

LOUIS R. RIGBY
Mayor
JOHN ZEMANEK
Councilmember At Large A
DOTTIE KAMINSKI
Councilmember At Large B
DANNY EARP
Mayor Pro-Tem
Councilmember District 1
CHUCK ENGELKEN
Councilmember District 2



DARYL LEONARD
Councilmember District 3
KRISTIN MARTIN
Councilmember District 4
JAY MARTIN
Councilmember District 5
MIKE CLAUSEN
Councilmember District 6

CITY COUNCIL MEETING AGENDA

Notice is hereby given of a Regular Meeting of the La Porte City Council to be held June 13, 2016, beginning at 6:00 PM in the City Hall Council Chambers, 604 W. Fairmont Parkway, La Porte, Texas, for the purpose of considering the following agenda items. All agenda items are subject to action.

- 1. CALL TO ORDER**
- 2. INVOCATION** – The invocation will be given by Assistant City Attorney Clark Askins.
- 3. PLEDGE OF ALLEGIANCE** – The Pledge of Allegiance will be led by Councilmember Danny Earp.
- 4. PRESENTATIONS, PROCLAMATIONS, and RECOGNITIONS**
 - (a) Presentations - Public Works Coloring Book Contest Winners - Mayor Rigby
- 5. PUBLIC COMMENTS** (Limited to five minutes per person.)
- 6. CONSENT AGENDA** *(All consent agenda items are considered routine by City Council and will be enacted by one motion. There will be no separate discussion of these items unless a Councilmember requests an item be removed and considered separately.)*
 - (a) Consider approval or other action regarding minutes of the meeting held on May 23, 2016 - P. Fogarty
 - (b) Consider approval or other action awarding quote for the City of La Porte Fiscal Year 2016 Headworks Improvements - S. Valiante
 - (c) Consider approval or other action awarding Bid #16016 for the City of La Porte Fiscal Year 2016 Concrete Street Repairs - S. Valiante
 - (d) Consider approval or other action regarding revisions to the Employee Policy Handbook, Chapter 7, Section 13, "Bereavement Leave" - M. Hartleib
 - (e) Consider approval or other action awarding RFP #16506 for City group health plan Insurance Benefits Consultant - M. Hartleib
 - (f) Consider approval or other action regarding a Resolution authorizing the resale of Lot 23, Block 1219 Town of La Porte; Lot 24, Block 1219 and Tract 18, 19 and 20, Block 715, Town of La Porte - K. Powell
 - (g) Consider approval or other action regarding acquisition of the power and cooling component for the City's technology infrastructure update project - R. Valdez
- 7. AUTHORIZATIONS**
 - (a) Consider approval or other action authorizing the Mayor to execute an Interlocal Agreement with Goose Creek Consolidated Independent School District for property tax collection services - M. Dolby

- (b) Consider approval or other action authorizing the City Manager to execute a contract with the Brook Agency, Inc., for turn-key presentation of the entertainment production for the City of La Porte 125th Anniversary Celebration - T. Leach

8. DISCUSSION AND POSSIBLE ACTION

- (a) Discussion and possible action regarding recommendation of the 125th Anniversary Celebration Committee for the City of La Porte 125th Anniversary Celebration - T. Leach
- (b) Discussion and possible action regarding proposal to include a portion of Bay Area Blvd. on the City of La Porte truck route - T. Tietjens

9. ADMINISTRATIVE REPORTS

- Planning and Zoning Commission Meeting, Thursday, June 16, 2016
- Zoning Board of Adjustment Meeting, Thursday, June 23, 2016
- La Porte Development Corporation Board Meeting, Monday, June 27, 2016
- City Council Meeting, Monday, June 27, 2016

- 10. COUNCIL COMMENTS** regarding matters appearing on the agenda; recognition of community members, city employees, and upcoming events; inquiry of staff regarding specific factual information or existing policies – Councilmembers Earp, Clausen, J. Martin, K. Martin, Kaminski, Zemanek, Leonard, Engelken and Mayor Rigby

11. ADJOURN

The City Council reserves the right to meet in closed session on any agenda item should the need arise and if applicable pursuant to authorization by Title 5, Chapter 551, of the Texas Government Code (the Texas open meetings laws).

In compliance with the Americans with Disabilities Act, the City of La Porte will provide for reasonable accommodations for persons attending public meetings. To better serve attendees, requests should be received 24 hours prior to the meeting. Please contact Patrice Fogarty, City Secretary, at 281.470.5019.

CERTIFICATION

I certify that a copy of the June 13, 2016, agenda of items to be considered by the City Council was posted on the City Hall bulletin board on June 7, 2016.

Patrice Fogarty



**Council Agenda Item
June 13, 2016**

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(a) Presentations - Public Works Coloring Book Contest Winners - Mayor Rigby
5. **PUBLIC COMMENTS** (Limited to five minutes per person.)

Since 1960, the American Public Works Association has sponsored National Public Works Week. Across North America. The association has more than 29,000 members in the U.S. and Canada and use this week to energize and educate the public on the importance of public works to their daily lives: planning, building, managing and operating at the heart of their local communities to improve everyday quality of life.

During the 3rd week in May of each year, across the US and Canada, many local cities take time to organize activities that promote the education of Public Works within their communities. There are many different types of activities and events that take place. The City of La Porte participated in this promotional opportunity this year with a few activities including hosting a coloring book page coloring contest within one of the local elementary schools at the third grade level. The participating school, Bayshore Elementary, and the third grade teacher, Ms. Joanne Holt, allowed our Public Works staff to come and give the students a little background on our contest. The teach chose a specific page out of the PW Paws coloring Book and the kids went to work! There were 17 kiddos that did an outstanding job of coloring! The challenge with our PW judging committee was to choose the top 3. After much deliberation and consideration, the winners were chosen.

We were and are very proud to present the following contest winners:

3rd Place: Lorelai Young

2nd Place: Melonni Pulido

1st Place: Brandon Guerra

Please help me in congratulating our winners!



Council Agenda Item June 13, 2016

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**MINUTES OF THE REGULAR MEETING OF THE
CITY COUNCIL OF THE CITY OF LA PORTE
MAY 23, 2016**

The City Council of the City of La Porte met in a regular meeting on **Monday, May 23, 2016**, at the City Hall Council Chambers, 604 West Fairmont Parkway, La Porte, Texas, at **6:00 p.m.** to consider the following items of business:

Mayor Rigby called the meeting to order at 6:00 p.m. Members of Council present: Councilmembers Engelken, Earp, Zemanek, Clausen, K. Martin, Leonard, Kaminski and J. Martin. Also present were City Secretary Patrice Fogarty, City Manager Corby Alexander, and Assistant City Attorney Clark Askins.

2. **INVOCATION** – The invocation was given by Brian Christen, La Porte Community Church.
3. **PLEDGE OF ALLEGIANCE** – The Pledge of Allegiance was led by Councilmember Chuck Engelken.

4. **PRESENTATIONS, PROCLAMATIONS, and RECOGNITIONS**

- (a) Proclamation – National Bike Month in the City of La Porte – Mayor Rigby

Mayor Rigby presented a proclamation to Planning and Development Director Tim Tietjens in honor of National Bike Month in the City of La Porte.

- (b) Recognition – Employee of the First Quarter 2016 – Christopher Sandoval – City of La Porte Police Department – Mayor Rigby

Mayor Rigby recognized Officer Christopher Sandoval as Employee of the First Quarter 2016.

5. **PUBLIC COMMENTS** (Limited to five minutes per person.)

Chuck Rosa, 812 S. Virginia, addressed Council regarding the attendance records of Board members of the Planning and Zoning Commission and La Porte Development Corporation Board.

6. **CONSENT AGENDA** *(All consent agenda items are considered routine by City Council and will be enacted by one motion. There will be no separate discussion of these items unless a Councilmember requests an item be removed and considered separately.)*

- (a) Consider approval or other action regarding minutes of the meeting held on May 9, 2016 – P. Fogarty
- (b) Consider approval or other action awarding Bid No. 16014 for La Porte FY 2016 Street Overlay – S. Valiante
- (c) Consider approval or other action awarding Bid No. 16012 for D Street and 4th Street Paving and Drainage Improvements – S. Valiante

- (d) Consider approval or other action regarding a three (3) year lease agreement with Dell Financial Services for computer equipment – R. Valdez
- (e) Consider approval or other action regarding an Ordinance vacating, abandoning, and closing the entire east/west and north/south alleys in Block 1112, Town of La Porte, and a portion of the east/west alley in Block 1113, Town of la Porte; and abandoning in place an existing 8” sanitary sewer main located in the north/south alley of Block 1112, Town of La Porte – T. Tietjens
- (f) Consider approval or other action regarding an Ordinance vacating, abandoning, and closing a portion of the East A Street right-of-way – B. Sterling
- (g) Consider approval or other action authorizing the City Manager to execute a Water Service Agreement and a Sanitary Sewer Service Agreement with Carson Bayport 3, LLC., for its facility located at 4111 Malone Dr., in the Bayport Industrial District – S. Sterling
- (h) Consider approval or other action authorizing the City Manager to execute a Water Service Agreement and a Sanitary Sewer Service Agreement with Carson Bayport 3, LLC., for its facility located at 4033 Malone Dr., in the Bayport Industrial District – S. Sterling
- (i) Consider approval or other action authorizing the City Manager to execute a Water Service Agreement and a Sanitary Sewer Service Agreement with Carson Bayport 3, LLC., for its facility located at 10322 New Decade Dr., in the Bayport Industrial District – S. Sterling
- (j) Consider approval or other action authorizing the City Manager to execute a Water Service Agreement and a Sanitary Sewer Service Agreement with Carson Bayport 3, LLC., for its facility located at 10344 New Decade Dr., in the Bayport Industrial District – S. Sterling

City Manager Corby Alexander requested Item D be removed from the agenda.

Councilmember Engelken moved to approve the Consent Agenda items pursuant to staff recommendations. Councilmember Earp seconded. **MOTION PASSED UNANIMOUSLY 9/0.**

Prior to council action, Assistant City Attorney Clark Askins read the caption of **Ordinance 2016-3629**: AN ORDINANCE VACATING, ABANDONING AND CLOSING THE ENTIRE EAST/WEST AND NORTH/SOUTH ALLEYS IN BLOCK 1112, TOWN OF LA PORTE, AND A PORTION OF THE EAST/WEST ALLEY IN BLOCK 1113, TOWN OF LA PORTE, ABANDONING IN PLACE AN EXISTING 8” SANITARY SEWER MAIN LOCATED IN THE NORTH/SOUTH ALLEY OF BLOACK 1112, TOWN OF LA PORTE; AND AUTHORIZING THE EXECUTION AND DELIVERY OF A DEED TO THE ADJOINING LANDOWNER; FINDING COMPLIANCE WITH THE OPEN MEETINGS LAW; AND PROVIDING AN EFFECTIVE DATE HEREOF.

Prior to council action, Assistant City Attorney Clark Askins read the caption of **Ordinance 2016-3630**: AN ORDINANCE VACATING, ABANDONING AND CLOSING A PORTION OF THE EAST “A” STREET RIGHT-OF-WAY AND AUTHORIZING THE EXECUTION AND DELIVERY OF A DEED TO THE ADJOINING LANDOWNER, FINDING COMPLIANCE WITH THE OPEN MEETINGS LAW, AND PROVIDING AN EFFECTIVE DATE HEREOF.

7. PUBLIC HEARING AND ASSOCIATED ORDINANCES

- (a) Public hearing to receive comments regarding the recommendation by the Planning and Zoning Commission to amend Chapter 106, “Zoning” of the Code of Ordinances of the City of La Porte, Texas by amending provisions related to zoning permits; amendments procedures; special exceptions; notification of confirming status; official zoning map; commercial and industrial uses; location of heavy truck uses; interpretation of zoning district boundaries; yard requirements; parking design standards; development of towers; and building exterior design standards; and consider approval or other action regarding an Ordinance amending Chapter 106, “Zoning” of the Code of Ordinances of the City of La Porte, Texas by amending provisions related to zoning permits; amendments procedures; special exceptions; notification of confirming status; official zoning map; commercial and industrial uses; location of heavy truck uses; interpretation of zoning district boundaries;

yard requirements parking design standards; development of towers; and building exterior design standards – E. Ensey

The public hearing opened at 6:18 p.m.

City Planner Eric Ensey presented a summary and recommendation by the Planning and Zoning Commission.

Councilmember Zemanek questioned who is the City Enforcement Officer per Section 106-145. Planning and Development Director Tim Tietjens responded, the Deputy Building Official.

Councilmember Earp asked if there were changes to the livestock provisions. City Planner Eric Ensey responded no.

There being no public comments the public hearing closed at 6:21 p.m.

Councilmember Earp moved to approve an Ordinance amending Chapter 106, "Zoning" of the Code of Ordinances of the City of La Porte, Texas by amending provisions related to zoning permits; amendments procedures; special exceptions; notification of confirming status; official zoning map; commercial and industrial uses; location of heavy truck uses; interpretation of zoning district boundaries; yard requirements parking design standards; development of towers; and building exterior design standards. Councilmember Kaminski seconded. **MOTION PASSED UNANIMOUSLY 9/0.**

Prior to council action, Assistant City Attorney Clark Askins read the caption of **Ordinance 2016-3631** AN ORDINANCE AMENDING CHAPTER 106, "ZONING" OF THE CODE OF ORDINANCES OF THE CITY OF LA PORTE, TEXAS BY AMENDING PROVISIONS RELATED TO ZONING PERMITS; AMENDMENTS PROCEDURES; SPECIAL EXCEPTIONS; NOTIFICATION OF CONFIRMING STATUS; OFFICIAL ZONING MAP; COMMERCIAL AND INDUSTRIAL USES; LOCATION OF HEAVY TRUCK USES; INTERPRETATION OF ZONING DISTRICT BOUNDARIES; YARD REQUIREMENTS PARKING DESIGN STANDARDS; DEVELOPMENT OF TOWERS; AND BUILDING EXTERIOR DESIGN STANDARDS; PROVIDING THAT ANY PERSON VIOLATING THE TERMS OF THIS ORDINANCE SHALL BE DEEMED GUILTY OF A MISDEMEANOR AND UPON CONVICTION SHALL BE FINDED IN A SUM NOT TO EXCEED TWO THOUSAND DOLLARS; PROVIDING FOR THE PUBLICATION OF THE CAPTION HEREOF; AND PROVIDING AN EFFECTIVE DATE HEREOF.

8. DISCUSSION AND POSSIBLE ACTION

- (a) Discussion and possible action regarding an Ordinance appointing a member of the City Council to serve as Mayor Pro-Tem of the City of La Porte, Texas, for the period of June 1, 2016 through May 31, 2017 – P. Fogarty

Councilmember Martin moved to approve an Ordinance appointing Councilmember Danny Earp to serve as Mayor Pro-Tem of the City of La Porte, Texas, for the period of June 1, 2016, through May 31, 2017. Councilmember Engelken seconded. **MOTION PASSED UNANIMOUSLY 9/0.**

Prior to council action, Assistant City Attorney Clark Askins read the caption of **Ordinance 2016-3632**: AN ORDINANCE PROVIDING FOR THE ELECTION OF A MEMBER OF THE CITY COUNCIL TO SERVE AS MAYOR PRO-TEM OF THE CITY OF LA PORTE, TEXAS, FOR THE PERIOD JUNE 1, 2016, THROUGH MAY 31, 2017, OR UNTIL A SUCESSOR HAS BEEN APPOINTED AND HAS QUALIFIED, FINDING COMPLIANCE WITH THE OPEN MEETINGS LAW, AND PROVIDING AN EFFECTIVE DATE HEREOF.

- (b) Discussion and possible action regarding proposed concept design for the Wharton Weems Blvd., entryway monument – T. Leach

Assistant City Manager Traci Leach presented a summary.

Councilmember Martin moved to approve concept design No. 3 for the Wharton Weems Blvd. entryway monument. Councilmember Clausen seconded. **MOTION PASSED UNANIMOUSLY 9/0.**

9. REPORTS

- (a) Receive report of the La Porte Development Corporation Board – Councilmember Engelken

Councilmember Engelken provided a report of the meeting of the La Porte Development Corporation Board held immediately prior to the City Council meeting.

10. ADMINISTRATIVE REPORTS - There were no additional reports.

11. COUNCIL COMMENTS regarding matters appearing on the agenda; recognition of community members, city employees, and upcoming events; inquiry of staff regarding specific factual information.

Councilmembers Engelken, Clausen, K. Martin, Zemanek and Leonard congratulated Councilmember Earp for being appointed as Mayor Pro-Tem and Officer Sandoval as the Employee of the First Quarter 2016; Councilmember Earp congratulated Officer Sandoval as the Employee of the First Quarter 2016 and thanked Public Works Director Sharon Valiante for the tour of the Waste Water Treatment Plant; Councilmember J. Martin congratulated Councilmember Earp for being appointed as Mayor Pro-Tem; Officer Sandoval as the Employee of the First Quarter 2016 and commented he appreciates Mr. Rosa’s comments; Councilmember Kaminski congratulated Officer Sandoval as the Employee of the First Quarter 2016; commented she will be looking for everyone riding bikes to work on Friday and how much she enjoyed the Public Works event and congratulated Councilmember Earp for being appointed as Mayor Pro-Tem; and Mayor Rigby congratulated Officer Sandoval as the Employee of the First Quarter 2016, commented he appreciates all City employees; thanked Public Works Director Sharon Valiante for a great job during the Public Works Week; congratulated Councilmember Earp for being appointed as Mayor Pro-Tem and thanked Councilmember J. Martin for his service as Mayor Pro-Tem for the past year.

12. EXECUTIVE SESSION – The City reserves the right to meet in closed session on any agenda item should the need arise and if applicable pursuant to authorization by Title 5, Chapter 551, of the Texas Government Code, including, but not limited to, the following:

Texas Government Code, Section 551.071 (2) – Consultations with Attorney: Meet with City Attorney to discuss legal issues presented by use of Harris County issued overweight/oversize permits by commercial motor vehicles operating in La Porte corporate limits.

City Council recessed the regular Council meeting to convene an executive session at 6:39 p.m. regarding the item listed above.

13. RECONVENE into regular session and consider action, if any on item(s) discussed in executive session.

City Council reconvened into the regular Council meeting at 8:01 p.m.

Regarding the legal issues presented by use of Harris County issued overweight/oversize permits by commercial motor vehicles operating in La Porte corporate limits, Councilmember Earp moved to direct the City Attorney to continue the prosecution of the tickets as written. Councilmember Leonard seconded. **MOTION PASSED 8/1.**

Ayes: Councilmembers K. Martin, J. Martin, Clausen, Kaminski, Zemanek, Leonard, Earp and Engelken
Nays: Mayor Rigby
Absent: None

14. **ADJOURN** - There being no further business, Councilmember Engelken made a motion to adjourn the meeting at 8:02 p.m. Councilmember Leonard seconded. **MOTION PASSED UNANIMOUSLY 9/0.**

Patrice Fogarty, City Secretary

Passed and approved on June 13, 2016.

Mayor Louis R. Rigby

REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested:	<u>June 13, 2016</u>	Appropriation
Requested By:	<u>Sharon Valiante</u>	Source of Funds: <u>CIP Utility Fund</u>
Department:	<u>Public Works</u>	Account Number: <u>003.7087.532.1100</u>
Report: <input checked="" type="radio"/>	Resolution: <input type="radio"/> Ordinance: <input type="radio"/>	Amount Budgeted: <u>\$300,000.00</u>
Other: <input type="radio"/>		Amount Requested: <u>\$129,433.00</u>
Attachments :		Budgeted Item: <input checked="" type="radio"/> YES <input type="radio"/> NO

1. Sole Source Letter
2. Quote

SUMMARY & RECOMMENDATIONS

The headworks of a waste water treatment plant is typically the first treatment in the treatment plant process. The headworks removes larger objects such as small flushed toys, plastic, rags and other objects that have entered the waste water collection system with some type of screening device. In smaller plants less than .5 million gallons per day (MGD) there is typically a bar screen with 1/2 to 3/4 inch openings that an Operator manually removes debris with a rake and shovel as needed. In larger plants there are automatic screens that mechanically remove the debris and dump into a waste container to haul to the landfill. Typically all waste treatment plants have redundant equipment so that if/when a piece of equipment fails there is another backup piece available to put in place.

The La Porte Wastewater Treatment Plant (WWTP) is rated at 7.56 MGD and has one manual bar screen and one automatic bar screen. In the summer of 2012 the automatic bar screen at the La Porte WWTP, which had been in service 10 years, went out of service when the drive sprockets, chain and bearings failed from wear. The bar screen was out of service for 26 days while being refurbished. This required the manual bar screen to be cleaned numerous times during the day, evening, and in the middle of the night incurring overtime. The openings on the manual bar screen are 3/4 inch compared to 1/4 inch on the automatic bar screen allowing larger items to pass through and into the treatment plant. Smaller openings are not possible on the manual screen due to channel size and hydraulic flow reduction. To clean the bar screen, an operator has to go up on top of the headworks to access the bar screen. This presents a safety hazard, because the location is one of the highest points in the WWTP, especially when there is inclement weather. Fortunately the unit was not out for a longer period of time or during a tropical storm. Had there been a second bar screen stored at the WWTP, the second unit could have been installed the same day and been left in service while the original unit was being refurbished.

