB)			Fe	oster City (N	B)	Foster City (SB)		
	Left	Thru	Right	Left Thru Right			Left	Thru	Right	Left	Thru	Right
BEFORE	747	1164	1140	314	672	279	448	1223	82	603	1353	495
AFTER	1027	1342	1089	204	652	269	466	1185	95	622	1350	428
Δ	280	178	(51)	(110)	(20)	(10)	18	(38)	13	19	(3)	(67)
%	37.5%	15.3%	-4.5%	-35.0%	-3.0%	-3.6%	4.0%	-3.1%	15.9%	3.2%	-0.2%	-13.5%

		Hillsdale	& Altair	
	Left	Thru	Right	Total
BEFORE	129	5848	1159	7136
AFTER	210	5168	1529	6907
Δ	81	(680)	370	(229)
	62.8%	-11.6%	31.9%	-3.2%

#### Metro Center Blvd - Edgewater Blvd

	M	Metro Center (EB)			Metro Center (WB)			dgewater (N	В)	Edgewater (SB)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
EFORE	526	1945	33	67	1884	602	31	22	15	769	24	578	
AFTER	565	1891	41	65	1584	380	61	73	27	774	34	528	
Δ	39	(54)	8	(2)	(300)	(222)	30	51	12	5	10	(50)	
%	7.4%	-2.8%	24.2%	-3.0%	-15.9%	-36.9%	96.8%	231.8%	80.0%	0.7%	41.7%	-8.7%	

# Metro Center Blvd & Vintage Park Dr

	Me	tro Center (	EB)	Metro Center (WB)			Vintage Park (NB)			Vintage Park (SB)		
	Left	Thru	Right	Left	3 .			Thru	Right	Left	Thru	Right
BEFORE	382	878	86	72	408	911	60	506	175	693	341	468
AFTER	306	897	81	90	407	955	47	550	267	747	308	450
Δ	(76)	19	(5)	18	(1)	44	(13)	44	92	54	(33)	(18)
%	-19.9%	2.2%	-5.8%	25.0%	-0.2%	4.8%	-21.7%	8.7%	52.6%	7.8%	-9.7%	-3.8%

# Metro Center Blvd & Hwy 92 Off-Ramp-Shopping Center

	Me	etro Center (	(EB)	Metro Center (WB)			Shop	ping Center	(NB)	Hwy 92 Off-Ramp (SB)		
	Left	Thru	Right	Left	Left Thru Right Le		Left	Thru	Right	Left	Thru	Right
BEFORE	1370	590	25	27	288	2490	14	134	47	435	15	188
AFTER	1255	637	4	31	337	2905	11	93	49	558	10	190
Δ	(115)	47	(21)	4	49	415	(3)	(41)	2	123	(5)	2
%	-8.4%	8.0%	-84.0%	14.8%	17.0%	16.7%	-21.4%	-30.6%	4.3%	28.3%	-33.3%	1.1%

## Edgewater Blvd-Mariners Island Blvd & Hwy 92 Ramps-Emerald Bay

	Mar	iners Island	(EB)	Edgewater Blvd (WB)			Emerald Bay (NB)			Hwy 92 Ramps (SB)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
BEFORE	1404	1835	44	38	1858	854	9	26	20	607	7	338
AFTER	1000	1770	18	26	1737	563	13	2	13	861	7	449
Δ	(404)	(65)	(26)	(12)	(121)	(291)	4	(24)	(7)	254	0	111
0/	20.00/	2 E0/	EO 10/	21.00/	C F0/	24.10/	44.40/	02.20/	25.00/	44.00/	0.00/	22.00/

# Exhibit C Traffic Data Calculations over Trial Period, 4pm-7pm

# Exhibit D Synchro Traffic Model – Intersection Level of Service (LOS) Reports

Exhibit D-1	Synchro Analysis - E Hillsdale Blvd & Altair Ave-Sea Spray Lane
Exhibit D-2	Synchro Analysis - E Hillsdale Blvd & Edgewater Blvd
Exhibit D-3	Synchro Analysis - E Hillsdale Blvd & Center Park Ln
Exhibit D-4	Synchro Analysis - E Hillsdale Blvd & Shell Blvd
Exhibit D-5	Synchro Analysis - E Hillsdale Blvd & Foster City Blvd
Exhibit D-6	Synchro Analysis - Metro Center Blvd & Edgewater Blvd
Exhibit D-7	Synchro Analysis - Metro Center Blvd & Vintage Park Dr
Exhibit D-8	Synchro Analysis - Metro Center Blvd & Hwy 92 Ramps
Exhibit D-9	Synchro Analysis - Edgewater Blvd & Hwy 92 Ramps

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		4îÞ		ሻ	4		ሻ	ተተኈ		ሻ	ተተኈ	
Traffic Volume (vph)	1	4	20	154	7	30	75	1838	607	42	1250	16
Future Volume (vph)	1	4	20	154	7	30	75	1838	607	42	1250	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	10	10	10	10	10	10
Storage Length (ft)	200		200	260		0	250		0	75		0
Storage Lanes	0		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	0.91	0.91	1.00	0.91	0.91
Ped Bike Factor		0.98			0.99			1.00			1.00	
Frt		0.878			0.952			0.963			0.998	
Flt Protected		0.998		0.950	0.971		0.950			0.950		
Satd. Flow (prot)	0	3047	0	1681	1626	0	1652	4554	0	1652	4735	0
Flt Permitted		0.998		0.950	0.971		0.950			0.950		
Satd. Flow (perm)	0	3047	0	1681	1626	0	1652	4554	0	1652	4735	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			17			58			1	,
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		247			282			843			426	
Travel Time (s)		5.6			6.4			19.2			9.7	
Confl. Bikes (#/hr)		0.0	11		0.1	9		17.2	3		,.,	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	4	22	167	8	33	82	1998	660	46	1359	17
Shared Lane Traffic (%)	•	•		37%		00	02	1770	000	10	1007	.,
Lane Group Flow (vph)	0	27	0	105	103	0	82	2658	0	46	1376	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			10			10	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.09	1.09	1.09	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	-
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases												
Minimum Split (s)	37.2	37.2		36.2	36.2		9.5	30.0		9.5	30.0	
Total Split (s)	40.0	40.0		43.0	43.0		15.0	42.0		15.0	42.0	
Total Split (%)	28.6%	28.6%		30.7%	30.7%		10.7%	30.0%		10.7%	30.0%	
Maximum Green (s)	35.8	35.8		38.8	38.8		11.4	37.0		11.4	37.0	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.1	4.0		3.1	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	110	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.2		4.2	4.2		3.6	5.0		3.6	5.0	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Walk Time (s)	5.0	5.0		5.0	5.0		103	5.0		103	5.0	
Flash Dont Walk (s)	28.0	28.0		27.0	27.0			20.0			20.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Act Effct Green (s)		35.8		38.8	38.8		11.4	37.0		11.4	37.0	
Actuated g/C Ratio		0.26		0.28	0.28		0.08	0.26		0.08	0.26	
v/c Ratio		0.03		0.23	0.22		0.61	2.13		0.34	1.10	
Control Delay		17.4		40.6	33.9		81.9	538.4		69.0	119.1	
Queue Delay		0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay		17.4		40.6	33.9		81.9	538.4		69.0	119.1	
LOS		В		D	С		F	F		Е	F	
Approach Delay		17.4			37.3			524.7			117.5	
Approach LOS		В			D			F			F	

# **Intersection Summary**

Area Type: Other

Cycle Length: 140
Actuated Cycle Length: 140

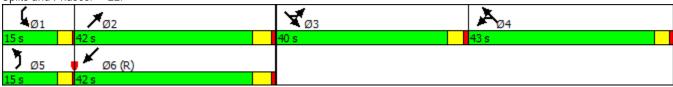
Offset: 50.3 (36%), Referenced to phase 6:SWT, Start of Green

Natural Cycle: 115 Control Type: Pretimed Maximum v/c Ratio: 2.13

Intersection Signal Delay: 366.8 Intersection LOS: F
Intersection Capacity Utilization 76.3% ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 22:



Baseline Synchro 9 Light Report

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻሻ	<b>^</b>	7	ሻሻ	<b>∱</b> ∱		ሻሻ	<b>^</b>	7	*	<b>^</b> ^	7
Traffic Volume (vph)	6	1425	400	221	740	219	284	372	85	186	554	265
Future Volume (vph)	6	1425	400	221	740	219	284	372	85	186	554	265
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	10	10	10	13	10	10
Storage Length (ft)	700		115	500		0	540		75	315		200
Storage Lanes	2		1	2		0	2		1	1		1
Taper Length (ft)	25			25			25			25		-
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	0.97	0.95	1.00	1.00	0.91	1.00
Ped Bike Factor			0.97						0.99			
Frt			0.850		0.966				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3419	0	3204	3303	1478	1829	4746	1478
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1543	3433	3419	0	3204	3303	1457	1829	4746	1478
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			113		27				113			288
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		277			383			755			1138	
Travel Time (s)		6.3			8.7			17.2			25.9	
Confl. Peds. (#/hr)			12						2			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	1549	435	240	804	238	309	404	92	202	602	288
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	1549	435	240	1042	0	309	404	92	202	602	288
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24	J ·		24	<b>J</b> •		20	J ·		20	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.09	1.09	0.96	1.09	1.09
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Minimum Split (s)	9.5	41.6	41.6	9.5	40.0		9.5	42.9	42.9	9.5	39.0	39.0
Total Split (s)	28.0	42.0	42.0	28.0	42.0		18.0	43.0	43.0	27.0	52.0	52.0
Total Split (%)	20.0%	30.0%	30.0%	20.0%	30.0%		12.9%	30.7%	30.7%	19.3%	37.1%	37.1%
Maximum Green (s)	24.0	37.4	37.4	24.0	37.0		14.0	38.1	38.1	22.5	47.0	47.0
Yellow Time (s)	3.5	3.6	3.6	3.5	4.0		3.5	3.9	3.9	3.5	4.0	4.0
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.5	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.6	4.6	4.0	5.0		4.0	4.9	4.9	4.5	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		4.0	4.0		4.0			4.0	4.0		4.0	4.0
Flash Dont Walk (s)		33.0	33.0		31.0			34.0	34.0		30.0	30.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Act Effct Green (s)	24.0	37.4	37.4	24.0	37.0		14.0	38.1	38.1	22.5	47.0	47.0
Actuated g/C Ratio	0.17	0.27	0.27	0.17	0.26		0.10	0.27	0.27	0.16	0.34	0.34
v/c Ratio	0.01	1.64	0.88	0.41	1.13		0.97	0.45	0.19	0.69	0.38	0.42
Control Delay	62.0	325.8	56.4	54.1	117.0		96.6	20.6	1.8	68.7	36.2	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.0	325.8	56.4	54.1	117.0		96.6	20.6	1.8	68.7	36.2	5.5
LOS	Е	F	Е	D	F		F	С	Α	Е	D	Α
Approach Delay		266.0			105.2			47.6			34.1	
Approach LOS		F			F			D			С	