Request for quotes were sent out to vendors for an exact replacement make and model of the existing automatic screen in order to have interchangeable parts, matching spare parts, match up to existing control panel, and wash press. The manufacture, Vulcan Industries replied that HRM Environmental LLC is the sole vendor/distributor representing Vulcan Industries in the State of Texas.

A formal quote was received from HRM Environmental LLC for an exact replacement automatic bar screen, control panel, wash press, and spare parts for \$165,173.00. Staff contacted other automatic bar screen manufacture representatives and were given informal written quotes of \$90,000 for an automatic bar screen only that will fit into the existing flow channel. The quote of \$86,618 for the automatic bar

screen only from HRM Environmental is in line with other types of automatic bar screens.

With the support of the Purchasing Division, staff recommends purchase of the automatic bar screen (Item 1 in Quote), washing press (Item 3), and spare parts (Item 4) along with freight (Item 5) for \$129,433.00. The existing control panel is stainless steel and all electrical components are available locally. Staff does not recommend a replacement control panel (Item 2).

Benefits:

The availability of a second or stand-by unit provides the following benefits:

1. Redundancy for operations - When the automatic bar screen is removed from service for repair a replacement unit is available to put into immediate service
2. Removes/reduces the potential safety concerns
3. Reduce extended use of the manual bar screen that allows larger waste objects into the treatment plant process that will wear equipment, clog pumps and piping, add to additional processing of solids.
4. Cost savings for future headworks expansion – an automated bar screen is a major cost component of an expansion.

Liabilities:

Cost

Operating Costs:

Reduce overtime

Action Required of Council:

Consider approval or other action to award quote to HRM Environmental LLC for the purchase of Automatic Bar Screen, Washing Press, and spare parts for \$129,433.00 including freight.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date



April 25, 2016

Ashley Ellison,
Purchasing Divison
City of La Porte, TX

Ashley:

HRM Environmental, LLC is the sole representative / distributor for Vulcan Industries, Inc. products in the State of Texas. The proposed replacement stair screen offered from Vulcan Industries through our representative, HRM Environmental, is a duplicate design of the existing Vulcan stair screen in regards to size and materials currently installed in the existing 6'-0" wide x 4'-6" deep channel at the La Porte, Tx wastewater treatment facility. The proposed Vulcan replacement stair screen is a captive replacement piece of equipment only available through Vulcan Industries.

Please contact me if you require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Norm Jackman", with a long horizontal flourish extending to the right.

Norm Jackman
National Sales Manager
(712) 642-2755

City of La Porte

La Porte FY 16 Headworks Improvements

Bid Date: May 2016

A. BASE BID UNIT ITEMS

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Price
1	Vulcan ESR-28/1570/6 Stair Screen	EA	1	\$86,618.00	\$86,618.00
	Total Base Bid				\$86,618.00
	Alternates				
2	Stair Screen Control Panel	EA	1	\$35,740.00	\$35,740.00
3	Vulcan EWP 250/1200 Washing Press with washing valves and controls	EA	1	\$36,488.00	\$36,488.00
4	Spare Parts listed	lump sum	1	\$3,687.00	\$3,687.00
5	Freight/Shipping				\$2,640.00

Total base Bid and alternates: \$165,173.00



QUOTATION

**To: City of La Porte
La Porte, TX**

Quotation No.: 16/140

**Subject: La Porte FY 16 Headworks Improvements
La Porte, TX**

Date: 5/9/2016

Bid Date: N/A

F.O.B.: Factory Frt Allowed

Equipment: shipped 18-22 weeks after receipt of approved purchase order

MECHANICALLY CLEANED STAIR SCREEN SCREENINGS WASHING PRESS

Vulcan Industries proposes to furnish and deliver One (1) Model ESR 28/1563/6 stair screen and one (1) Model EWP 250/1200 washing press for installation in owner's treatment plant. This proposal includes stair screen drive unit, chain drives, moving and stationary lamellas, moving and stationary frames, and discharge chute, washing press housing, compaction screw, drain pan, discharge piping, inlet hopper, wash and flush water valves, all required electrical control panels and other necessary items as listed below.

STAIR SCREEN QUANTITY: One (1)

NUMBER OF PIECES: Minimum practical for shipment and installation

PROJECT DETAILS:

Channel size:	6'-0" wide x 4'-6" deep (4'-6" invert to operating floor level)
Lamella thickness:	3 mm
Lamella clear spacing:	6 mm (1/4")
Angle of inclination:	57° from horizontal
Debris discharge height:	4'-7" above top of channel
Motor power:	3.0 hp
Electrical supply:	460 volt, 3 phase, 60 cycle (by others)

MATERIALS OF CONSTRUCTION:

Moving lower lamellas:	316 Stainless steel
Stationary lower lamellas:	316 Stainless steel
Moving upper lamellas:	Plastic
Stationary upper lamellas:	Plastic
Side Frames:	316 Stainless steel
Discharge Chutes:	316 Stainless steel
Drive chains:	Hardened carbon steel
Sprockets:	Hardened carbon steel
Gear Reducers:	Cast Iron/Manufacturers Standard
Motor:	Cast Iron, TEFC
Enclosures:	316 Stainless steel

WASHER/COMPACTOR QUANTITY: One (1)

NUMBER OF PIECES: Minimum practical for shipment and installation

PROJECT DETAILS:

Capacity: Up to 33 cubic feet per hour each (batch)
Up to 99 cubic feet per hour each (continuous)

Screw Size: 8-1/2" diameter

Angle of inclination: Horizontal

Debris discharge point: To match original press

Motor power: 5.0 h.p.

Electrical supply: 460 volt, 3 phase, 60 cycle (by others)

MATERIALS OF CONSTRUCTION:

Housings: 316 Stainless Steel

Support legs: 316 Stainless Steel

Compaction screws: Carbon steel

Discharge Piping: 316 Stainless Steel

Inlet Hoppers: 316 Stainless Steel

Gear Reducers: Cast Iron/Manufacturers Standard

Motors: Cast iron, explosion-proof

CONTROLS:

Main (remote) panel: NEMA 4X, One (1) panel required for each stair screen and washer compactor.

Screen Control sequence: Programmable timers with differential level override system. Motor starters, Allen-Bradley MicroLogix programmable logic controller, Red Lion G307 operator interface terminal, necessary relays, internal wiring and other necessary components provided with control panel per contract documents.

Washer/Compactor Control sequence: Batch mode signaled by mechanical bar screen operation. Programmable logic controller, operator interface terminal, circuit breakers, control power transformers, necessary relays, internal wiring and other necessary components provided in stair screen control panel.

Screen Local panel: NEMA 4X stainless steel (1 local station provided for stair screen). Includes Hand-Off-Auto switches and Emergency Stop pushbuttons

Washer/Compactor local panel: NEMA 4X stainless steel (1 local station provided for washing press). Includes Hand-Off-Auto, Forward-Off-Reverse selector switches, Initiate and Emergency Stop pushbuttons

PAINTING:

Motors and Gear Reducers: Tnemec 69 epoxy
 All other components: Cleaned and shop passivated after fabrication

SPARE PARTS:

- a. Eight (8) stair screen plastic chain wheels
- b. One (1) stair screen drive shaft key set
- c. Six (6) stair screen chain tensioners
- d. Twenty-five (25) feet stair screen cover retainer strip
- e. Two hundred (200) stair screen lamella spacers
- f. Three (3) washer compactor solenoid valve
- g. One (1) washer compactor swivel joint

FIELD SERVICE:

Number of Trips: None included
 Number of Days: None included

FREIGHT:

Number of containers: Minimum practical
 Cost of Freight: Included to LaPorte, TX, USA

ITEMS PROVIDED BY OTHERS:

Installation of Equipment (including concrete, grout, etc.)
 Interconnecting electrical wiring and conduit
 Hand rails, platforms, grating
 Other items not specifically included in this Quotation

STAIR SCREEN PRICE (Base Bid).....\$86,618.00
TOTAL BASE BID PRICE.....\$86,618.00

CONTROL PANEL PRICE (Alternate Bid).....\$35,740.00
 (includes controls for stair screen and washing press)

WASH PRESS PRICE (Alternate Bid).....\$36,488.00

SPARE PARTS PRICE (Alternate Bid).....\$3,687.00

FREIGHT PRICE (Alternate Bid).....\$2,640.00

TOTAL BASE BID AND ALTERNATE BID.....\$165,173.00

NOTES:

1. This quotation is subject to our Standard Quotation Notes below and the Standard Terms and Conditions, STC-001 included and made a part of this Quotation by reference hereto.

2. **Additional information is available from the sales representative as follows:**

**HRM Environmental
1426 Stone Trail Drive
Sugar Land, TX 77479**

**Attn: Scott Hawkins
Tel: 281-343-1993
FAX 281-343-1995
Mobile: 281-923-2023**

3. **SPECIFICALLY NOT INCLUDED:** Unless otherwise outlined and defined within the written scope of the quotation are:

- a) Installation or demolition.
- b) Construction Items: Such as concrete foundations, base slabs, grout, sealants, field specified preparations and coatings, etc.
- c) Mechanical Items: Such as interconnecting pipe, pipe fittings, gaskets, hangers, supports, etc.
- d) Electrical Items: Such as motor control centers, disconnect switches, contactors, instrumentation, conduit, interconnecting wire, potting, etc.
- e) Maintenance Items: Such as tools, oil, grease, solvents, chemicals, light bulbs or tubes, etc.

4. **SHIPMENT:** The schedule outline on Page 1 of the quotation is our best estimate based upon material availability. Vulcan Industries cannot assume any liability for delay caused by the unavailability of material which is beyond our reasonable control.

5. **PAYMENT:** Payment shall be in accordance with Sheet STC-001, Article 4 ; B. The terms for payment are independent of, and are not contingent on, third party contracts or commitments.

6. **DELIVERIES:** The equipment will be shipped on a flat bed truck to the first specified destination provided suitable access roads exist for the delivering carrier. If delivering carrier cannot negotiate the construction site roads, the Buyer shall provide for unloading at the nearest accessible site and shall be responsible for any additional transport required to reach the project site.

7. **ACCEPTANCE:** The Buyer shall accept this quotation within 30 days from the bid date by letter of intent or purchase order with payment terms that conform to the Terms and Conditions for Quotation or Sale, Sheet STC-001. Price is subject to change without notice after this interval.

Purchase order, or agreement forms, that involve changes, disclaimers, special terms, etc. which conflict with our Standard Quotation Notes and/or Terms and Conditions, may require additional time for processing of up to several weeks, depending on the extent of legal and/or financial involvement that may be associated in a detailed examination. Additionally, if such requirements involve added cost such charges shall be presented for written authorization prior to further processing.

Where a mutual agreement cannot be reached VULCAN INDUSTRIES reserves the right to return all purchase documents without further obligation or liability.

VULCAN INDUSTRIES



Norm Jackman
Sales Manager

STANDARD TERMS AND CONDITIONS

1. **DEFINITION:** The definition of terms used, interpretation of sale agreement and rights of parties hereto shall be construed under and governed by the Uniform Commercial Code of the State of Iowa. "Seller" when used herein means VULCAN INDUSTRIES. "Buyer" when used herein means the person, company or corporation to whom the quotation is addressed. "Equipment" means those components, articles, supplies or services described herein. These terms and conditions apply unless specifically noted on the quotation.
2. **ACCEPTANCE:** All quotations are for acceptance within the limits established therein and beyond which are subject to change without notice. If this quotation constitutes an acceptance of an offer, such acceptance is expressly made conditional on Buyer's assent solely to the terms of this quotation.

Any terms proposed in buyers acceptance of this quotation which add to, vary from, or conflict with the terms hereof are hereby objected to and rejected and shall not constitute any part of any contract resulting from this quotation. Any such proposed terms shall have no force or effect and the terms herein shall constitute the complete and exclusive statement of the terms and conditions of any contract resulting from this quotation and may be modified only by written instrument executed by the authorized representative of both parties.
3. **PRICES:** Prices for Equipment included in this quotation are subject to the specific outline herein.
4. **PAYMENT:** (A. Domestic) Net 30 days, basic orders; (B. Domestic) 90% Net 30 days, 10% Net 30 days after start-up but not to exceed 120 days after initial billing. (C. Domestic) 95% Net 30 days, 5% Net 30 days after start-up but not to exceed 120 days after initial billing. (D. International) Irrevocable Letter of Credit - Payment due at sight, available at First National Bank, Attn: International Trade Services, 134 South 13th Street, Suite 100, Lincoln, NE 68508 USA, Telex: 484410 FIRSTNATBK OMA, SWIFT: FNBOUS44LIN. Tel: 402-323-5258 Fax: 402-323-5219; ABA #104000016 (E. International) Payment will be wired to our account per the following: 30% with purchase order, 30% with approval of submittals, 30% upon delivery to plant and 10% after unit Start-up (to be sent with factory service tech).

If buyer delays shipment, payment shall become due from the scheduled date when equipment is ready for shipment. If Buyer delays completion of manufacture, Seller may require payment according to the percentage of Equipment completion. Equipment held for the Buyer shall be at the Buyer's risk and storage charges may be applied at the discretion of the Seller.

Accounts past due shall accrue interest charges at a rate of 1.5% per month, (18% annual rate), where permitted by applicable law. Buyer shall pay Seller reasonable cost of collection or securing money due and unpaid, including a reasonable attorney's fee of 25% of the amount owed.
5. **TAXES:** Prices do not include present or future sales, use, occupation, excise or other taxes in repeat of manufacture sales, or delivery of Equipment which shall be paid by the Buyer unless this is specifically defined and outlined in the body of the quotation as paid by the Seller. If tax-exempt, Buyer shall supply to the Seller a valid exemption certificate. If not exempt, Buyer shall supply all other tax information required by Seller.
6. **SCHEDULE:** Delivery dates shall be interpreted as estimated and in no event shall dates be construed as falling within the meaning "time is of the essence." The Seller shall not be liable for delays due to force majeure, strikes, labor difficulties, fires, acts of government or military forces, transportation, procurement or any other cause beyond the reasonable control of the Seller. No provision for liquidated damages for any cause shall apply under this order.
7. **TITLE/RISK OF LOSS:** Title and risk of loss shall pass to the Buyer upon tender of delivery F.O.B. manufacturing facility unless otherwise agreed upon by the parties, except that a security interest in the Equipment shall remain with the Seller, regardless of mode of attachment to realty or other property, until full payment has been made therefore. Buyer agrees to do all things and acts necessary to protect said security interest.

8. **ASSIGNMENT:** Neither party shall assign or transfer this contract without prior written consent of the other party. As a condition of any such written consent, such assignment shall be subject to the terms and conditions herein and no greater rights or remedies shall be available to the assignee.
9. **PATENTS:** The Seller shall defend the Buyer and the ultimate owner of the Equipment from alleged or actual infringement of any United States patent by the equipment furnished pursuant hereto if properly notified and given an opportunity to do so with friendly assistance. The Seller shall pay all damages and cost awarded by a competent court in any litigation thus defended or of which it may have had notice and opportunity to defend as aforesaid. Specifically excepted would be parts of special design, construction, or manufacture specified by and originating with the Buyer or the ultimate owner.
10. **WARRANTY:** The Seller warrants all Equipment of its own manufacture to be free of defects caused by faulty material or workmanship and shall, at its option, exchange or repair without charge, F.O. B. its factory, such part or parts thereof that prove defective under normal use within eighteen (18) months from date of shipment or twelve (12) months from date of start-up, whichever occurs first. The Seller's obligation under this warranty is limited to the above and does not apply to replacement or repairs, which are required as the result of improper installation, misuse, maladjustment, abnormal operating conditions, or lack of routine maintenance. Nor does this warranty include furnishing of service for maintenance or problems arising from the foregoing causes.

The Seller shall not be liable for any claims, losses, labor expenses or damages, direct or consequential, resulting directly or indirectly from the use of, or inability to use, its products, or the other consequential loss of damage of any nature arising from any cause.

This warranty is the sole warranty of the Seller and any other warranties express, implied in law, implied in fact including any warranties of merchantability and fitness for use, are hereby specifically excluded.

11. **QUALIFICATIONS:** This warranty is void unless the Buyer provides protective storage, installs and maintains the equipment in accordance with the Sellers furnished instructions. No employee of the Seller or its representatives has the authority to alter, or enlarge the terms of this warranty or obligate the Seller beyond the terms of this written warranty.
12. **LIABILITY LIMITATIONS:** The aggregate total liability of the Seller in connection with the performance of this contract, whether for breach of contract or warranty, negligence or otherwise, shall in no event exceed the purchase price of the unit of Equipment upon which such liability is based.
13. **CANCELLATION:** Any contract resulting from this quotation cannot be cancelled except with written consent of the Seller and upon terms, which will indemnify the Seller from any loss, occasioned thereby.
14. **CHANGES:** If the Buyer requests changes of design, configuration, or quantities, other than as outlined by the quotation, these shall be in writing recognizing any price increase or reduction resulting there from. The Seller reserves the right to change or modify the design, construction or material that are equal to or superior to that originally covered by the quotation, subject to approval by applicable reviewing authorities.
15. **SHORTAGES:** All claims by the Buyer for shortages must be made in writing to the Seller within thirty (30) days after shipment or with ten (10) days after receipt by the Buyer, whichever first occurs.
16. **O.S.H.A.:** The Seller shall endeavor to comply with the Occupational Health and Safety Act of 1970 in the design and manufacture of Equipment under this contract. Compliance for the total installation, use, operation and other matters beyond the control of the Seller cannot be assumed by the Seller as to responsibility for compliance with such laws and regulation, or other State and Local laws and regulation, whether by way of indemnity, warranty or otherwise.

REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested:	<u>June 13, 2016</u>	Appropriation	
Requested By:	<u>Sharon Valiante</u>	Source of Funds:	<u>033</u>
Department:	<u>Public Works</u>	Account Number:	<u>033.7071.531.1100</u>
Report: <input checked="" type="radio"/>	Resolution: <input type="radio"/>	Ordinance: <input type="radio"/>	Amount Budgeted: <u>\$447,083</u>
Other: <input type="radio"/>			Amount Requested: <u>\$337,779</u>
Attachments :		Budgeted Item:	<input checked="" type="radio"/> YES <input type="radio"/> NO

1. Access Report Sealed Bids
2. Bid Tab FY 2016
3. Bid Form-16015 Precise Services, Inc.
4. Concrete Repair List
5. Concrete Street Repair Location Map

SUMMARY & RECOMMENDATIONS

Pavement Management Programs are designed to manage and maintain existing infrastructure. Until March of 2013, Public Works staff relied solely on citizen requests for pavement repairs and staff noted repair sites to determine the candidates for the repair program. In March 2013, staff contracted with a firm to conduct an assessment to provide a condition rating for all the street segments in the City. The information from the assessment is used as a planning tool that assists the Department in developing a city-wide paving improvement program. The goal of a street condition assessment is to determine which streets will require repair and maintenances.

The assessment assigns a condition rating to street segments. The condition rating ranges in magnitude (1-9, with a 1 being very poor or failing and a 10 being very good) depending on the severity of the distresses that each segment is rated against. On the rating scale, those segments or areas within those segments that rate in the range between a 1 and a 5 are candidates for concrete repairs.

Historically, each year, the Public Works Department has identified failed concrete pavement sections as candidates for repairs, prepared bid documents and solicited bids to perform the work. This year's program is much the same. Utilizing the condition assessments, staff noted sites, and customer requests for site repairs, contract documents and specifications were prepared by Lyle & Perossa for an annual contract to repair concrete street failure locations that will be repaired as they are identified. The bid was prepared on a unit price basis with an option to renew the contract for an additional year at the same unit prices bid. The unit prices will be used to prepare work orders that will be issued to the contractor.

Solicitations for bids for the Bid #16016 "FY 2016 Concrete Street Repair" was issued on April 14, 2016. Twenty-seven (27) vendors accessed the bid document and five (5) contractors returned bids. The lowest and best bid was received from Precise Services, Inc. with a total base bid of \$269,779.

Precise Services, Inc. is located in Porter, Texas, and has successfully completed concrete paving work for the Cities of Bay City, Shore Acres, and Conroe. Current projects include Annual Sidewalk and Maintenance Project for the City of Pearland, Sidewalk Project for the City of Deer Park, and Road Construction for Harris County Pct1.

This annual concrete street repair project is budgeted out of the Street Maintenance Tax Program Fund (033) with available funding of \$447,083. Staff expect to spend the minimum total base bid (\$269,779) and recommend an option to spend an additional \$68,000 for other streets as deemed necessary, making the total project budget \$337,779. This contract can also be utilized for emergency repairs throughout the year.

The following streets are scheduled for repair in FY 2016:

1. Valley Brook – Parkcrest to Ridgecrest and at Valley Brook Ct
2. Beachhaven – Somerton to Gladwyne
3. Farrington – Glenview to Crestway
4. Bay Forest Dr.
5. Old Hickory @ Quiet Hill
6. Green Leaf – cul-de-sac

If, by mutual agreement, the contract is renewed for an additional year in FY 17, a listing of streets for FY 17 will be presented to the Contractor at the time of renewal. Staff would expect to spend a similar amount in FY 17.

Project Benefits, Liabilities, and Operating Cost:

Benefits:

- The proposed project provides cost effective approach to pavement management and timely maintenance of existing public facilities that have been identified for necessary repairs.

Liabilities of Maintaining the Status Quo:

- Level of service decline - A citizen request for service likely kicked off the initial investigation of a few of the pavement repair areas that will be addressed in this program.
- Deferred maintenance - adds cost, and some cases significant costs (reconstruction) and work hours to future budget years.

Operating Costs:

- No new facilities will be added with this project.
-

Action Required of Council:

Consider approval or other action to award bid # 16016 FY2016 Concrete Street Repair Contract to Precise Services, Inc. at the unit prices bid and allocate an additional \$68,000 for emergency repairs and other street repairs as necessary for a total contract price of \$337,779.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

Access Report
Agency
Bid Number
Bid Title

City of La Porte (TX)
16015
FY 2016 Concrete Street I

Vendor Name	Accessed First Time
BidClerk	2016-04-18 05:49 AM CDT
AMTEK	2016-04-21 01:22 PM CDT
Brooks Concrete Inc	2016-04-19 09:06 AM CDT
Legion Contracting Services, Inc.	2016-05-02 11:41 AM CDT
Conrad Construction Co., LTD	2016-04-21 11:18 AM CDT
Detail Construction	2016-04-17 09:11 PM CDT
Perkens WS Corporation	2016-04-14 11:48 AM CDT
ISI Contracting, Inc.	2016-04-14 11:28 AM CDT
North America Procurement Council	2016-04-14 10:02 PM CDT
Teamwork Cnstruction	2016-04-14 09:55 PM CDT
aztec remodeling &landscaping company	2016-04-15 02:32 PM CDT
TLC Trucking & Contracting, Inc.	2016-04-15 09:05 AM CDT
Onvia	2016-04-14 03:22 PM CDT
The Blue Book Building & Construction Network	2016-04-22 09:48 AM CDT
I Sqft Plan Room	2016-04-15 05:02 AM CDT
El Dorado Services Inc.	2016-04-15 08:55 PM CDT
All Points Inspection Services, Inc.	2016-04-22 08:41 AM CDT
Taylor & Taylor Construction	2016-04-14 10:41 AM CDT
Hearn Company	2016-04-15 02:32 PM CDT
GW Phillips Construction, INC.	2016-04-14 11:36 AM CDT
AAA Asphalt Paving Inc.	2016-04-14 10:37 AM CDT
Precise Services Inc.	2016-04-22 08:05 AM CDT
Construction Software Technologies	2016-05-04 04:28 AM CDT
Texas concrete and remodeling	2016-05-06 11:15 AM CDT
iSqFt	2016-04-16 02:44 PM CDT
Public Works	2016-05-10 07:55 AM CDT
RAC Industries, LLC	2016-05-02 09:56 AM CDT

City of La Porte
 La Porte FY 16 Concrete Street Repairs
 Bid Opening Date: May 10, 2016

A. BASE BID UNIT ITEMS				Precise Services, inc		Brooks Concrete		GW Phillips Concrete		RAC Industries		ISI Contracting	
Item No.	Item Description	Unit	Quantity	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price	Unit Price	Extended Price
1	Remove Concrete Pavement Including Curb, Roadway, Driveways, and Sidewalk	SY	3094	\$10.50	\$32,487.00	\$8.24	\$25,494.56	\$18.00	\$55,692.00	\$7.00	\$21,658.00	\$33.00	\$102,102.00
2	Remove 10" Concrete Pavement and Subgrade Including Curb, Roadway, Driveways, and Sidewalk (BayForest)	SY	320	\$29.00	\$9,280.00	\$14.56	\$4,659.20	\$18.00	\$5,760.00	\$9.00	\$2,880.00	\$42.00	\$13,440.00
3	6" Concrete Pavement	SY	3094	\$50.00	\$154,700.00	\$69.00	\$213,486.00	\$58.00	\$179,452.00	\$79.70	\$246,591.80	\$76.00	\$235,144.00
4	6" Over Excavation of subgrade (per city direction)	SY	100	\$23.75	\$2,375.00	\$8.24	\$824.00	\$12.00	\$1,200.00	\$5.10	\$510.00	\$14.00	\$1,400.00
5	Cement Stabilized Sand (CSS, Complete-In-Place)	Ton	150	\$38.50	\$5,775.00	\$41.69	\$6,253.50	\$35.00	\$5,250.00	\$31.30	\$4,695.00	\$84.00	\$12,600.00
6	Recycled Crushed Concrete Base (RCCB, Complete-In-Place)	Ton	150	\$46.50	\$6,975.00	\$41.69	\$6,253.50	\$35.00	\$5,250.00	\$29.00	\$4,350.00	\$80.00	\$12,000.00
7	6" High Early Strenth Concrete Pavement (7 sack/CY) (Greenleaf)	SY	700	\$55.25	\$38,675.00	\$72.80	\$50,960.00	\$68.00	\$47,600.00	\$99.20	\$69,440.00	\$78.00	\$54,600.00
8	6" Reinforced Concrete Curb	LF	1780	\$3.65	\$6,497.00	\$6.55	\$11,659.00	\$6.00	\$10,680.00	\$7.00	\$12,460.00	\$4.00	\$7,120.00
9	4" x 12" Mountable Reinforced Concrete Curb	LF	100	\$3.65	\$365.00	\$6.76	\$676.00	\$7.00	\$700.00	\$10.00	\$1,000.00	\$6.00	\$600.00
10	6" Concrete Pavement Driveways	SF	100	\$7.00	\$700.00	\$6.89	\$689.00	\$58.00	\$5,800.00	\$10.00	\$1,000.00	\$9.00	\$900.00
11	4.5" Concrete Pavement Sidewalks	SF	100	\$5.00	\$500.00	\$5.89	\$589.00	\$7.00	\$700.00	\$10.00	\$1,000.00	\$8.00	\$800.00
12	Concrete Pavement Header (Concrete to Asphalt pavement transitions)	LF	100	\$33.00	\$3,300.00	\$20.80	\$2,080.00	\$6.00	\$600.00	\$21.00	\$2,100.00	\$5.00	\$500.00
13	Concrete Curb Ramps (All types complete-in-place)	LS	6	\$750.00	\$4,500.00	\$520.00	\$3,120.00	\$1,500.00	\$9,000.00	\$1,610.00	\$9,660.00	\$3,000.00	\$18,000.00
14	Sodding	SY	100	\$5.00	\$500.00	\$4.16	\$416.00	\$6.50	\$650.00	\$6.00	\$600.00	\$5.00	\$500.00
15	Full Depth Pavement Sawcut	LF	100	\$7.50	\$750.00	\$7.80	\$780.00	\$8.00	\$800.00	\$7.00	\$700.00	\$12.00	\$1,200.00
16	Detectable Warning Type 1- Concrete Material (2'X5')	EA	6	\$200.00	\$1,200.00	\$200.00	\$1,200.00	\$450.00	\$2,700.00	\$115.00	\$690.00	\$300.00	\$1,800.00
17	Detectable Warning Type 2- Composite Material, Clay Red, 2.35 inch pattern (2'X5')	EA	6	\$200.00	\$1,200.00	\$155.00	\$930.00	\$700.00	\$4,200.00	\$230.00	\$1,380.00	\$250.00	\$1,500.00
	Total				\$269,779.00		\$330,069.76		\$336,034.00		\$380,714.80		\$464,206.00



BID FORM
BID -16015 FY 2016 Concrete Street Repair

DATE: 5/10/2016

Bid of Precise Services, Inc. an individual proprietorship, a corporation organized and existing under laws of the State of Texas, a partnership consisting of _____, for Construction of Bid- 16015 FY 2016 Concrete Street Repair, for the City of La Porte, Harris County, Texas.

Gentlemen:

The undersigned bidder has carefully examined the Instructions to Bidders, this Proposal, the General Conditions of Agreement, the Technical Specifications and the drawings for the work herein above described and referred to in the Invitation to Bid and has carefully examined the site of the work and will provide all necessary labor, superintendence, machinery, equipment, tools, materials, services and other means of construction to complete all the work upon which he bids, as called for in the Contract, the Specifications and shown on the drawings, and in the manner prescribed therein and according to the requirements of the City of La Porte.

TOTAL BASE BID \$ 269,779.00

Written Two Hundred Sixty Nine Thousand Seven Hundred Seventy Nine Thousand Dollars and Zero Cents

It is agreed that the contract price may be increased or decreased to cover work added or deleted by order of the Engineer, in accordance with the provisions of the General Conditions of Agreement.

The award may be made on the Base Bid alone or the Base Bid and any or all of the Items listed under Alternates or Substitutions, if any.

The undersigned agrees that the amounts bid in this proposal will not be withdrawn or modified for sixty (60) days following date of bid opening.

It is understood that the bid security accompanying this proposal shall be returned to the undersigned unless, in case of the acceptance of this proposal the undersigned should fail to enter into a construction contract and execute bonds as provided in the specifications. In the event the undersigned should fail to enter into a construction contract and execute bonds as required within 14 calendar days after the Engineer has given unsigned contracts to the Contractor, it is understood and agreed that the bid security shall be forfeited to the Owner and shall be considered as payment for damages due to delay and other inconveniences suffered by the Owner as a result of such failure on the part of the undersigned.

It is understood that the Owner reserves the right to reject any and all bids.

City of La Porte

La Porte FY 16 Concrete Street Repairs

Bid Date: April 27, 2016

A. BASE BID UNIT ITEMS

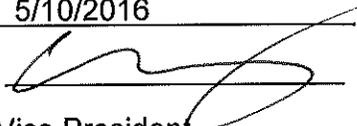
Item No.	Item Description	Unit	Quantity	Unit Price	Extended Price
1	Remove Concrete Pavement Including Curb, Roadway, Driveways, and Sidewalk	SY	3094	\$10.50	\$32,487.00
2	Remove 10" Concrete Pavement and Subgrade Including Curb, Roadway, Driveways, and Sidewalk (BayForest)	SY	320	\$29.00	\$9,280.00
3	6" Concrete Pavement	SY	3094	\$50.00	\$154,700.00
4	6" Over Excavation of subgrade (per city direction)	SY	100	\$23.75	\$2,375.00
5	Cement Stabilized Sand (CSS, Complete-In-Place)	Ton	150	\$38.50	\$5,755.00
6	Recycled Crushed Concrete Base (RCCB, Complete-In-Place)	Ton	150	\$46.50	\$6,975.00
7	6" High Early Strength Concrete Pavement (7 sack/CY) (Greenleaf)	SY	700	\$55.25	\$38,675.00
8	6" Reinforced Concrete Curb	LF	1780	\$3.65	\$6,497.00
9	4" x 12" Mountable Reinforced Concrete Curb	LF	100	\$3.65	\$365.00
10	6" Concrete Pavement Driveways	SF	100	\$7.00	\$700.00
11	4.5" Concrete Pavement Sidewalks	SF	100	\$5.00	\$500.00
12	Concrete Pavement Header (Concrete to Asphalt pavement transitions)	LF	100	\$33.00	\$3,300.00
13	Concrete Curb Ramps (All types complete-in-place)	LS	6	\$750.00	\$4,500.00
14	Sodding	SY	100	\$5.00	\$500.00
15	Full Depth Pavement Sawcut	LF	100	\$7.50	\$750.00
16	Detectable Warning Type 1 - Concrete Material (2'x5')	EA	6	\$200.00	\$1,200.00
17	Detectable Warning Type 2 - Composite Material, Clay Red, 2.35 inch pattern (2'x5')	EA	6	\$200.00	\$1,200.00

Notes:

- 1) The Unit Bid prices for the Base Bid Item include the cost of all associated work items including mobilization, maintenance of traffic in accordance with Texas MUTCD standards.
- 2) At the mutual written consent of the city and the contractor, the city may renew this contract no later than June 1, 2017 providing for an additional \$150,000 to \$250,000 in concrete repairs at the unit prices provided in this FY 16 Contract.

In the event of Award of the Contract to the undersigned, the undersigned agrees to furnish Performance and Payment Bonds as provided in the Specifications.

The undersigned certifies that the bid prices contained in this proposal have been carefully checked and are submitted as correct and final

Date 5/10/2016
Signed 
By Vice President
(Title)

Company Precise Services, Inc.
22337 Sandy Lane, Porter, Texas 77365
(Address)
(281) 354-5685
(Telephone Number)
alberto.lopez@preciseservicesinc.com
(Email Address)


Witness

SEAL (if Bidder is a Corporation)

Acknowledge receipt of Addenda Below:

Addendum No. 1 2 _____
Date Received 4/25/2016 4/27/2016 _____

THIS AGREEMENT is dated as of the 10th day of May in the year 2016 by and between The City of La Porte (hereinafter called OWNER) and Precise Services, Inc. (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1 - WORK

- 1.1 CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:
- 1.2 The Project for which the Work under the Contract Documents may be the whole or only a part of is generally described as follows

**SEALED BID #16015
FY 2016 Concrete Street Repair**

for

THE CITY OF LA PORTE

ARTICLE 2 - ENGINEER

- 2.1 The Project has been designed by the City of La Porte is hereinafter called ENGINEER and who is to act as OWNER'S representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3 - CONTRACT TIMES

- 3.1 The Work will be substantially completed within 120 calendar days after the date when the Contract Times commence to run as provided in Article 4.01 of the General Conditions, and completed and ready for final payment in accordance with Article 15.06 of the General Conditions within 150 calendar days after the date when the Contract Times commence to run.
- 3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in Paragraph 3.1 above, plus any extension thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER \$200.00 per day, plus additional engineering costs as set forth in the Supplementary Conditions, for each day that expires after the time specified in Paragraph 3.1 for Substantial Completion until the Work is substantially complete.
- 3.3 Permitting CONTRACTOR or Surety to continue and finish the Work or any part of the Work after the times specified for completion, or after the date to which the times for completion may have been extended, shall in no way operate as a waiver on the part of OWNER of its rights under the Contract.
- 3.4 At the mutual written consent of both parties, the City may renew this contract no later than June 1, 2017 providing for an additional \$150,000 to \$250,000 in concrete repairs at the unit price provided in this FY 2016 Contract.

ARTICLE 4 - CONTRACT PRICE

OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents an amount in current-funds as follows:

ARTICLE 5 - PAYMENT PROCEDURES

- 5.1 OWNER will make monthly progress payments on account of the Contract Price on the basis of CONTRACTOR'S APPLICATION for Payment as recommended by ENGINEER each month during construction. All progress payments will be on the basis of the progress of Work measured by the schedule of values or in the case of Unit Price Work based on the number of units complete. The amount of retainage will be ten percent (10%)

CONTRACTOR'S that submit requests for progress payments prior to the end of the month will receive payment less 10% retainage for that month's progress by the end of the following month. All retainage will be paid on the final payment. Contractor's affidavit of bills paid must be submitted with request for final payment.

- 5.2 The City of La Porte's budget is funded on an October 1st to September 30th fiscal year basis. Accordingly, the City of La Porte reserves the right to terminated this contract by giving Proposer (90) days written notice, without liability to the City, in the event that funding for this contract is discontinued or is no longer available.

ARTICLE 6 - INTEREST

All moneys not paid when due as provided in the General Conditions shall bear interest at the maximum rate allowed by law at the place of the Project.

ARTICLE 7 - CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

- 7.1 CONTRACTOR has examined and carefully studied the Contract Documents (including the Addenda listed in Article 8) and the other related data identified in the Bidding Documents including "technical data."
- 7.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, performance and furnishing of the Work.
- 7.3 CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.
- 7.4 CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

- 7.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.
- 7.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports, and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- 7.7 CONTRACTOR has given ENGINEER/ARCHITECT written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by ENGINEER/ARCHITECT is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 8 - CONTRACT DOCUMENTS

The Contract Documents which comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

- 8.1 This Agreement
- 8.2 Exhibits to this Agreement
- 8.3 Bid Form
- 8.4 Performance, Payment and other Bonds as required
- 8.5 Notice to Proceed, not attached hereto
- 8.6 General Conditions (Pages #1 to #42, inclusive)
- 8.7 Supplementary Conditions (Pages #1 to #13, Inclusive)
- 8.8 Specifications bearing the title: "Standard General Requirement"
- 8.9 Appendix A- Sheets 1-3, Maps, Street list, Details
- 8.10 Addenda numbers from to inclusive

ARTICLE 9 - MISCELLANEOUS

- 9.1 Terms used in this Agreement which are defined in the General Conditions will have the meanings indicated in the General Conditions.
- 9.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 9.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR, and ENGINEER/ARCHITECT. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR or identified by ENGINEER/ARCHITECT on their behalf.

This Agreement will be effective on _____, 20____, (which is the effective Date of the Agreement).

FOR CONTRACTOR

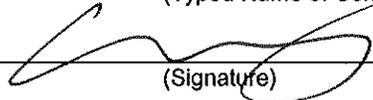
Attest:



(Signature)

Tiffany Lowery - Corporate Secretary
(Typed name and Title)

Precise Services, Inc.
(Typed Name of Contractor)



(Signature)

Contractor address for giving notices:
22337 Sandy Lane,
Porter, Texas 77365

Alberto Lopez - Vice President
(Typed Name & Title)

(If CONTRACTOR is a corporation, attach evidence of authority.)

FOR OWNER

Attest:

(City Secretary)

City of La Porte

(Signature)

Owner Address for giving notices:

604 West Fairmont Pkwy
La Porte, TX 77571

(Typed Name & Title)

(City Attorney signature)

(Typed Name)

**CITY OF LA PORTE
RESPONDENT AFFIDAVIT**

The foregoing prices shall include all labor, materials, equipment, removal, overhead, profit, freight, insurance, etc., to cover the finished work specified in this bid.

All items bid and installed under this procurement must be new and unused and in undamaged condition.

The City of La Porte is tax exempt and no taxes shall be included in the pricing of this solicitation.

Respondent understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the solicitation.

The respondent agrees that this solicitation shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving submittals.

The undersigned affirms they are duly authorized to represent this firm, that this proposal has not been prepared in collusion with any other firm, and that the contents contained herein have not been communicated to any other firm prior to the official opening.

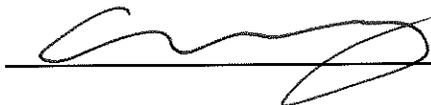
Respectfully submitted:

Business Name: Precise Services, Inc.

Address: 22337 Sandy Lane

Porter, Texas 77365

Printed Name: Alberto Lopez

Authorized Signature: 

Date: 5/10/2016

**CITY OF LA PORTE
CERTIFICATION OF RESPONDENT**

City of La Porte Ordinance #98-2217 prohibits any expenditure for goods or services by the City of La Porte from any person, firm, or corporation owing any delinquent indebtedness to the City. The undersigned respondent further certifies that it is in compliance with the requirements of said ordinance. A copy of the ordinance may be obtained by contacting the City of La Porte Purchasing Division at 281-470-5126.

If undersigned bidder is not in compliance with Ordinance 98-2217, it hereby assigns to the City of La Porte, the amount of its delinquent indebtedness to the City of La Porte, to be deducted by the City of La Porte from the amounts due the undersigned.

Failure to remit this certification with the response or non-compliance with said ordinance shall be just cause for rejection or disqualification of submitted proposal.

X The undersigned hereby certifies that it is in compliance with Ordinance 98-2217.

Or

 The undersigned assigns to the City of La Porte, the amount of its delinquent indebtedness, to be deducted by the City of La Porte from the amounts due the undersigned.

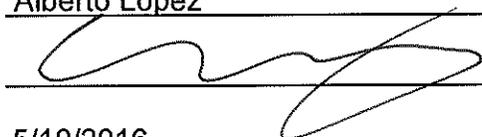
(Initial one of the above)

Business Name: Precise Services, Inc.

Address: 22337 Sandy Lane

Porter, Texas 77365

Printed Name: Alberto Lopez

Authorized Signature: 

Date: 5/10/2016

CITY OF LA PORTE
PROTECTION OF RESIDENT WORKERS COMPLIANCE

The City of La Porte, Texas actively supports the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S.