# **Intersection Summary**

Area Type: Other

Cycle Length: 140 Actuated Cycle Length: 140

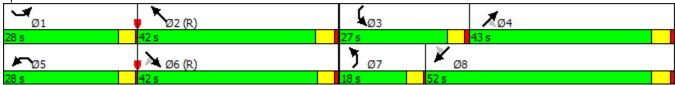
Offset: 0 (0%), Referenced to phase 2:NWT and 6:SET, Start of Green

Natural Cycle: 115 Control Type: Pretimed Maximum v/c Ratio: 1.64

Intersection Signal Delay: 143.1 Intersection LOS: F
Intersection Capacity Utilization 102.7% ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 27:



Baseline Synchro 9 Light Report

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Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	#	*	<b>^</b> ^	<b>††</b>	
Traffic Volume (vph)	193	90	408	1305	849	72
Future Volume (vph)	193	90	408	1305	849	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	10	10	10
Storage Length (ft)	200	200	400	10	10	0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.91
Ped Bike Factor	1.00	0.92	1.00	0.71	0.99	5.71
Frt		0.850	1.00		0.988	
Flt Protected	0.950	0.000	0.950		0.700	
Satd. Flow (prot)	1770	1583	1711	4746	4663	0
Flt Permitted	0.950	1000	0.950	4/40	4003	U
	1770	1450	1706	4746	4663	0
Satd. Flow (perm)	1770		1/00	4/40	4003	
Right Turn on Red		Yes			1.4	Yes
Satd. Flow (RTOR)	20	98		20	14	
Link Speed (mph)	30			30	30	
Link Distance (ft)	293			1138	593	
Travel Time (s)	6.7			25.9	13.5	
Confl. Peds. (#/hr)		47	4			20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	210	98	443	1418	923	78
Shared Lane Traffic (%)						
Lane Group Flow (vph)	210	98	443	1418	1001	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12	J		13	13	3
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	10			10	10	
Headway Factor	1.00	1.00	1.04	1.09	1.09	1.09
Turning Speed (mph)	1.00	9	1.04	1.07	1.07	9
	Prot			NΙΛ	NA	7
Turn Type		Perm	Prot	NA		
Protected Phases	4	,	5	2	6	
Permitted Phases	20.5	6		00.5	07.5	
Minimum Split (s)	29.5	27.5	9.5	22.5	27.5	
Total Split (s)	36.0	47.0	27.0	84.0	47.0	
Total Split (%)	30.0%	39.2%	22.5%	70.0%	39.2%	
Maximum Green (s)	31.5	42.5	23.4	79.5	42.5	
Yellow Time (s)	3.5	3.5	3.1	3.5	3.5	
All-Red Time (s)	1.0	1.0	0.5	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	3.6	4.5	4.5	
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Walk Time (s)	5.0	5.0			5.0	
Flash Dont Walk (s)	20.0	18.0			18.0	
Pedestrian Calls (#/hr)	0	0			0	
- CUCSUIAII CAIIS (#/III)	U	U			U	

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Lane Group	SEL	SER	NEL	NET	SWT	SWR
Act Effct Green (s)	31.5	52.5	23.4	79.5	52.5	
Actuated g/C Ratio	0.26	0.44	0.20	0.66	0.44	
v/c Ratio	0.45	0.14	1.33	0.45	0.49	
Control Delay	40.8	4.4	206.4	10.3	25.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	40.8	4.4	206.4	10.3	25.2	
LOS	D	Α	F	В	С	
Approach Delay	29.2			57.0	25.2	
Approach LOS	С			E	С	
Intersection Summary						
Area Type:	Other					
Cycle Length: 120						
Actuated Cycle Length: 1						
Offset: 0 (0%), Reference	ed to phase 2:N	NET and	6:SWT, S	tart of Gr	een	
Natural Cycle: 80						
Control Type: Pretimed						
Maximum v/c Ratio: 1.33						
Intersection Signal Delays					tersectior	
Intersection Capacity Utili	ization 73.4%			IC	U Level of	of Service D

Intersection Capacity Utilization 73.4% Analysis Period (min) 15

Splits and Phases: 21:



Synchro 9 Light Report Baseline

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	Ť	<b>^</b>	7	1,4	<b>†</b>	7	ሻ	<b>^</b>	7	ሻ	<b>^</b>	7
Traffic Volume (vph)	1	1003	463	110	524	65	266	193	109	109	209	70
Future Volume (vph)	1	1003	463	110	524	65	266	193	109	109	209	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	11	10	10	11	10	11
Storage Length (ft)	130		130	430		215	250		200	150		150
Storage Lanes	1		1	2		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor			0.96			0.97			0.97			0.96
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1711	3303	1478	1711	3303	1531
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1521	3433	1863	1541	1711	3303	1432	1711	3303	1471
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			223			85			118			85
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		582			897			602			1238	
Travel Time (s)		13.2			20.4			13.7			28.1	
Confl. Peds. (#/hr)			24			13			18			25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	1090	503	120	570	71	289	210	118	118	227	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	1090	503	120	570	71	289	210	118	118	227	76
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.09	1.09	1.04	1.09	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	custom	Prot	NA	custom	Prot	NA	custom	Prot	NA	custom
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			4			8			2			6
Minimum Split (s)	9.5	37.6	35.6	9.5	37.6	35.6	9.5	35.6	37.6	9.5	35.6	37.6
Total Split (s)	20.0	39.0	37.0	20.0	39.0	37.0	24.0	37.0	39.0	24.0	37.0	39.0
Total Split (%)	16.7%	32.5%	30.8%	16.7%	32.5%	30.8%	20.0%	30.8%	32.5%	20.0%	30.8%	32.5%
Maximum Green (s)	16.4	34.4	32.4	16.4	34.4	32.4	20.4	32.4	34.4	19.9	32.4	34.4
Yellow Time (s)	3.1	3.6	3.6	3.1	3.6	3.6	3.1	3.6	3.6	3.1	3.6	3.6
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.6	4.6	4.6	3.6	4.6	4.6	3.6	4.6	4.6	4.1	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		28.0	26.0		28.0	26.0		26.0	28.0		26.0	28.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Act Effct Green (s)	16.4	34.4	32.4	16.4	34.4	32.4	20.4	32.4	34.4	19.9	32.4	34.4
Actuated g/C Ratio	0.14	0.29	0.27	0.14	0.29	0.27	0.17	0.27	0.29	0.17	0.27	0.29
v/c Ratio	0.00	1.07	0.88	0.26	1.07	0.15	1.00	0.24	0.24	0.42	0.25	0.16
Control Delay	45.0	91.7	40.9	48.0	99.5	5.7	95.2	36.8	3.0	57.7	44.5	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.0	91.7	40.9	48.0	99.5	5.7	95.2	36.8	3.0	57.7	44.5	9.6
LOS	D	F	D	D	F	Α	F	D	Α	Е	D	Α
Approach Delay		75.6			82.6			57.7			41.9	
Approach LOS		Е			F			Е			D	

# **Intersection Summary**

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120

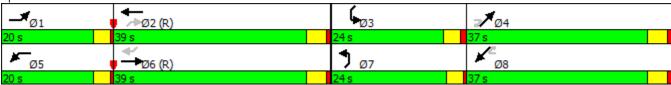
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Natural Cycle: 105 Control Type: Pretimed Maximum v/c Ratio: 1.07

Intersection Signal Delay: 69.7 Intersection LOS: E
Intersection Capacity Utilization 86.8% ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5:



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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻሻ	<b>^</b>	7	ሻሻ	<b>↑</b> ↑		ሻ	<b>^</b>	7	*	<b>^</b>	7
Traffic Volume (vph)	333	594	393	71	257	90	174	411	33	235	498	153
Future Volume (vph)	333	594	393	71	257	90	174	411	33	235	498	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	13	11	11	13	11	10	10	10	10	12
Storage Length (ft)	400		200	400		200	200		200	140		140
Storage Lanes	2		1	2		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor			0.96		0.99				0.97			0.97
Frt			0.850		0.961				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3319	3421	1636	3319	3255	0	1711	3303	1478	1652	3303	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3319	3421	1576	3319	3255	0	1711	3303	1437	1652	3303	1543
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			427		43				113			153
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		487			682			1238			324	
Travel Time (s)		11.1			15.5			28.1			7.4	
Confl. Peds. (#/hr)			22			23			13			11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	362	646	427	77	279	98	189	447	36	255	541	166
Shared Lane Traffic (%)												
Lane Group Flow (vph)	362	646	427	77	377	0	189	447	36	255	541	166
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		22	Ü		22	Ŭ		11	Ŭ		11	Ü
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	0.96	1.04	1.04	0.96	1.04	1.09	1.09	1.09	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Minimum Split (s)	9.5	35.6	35.6	9.5	35.6		9.5	33.6	33.6	9.5	33.6	33.6
Total Split (s)	20.0	36.0	36.0	27.0	43.0		23.0	37.0	37.0	20.0	34.0	34.0
Total Split (%)	16.7%	30.0%	30.0%	22.5%	35.8%		19.2%	30.8%	30.8%	16.7%	28.3%	28.3%
Maximum Green (s)	16.4	31.4	31.4	23.4	38.4		19.4	32.4	32.4	16.4	29.4	29.4
Yellow Time (s)	3.1	3.6	3.6	3.1	3.6		3.1	3.6	3.6	3.1	3.6	3.6
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.5	1.0	1.0	0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.6	4.6	4.6	3.6	4.6		3.6	4.6	4.6	3.6	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		4.0	4.0		4.0			4.0	4.0		4.0	4.0
Flash Dont Walk (s)		27.0	27.0		27.0			25.0	25.0		25.0	25.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Act Effct Green (s)	16.4	31.4	31.4	23.4	38.4		19.4	32.4	32.4	16.4	29.4	29.4
Actuated g/C Ratio	0.14	0.26	0.26	0.20	0.32		0.16	0.27	0.27	0.14	0.24	0.24
v/c Ratio	0.80	0.72	0.59	0.12	0.35		0.68	0.50	0.08	1.13	0.67	0.34
Control Delay	64.3	45.7	7.0	40.5	28.6		67.0	55.6	4.0	147.3	45.7	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.3	45.7	7.0	40.5	28.6		67.0	55.6	4.0	147.3	45.7	9.1
LOS	Е	D	Α	D	С		Е	Е	Α	F	D	Α
Approach Delay		38.9			30.6			56.1			66.3	
Approach LOS		D			С			Е			Е	

# **Intersection Summary**

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

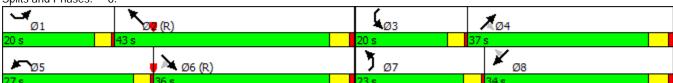
Offset: 0 (0%), Referenced to phase 2:NWT and 6:SET, Start of Green

Natural Cycle: 100 Control Type: Pretimed Maximum v/c Ratio: 1.13

Intersection Signal Delay: 48.6 Intersection LOS: D
Intersection Capacity Utilization 86.9% ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 8:



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1,1	ħβ		ሻ	ተተተ	7		ર્ન	7	ች	4	7
Traffic Volume (vph)	189	656	17	25	536	130	22	28	10	321	10	208
Future Volume (vph)	189	656	17	25	536	130	22	28	10	321	10	208
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	200		0	0		0	170		170
Storage Lanes	2		0	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.97	0.95	0.95	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor		1.00				0.97			0.98			0.98
Frt		0.996				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.978		0.950	0.955	
Satd. Flow (prot)	3433	3522	0	1770	5085	1583	0	1822	1583	1681	1690	1583
Flt Permitted	0.950			0.950				0.978		0.950	0.955	
Satd. Flow (perm)	3433	3522	0	1770	5085	1530	0	1822	1556	1681	1690	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				141			100			226
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		566			384			232			792	
Travel Time (s)		12.9			8.7			5.3			18.0	
Confl. Peds. (#/hr)			5			10			4			7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	205	713	18	27	583	141	24	30	11	349	11	226
Shared Lane Traffic (%)										48%		
Lane Group Flow (vph)	205	731	0	27	583	141	0	54	11	181	179	226
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		3	3	
Permitted Phases						2			4			3
Minimum Split (s)	9.5	31.9		9.5	23.9	23.9	36.7	36.7	36.7	36.7	36.7	36.7
Total Split (s)	14.0	41.0		20.0	47.0	47.0	40.0	40.0	40.0	39.0	39.0	39.0
Total Split (%)	10.0%	29.3%		14.3%	33.6%	33.6%	28.6%	28.6%	28.6%	27.9%	27.9%	27.9%
Maximum Green (s)	10.4	36.1		16.4	42.1	42.1	36.3	36.3	36.3	35.3	35.3	35.3
Yellow Time (s)	3.1	3.9		3.1	3.9	3.9	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.6	4.9		3.6	4.9	4.9		3.7	3.7	3.7	3.7	3.7
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		22.0			14.0	14.0	28.0	28.0	28.0	28.0	28.0	28.0
Pedestrian Calls (#/hr)		0			0	0	0	0	0	0	0	0
Act Effct Green (s)	10.4	36.1		16.4	42.1	42.1		36.3	36.3	35.3	35.3	35.3

Baseline

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.07	0.26		0.12	0.30	0.30		0.26	0.26	0.25	0.25	0.25
v/c Ratio	0.80	0.80		0.13	0.38	0.25		0.11	0.02	0.43	0.42	0.40
Control Delay	92.4	35.3		75.0	48.1	15.2		40.5	0.1	47.6	47.4	7.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	92.4	35.3		75.0	48.1	15.2		40.5	0.1	47.6	47.4	7.2
LOS	F	D		Ε	D	В		D	Α	D	D	Α
Approach Delay		47.8			42.9			33.7			32.0	
Approach LOS		D			D			С			С	

#### **Intersection Summary**

Area Type: Other

Cycle Length: 140 Actuated Cycle Length: 140

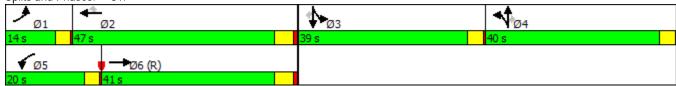
Offset: 0 (0%), Referenced to phase 6:EBT, Start of Green

Natural Cycle: 115 Control Type: Pretimed Maximum v/c Ratio: 0.80

Intersection Signal Delay: 41.9 Intersection LOS: D
Intersection Capacity Utilization 88.3% ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 31:



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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	<b>†</b>	7	ሻ	<b>↑</b> ↑		ሻ	<b>↑</b> ↑		*	<b>^</b>	7
Traffic Volume (vph)	95	341	33	32	143	331	20	234	100	281	149	189
Future Volume (vph)	95	341	33	32	143	331	20	234	100	281	149	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		260	200		0	175		0	250		140
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor	,,,,,		0.79		0.92			0.95				0.92
Frt			0.850		0.895			0.955				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	2927	0	1770	3225	0	1770	3539	1583
Flt Permitted	0.950	.000	.000	0.950	_,_,	Ū	0.950	0220	J	0.950	0007	.000
Satd. Flow (perm)	1770	1863	1254	1770	2927	0	1770	3225	0	1770	3539	1463
Right Turn on Red	1770	1000	Yes	1770	2,2,	Yes	1770	0220	Yes	1770	0007	Yes
Satd. Flow (RTOR)			106		360	100		57	100			205
Link Speed (mph)		30	.00		30			30			30	200
Link Distance (ft)		345			169			394			972	
Travel Time (s)		7.8			3.8			9.0			22.1	
Confl. Peds. (#/hr)		7.0	83		0.0	74		7.0	61		22.1	51
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	103	371	36	35	155	360	22	254	109	305	162	205
Shared Lane Traffic (%)	100	071	00	00	100	000	22	201	107	000	102	200
Lane Group Flow (vph)	103	371	36	35	515	0	22	363	0	305	162	205
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Lort	12	rtigiti	Loit	12	rtigitt	Loit	12	ragne	Loit	12	ragne
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	9	1.00	1.00	9	1.00	1.00	9	1.00	1.00	9
Turn Type	Prot	NA	Perm	Prot	NA	,	Prot	NA	,	Prot	NA	Perm
Protected Phases	1 100	6	I CIIII	5	2		7	4		3	8	1 CIIII
Permitted Phases		U	6	J	2		,	4		J	U	8
Minimum Split (s)	9.5	30.5	30.5	9.5	31.5		9.5	30.7		9.5	32.2	32.2
Total Split (s)	22.0	35.0	35.0	25.0	38.0		25.0	40.0		20.0	35.0	35.0
Total Split (%)	18.3%	29.2%	29.2%	20.8%	31.7%		20.8%	33.3%		16.7%	29.2%	29.2%
Maximum Green (s)	18.5	30.5	30.5	21.5	33.5		21.5	36.3		16.778	30.8	30.8
Yellow Time (s)	3.0	3.5	3.5	3.0	3.5		3.0	3.2		3.0	3.2	3.2
All-Red Time (s)	0.5	1.0	1.0	0.5	1.0		0.5	0.5		0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	3.5	4.5	4.5	3.5	4.5		3.5	3.7		3.5	4.2	4.2
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Walk Time (s)		5.0	5.0		5.0			5.0			5.0	5.0
Flash Dont Walk (s)		21.0	21.0		22.0			22.0			23.0	23.0
Pedestrian Calls (#/hr)	10.5	0	0	21 5	0		21 5	0		1/ 5	0	0
Act Effct Green (s)	18.5	30.5	30.5	21.5	33.5		21.5	36.3		16.5	30.8	30.8