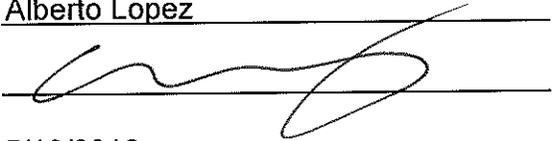
The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9).

The Contractor shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment.

Business Name: Precise Services, Inc.

Address: 22337 Sandy Lane
Porter, Texas 77365

Printed Name: Alberto Lopez

Authorized Signature: 

Date: 5/10/2016

CITY OF LA PORTE
INDEMNITY HOLD HARMLESS AGREEMENT

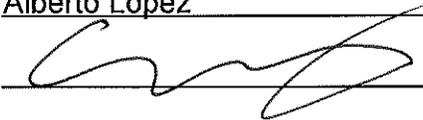
To the fullest extent permitted by law, Contractor, its successors, assigns and guarantors, shall pay, defend, indemnify and hold harmless the City of La Porte, its agents, representatives, officers, directors, officials and employees from and against all allegations, demands, proceedings, suits, actions, claims, including claims of patent or copyright infringement, damages, losses, expenses, including but not limited to, attorney's fees, court costs, and the cost of appellate proceedings, and all claim adjusting and handling expenses, related to, arising from or out of or resulting from any actions, acts, errors, mistakes or omissions caused in whole or part by Contractor relating to work, services and/or products provided in the performance of this Contract, including but not limited to, any Subcontractor or anyone directly or indirectly employed by or working as an independent contractor for Contractor or said Subcontractors or anyone for whose acts any of them may be liable and any injury or damages claimed by any of Contractor's and Subcontractor's employees or independent contractors.

The Contractor expressly understands and agrees that any insurance policies required by this contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the City of La Porte, its Council members, officers, agents and employees and herein provided.

Business Name: Precise Services, Inc.

Address: 22337 Sandy Lane
Porter, Texas 77365

Printed Name: Alberto Lopez

Authorized Signature:  _____

Date: 5/10/2016

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

Precise Services, Inc.

2 Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

N/A

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

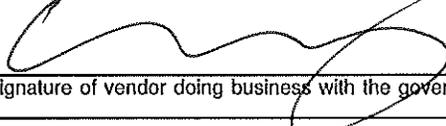
Yes No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6 Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7 
Signature of vendor doing business with the governmental entity

5/10/2016
Date

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.
 Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY CERTIFICATION OF FILING

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.
 Precise Services, Inc.
 Porter, TX United States

Certificate Number:
 2016-52577

Date Filed:
 05/10/2016

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.
 City of La Porte

Date Acknowledged:

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

Bid - 16016
 FY 2016 Concrete Street Repair

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary

5 Check only if there is NO Interested Party.

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.



[Handwritten Signature]

 Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said Alberto Lopez, this the 10th day of May, 2016, to certify which, witness my hand and seal of office.

[Handwritten Signature] Karina Lopez Notary Public
 Signature of officer administering oath Printed name of officer administering oath Title of officer administering oath



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
9/15/2015

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Brown & Brown Lone Star Insurance Services Inc 1717 N. Sam Houston Parkway #115 Houston TX 77038	CONTACT NAME: Robin Parrott	PHONE (A/C, No, Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:		
INSURED Precise Services Inc. 22337 Sandy Ln Porter TX 77365	CERTIFICATE NUMBER: 1802847871		REVISION NUMBER:
	INSURER A: Gemini Insurance Company		NAIC # 10833
	INSURER B: Imperium Insurance Company		NAIC # 35408
	INSURER C: Evanston Insurance Company		NAIC # 35378
	INSURER D: Texas Mutual Insurance Company		NAIC # 22945
	INSURER E: Travelers Lloyds Ins Co		NAIC # 41262
INSURER F:			

COVERAGES CERTIFICATE NUMBER: 1802847871 REVISION NUMBER:

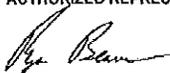
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GENL AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC			VGGP001678	9/10/2015	9/10/2016	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$50,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMPIOP AGG \$2,000,000 \$
B	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			ILR180077700	9/10/2015	9/10/2016	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
C	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			MKLV20LE103579	9/10/2015	9/10/2016	EACH OCCURRENCE \$2,000,000 AGGREGATE \$2,000,000 \$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	TSF0001270205	5/24/2015	5/24/2016	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
E	Contractors Equipment			6608070X334	9/10/2015	9/10/2016	Leased/Rented Limit \$250,000 Deductible \$1,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

General Liability: The policy includes a blanket automatic additional insured endorsement that provides additional insured status to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status. The policy contains a special endorsement with Primary and Noncontributory wording. The policy includes a blanket waiver of subrogation endorsement that waives the underwriters rights of subrogation to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status.

See Attached...

CERTIFICATE HOLDER Precise Services, Inc. 22337 Sandy Lane Porter TX 77365	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
--	---

AGENCY CUSTOMER ID: PRECIS1

LOC #: _____



ADDITIONAL REMARKS SCHEDULE

Page 1 of 1

AGENCY Brown & Brown Lone Star Insurance Services Inc		NAMED INSURED Precise Services Inc. 22337 Sandy Ln Porter TX 77365	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

Auto Liability: The policy includes a blanket automatic additional insured endorsement that provides additional insured status to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status. The policy includes a blanket waiver of subrogation endorsement that waives the underwriters rights of subrogation to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status.

Workers Compensation: The policy includes a blanket waiver of subrogation endorsement that waives the underwriters rights of subrogation to the certificate holder only when there is a written contract between the named insured and the certificate holder that requires such status.

BID BOND

STATE OF TEXAS §
 §
COUNTY OF HARRIS §

SURETY'S NO. IN00944

KNOW ALL MEN BY THESE PRESENTS, THAT Precise Services, Inc.

(hereinafter called the Principal), as Principal and City of La Porte

(hereinafter called the Surety), as Surety, are bound unto the City of La Porte, Texas, a home rule municipal corporation of Harris County, Texas (hereinafter called Obligee) in the amount of Five Percent of the Greatest Amount Bid Dollars (\$5% GAB), for the payment whereof said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a Bid to enter into a certain written Contract with Obligee for FY 2016 Concrete Street Repair Bid #16015

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully, enter into such written Contract, then this obligation shall be void; otherwise to remain in full force and effect.

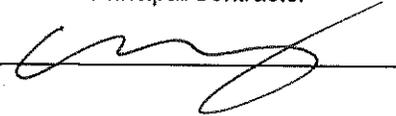
IT IS EXPRESSLY UNDERSTOOD AND AGREED that if said Principal should withdraw its Bid anytime after such Bid is opened and before this Bid Bond is returned or before official rejection of such Bid; or, if successful in securing the award thereof, said Principal should fail to enter into the Contract and furnish satisfactory Performance Bond and Payment Bond, and other required contract documents, the Obligee, in either of such events, shall be entitled and is hereby given the right to collect the full amount of this Bid Bond as liquidated damages.

PROVIDED, further that if any legal action be filed upon this Bond, venue shall lie in Harris County, Texas.

IN WITNESS WHEREOF, the said Principal and Surety do sign and seal this instrument this 10
day of May, 2016.

Precise Services, Inc.
Principal/Contractor

By:



International Fidelity Insurance Company
Surety

By:


Cheryl R. Colson, Attorney-In-Fact

Address: 22337 Sandy Lane
Porter, Texas 77365

Address: 25025 IH-45 N. Frwy., Ste. 525
The Woodlands, Texas 77380

NOTE: Attach Power of Attorney

POWER OF ATTORNEY

INTERNATIONAL FIDELITY INSURANCE COMPANY ALLEGHENY CASUALTY COMPANY

ONE NEWARK CENTER, 20TH FLOOR NEWARK, NEW JERSEY 07102-5207

KNOW ALL MEN BY THESE PRESENTS: That INTERNATIONAL FIDELITY INSURANCE COMPANY, a corporation organized and existing under the laws of the State of New Jersey, and ALLEGHENY CASUALTY COMPANY a corporation organized and existing under the laws of the State of New Jersey, having their principal office in the City of Newark, New Jersey, do hereby constitute and appoint

KEVIN MCQUAIN, CHERYL R. COLSON, ELAINE LEWIS, ROSALYN D. HASSELL, SCOTT D. CHAPMAN,
KEITH M. ILLA, JEANNE M. BUCHAN, JUSTIN MCQUAIN

The Woodlands, TX.

their true and lawful attorney(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of the By-Laws of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY and is granted under, and by authority of the following resolution adopted by the Board of Directors of INTERNATIONAL FIDELITY INSURANCE COMPANY at a meeting duly held on the 20th day of July, 2010 and by the Board of Directors of ALLEGHENY CASUALTY COMPANY at a meeting duly held on the 15th day of August, 2000:

"RESOLVED, that (1) the President, Vice President, Chief Executive Officer or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

IN WITNESS WHEREOF, INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY have each executed and attested these presents on this 31st day of December, 2015.



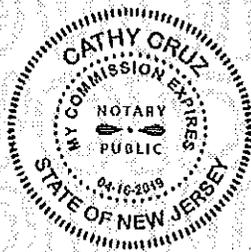
STATE OF NEW JERSEY
County of Essex

ROBERT W. MINSTER
Chief Executive Officer (International Fidelity Insurance Company) and President (Allegheny Casualty Company)



On this 31st day of December 2015, before me came the individual who executed the preceding instrument, to me personally known, and, being by me duly sworn, said he is the therein described and authorized officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY; that the seals affixed to said instrument are the Corporate Seals of said Companies; that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark, New Jersey the day and year first above written.



A NOTARY PUBLIC OF NEW JERSEY
My Commission Expires April 16, 2019

CERTIFICATION

I, the undersigned officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home office of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 10 day of May 2016

MARIA BRANCO, Assistant Secretary

IMPORTANT NOTICE

TO OBTAIN INFORMATION OR MAKE A COMPLAINT:

You may call International Fidelity Insurance Company's toll-free telephone number for information or to make a complaint at:

800-333-4167

You may also write to International Fidelity Insurance Company at:

**Attn: Claims Department
One Newark Center, 20th Floor
Newark, NJ 07102**

You may contact the Texas Department of Insurance to obtain information on companies, coverages, rights or complaints at:

800-252-3439

You may write the Texas Department of Insurance at:

**P.O. Box 149104
Austin, TX 78714-9104
Fax: (512) 475-1771
Web: <http://www.tdi.state.tx.us>
E-mail: ConsumerProtection@tdi.state.tx.us**

PREMIUM OR CLAIM DISPUTES:

Should you have a dispute concerning your premium or about a claim you should contact your Agent or International Fidelity Insurance Company first. If the dispute is not resolved, you may contact the Texas Department of Insurance.

ATTACH THIS NOTICE TO YOUR BOND.

This notice is for information only and does not become a part or a condition of the attached document and is given to comply with Texas legal and regulatory requirements.

Precise Services, Inc. References

Reference #1

Organization Name: Triple B Services

Contact Name: Keith Burke

Phone # / Fax #: (281) 324-3264 / (281) 324-1304

Address: 820 Old Atascocita Rd. Huffman, TX 77336

Services provided: Sub-contract Labor for concrete paving

Contract Value: 2014 - \$2.5MM 2015-\$3.3MM

Reference #2

Organization Name: City of Bay City, Texas

Contact Name: Barry Calhoun –Director of Public Works or Bill Tanner

Telephone/Fax: (979) 245-7236 / (979) 245-0756 or (979) 943-4810

Address: 1901 Fifth Street, Bay City, Texas 77414

Services provided: Removed existing sidewalk and replaced with pavers

Contract Value: \$175,000

Reference #3

Organization Name: BHA Hutchison & Associates/City of Shore Acres

Contact Name: Jerry Gainer or Kenneth Jackson

Telephone #: (281) 442-8213 or (713) 818-9174

Address: 1209 Decker Drive #100 Baytown, TX 77520

Services provided: Subgrade & Concrete Paving (roadway) Southbrook Dr.

Contract Value: \$60,000

Reference #4

Organization Name: Lonestar Ecology

Contact Name/Telephone: Larry Peyton – (281)-636-1077

Address: 12901 A Bay Park Rd Pasadena, TX 77507

Services provided: Placed two tank farm concrete slabs

Contract Value: \$150,000

Reference #5

Organization Name: Jacobs Engineering

Contact Name: Nick Prince

Telephone: (915) 615-9335 (cell) preferred method e-mail: Nick.Prince@Jacobs.com

Address: 5995 Rogerdale Road, Houston, Texas 77052

Services provided: Concrete pavement repairs and storm sewer replacement.

Project Name: Belvedere Point Dr.

Contract Value: \$180,000

Reference #6

Organization Name: GW Phillips
Contact Name: Matt Phillips
Telephone: (713) 376-2034
Address: 117 Oats Rd, Houston, Texas 77013
Services provided: Concrete paving for Willow Street, Humble, Texas and Newport Elementary Dr., Crosby, Texas
Contract Value: \$150,000

Reference #7

Organization Name: City of Pearland
Contact Name: Mark Graham
Telephone: (281) 924-8249
Address: 3519 Liberty Dr., Pearland, Texas 77548
Services provided: Sidewalk repairs throughout the city
Contract Value: \$1.37MM

Reference #8

Organization Name: R&T Ellis Excavating
Contact Name: Jarred Miller or Randy Ellis
Telephone: (281) 659-3291
Address: 445 County Rd 2301, Cleveland, Texas 77327
Services provided: Concrete paving and subgrade manipulation and stabilization at Grand Central Park Section 1
Contract Value: \$870,436.48

Reference #9

Organization Name: City of Conroe
Contact Name: James "Matt" Pekar
Telephone: (936) 522-3139
Address: 300 West Davis, Conroe, Texas 77301
Services provided: New sidewalk placement, repair of driveway and sidewalks on US 75 (Frazier St.) from Wilson Rd. to N. Loop 336
Contract Value: \$467,813.01

Reference #10

Organization Name: Statewide Traffic Signal Co.
Contact Name: Ed Morales
Telephone: (713) 680-2875
Address: 1509 W 34th St., Houston, Texas 77018
Services provided: new sidewalk and median nose
Contract Value: \$12,000.00



Paving the road to the future

May 4th, 2016

To whom it may concern,

Since September 9, 2013, Precise Services, Inc. has worked on a multitude of projects as a concrete paving contractor (Sub and General). Our plan from the date the company started has been to acquire a bonding line and slowly fade out the sub-contracts side of our company. In 2015 we acquired a bonding line through CHS surety that helped us break into the concrete paving and underground utilities market in the Houston metropolitan area. Our key personnel's experience coupled with our unblemished track record is more than enough to qualify Precise Services, Inc. to tackle any project, regardless of intricacy. We currently only have one office at 22337 Sandy Lane, Porter, Texas 77365.

Key Personnel and Experience

Ramiro Lopez- President and General Superintendent

4 years - U.S Navy, Seabee Construction Battalion

4 Years - Angel Brothers Ent.

9 years - Triple B Services LLP.

2.5 years - Precise Services, Inc.

Alberto Lopez- Vice President and Estimator

4 years - Angel Brothers Ent.

1 year - KBR(Afghanistan)

2 years - Triple B Services LLP

2.5 Years - Precise Services, Inc.

Ramiro Lopez Sr. – Operations Manager and Quality Control

12 years - William Brothers Construction

6 years - Contractors Technology Inc.

10 years - Angel Brothers Ent.

2.5 years - Precise Services, Inc.

Combined our key personnel hold over 50 years of experience in Concrete Paving Operations. This experience equips our company with the ability to construct projects ranging from building drainage overflow and outfall structures, to full scale highway main lane paving. We are no strangers to adhering to the specifications, and regulations of the City of Houston and surrounding municipalities. We employ ACI, safety, and traffic control certified supervisors and trained individuals. Our highly skilled workforce averages 65 full time employees year round, including Crew foremen, and their elemental staff. Please see the following lists for your reference. Precise Services, Inc. nor it officers have never defaulted on a contract, have had any contracts resulting in lawsuits, nor have ever filed bankruptcy while performing work of like nature or magnitude.

PRECISE SERVICES, INC.

22337 Sandy Ln. Porter, Texas 77365 • 281-354-5685 • FAX 281-354-1068

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Paving the road to the future

Current General Contracts

US 75 Sidewalk Construction from Wilson Rd. to Loop 336

Contract Amount-\$467,813.00

Location- City of Conroe

Client- City of Conroe

Construction Time- Substantial 90 Days, Final 120

Percent Complete: 99%

Actual Construction Time- Final Completion 90 Days City has approved change order to add another section of sidewalks.

Project Description- Installation of sidewalk facilities and concrete drives along U.S 75 from Wilson Rd. to Loop 336 in Conroe, TX.

Annual Sidewalk and Street Maintenance Project (City Wide)

Contract Amount- \$1,229,456.76

Location- City of Pearland

Client- City of Pearland

Construction Time- 365 Days

Percent Complete: 98%

Actual Construction Time- Completed \$1,100,000.00 in the first 90 Days, awarded additional work orders since then, contract does not end until May of 2016. The City of Pearland has exercised their right to renew the contract with us until May of 2017.

Project Description- City wide sidewalk and street maintenance.

City of Deer Park 2016 Sidewalk Project

Contract Amount-\$242,200.00

Location- City of Deer Park

Client- City of Deer Park

Construction Time- 90 Days

Percent Complete: 15%

Actual Construction Time- On schedule to be complete in 90 Days

Project Description-Sidewalk construction along various roads in Deer Park, TX

City of Conroe North and South Rivershire Culvert Headwalls

Contract Amount-\$79,500.00

Location- City of Conroe

Client- City of Deer Park

Construction Time- 30 Days

Percent Complete: 20%

Actual Construction Time- On track to be complete in 30 Days

Project Description- Construction of 120 LF of Headwalls

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Paving the road to the future

Current General Contracts (CONTINUED)

Road Construction along Imperial Valley Drive at East Richey Road for Harris County Precinct1

Contract Amount-\$406,573.50

Location- Houston, TX

Client- Harris County, Precinct 1

Construction Time- 60 Days

Percent Complete: 0%

Actual Construction Time- TBD Project is in Pre-Construction Phase

Project Description- Road Construction along Imperial Valley Drive at East Richey Road

Admin Parking Lot Extension

Contract Amount-\$62,798.00

Location- Houston, TX

Client- Harris County Municipal Utility District #24

Construction Time- 30 Days

Percent Complete: 0%

Actual Construction Time- TBD Project is in Pre-Construction Phase

Project Description- Extension of Current Parking Lot

Completed General Contracts

City of Shore Acres Southbrook Dr. Reconstruction

Contract Amount- \$60,000.00

Location- City of Shore Acres

Client- City of Shore Acres

Construction Time- 15 Days

Actual Construction Time- 5 days substantial, 7 days complete

Project Description- Excavation and haul-off of approximately 200 CY of asphalt millings, compaction and grading of natural subgrade, approximately 1,100 SY of 6-inch concrete pavement, and 60 LF of Pavement Header to connect to asphalt road.

City of Bay City Sidewalk Improvements

Contract Amount- \$175,000

Location- City of Bay City

Client- City of Bay City

Construction Time- 63 Days

Actual Construction Time- 30 days substantial, 58 days complete

Project Description- Removal of concrete sidewalks and replacement with paver sidewalk. Project was very delicate due to the fact that the sidewalks were located directly in front of buildings that belonged in historical district of Bay city.

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Paving the road to the future

Completed General Contracts (CONTINUED)

Belvedere Point Dr. Pavement Repairs and storm Sewer

Contract Amount- \$180,000.00

Location- Belvedere Point Dr., Spring, TX

Client- Harris County Improvement District 18

Construction Time- 15 Days Substantial, 25 days Final (Contract was extended Due to Change Orders)

Actual Construction Time- 15 days Substantial, due to Change Orders contract was extended 30 days.

Project Description- Remove and replace a section concrete pavement, subgrade and storm sewer.

Lone star Ecology Tank Farm Foundation

Contract Amount- \$150,000.00

Location- Lone Star Ecology Facility (Pasadena, TX)

Client- Lone Star Ecology

Construction Time- 30 Days

Actual Construction Time- 14 Days

Project Description- Construction of Commercial Grade tank farm foundation and 12" cement stabilized subgrade

Current Sub Contracts

IH-45 @ FM 525

Location- Houston, TX

Client- Statewide Signal on Behalf of Harris County.

Construction Time- 10 days Substantial 10 days Final

Actual Construction Time- Pre-construction Phase

Project Description- Sidewalk and Wheel Chair Ramps

Skyscraper Shadows Area Roadside Ditch Rehabilitation

Location- Houston, TX

Client- Triple B Services on Behalf of The City of Houston.