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Actuated g/C Ratio	0.15	0.25	0.25	0.18	0.28		0.18	0.30		0.14	0.26	0.26
v/c Ratio	0.38	0.78	0.09	0.11	0.48		0.07	0.36		1.26	0.18	0.39
Control Delay	50.2	54.7	0.5	42.4	11.9		41.8	28.5		186.5	35.4	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	50.2	54.7	0.5	42.4	11.9		41.8	28.5		186.5	35.4	7.1
LOS	D	D	Α	D	В		D	С		F	D	Α
Approach Delay		50.0			13.8			29.3			95.3	
Approach LOS		D			В			С			F	

#### **Intersection Summary**

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120

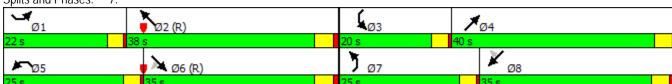
Offset: 0 (0%), Referenced to phase 2:NWT and 6:SET, Start of Green

Natural Cycle: 85 Control Type: Pretimed Maximum v/c Ratio: 1.26

Intersection Signal Delay: 51.2 Intersection LOS: D
Intersection Capacity Utilization 79.6% ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 7:



14: 04/15/2019

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	स्	77		4	7	ሻሻ	<b>↑</b> Ъ		*	<b>↑</b> ↑	7
Traffic Volume (vph)	126	4	44	5	29	26	460	236	0	14	110	979
Future Volume (vph)	126	4	44	5	29	26	460	236	0	14	110	979
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500	.,,,	500	60	.,,,	0	600	.,,,,	0	100	1,00	400
Storage Lanes	1		2	0		1	2		0	1		1
Taper Length (ft)	25		_	25		•	25		· ·	25		•
Lane Util. Factor	0.95	0.95	0.88	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.91	0.91
Ped Bike Factor	0.70	0.70	0.00	1.00	1.00	0.97	0.77	0.70	0.70	1.00	0.71	0.71
Frt			0.850			0.850					0.878	0.850
Flt Protected	0.950	0.955	0.000		0.993	0.000	0.950			0.950	0.070	0.000
Satd. Flow (prot)	1681	1690	2787	0	1850	1583	3433	3539	0	1770	2977	1441
Flt Permitted	0.950	0.955	2707	U	0.993	1000	0.950	0007	U	0.950	2711	
Satd. Flow (perm)	1681	1690	2787	0	1850	1529	3433	3539	0	1770	2977	1441
Right Turn on Red	1001	1070	Yes	U	1030	Yes	J-100	3337	Yes	1770	2711	Yes
Satd. Flow (RTOR)			113			120			103		532	532
Link Speed (mph)		30	113		30	120		30			30	332
Link Distance (ft)		243			206			479			441	
Travel Time (s)		5.5			4.7			10.9			10.0	
Confl. Peds. (#/hr)		5.5			4.7	11		10.7			10.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	137	4	48	5	32	28	500	257	0.72	15	120	1064
Shared Lane Traffic (%)	49%	4	40	J	32	20	300	237	U	13	120	50%
Lane Group Flow (vph)	70	71	48	0	37	28	500	257	0	15	652	532
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Len	12	Rigiti	Leit	12	Rigiti	Leit	24	Rigiii	Leit	24	Rigiii
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	9
0		NA	Prot	Split	NA	Perm	Prot	NA	9	Prot	NA	Perm
Turn Type Protected Phases	Split 4	4	4	3 3	3	Pellii	5	2		1	6	Pellii
	4	4	4	3	3	2	<b>o</b>	Z		ı	Ü	4
Permitted Phases	22 A	22.0	22.0	22 E	22 E	3	0.5	27 F		0.5	22 E	6
Minimum Split (s)	23.0	23.0	23.0	22.5	22.5	22.5	9.5	27.5		9.5	22.5	22.5
Total Split (s)	36.0	36.0 28.9%	36.0	22.5	22.5	22.5	36.0	48.0 38.6%		18.0	22.5	22.5
Total Split (%)	28.9%		28.9%	18.1%	18.1%	18.1%	28.9%			14.5%	18.1%	18.1%
Maximum Green (s)	31.0	31.0	31.0	18.3	18.3	18.3	32.4	43.5		14.4	18.0	18.0
Yellow Time (s)	4.0	4.0	4.0	3.2	3.2	3.2	3.1	3.5		3.1	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0		0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0		4.2	4.2	3.6	4.5		3.6	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Walk Time (s)								6.0				
Flash Dont Walk (s)								17.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	31.0	31.0	31.0		18.3	18.3	32.4	43.5		14.4	25.5	25.5

Baseline

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Actuated g/C Ratio	0.25	0.25	0.25		0.15	0.15	0.26	0.35		0.12	0.20	0.20
v/c Ratio	0.17	0.17	0.06		0.14	0.09	0.56	0.21		0.07	0.63	0.74
Control Delay	38.0	38.0	0.2		47.8	0.5	42.7	29.0		50.2	11.6	10.7
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	38.0	38.0	0.2		47.8	0.5	42.7	29.0		50.2	11.6	10.7
LOS	D	D	Α		D	Α	D	С		D	В	В
Approach Delay		28.4			27.4			38.1			11.7	
Approach LOS		С			С			D			В	

#### **Intersection Summary**

Area Type: Other

Cycle Length: 124.5

Actuated Cycle Length: 124.5

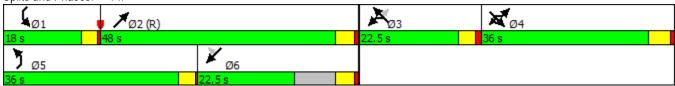
Offset: 0 (0%), Referenced to phase 2:NET, Start of Green

Natural Cycle: 85 Control Type: Pretimed Maximum v/c Ratio: 0.74

Intersection Signal Delay: 22.6 Intersection Capacity Utilization 68.3% ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 14:



**34**: 04/15/2019

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	<b>∱</b> ∱		ነ ነ	<b>^</b>	7		र्स	7	ሻ	र्स	7
Traffic Volume (vph)	374	699	9	11	683	203	8	0	2	238	7	103
Future Volume (vph)	374	699	9	11	683	203	8	0	2	238	7	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	50		350	50		50	500		250
Storage Lanes	1		0	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor						0.97			0.98			0.98
Frt		0.998				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.950		0.950	0.955	
Satd. Flow (prot)	1770	3532	0	1770	3539	1583	0	1770	1583	1681	1690	1583
Flt Permitted	0.950	0002	· ·	0.950	0007	.000		0.950	.000	0.950	0.955	
Satd. Flow (perm)	1770	3532	0	1770	3539	1540	0	1770	1557	1681	1690	1559
Right Turn on Red	1770	0002	Yes	1770	0007	Yes		1770	Yes	1001	1070	Yes
Satd. Flow (RTOR)		1	103			221			82			117
Link Speed (mph)		30			30	221		30	02		30	,
Link Distance (ft)		243			566			197			586	
Travel Time (s)		5.5			12.9			4.5			13.3	
Confl. Peds. (#/hr)		5.5			12.7	2		4.5	2		13.3	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	407	760	10	12	742	221	9	0.72	2	259	0.72	112
Shared Lane Traffic (%)	407	700	10	12	142	221	7	U	2	49%	Ü	112
Lane Group Flow (vph)	407	770	0	12	742	221	0	9	2	132	135	112
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Leit	24	Right	Leit	24	Right	LCII	12	Right	LCII	12	Rigit
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
. ,		10			10			10			10	
Two way Left Turn Lane Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
,	1.00	1.00	9	1.00	1.00	9	1.00	1.00	1.00	1.00	1.00	9
Turn Type	Prot	NA	9	Prot	NA	Perm		NΙΛ	custom		NA	Perm
Turn Type	_	_		1		Pellii	Split	_	CuStom	Split		Pelili
Protected Phases Permitted Phases	5	2		ı	6	6	3	3	2	4	4	1
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	4 22.5
1 , , ,	30.0	60.0		12.0	42.0	42.0	38.0	38.0	60.0	30.0	30.0	30.0
Total Split (s)	21.4%	42.9%		8.6%	30.0%	30.0%	27.1%	27.1%	42.9%	21.4%	21.4%	21.4%
Total Split (%) Maximum Green (s)												
. ,	25.5	55.5		7.5	37.5	37.5	33.5	33.5	55.5	25.5	25.5	25.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	اممما	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		7.0			7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)		11.0			11.0	11.0	11.0	11.0	11.0			
Pedestrian Calls (#/hr)	25.5	0		7 -	0	0	0	0	0	25.5	05.5	25.5
Act Effct Green (s)	25.5	55.5		7.5	37.5	37.5		33.5	55.5	25.5	25.5	25.5

Baseline

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio	0.18	0.40		0.05	0.27	0.27		0.24	0.40	0.18	0.18	0.18
v/c Ratio	1.26	0.55		0.13	0.78	0.39		0.02	0.00	0.43	0.44	0.30
Control Delay	186.9	34.4		94.6	34.0	5.2		41.1	0.0	55.9	56.1	9.5
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	186.9	34.4		94.6	34.0	5.2		41.1	0.0	55.9	56.1	9.5
LOS	F	С		F	С	Α		D	Α	Ε	Е	Α
Approach Delay		87.1			28.2			33.6			42.3	
Approach LOS		F			С			С			D	

#### **Intersection Summary**

Area Type: Other

Cycle Length: 140 Actuated Cycle Length: 140

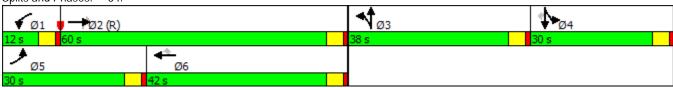
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 90 Control Type: Pretimed Maximum v/c Ratio: 1.26

Intersection Signal Delay: 57.6 Intersection LOS: E
Intersection Capacity Utilization 65.9% ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 34:



# **Notice of Exemption**

Appendix E

To: Office of Planning and Research	From: (Public Agency): City of Foster City
P.O. Box 3044, Room 113 Sacramento, CA 95812-3044	610 Foster City Blvd
County Clerk	Foster City, CA 94404
County of: San Mateo	(Address)
555 County Center Redwood City, CA 940	
Trouwood Orly, Orlo to	
Project Title: Temporary Extension of Traffi	c Relief Pilot Program
Project Applicant: City of Foster City	
Project Location - Specific:	
2 intersections: East Hillsdale Blvd and Shell Bl	vd and East Hillsdale Blvd and Edgewater Blvd
Project Location - City: Foster City	Duning the continue of the San Mateo
Project Location - City: Foster City  Description of Nature, Purpose and Beneficiar	Project Location - County: San Mateo
· · · · · · · · · · · · · · · · · · ·	onth Traffic Relief Pilot program to restrict left hand turns
(including u-turms) at both project location in	tersections between the hours of 4PM and 7PM on weekdays in
order to discourage cut-through traffic in Fost	er City from Hwy 101 northbound traffic.
Name of Public Agency Approving Project: Ci	ty of Foster City
Name of Person or Agency Carrying Out Proje	ect: City of Foster City
Exempt Status: (check one):	
☐ Ministerial (Sec. 21080(b)(1); 15268);	
☐ Declared Emergency (Sec. 21080(b)(	(3); 15269(a));
☐ Emergency Project (Sec. 21080(b)(4)	; 15269(b)(c)); 8 15301; 8 15306; 8 15305
<ul><li>Categorical Exemption. State type an</li><li>Statutory Exemptions. State code nur</li></ul>	d section number: § 15301; § 15306; § 15305
Reasons why project is exempt:	11001, 3
Please see attached	
Lead Agency	(050) 000 0000
Contact Person: Norm Dorais	Area Code/Telephone/Extension: (650) 286-3200
If filed by applicant:	
Attach certified document of exemption     Attach certified document of exemption     Attach certified been filed be	finding.  y the public agency approving the project? ⊠ Yes □ No
·	
Signature:	Date: Title: Director of Public Works
Signed by Lead Agency  Signe  Si	ed by Applicant
Authority cited: Sections 21083 and 21110, Public Reso Reference: Sections 21108, 21152, and 21152.1, Public	

#### Attachment - Reasons Why Project is Exempt

#### § 15262. Feasibility and Planning Studies.

A project involving only feasibility or planning studies for possible future actions which the agency, board, or commission has not approved, adopted, or funded does not require the preparation of an EIR or negative declaration but does require consideration of environmental factors. This section does not apply to the adoption of a plan that will have a legally binding effect on later activities.

The project qualifies for this statutory exemption because it involves a temporary traffic relief pilot program for the purpose of studying whether the restriction of left turns off of East Hillsdale Blvd is a feasible and effective mechanism to reduce cut-through traffic from Hwy 101 into Foster City. Any permanent implementation of the pilot program would require separate future action by the City Council.

#### § 15301. Existing Facilities.

Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The types of "existing facilities" itemized below are not intended to be all-inclusive of the types of projects which might fall within Class 1. The key consideration is whether the project involves negligible or no expansion of use. Examples include but are not limited to:

(c) Existing highways and streets, sidewalks, gutters, bicycle and pedestrian trails, and similar facilities (this includes road grading for the purpose of public safety, and other alterations such as the addition of bicycle facilities, including but not limited to bicycle parking, bicycle-share facilities and bicycle lanes, transit improvements such as bus lanes, pedestrian crossings, street trees, and other similar alterations that do not create additional automobile lanes).

The project qualifies for a Class 1 categorical exemption because restricting the hours in which left hand turns are allowed off East Hillsdale Blvd. is a minor alteration to an existing street that would involve negligible or no expansion of use as the project would not generate any net new trips.

§ 15306. Information Collection.

Class 6 consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

The project qualifies for a Class 6 categorical exemption because the purpose of the traffic relief pilot program is to collect data on whether restricting left hand turns from East Hillsdale Blvd. is a feasible and effective mechanism for reducing cut-through traffic from hwy 101 into the City. Counts at 9 intersections were conducted prior to implementation of the pilot program and additional counts will be conducted after implementation of the program to determine whether there is any reduction in trips through these intersections as a result.

#### § 15305. Minor Alterations in Land Use Limitations.

Class 5 consists of minor alterations in land use limitations in areas with an average slope of less than 20%, which do not result in any changes in land use or density

The project qualifies for a Class 5 categorical exemption because restricting left turns at two intersections off of East Hillsdale Blvd. is a minor alteration in land use limitation in an area with an average slope of less than 20% which does not result in any changes in land use or density.

# **Exceptions to Categorical Exemption Analysis**

15300.2 Exceptions

(a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located -- a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

This exception does not apply to the project because the project location is an existing City street in an urbanized, extensively developed area of the City of Foster City and therefore is not in a particularly sensitive environment and will not impact an environmental resource of hazardous or critical concern.

(b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

This exception does not apply to the proposed project because it would not be expected to contribute to significant cumulative impacts when considered along with other impacts or other

reasonably foreseeable projects or when considered with the overall buildout under the City's General Plan.

(c) Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

This exception does not apply to the proposed project because there are no unusual circumstances involved. The project site is an existing City street in an urbanized, extensively developed area of the City of Foster City. There are no sensitive natural communities, no areas of sensitive habitat, and no areas of critical habitat occurring at the project site. Additionally, there are no buildings currently listed or eligible for listing on the California Register of Historical Resources, no recorded archaeological sites, and no known paleontological resources located on the project site. Therefore, implementation of the proposed project would not result in assignificant effect on the environment due to unusual circumstances.

(d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

The project site is not within or visible from any state scenic highway and therefore this exception does not apply to the proposed project.

(e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.

This exception does not apply to the proposed project because it is not located on a hazardous waste site listed pursuant to California Government Code Section 65962.5 which requires various state agencies to compile lists of hazardous waste disposal facilities, unauthorized release from underground storage tanks, contaminated drinking water wells, and solid waste facilities from which there is known migration of hazardous waste and submit such information to the Secretary for Environmental Protection on at least an annual basis.

(f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

This exception does not apply to the proposed project because the federal, State, and City historic registers do not indicate any historically or architecturally significant buildings designated within or adjacent to the project site.