Construction Time- 90 days Substantial 120 days Final

Actual Construction Time- Pre-construction Phase

Project Description- Sidewalk, Driveways and Wheel Chair Ramps

Festival Site Roadways (Sidewalks, Ramps, and Sloped Paving Sub- Contract)

Location- Sugarland, TX

Client- Triple B Services on Behalf of The City of Sugarland

Construction Time- 90 days Substantial 120 days Final

Actual Construction Time- Pre-construction Phase

Project Description- Sidewalk, wheel chair ramps, and sloped paving

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Paving the road to the future

Completed Sub- Contracts

Grand Central Parkway Section 1 Paving and Sub-Grade Stabilization

Contract Amount- \$958,872.49

Location- Conroe, TX

Client- R&T Ellis on behalf of Conroe CS Texas Holdings, L.P.

Construction Time- 30 Days Substantial, 60 Days Final

Actual Construction Time- 60 Days Substantial, 90 days Final (Change order, adding pavers to intersections extended contract by 30 days)

Project Description- 20,000 SY of 6-inch Concrete Paving and 22,400 SY of Subgrade Stabilization

Cimarron Creek Section 1 Paving

Location- Magnolia, TX

Client- R. Construction on behalf of KB- Homes Lone Star Inc.

Actual Construction Time- 45 Work Days

Project Description- 21,000 SY of 6-inch Concrete Pavement

Albury Trails Estates Sections 3 and 4 Paving Only

Location- Tomball, TX

Client- R. Construction on behalf of Willow Creek Development Company

Actual Construction Time- 45 work Days

Project Description- 13,000 SY of 6 and 7-inch concrete paving.

Willow Street Re-Construction Paving Only

Location- Humble, TX

Client- G.W. Phillips on behalf of the City of Humble, TX

Construction Time- 30 days

Actual Construction Time- 20 Days

Project Description- 11,000 SY of 6" concrete paving

FM 1463 at Fulshear Bend.

Location- Houston, TX

Client- Statewide Signal on Behalf of TXODT.

Construction Time- 10 days Substantial 10 days Final

Actual Construction Time- 2 Days Final

Project Description- 8 Wheelchair Ramps and landings at intersections

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Paving the road to the future

Completed Sub- Contracts (CONTINUED)

Construction of Public Drainage Improvements for 55-Acre Rankin Road Tract Headwalls, Sloped Paving, and Outfall Repair

Location- Houston, TX

Client- R&T Ellis Excavating on behalf of Liberty Property Trust.

Construction Time- 30 days Substantial 60 days Final

Actual Construction Time- 45 Days Complete

Project Description- 500 LF of 12" Wing and Headwalls Combined. Average Height 10'-6". 140 SY of Sloped Paving for Emergency Overflow Structure, and an Outfall Repair.

Equipment Schedule

Owned Equipment Available for use

2014 RAM 3500 Pick Up-2

2016 RAM 3500 Pick Up

2008 Sterling Bullit 5500

2010 Trailer Mounted Arrow Board

2008 John Deere Dozer 650j LGP

2012 John Deere Loader Backhoe 310J

1998 CAT 140H Motor Grader

2004 BOMAG Vibratory Roller

2005 CAT 325CL Hydraulic Excavator

2007 CAT 420E Backhoe

2015 Allen Razorback Self Propelled Vibratory Truss Screed (Up to 30' of Sections)

2010 Trailer Mounted Pressure Washer and Water Tank

2014 Big Tex Gooseneck Trailer

2013 20' Trailer

2010 Husqvarna Walk Behind Concrete Saw

500 Gallon Fuel Tanks and Pumps- 2

2005 International 4400 Flatbed

2001 Sterling M7500 (2500 Gallon water truck)

2006 Mack CHN613 Dump Truck

2005 Mack CXN613 Dump Truck

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Paving the road to the future

Any equipment that is necessary but not listed can be provided from the Mustang CAT rental fleet. List of references pertaining to projects in our track record attached.

Thank you for considering Precise Services, Inc. for award of this contract.

Respectfully,

Alberto Lopez
Vice President
Precise Services, Inc.

PRECISE SERVICES, INC.

22337 Sandy Ln. Porter, Texas 77365 • 281-354-5685 • FAX 281-354-1068

www.preciseservicesinc.com

FY16 Concrete Repair Street List & Est. Quantities

Street	Linear Ft.	Width	Square Yds.	Condition Rating
1 Valley Brook between Parkcrest and Ridgecrest	215	14	334.44	5
2 Valley Brook at Valley Brook Ct.	130	14	202.22	5
3 Beachhaven between Somerton and Gladwyne	300	28	933.33	3
4 Farrington between Glenview and Crestway	179	14	278.44	5
5 Bay Forest Dr.	200	12	266.67	4
6 Old Hickory at Quiet Hill	347	28	1079.56	5
7 Green Leaf cul-de-sac/ driveway			700.00	4
	1371		3794.67	



VALLEY BROOK

VALLEY BROOK CT.

FARRINGTON

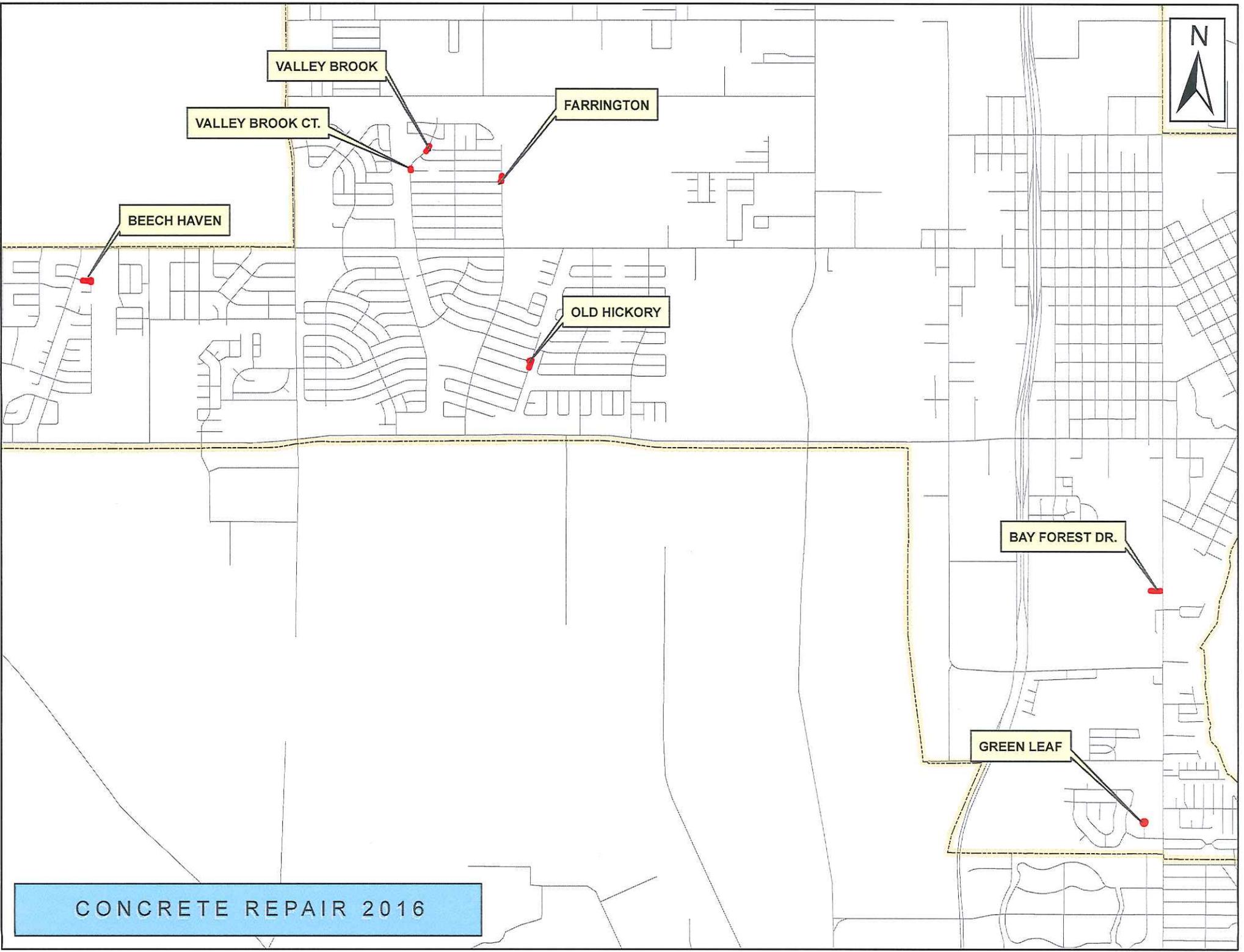
BEECH HAVEN

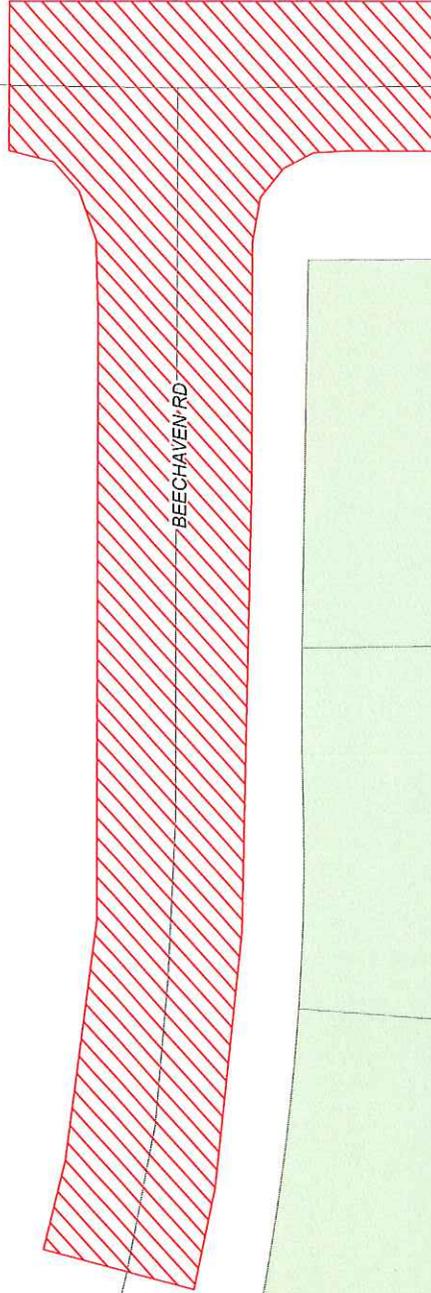
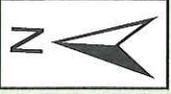
OLD HICKORY

BAY FOREST DR.

GREEN LEAF

CONCRETE REPAIR 2016





GLADWYNE LN

BEECHAVEN RD

BEECH HAVEN

223 x 28 = 6,244

48 x 28 = 1,344

7,588 SF x .5 /27 = 140.52 CY

843.11 SY

CONCRETE REPAIR 2016



VALLEY BROOK DR

18

156

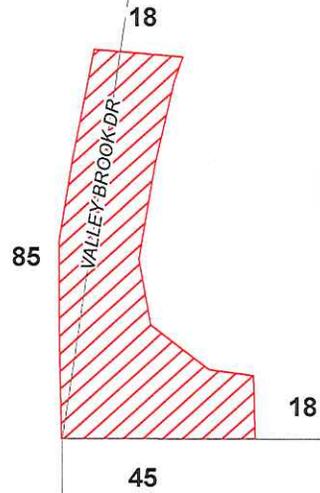
18

ARCHWAY DR

VALLEY BROOK DR

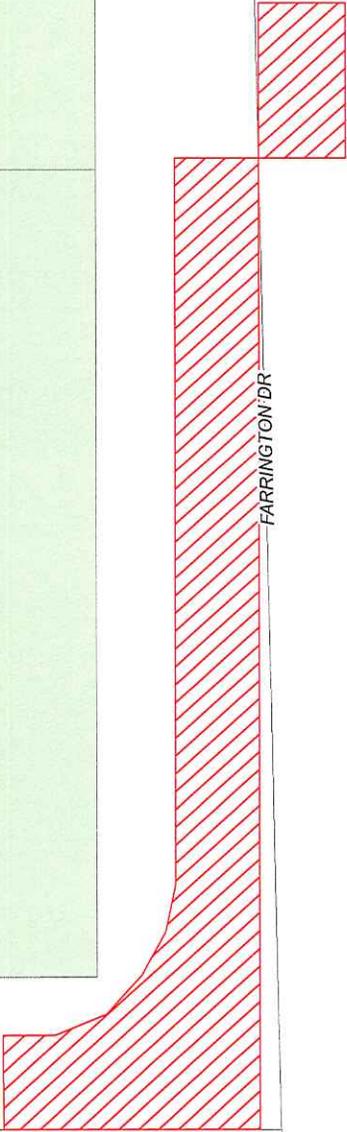
156 x 18 = 2,808SF x .5 /27 = 52 CY
312 SY

CONCRETE REPAIR 2016



VALLEY BROOK CT.
 $130 \times 18 = 2,340\text{SF} \times .5 / 27 = 43.33 \text{ CY}$
260 SY

CONCRETE REPAIR 2016



CRESTWAY DR

FARRINGTON DR

CONCRETE REPAIR 2016

FARRINGTON	
26 x 14 =	364
141 x 14 =	1,974
26 x 14 =	364
2,702 SF x .5 /27 =	50.04 CY
	300.22 SY



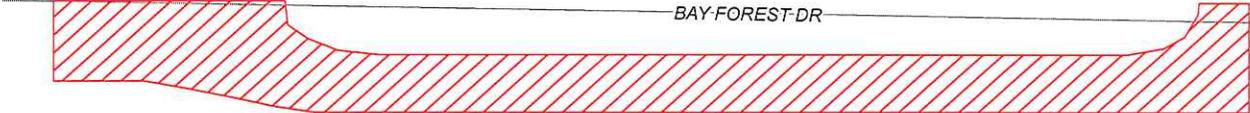
QUIET HILL RD

OLD HICKORY DR

OLD HICKORY

172 x 28 = 4,816 SF x .5 /27 = 89.19 CY
30 x 28 = 840 SF x .5 /27 = 15.56 CY
104.75 SY

CONCRETE REPAIR 2016



S BROADWAY ST

CONCRETE REPAIR 2016

BAY FOREST DR.
 $240 \times 12 = 2,880 \text{ SF} \times .5 / 27 = 53.34 \text{ CY}$
320 SY



3102

3103

3107

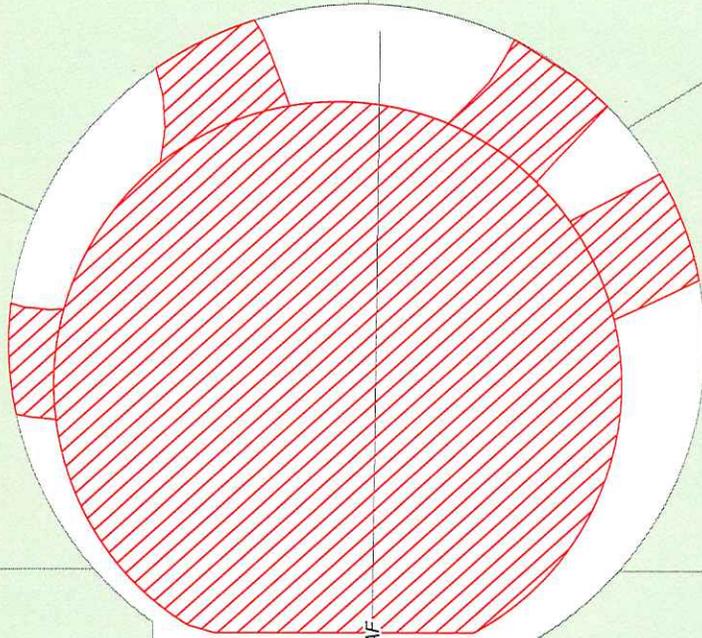
3106

3124

3114

3111

3115



GREEN LEAF

GREEN LEAF

40 x 40 x 3.14 = 5,024 SF x .5 /27 = 93.04 CY

D/W

3107 15 x 20 = 33.33 SY 5.56 CY

3103 14 x 14 = 21.78 SY 3.63 CY

3102 19 x 10 = 21.11 SY 3.52 CY

3106 18 x 12 = 24.00 SY 4.00 CY

CONCRETE REPAIR 2016

REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested: June 13, 2016 Appropriation
Requested By: Matt Hartleib, HR Manager Source of Funds: N/A
Department: Human Resources Account Number:
Report: Resolution: Ordinance: Amount Budgeted:
Other: Amount Requested:
Budgeted Item: YES NO

Attachments :

1. Proposed Policy Language-Bereavement Leave
2. Current Policy

SUMMARY & RECOMMENDATIONS

The current Employee Policies Handbook includes a section covering Bereavement Leave for employees experiencing a loss of a family member. The intent of this policy is allow employees time off from work to attend the funeral or attend to other related matters. A recent review of the language of the policy revealed some potential unintended limitations.

Specifically the current language provides only three days of bereavement leave per calendar year. It is conceivable that an employee may experience more than one qualifying loss in a calendar year. Staff recommends changing 'per calendar year' to 'per incident' to align with the intent of this benefit.

Secondly, the list of covered relations currently does not include grandchildren. Spouses, siblings, parents, foster parents, and grandparents are included. Staff recommends the addition of grandchildren to the approved list and removing the reference to foster parents. The resulting list of spouse, child, parent, sibling, grandparent, and grandchildren provides clarity of covered relations and allows for reasonable management discretion regarding the specific nature of those relations (step, foster, etc.)

Action Required of Council:

Consider approval or other action to change Handbook Chapter 7 Section 13 Bereavement Leave to provide leave per incident and to include grandchildren in the list of covered family members.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

7.13 Bereavement Leave

The City will grant a maximum of 3 days bereavement leave per incident for an employee to attend the funeral of a family member including spouse, and the following of either the employee or spouse: child, sibling, parent, grandparent, or grandchild. Department Directors may approve the employee's request to take sick and/or vacation leave in addition to the 3 days bereavement leave as follows:

1. The first 3 days will be charged to bereavement leave
2. Days 4 through 6 may be charged to sick leave. Leave exceeding 6 days will be charged to vacation.
3. Employees have the option to use vacation rather than sick leave for days 4 through 6

Use of All Other Available Leave- All paid leave authorized under FMLA must be used prior to authorizing Leave Without Pay to an employee. If the Leave Without Pay is due to the employee's own illness or injury, all sick leave must also be used prior to authorizing Leave Without Pay.

Documentation - Requests for leave without pay must be made in writing to the employee's Department Director as far in advance as possible prior to the requested leave date. Requests for an extension of leave must also be in writing and submitted to the Department Director, who will forward the request to the City Manager's office and the Human Resources Manager. The need for a leave without pay must be supported by documentation acceptable to the City. The Department Director and/or City Manager may require that the employee on leave periodically contact a designated supervisor to report on his/her condition or status. Before returning to work from a medical leave without pay, the employee may be required to submit a letter from his or her doctor stating that the employee is able to resume his or her normal job duties.

Revocation - The City Manager may revoke authorized leave without pay at any time. Failure to return to work after the expiration of an authorized leave without pay or failure to provide required status reports, physician's statements, or to contact the City per the required schedule will likely result in disciplinary action up to and including termination.

7.13 Bereavement Leave

The City will grant a maximum of 3 days bereavement leave per calendar year for an employee to attend the funeral of a family member including spouse, and the following of either the employee or spouse: child, brother, sister, parents, grandparents, or foster parents. Department Directors may approve the employee's request to take sick and/or vacation leave in addition to the 3 days bereavement leave as follows:

1. The first 3 days will be charged to bereavement leave
2. Days 4 through 6 may be charged to sick leave. Leave exceeding 6 days will be charged to vacation.
3. Employees have the option to use vacation rather than sick leave for days 4 through 6

7.14 Jury Duty

The City provides paid leave to regular full-time employees required to serve on jury duty or requested to testify as a witness by the City in a City-related civil, criminal, legislative, or administrative proceeding.

The employee must provide documentation of the requirement for jury duty, subpoena compliance, etc., with his/her leave request. Employees must submit supporting documentation to their supervisor as soon as possible so that arrangements can be made to accommodate the absence.

Employees on jury duty leave should keep up with their job responsibilities if possible. An employee who is on jury duty typically must report for City duty for the remainder of the day upon completion of court or jury service, or request approval for use of other available paid time off. Any payment for jury duty received by the employee may be retained by the employee.

REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested:	<u>June 13, 2016</u>	Appropriation	
Requested By:	<u>Matt Hartleib, HR Manager</u>	Source of Funds:	<u>Consulting</u>
Department:	<u>Human Resources</u>	Account Number:	<u>01461445155004</u>
Report: <input checked="" type="radio"/>	Resolution: <input type="radio"/>	Ordinance: <input type="radio"/>	Amount Budgeted: <u>\$40,000.00</u>
Other: <input type="radio"/>			Amount Requested: <u>\$47,500.00</u>
		Budgeted Item:	<input checked="" type="radio"/> YES <input type="radio"/> NO

Attachments :

1. Access Report from Public Purchase-16506
2. Detailed Evaluation Summary
3. IPS Presentation

SUMMARY & RECOMMENDATIONS

On March 1st the City initiated the RFP process for a benefits consultant in preparation for the previous contract with McGriff, Seibels & Williams of Texas, Inc. expiring in May 2017. The request for proposals was advertised on March 24th and March 31st in the Bay Area Observer and posted on Public Purchase and the City's website. Additionally, 34 firms received a direct email notification. 14 firms downloaded the RFP from Public Purchase and proposals were received from Crystal Company, Gallagher Benefit Services, and IPS Advisors. An independent internal review was conducted by staff (Assistant City Manager, Director of Finance, and Human Resources Manager) with IPS Advisors as the consensus top pick. Staff reviewed the proposals received and the staff evaluation ratings with the 172 Committee on April 29th. At that meeting, it was decided to request in-person presentations from each of the three firms to better determine their ability to meet the needs of the City. Those presentations were conducted on May 13th and May 16th. Reference discussions were conducted with current clients of IPS Advisors and Gallagher in addition to the reference surveys on all proposals included in the RFP process. At a 172 Committee meeting held on May 23rd a unanimous decision was made to recommend IPS Advisors as the benefits consultant for the City.

The contract with IPS includes a rate guarantee for three years and also places 100% of the fee at-risk based on a mutually agreed upon performance-based criteria. Specific logistics of the performance-based criteria are being finalized by IPS and City staff for inclusion in the contract. A representative of IPS will be present at the Council meeting to answer any questions from Council.

This account has a total budget of \$40,000. The City paid McGriff, Seibels & Williams a total of \$17,500 for services through the end of the current contract, which leaves a \$22,500 account balance. The value of the IPS contract through this current fiscal year is \$15,833.33.

Action Required of Council:

Consider approval or other action to contract with IPS Advisors as the City's benefits consultant at an annual fee not to exceed \$47,500.00.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

Access Report

Agency

Bid Number

Bid Title

City of La Porte (TX)

16506

Insurance Benefits Consulting Services

Vendor Name	Accessed First Time	Most Recent Access
Marsh & McLennan Agency	2016-03-24 12:37 PM CDT	2016-03-24 12:38 PM CDT
Perkens WS Corporation	2016-03-24 12:52 PM CDT	2016-04-11 12:39 PM CDT
BancorpSouth Insurance Services, Inc.	2016-03-29 03:28 PM CDT	2016-03-29 03:30 PM CDT
North America Procurement Council	2016-03-25 10:15 PM CDT	2016-04-27 04:40 AM CDT
SWBC Insurance Services, Inc.	2016-03-24 04:24 PM CDT	2016-03-24 04:24 PM CDT
Onvia	2016-03-24 04:49 PM CDT	2016-05-25 04:19 AM CDT
Kelsey-Seybold Clinic	2016-03-28 08:56 AM CDT	2016-03-28 08:57 AM CDT
OPEN MINDS	2016-04-01 09:30 AM CDT	2016-04-01 09:30 AM CDT
Station & Ayers Insurance Planning	2016-03-24 09:32 AM CDT	2016-03-24 09:39 AM CDT
IPS Advisors	2016-03-24 09:06 AM CDT	2016-03-30 11:11 AM CDT
Financial Benefit Services	2016-03-28 10:07 AM CDT	2016-03-28 10:10 AM CDT
The Segal Company	2016-03-24 11:12 AM CDT	2016-03-24 11:13 AM CDT
Crystal 7 Company	2016-04-04 12:04 PM CDT	2016-04-08 04:21 PM CDT
Gallagher Benefits	2016-03-30 04:43 PM CDT	2016-03-30 04:44 PM CDT

Final Evaluation Worksheet for RFP #16506 Insurance Benefits Consultant

Criteria	Weight	Arthur J. Gallagher			Crystal & Company			IPS Advisors		
		A	B	C	A	B	C	A	B	C
Qualifications & Experience	40%	3.2	2.8	3.2	3.2	2.8	2.8	3.6	4	4
Additonal Services	15%	1.2	1.05	1.35	1.35	1.4	1.05	1.35	1.2	1.2
Sub Total (before Cost)		4.4	3.85	4.55	4.55	4.2	3.85	4.95	5.2	5.2
Cost	45%	4.5	4.5	4.5	4.5	4.5	4.5	4.23	4.23	4.23

FINAL Results (including cost)	8.9	8.35	9.05	9.05	8.7	8.35	9.18	9.43	9.43
	26.3			26.1			\$28.0		

Cost	\$45,000.00	\$45,000.00	\$47,500.00
-------------	--------------------	--------------------	--------------------

	Arthur J. Gallagher			Crystal & Company			IPS Advisors		
Criteria	A	B	C	A	B	C	A	B	C
Cost Estimate	10	10	10	10	10	10	9.4	9.4	9.4
Qualifications/Experience	8	7	8	8	7	7	9	10	10
Additional Services	8	7	9	9	9	7	9	8	8

Where Experience and
Independence Matter

Corporate Benefits Consulting
Insurance Planning Services
Retirement Plan Consulting



Value Proposition for City of La Porte



Randall R. Martell, HIA, MHP, CBC
Managing Partner

Brent A. Weegar, MBA
Principal – Consultant

John M. Heerwagen
Employee Benefits Specialist

May 16, 2016



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Appendices

- a. Sample Five Year Benefit Strategy
- b. Sample Monthly Reporting Package
- c. BenefitCloud

I. INTRODUCTION

- Established in 1978, IPS Advisors is an independent brokerage and consulting firm. We specialize in assisting public and closely held business owners, governmental sector clients, individuals and family groups with their employee benefits needs, executive benefits, business succession planning, estate planning and wealth counseling.
- We provide specialized services through our core practice areas:
 - Corporate Benefits Consulting
 - Corporate Retirement Planning Services
 - Life Insurance Portfolio Management

II. YOUR IPS ADVISORS TEAM

Randall R. Martell, HIA, MHP, CBC

Mr. Martell, the Managing Partner leading the Employee Benefits practice, has 28 years of experience in Corporate Benefits Consulting, and over 20 years of consulting experience with public entities. In addition to assisting large employers in their fight to manage rising health care costs, Martell provides consulting services to clients in the areas of performance reviews, flexible benefits, wellness reviews, health care financing alternatives and employee communications. Prior to joining IPS Advisors, Mr. Martell was Director of Health and Welfare Benefits Consulting at Deloitte & Touche. He is also active in the community and serves as an Advisory Board Member for National Financial Partners, as well as having served many industry organizations.

Brent Weegar, Principal Brent joined the IPS team after graduating from Baylor University in 2004. Brent not only provides consulting services for large corporate clients but also heads our consulting unit for public entities including Municipal, County and State Governments. He possesses a strong understanding of governmental organizational structure and processes. His ability to provide strategic insight with alternative funding arrangements, plan design, claims analysis, budgeting and forecasting, health care reform and compliance issues are key strengths.

John Heerwagen, Employee Benefit Specialist

John has over 7 years of sales and customer service experience. That experience followed him to IPS Advisors in 2015, where he continues to provide excellence to his clients. John's clients benefit from his attention to detail, exceptional organizational skills and eagerness to provide the highest level of customer service. He truly enjoys the opportunity of building relationships with his clients and helping put their insurance concerns at ease.



YOUR IPS ADVISORS TEAM

Brian Wilson – Account Manager

Brian joined IPS in June, 2011. He has been in the industry since 1996, working on the broker and carrier side of the business. His experience in account management and renewals provide the expertise that our clients expect. Brian currently is the Account Manager for the City of La Porte handles the South Texas Region for IPS Advisors.

Dominique Martinez, Corporate Benefits Analyst

Dominique started with IPS Advisors in 2015. As a Corporate Benefit Analyst for IPS Advisors, Dominique works closely with our advisors to support the development and implementation of comprehensive, cost-effective benefits programs. Dominique graduated from Austin College with a Bachelor of Arts in Business Administration and Bachelor of Arts in Chemistry.

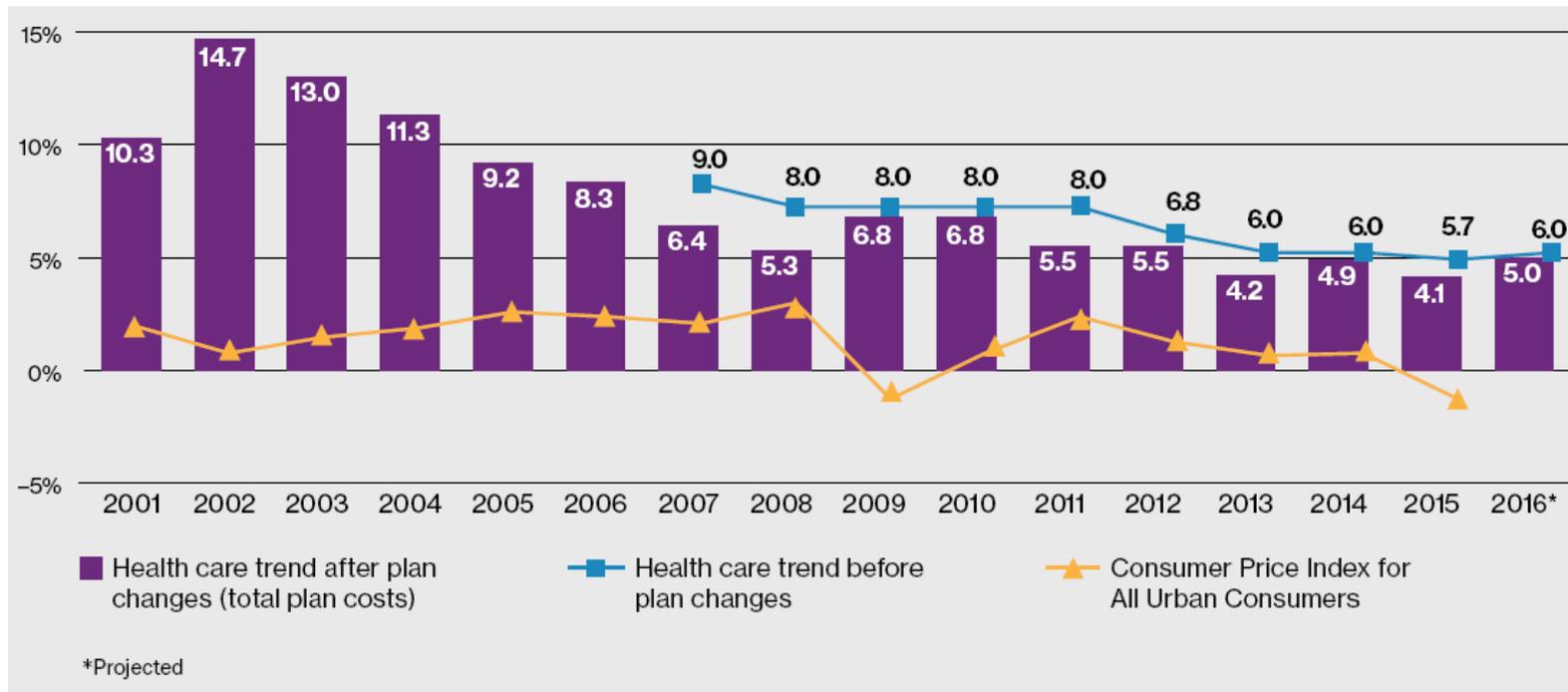
Charlotte Starks, Senior Marketing Assistant

Charlotte has worked in Underwriting, Marketing and Administration since 1987. Her well-rounded background brings a seasoned perspective in helping to achieve our client's goals. Mrs. Starks will assist Brent Weegar in the renewal and request for proposal process with the City of La Porte. Her responsibilities will include assisting with the coordination, facilitation and ongoing management of the Request for Proposal process.

III. STRATEGY AND TRENDS

HEALTH CARE COST TRENDS: 2001 – 2016

- Although health care trends have reduced to historically low levels they continue to outpace inflation. Plan design and contribution strategies have contributed significantly to the lower inflation rates.
- Signs point to future escalation ahead including expected double digit trend rates for pharmacy.

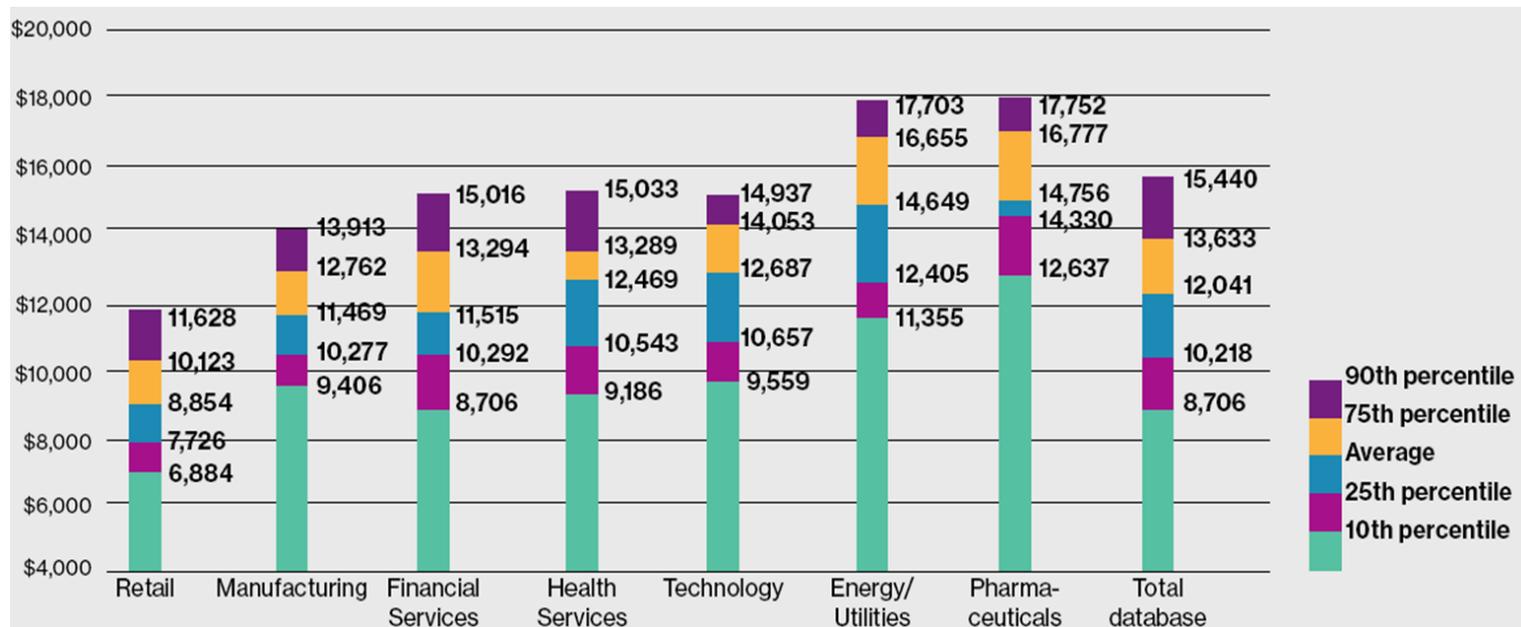


Source: Towers Watson / NBGH – The New Health Care Imperative Survey

STRATEGY AND TRENDS

HEALTH CARE COST TRENDS – PER CAPITA COSTS

- Total health care costs are expected to reach \$12,041 per employee per year in 2015, up 4.1% from \$11,567 from 2014.
- Per Capita Health Care costs vary greatly by industry.

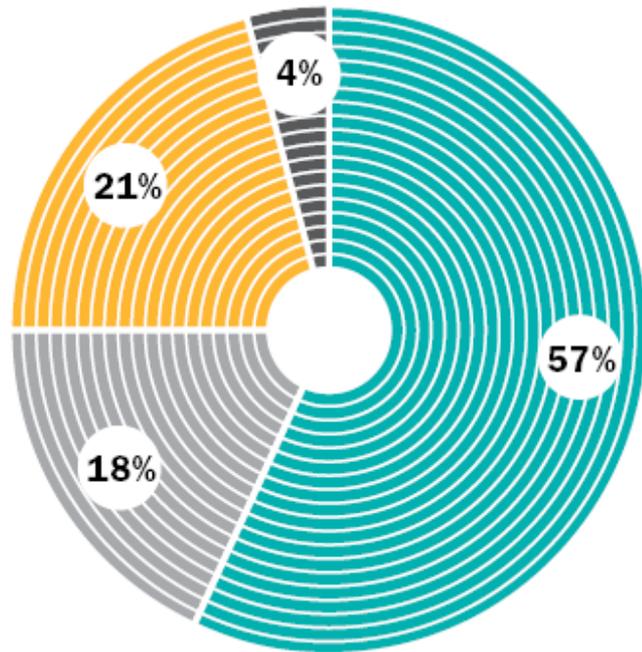


Source: TowersWatsonWillis

STRATEGY AND TRENDS

STRATEGY RECALIBRATION

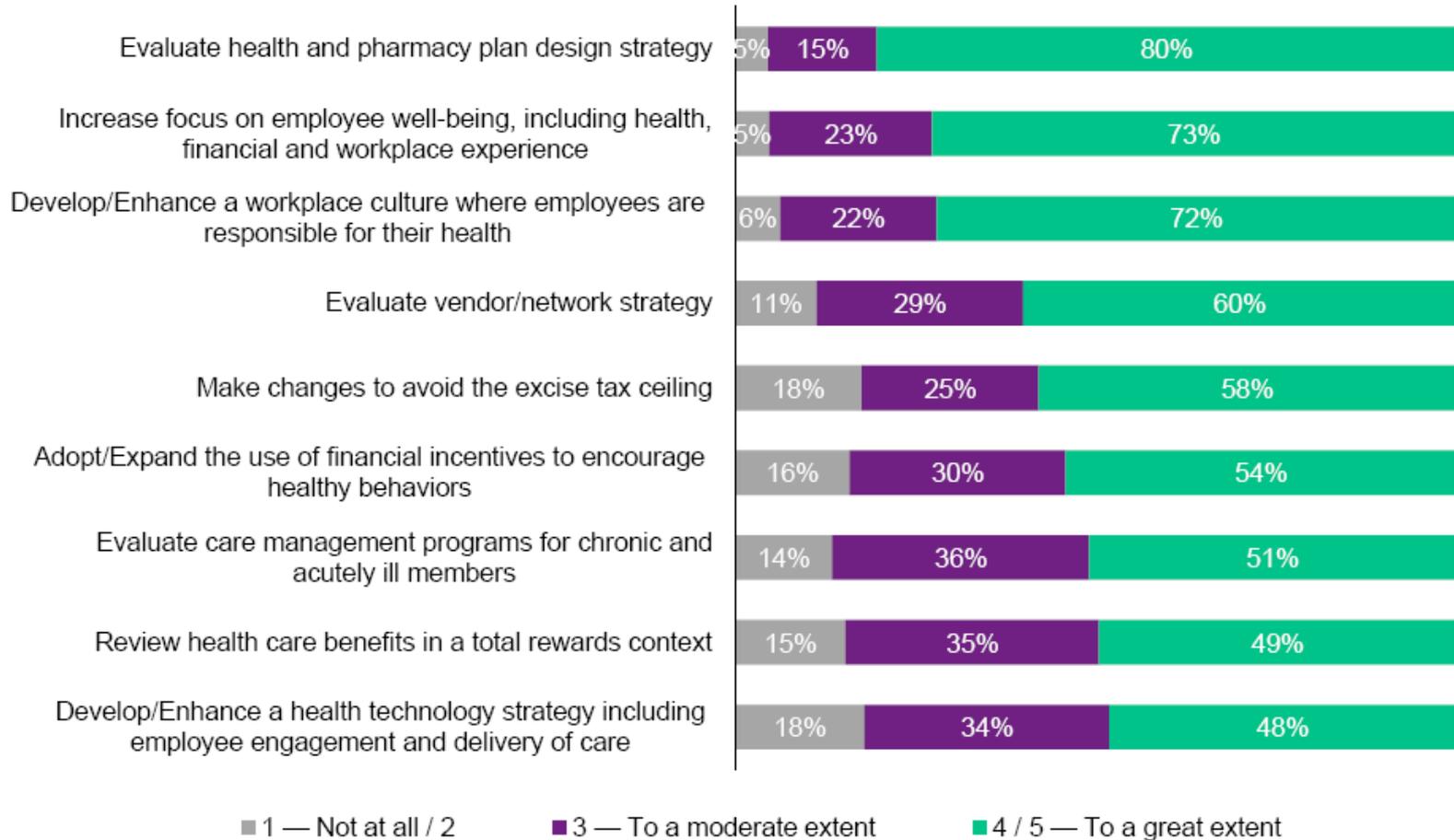
- A widespread trend in healthcare strategy recalibration is underway across the country due to rising employer costs, economic factors and the Patient Protection and Affordable Care Act.



- **57%** We are currently developing a strategy
- **18%** We have developed a strategy
- **21%** We have not yet begun developing a strategy but will do so
- **4%** We have no plans to recalibrate our strategy

STRATEGY AND TRENDS

TOP 10 STRATEGIC FOCUS AREAS FROM EMPLOYERS



Source: Towers Watson / NBGH – The New Health Care Imperative Survey



STRATEGY AND TRENDS

EMERGING STRATEGIES AND BEST PRACTICES

- Multiple studies indicate that the emerging strategies and best practices in the following areas will drive health care strategic direction over the next three years.

Pharmacy

Healthcare
Delivery

Employer
Funding

Health
Improvement

Engagement
and
Consumerism

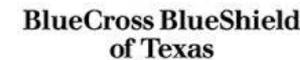
- Employers who have implemented the most best practices show a significant difference in per employee costs than those who have implemented the fewest. Both Mercer and Willis Towers Watson surveys have shown that cost varies from \$700 to \$2,000 per employee per year.

IV. VALUE PROPOSITION

MARKET LEVERAGE

IPS maintains over 300 clients with over 277,000 employee lives. Our size allows our clients access to our relationships with some of the leading carriers in the industry and gives you:

- Access to non-standard benefits solutions
- Direct access to underwriters and upper management
- Preferred service levels and performance guarantees
- A greater competitive advantage



Experience. Wellness. Everywhere.™



VALUE PROPOSITION – Why IPS?

EXPERIENCE

Municipal / State Government:

In regard to employee benefit plans; there are a unique set of rules and culture that apply to public entities. With that said, it is important to partner with a consulting team who has significant experience working with public sector employers and employees. The IPS Advisor's Governmental Services Division has over 30 years of consulting experience in the public sector. Today we serve over 35 Texas public entities, ranging in size from 25 to 7,000 employees.

Government Associations

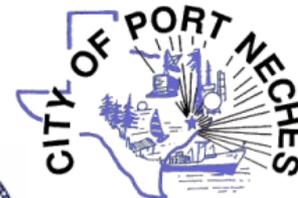
IPS is actively involved in monitoring and assessing opportunities for possible collective purchasing initiatives. IPS is active with the Public Employee Benefits Alliance and advises our clients if / when participation in bid opportunities are necessary.

Interlocal Agreements

IPS manages and maintains multiple inter-local agreements for Health and Welfare Benefits for groups of municipalities. IPS will evaluate potential inter-local Arrangements on behalf of the City of La Porte.



Municipal Experience



CORE SERVICES

CLAIMS / BENEFIT ANALYSIS

Utilization Review

IPS will work with City's carrier to obtain available claims data and provide analysis of eligibility information, medical claims, pharmacy claims, and statistics to help you:

- Drill down to root causes of health care cost (includes benchmarking)
- Measure ROI of wellness and disease management activities
- Improve plan and benefit design
- Develop a long-term health care strategy

Monthly Claims / Quarterly Claims Updates

IPS Advisors will prepare monthly and quarterly claim reporting to include (but not limited to) monthly medical / prescription / dental claims by plan, large claims analysis, (as applicable), monthly enrollment by plan, and monthly budget reconciliation.

Benchmarking Analysis

IPS Advisors will benchmark the City's benefits plan, contribution structure and utilization data against our data base. Benchmarking will be broken down by industry, size, and geographic location. This information will be used in our analysis and recommendations.

VALUE PROPOSITION

CLAIMS / BENEFIT ANALYSIS

Actuarial Analysis

IPS Advisors has on staff actuarial services. These services include but are not limited to:

- Budget Projections
- Contribution Modeling and Subsidy Analysis
 - Active, Pre and Post 65 Retirees
- Benefit Design Modeling
- ACA Impact Analysis
- Cadillac Tax Assessment

Alternative Funding Strategies

IPS Advisors has extensive experience in implementing alternative funding strategies for health and welfare programs. These strategies include MERP, GAP, Partial Self Funding, Minimum premium and more. Currently, 50% of our clients utilize alternative funding benefits strategies.

Retiree Benefit Strategies

IPS will assist the City of La Porte in establishing strategies to manage pre and post 65 retiree liabilities. These include but are not limited to carve out options, subsidy strategies, policy recommendations and benchmarking.

VALUE PROPOSITION

REQUEST FOR PROPOSAL

RFP Process and Analysis

IPS will manage the entire RFP process on behalf of the City including drafting, RFP release, addendums, and receipt. Once RFP's are received, IPS will provide analysis and recommendations for Finalists. We will then request and negotiate best and final offer and present analysis including plan design, network and contribution alternatives.



NETWORK AND DISCOUNT ANALYSIS

Network Analysis

As part of the RFP process, IPS will collect medical and pharmacy claim files and perform a network disruption, discount and pharmacy analysis to limit disruption and maximize client savings. These processes will provide the City with a transparent view of network strength, network alternatives and leverage the City's ability to make informed decisions.

Direct Contracting

IPS Advisors will evaluate the local providers to determine if direct contracts are needed in order to maximize claims savings. IPS will assist the City in negotiating and drafting contracts with providers.

VALUE PROPOSITION

Physical Wellness



HEALTH RISK MANAGEMENT

IPS will provide the City with guidance and support in identifying and implementing feasible solutions to impact participant health and behavior, while ensuring they are receiving the highest quality care throughout the health care continuum.

- Value Based Plan Designs
- Accountable Care Organizations
- Concierge and Transparency Services
- Telemedicine
- Incentive Plan Designs
- Direct Contracting for Primary and Preventive Care
- Biometric Screening and HRA Initiatives
- On-Site Health and Wellness Clinics
- Executive Physicals and Concierge Medicine
- Tobacco Cessation and Weight Management Programs

IPS will evaluate the City's current program and will provide strategic recommendations to maximize participation and return on investment. IPS will assist in securing vendor services where needed, participate in implementation processes and will actively monitor the success and return on investment of programs implemented.

VALUE PROPOSITION

CONSUMERISM

Consumer Driven Health Plans

IPS Advisors has extensive experience in creating and implementing effective Consumer Driven Health Plan strategies. In our base of clients, 60% are offering a consumer driven health plan (HSA or HRA) as an option to traditional plans and 15% have implemented a full replacement CDHP strategy – offering only CDHP options to employees.



As part of employee education, IPS will assist the City in providing pre-implementation, implementation, and post implementation communications campaigns. These communication efforts include e-mail blasts, communication booklets, lunch and learns, and webinars. These efforts are a highly critical step in achieving and maintaining a successful CDHP platform.

HEALTH CARE REFORM

Patient Protection and Affordable Care Act

With the passage of Health Care Reform, IPS is armed with compliance and actuarial expertise to provide guidance and financial analysis showing the impact of health care reform on the City's benefits plan and claims/utilization data. This will include analysis of Employer Mandate and Cadillac Tax assessments.

VALUE PROPOSITION

COMPLIANCE

Compliance Department

IPS has a dedicated internal compliance team with access to industry attorneys that we can call upon to help the City with complex compliance or regulatory questions. Their expertise includes a wide variety of benefits compliance topics, including PPACA, COBRA, ARRA, HIPAA, USERRA, ERISA, and FMLA.

Compliance Audit / Manual

IPS will conduct a Compliance audit for the City which will include (but is not limited to) PPACA, COBRA, HIPAA, ARRA, USERRA, ERISA (as applicable), Medicare Part D and all insurance contracts. IPS will provide guidance and training to City representatives as needed.

Industry Alerts / Seminars / Webinars

IPS will send Industry Alerts to the City with timely legislative state and federal updates pertinent to your plan. Additionally, IPS holds periodic seminars targeting compliance related issues in the Group Benefits industry.



Item	Description	Due Date	Citation	Penalty
Plan Documents	Includes Summary Plan Description (SPD), most recent annual report, trust agreement, contracts, and other "documents under which the plan was established or is operated." California Plan Document must contain the following information: description, eligibility rules, names of employee contributions, custodian employer and employee contributions, plan trust, listing of participant elections, and names of all participant elections.	Must be provided to participants and beneficiaries within 90 days of request.	ERISA § 104 29 CFR § 2520.104a-101 Prop. Trans Reg. § 1.125-1	Plan administrator could be liable for a penalty up to \$100 per day. Failure to adopt a California Plan Document prior to the plan effective date could endanger the plan's favorable tax treatment.
Summary Plan Description (SPD)	Advise participants and beneficiaries of their rights and obligations under the plan. Should be written in plain language so that the average participant can understand. Must include plan name, employee names, type of plan, type of administration, plan administrator name/address/phone number, legal agent name/address, plan eligibility requirements, summary of benefits, claim procedures, and Employee Retirement Income Security Act (ERISA) rights.	Must be provided to participants and beneficiaries within 90 days of participation, within 120 days of plan effective date, every 5 years for an amended plan, and every 10 years for an unamended plan.	ERISA § 104(c) 29 CFR § 2520.102-2(a) 29 CFR § 2520.102-2 29 CFR § 2520.104b-2	No specific civil penalties, but ERISA violations can result in penalties up to 10 years in prison and \$500,000 fine.
In compliance?		Comments/ Plan of action:		



ComplianceCorner

YOUR BENEFITS COMPLIANCE AND REGULATORY NEWS RESOURCE

In This Issue:

- Reminder: Calendar Year Cafeteria Plan Grace Period Ends March 15
- DOL Issues Proposed Changes to FMLA
- DOL Issues Bulletin on Collecting Delinquent Contributions
- Revises to Begin on HIPAA Compliance
- EBSA Issues Checklist for Wellness Programs
- CAH Releases State Mandate Summary
- State Updates: DE, VT, and WI

Reminder: Calendar Year Cafeteria Plan Grace Period Ends March 15

March 15, 2008 is the end of the grace period for any calendar-year cafeteria plans that instituted the maximum grace period of 2 months and 15 days.

DOL Issues Proposed Changes to FMLA

The U.S. Department of Labor (DOL) has issued a notice of proposed changes to the Family and Medical Leave Act (FMLA) regulations by incorporating 15 years of court decisions, regulatory and technical amendments. The DOL is seeking public comment that must be received by April 11, 2008 and expects to issue the final regulations before the end of the Bush administration. Some of the twelve proposed changes include:



VALUE PROPOSITION

COMMUNICATION / ADMINISTRATION

Benefits Communication

IPS Advisors has a full service communication department which will assist the City in drafting and printing customized communication materials for employees. The department will create and maintain employee communication booklets, benefits communication initiatives, total compensation statements benefits surveys, and provide access to the Benergy Website.

Benefit Cloud

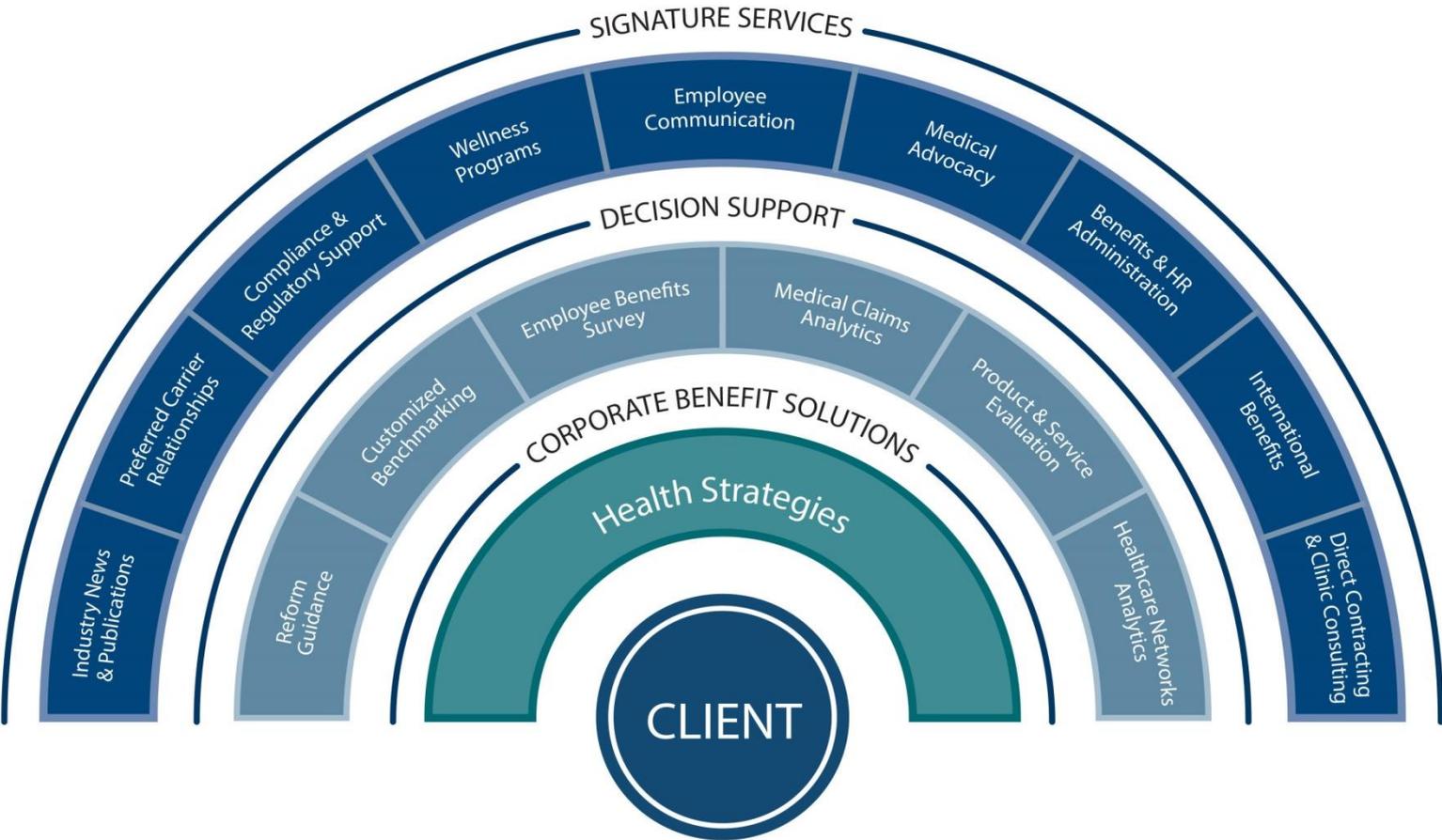
City employees will have access to a customizable employee facing benefits communication website and mobile application. Benefit Cloud provides employees access to benefit plan content, decision making tools and health and wellness resources.

Benefit Connector

IPS will provide the City with our proprietary on-line benefits administration technology. This program includes:

- Year-Round On-Line Enrollment
- Aggregated Billing
- Total Compensation Statements
- Full Service COBRA Administration
- Call Center for Employee Support

OUR SERVICE MODEL



V. PROJECT APPROACH

1. Evaluate Current Employee Benefits Program

Evaluate current employee benefits programs and provide written analysis within thirty (30) days of receipt of necessary data; update as necessary.

Analysis to include the following:

- a. Review, benchmarking, gap analysis of current benefit design and plan document wording
- b. Detailed historical claims analysis including review of large claims, utilization data, trend analysis and renewals
- c. Retiree / employer contribution analysis
- d. Historical financial funding analysis
- e. Network provider analysis
- f. Compliance audit
- g. Health risk management strategies and reporting
- h. Report and recommendations

PROJECT APPROACH

2. Develop 5 Year Employee Benefits Plan Strategy

- a. Review and recommend short and long term strategic initiatives
- b. Provide plan design recommendation, with estimated cost implication for benefit modifications
- c. Project funding requirements and funding level analysis/development
- d. Meet with City staff to discuss options

3. Coordinate Competitive Purchasing Process

- a. Advise and assist in the RFP process including but not limited to the following plan components:
 - Medical Benefits
 - Dental Benefits
 - Basic Life / AD&D / LTD / STD
 - Voluntary and Supplemental Benefits

PROJECT APPROACH

3. Coordinate Competitive Purchasing Process (Continued)

- b. Prepare the bid/proposal specifications
- c. Attend meetings as requested with City staff to discuss specifications
- d. Monitor RFP/bid process and respond to questions for clarification and requests for additional information
- e. Brief staff on the proposal analysis, attend council meetings and brief members concerning recommendations

4. Implement Benefit Program

- a. Develop implementation and communication plans
- b. Prepare retiree communications as needed
- c. Prepare/review plan documents / contracts:
recommend/implement revisions
- d. Conduct and/or assist with the annual enrollment process

PROJECT APPROACH

5. Ongoing Services

- a. Keep staff advised on new developments involving employee benefits plans
- b. Act as liaison between carriers/service providers as needed to facilitate implementation and administration of employee benefits plans
- c. Assist in resolution of claim problems/billing issues with employee programs
- d. Assist with compliance related questions
- e. Keep City informed of state and/or federal legislation affecting the City's retiree benefit plans
- f. Meet as needed with City staff to review employee benefits program, including claim analysis and trends.
- g. Be available to meet with and provide reports to various City representatives

PROJECT APPROACH

5. Ongoing Services (Continued)

- h. Assist City in periodically reviewing, benchmarking and analyzing alternative approaches to its employee and retiree benefits program, including cooperative arrangements with other public entities
- i. Respond to and keep City abreast of inquiries from insurance companies and other parties who might be prospective provider organizations and who should be placed on City's RFP vendor mailing list
- j. Assist, as needed, with the transition between insurance providers when such a change occurs
- k. Participate in marketing and educational programs
- l. Provide Benergy, a benefits communication website for City Employees
- m. Create and maintain employee and retiree benefits booklets to include summary information on benefit plans and necessary regulatory notice requirements
- n. Provide Benefit Connector On-line Enrollment Services and direct 800 support for employee questions / issues on benefit Programs.

OUR COMMITMENT TO OUR CLIENTS

We appreciate the valuable relationship with **our clients** and never take it for granted. **We** strive to earn and **maintain client loyalty** by supporting firm adherence to the following standards:

- We are committed to upholding the highest standards of integrity and honesty in our business.
- We will strive to fully understand each of our client's business objectives, needs, and concerns.
- In recommending products and services, we will consider foremost the interest of our clients.
- We will actively monitor the benefits marketplace for quality and cost effective products, services, and solutions.
- We will communicate clearly and openly information related to overall strategy, product procurement, implementation, and associated compensation.

VI. BEST AND FINAL PRICING

FEE PROPOSAL

For the Scope of Services as outlined by the City of La Porte, IPS Advisors proposes an annual health consulting fee of \$47,500. IPS will guarantee this fee for 36 months of the consulting contract. IPS will not charge additional for travel or expenses to the City of La Porte and agrees not to accept any contingent compensation from contracted carriers / providers.

IPS Advisors' consulting fee includes:

Custom Communication Materials (design and printing)

BenefitCloud – *see appendices*

Compliance Audit

If projects are requested outside of the scope of services we will evaluate each of them on an individual basis. Typically, unless it is an extraordinary requests, IPS will not charge a fee outside of the agreed upon consulting fee.

IPS is willing to put 100% of its annual fees at risk based on a mutually (City and IPS) agreed upon set of performance-based criteria. Results will be measured annually for the initial term of this contract.

BEST AND FINAL PRICING

OPTIONAL SERVICES AND FEES

Additional services and pricing not included in the consulting fee include:

457 Plan Consulting	TBD
GASB 45 Valuation	TBD
Benefit Connector	\$5.00 PEPM
<ul style="list-style-type: none">• Year Round On-Line Enrollment• Confirmation Statements• Benefit Statements• COBRA Administration	
Health Care Reform Administration	\$1.50 PEPM
<ul style="list-style-type: none">• Tracking of On-going Measurement Periods• Tracking of New Hire Measurement Periods• Notifications to Employer of Newly Eligible Employees• Employer Reporting	
Preparation of Employee Benefit Statements (Only)	\$25.00 Per EE





Five Year Benefit Strategy

Original Date Prepared: August 26, 2014

Updated: January 13, 2016



COMPANY

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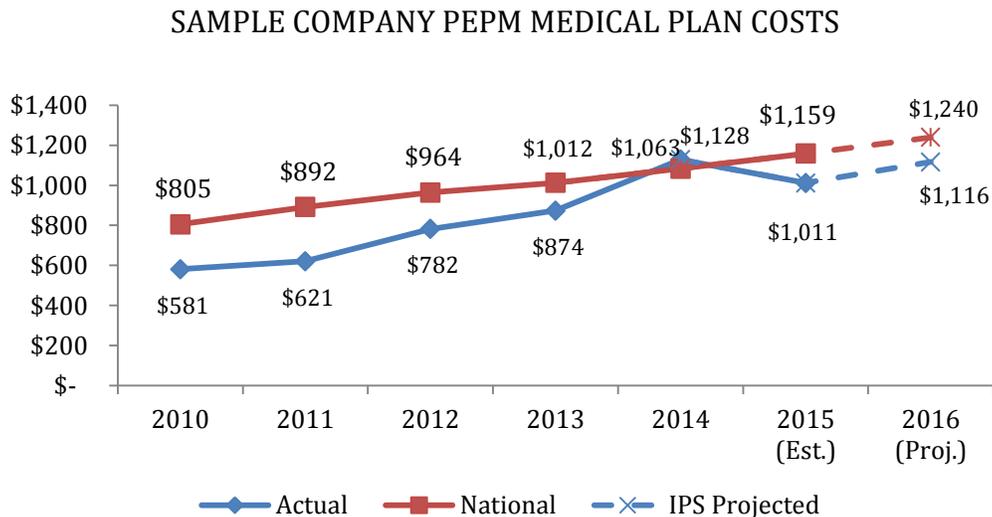
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Sample Company 5 Year Benefits Strategy

Introduction

At year-end 2010, Sample Company's health care costs totaled \$581 per employee per month (PEPM) and 5 years later actual 2014 plan year costs total \$1,128 PEPM. From 2010 to 2014, the Sample Company has experienced an average 12.1% increase per year. Over the same 5 year time period, the Nation experienced an average 8.3% increase per year. Although, the National trends were lower, the Sample Company outperformed the Nation in terms of total PEPM medical plan in all years except for the 2014 plan year which was driven by a significant increase the number of individual catastrophic claimants. While recent months have experienced more positive trending back below National PEPM cost, the 2014 and 2015 claims experience has significantly exceeded budget projections and appropriate adjustments to future funding is warranted.

Health care trend expectations combined with the continually changing regulatory horizon make it critical for Sample Company to craft a long term strategic plan to maintain a competitive and affordable benefits package for its employees. The 5 Year Benefits Strategy is a working document and will be used as a guide for short and long term Health and Welfare benefits considerations.

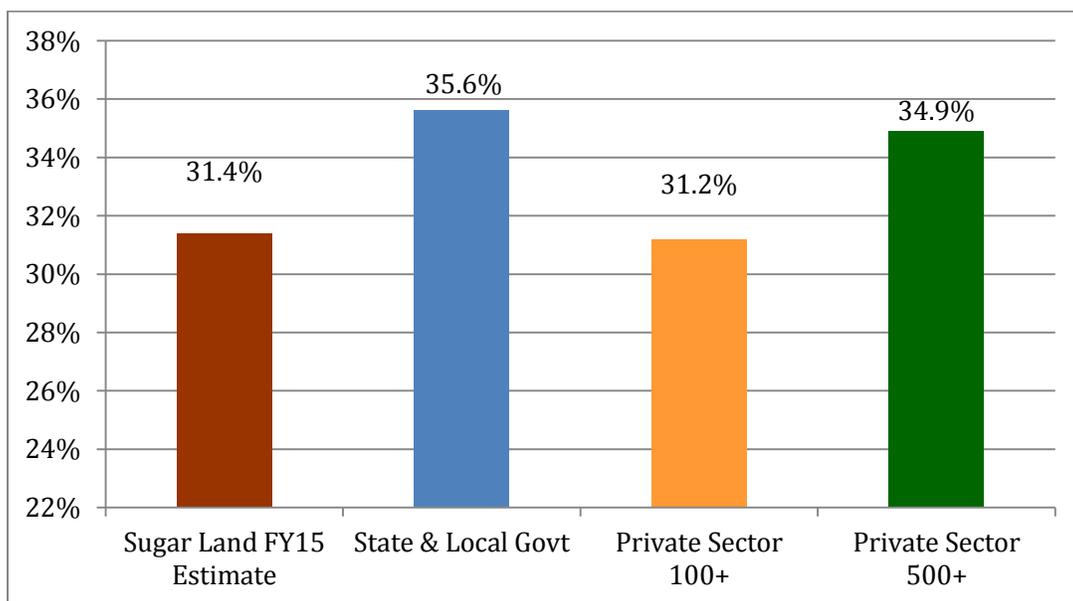


The establishment of and any amendments to the 5 Year Benefits Strategy will take into account Sample Company's Compensation Philosophy. Key Guiding Principles and Objectives stated within the Philosophy with respect to Health and Welfare benefits include:

- Utilize a fair and equitable compensation system that will assist the Sample Company in attracting, hiring, developing and retaining a championship workforce.
- Provide competitive group health benefits programs for all current and future full-time employees as part of the employees' compensation package.

- Provide employees and their families' access to group-sponsored medical and dental plans that foster wellness and preventative care as well as provide security and peace of mind in the event of a serious condition.
- Provide life and disability programs for qualified employees. In lieu of participation in the Federal Social Security Disability and Death Benefits program, Sample Company provides full-time employees with Long-Term Disability coverage as well as Basic Life insurance coverage.
- Offer post-employment benefits at group costs to employees who retire from Sample Company service. These opportunities are offered to ensure retirees and their families have access to healthcare and other services and programs as they did prior to retirement from the Sample Company.
- Offer a menu of appropriate ancillary benefits to full-time employees. A wide array of ancillary benefits is offered to employees so they may tailor their overall benefits selections to meet their personal needs.
- Maintain a benefits burden as it relates to total compensation. Sample Company's benefits burden will be calculated annually utilizing the same process as the State Auditor's office and the Federal Bureau of Labor statistics. The benefits burden will be calculated by dividing the costs of benefits by total compensation. The benefits burden will be no greater than what is listed in these benchmarks for the private sector.

SAMPLE COMPANY PROJECTED BENEFITS BURDEN FOR FY 2015



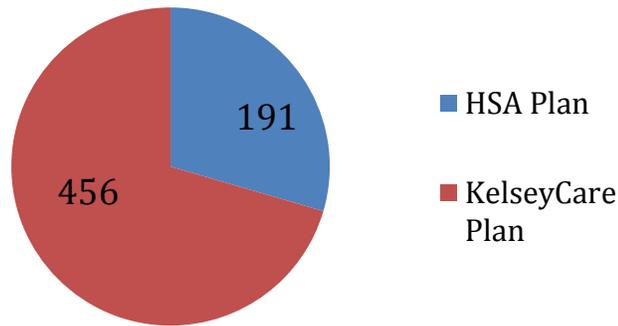
Background

Sample Company offers a comprehensive menu of benefits available to all full-time employees. After 15 years of being fully insured, the Sample Company transitioned to partial self-funding for its medical coverage in 2012 while retaining fully-insured coverage for its dental and vision benefits. This decision was made in order to benefit from its relatively low claims costs when

compared to similar entities. Furthermore, the Sample Company would be provided significantly more flexibility and discretion to implement programs and strategies to mitigate future health care costs.

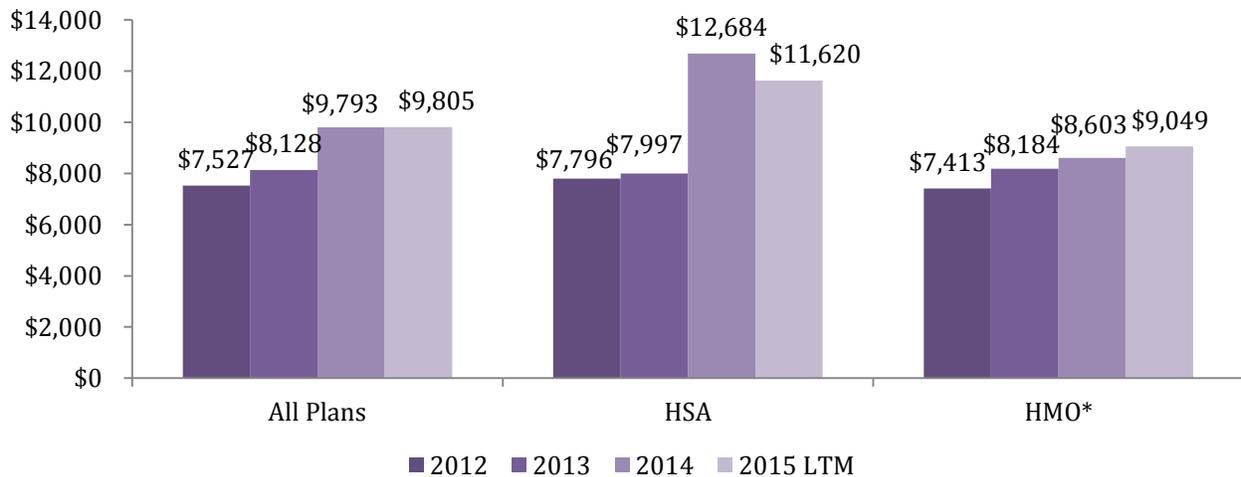
The Sample Company sponsors two health plan options unique from traditional PPO health plans. The Kelsey Care HMO program provides participants with a medical home where employees utilize Kelsey Care providers to treat and direct care throughout the health care continuum. This single point of entry is designed to provide higher quality and more efficient care than the fragmented healthcare system that exists today. The Health Savings Account plan combines a high deductible health plan with a tax free Health Savings Account to assist in paying for up front deductible expenses. The HSA plan is designed so that participants become educated health care consumers and are rewarded for good health.

Health Plan Enrollment



Currently the Kelsey Care HMO plan retains over 70% of the enrolled population and has experienced the most favorable results in terms of per capita annual claims costs when compared to the HSA Plan. As noted in the introduction, per capita paid claims trend for Sample Company has trended closely to projected national medical inflation over the past 5 years and this trend continued since becoming partial self-insured.

PER CAPITA ANNUAL CLAIMS COST



	All Plans	%Δ	HSA	%Δ	HMO*	%Δ
2012	\$7,527	n/a	\$7,796	n/a	\$7,413	n/a
2013	\$8,128	7.99%	\$7,997	2.57%	\$8,184	10.41%
2014	\$9,793	20.48%	\$12,684	58.62%	\$8,603	5.11%
2015 LTM	\$9,805	0.12%	\$11,620	-8.39%	\$9,049	5.19%

The plan offerings are accompanied by a comprehensive wellness program designed to assist employees in their journey toward health and wellness. The Sample Company has implemented a comprehensive Wellness Program that includes biometric screenings, health risk assessments, coaching and self-help resources, chronic condition coaching, on-site gym with training programs, and wellness events and activities. A critical component to maintaining and improving health outcomes, the Wellness Program is particularly important for partial self-insured municipalities to maintain health plan costs and a productive workforce. Unfortunately, only 13% of employees have elected to participate in this program over the past year.

Key Observations

After reviewing the current benefits program, cost centers, and strategic focus areas, below are salient points and recommendations that will be key strategic focus areas in establishing a 5 year benefits strategy. This list is not all encompassing but establishes a foundation for our 5 year benefits strategy moving forward.

- Although non-traditional plans are offered, the Sample Company's plan offerings and cost sharing elements (Deductible, Copays, etc.) are competitive with like entities. A detailed benchmarking analysis is included in Exhibit B.
- The Sample Company has incentivized employees to enter into the Health Savings Account through a combination of reduced premiums and HSA contributions; however the plans actuarial value including the Health Savings Account contribution exceeds the actuarial value of the Kelsey Care HMO Plan. Claims data combined with employer HSA contributions has justified the actuarial values as the HSA plan is the highest cost program to the Sample Company since moving to a partially self-insured funding arrangement. Shifting to a more equitable funding strategy based on plan value will be important to maintaining future health plan costs.
- Additional adjustments to health plan cost sharing elements (Deductible, Copays, etc.) for both the Kelsey Care plan and HSA plan are recommended to encourage efficient and effective use of health care benefits. These are included in Exhibit C.
- The Sample Company offers a Health and Wellness Program to the employee population that is underutilized. Only 13% of participants have participated in the biometric screening initiative sponsored by the Sample Company. Incentive structures warrant adjustments for the Sample Company to realize return on investment from its initiatives. Furthermore, expansion of the program and incentives to spouses is recommended.
- The financial foundation of the Sample Company's partially self-insured benefits program is adequate. The Sample Company's Incurred but Not Reported Reserve and Contingency

reserves are within acceptable ranges. However, the Sample Company maintains a conservative individual stop loss level and gradual adjustments are recommended.

- The communication of the benefits program and resources available to participants is adequate but additional resources to empower members and communicate value are warranted for consideration.
 - Compliance with PPACA has been an important strategic focus for the Sample Company and this will continue as the employer mandate and fees are implemented for the remainder of 2014 and into 2015.
 - The TMRS and 457 retirement plans provide employees with adequate retirement alternatives, however additional due diligence of 457 plan providers and investment options is warranted.
 - Although the Sample Company has provided access to a comprehensive ancillary / fringe benefits package, there are a few key benefit limitations within the Dental, Life, and Disability plans that warrant adjustments to provide comparable coverage to like entities.
-

Goals

The following are important organizational goals as it pertains to the health and welfare benefits package at Sample Company.

Establish a 5 Year Benefits Strategy that will allow the Sample Company to attract and retain quality employees while evaluating and implementing plan designs and encouraging behavior that leads to controlled costs.

Benchmark plan design, contribution levels and cost centers to ensure the Sample Company is offering a competitive group health benefits programs for all current and future full-time employees as part of the employees' compensation package.

Formulate recommendations to management for enhancements to the benefits program(s) offered to Sample Company employees.

Maintain a benefits burden as it relates to total compensation. Sample Company's benefits burden will be calculated annually utilizing the same process as the State Auditor's office and the Federal Bureau of Labor statistics. The benefits burden will be calculated by dividing the costs of benefits by total compensation. The benefits burden will be no greater than what is listed in these benchmarks for the private sector.

Increase participation in wellness programs, quantify results, and shift from incentivizing participation to impacting outcomes, particularly to reducing, when possible, the existence of chronic and catastrophic conditions within the Sample Company's population.

Continue to monitor and maintain appropriate reserve and risk retention levels to ensure a financially solvent benefits program.

Ensure compliance with Federal, State and Local government regulations. Specifically, with regard to PPACA Employer Mandate, comply with required eligibility, affordability and minimum coverage / value requirements.

Provide participants with educational resources and materials to understand and effectively use their benefits to their advantage

Framework

The proposed framework for the 5 Year Benefits Strategy has been established with the assistance of IPS Advisors, our benefits consultant. The framework identifies strategic areas of focus that will have substantial influence in the Sample Company's ability to maintain a competitive and cost effective benefits program. These areas include:

- Health Risk Management Strategy
- Financial Solvency Strategy
- Compliance Strategy
- Employee Engagement Strategy
- Catastrophic Risk Strategy
 - Health Plan
 - Life Insurance Plan
 - Disability Insurance Plan
 - Retirement Plan
- Ancillary Risk Strategy
 - Dental Plan
 - Vision Plan
 - Employee Assistance Program
 - Indemnity Insurance

Recommended short term (1 to 2 years) and long term (3-5 years) strategies are provided for each strategic focus area. Recommendations are founded upon trend reports, market benchmarking data ([Exhibit B](#)), literature on best practices, historical data, and our consultant's recommendations.

A timeline ([Exhibit A](#)) incorporating the strategic recommendations is also attached to provide additional perspective on potential implementation dates of the strategic recommendations contained within this report.

Health Risk Management Strategy

Employee and spousal participation within the Sample Company's Health and Wellness programs is paramount for future cost control. The Sample Company and its Wellness Committee have developed comprehensive wellness programs including but not limited to biometric screenings, health risk assessments, coaching and self-help resources, chronic condition coaching, on-site gym with training programs, and wellness events and activities.

The Sample Company uses a participatory strategy rewarding employees for healthy behaviors. Employees can earn up to \$100 for participation in the wellness opportunities. Although the Sample Company has developed a platform to encourage, develop, and maintain healthy lifestyles, participation in the programs has been minimal (less than 13% of employees participated in Biometrics in 2013).

Short Term Strategies:

- Maintain a participatory wellness program. To increase engagement, revise the incentive structure to include a health insurance premium reduction between \$25 and \$50 per paycheck for employee completion of Health Assessment, Biometric Screening and Health Coaching is recommended.
- Establish a health insurance premium reduction for non-Tobacco Users. A per paycheck reduction between \$25 and \$50 for employees, retirees and spouses is recommended.
- Include spouses in Wellness Program and rate differential / incentive structures starting in 2016 for premium reduction in 2017.
- Re-launch the Sample Company's Wellness Program utilizing Cigna's new and improved MotivateMe incentive platform and Zensy digital engagement platform.
- Implement and incentivize use of Cigna Healthy Baby program to target expectant mothers and high risk pregnancies.
- Establish plan participation and performance criteria to measure the short and long term success of the Wellness Program. Example:
 - Annual Participation: Minimum of 50% of population participates in one core program annually.
 - Biometric Participation: 80% of population participates in Biometric Screening and Health Risk Assessment.
 - Health Risk Reduction: Annual health risk shift of 2+% is defined as a decrease in the high-risk cohort or those with Metabolic Syndrome. Baseline biometric measurement in 2015 and compare to biometric measurement in 2016 (Cigna will provide reporting if screenings are provided by Summit Health).
 - Return on Investment (claims or risk factor models): 0.5:1 at the end of first year of full program implementation. 2:1 at the end of the second year.
- Re-evaluate disease management strategies and participation incentives for programs.

Long Term Strategies:

- Consider moving from a participatory approach to wellness to a results based approach, providing incentives to participants who meet pre-established biometric criteria centered on risk for Metabolic Syndrome.
 - Consider on-site or near-site physician services to enhance primary and preventive care utilization.
 - Evaluate targeted coaching and educational programs for employees with high risk health conditions (ex. Diabetes) and incentive programs for participation.
-

Financial Solvency Strategy

To ensure financial solvency of the health care plan, it is critical to establish and maintain appropriate risk retention levels (Stop Loss) and reserves. Individual stop loss caps the Sample Company's liability on each individual claimant and aggregate stop loss caps the Sample Company's total paid claims liability. A reserve is established to account for, at a minimum, Incurred But Not Reported (IBNR) claims and a contingency reserve is established to offset high claims years. Both IBNR and contingency reserves typically range from 20% to 25% of projected paid claims.

The Sample Company currently retains individual stop loss at a \$125,000 specific deductible level and aggregate stop loss capping the Sample Company's total paid claims liability at 120% of expected claims. The Sample Company's budgeted reserve is \$1,250,000 or 24.6% of projected claims for fiscal year 2013 – 2014.

Short Term Strategies:

- For the 2015 plan year, IPS Advisors has recommended a specific stop loss deductible range based on actuarial projections at \$132,029 low end and \$218,673 high end.
- Movement from \$125,000 to \$137,500 was implemented for the 2015 stop loss renewal.
- IPS Advisors recommended IBNR Reserve is \$532,915 at year end 2014 and the total reserve cap of \$1,250,000 is adequate based off projected 2014 and 2015 paid claims.

Long Term Strategies:

- Evaluate stop loss coverage policies and limitations annually to ensure appropriate risk retention levels.
- Continue monitoring of total reserve amounts against projected paid claims to ensure adequacy of reserve.

Compliance Strategy

Compliance with federal and local government legislation is becoming increasingly complex within the benefits industry. The ramp up of the Affordable Care Act will continue over the next several years. The most significant new requirement placed upon the Sample Company is the Employer Mandate effective January 1, 2015. The mandate requires the Sample Company to implement 30 Hour eligibility for health coverage, ensure premiums for employee-only coverage do not exceed 9.5% of W-2 earnings for the base plan (HSA Plan) and the minimum actuarial value of the base plan exceeds 60% for the base plan (HSA Plan). The Sample Company currently meets most employer mandate requirements except the eligibility requirement of 30 hours which will be adjusted from 40 hours, January 1, 2015.

Legislation allows the Sample Company to establish a measurement period not to exceed 12 months to determine if an employee would meet the 30 hour eligibility for health insurance coverage. The Sample Company will implement a 12 month measurement period to offset potential liability from part-time and seasonal employment.

Short Term Strategies:

- Comply with Key Affordable Care Act Requirements for 2014 – 2015.
 - Health Plan Identifier application will be filed with Health and Human Services by November 5, 2014.
 - The Employer Mandate becomes effective January 1, 2015.
 - 40 hour eligibility will be revised to 30 hours for the Sample Company requiring a policy update.
 - A 12 month measurement period is employed to limit liability to the Sample Company.
 - Out of pocket cost sharing limits for health plan revised to \$6,600 and \$13,200.
 - The Health and Human Services (HHS) Reinsurance Fee filing deadline of eligible participants with HHS is November 15, 2014. Payment of \$63 per plan participant will be due and payable by January 15, 2015. (2 installment payments are allowed)
 - The annual Patient Centered Outcome and Reinsurance Fee of \$2 per participant is due and payable by July 1, 2015.
- IPS Advisors will conduct a Compliance Audit of all policies and procedures to ensure the Sample Company is in compliance with legislation including but not limited to ACA, COBRA, HIPAA, USERRA, etc.

Long Term Strategies:

- Continue close monitoring of compliance and ACA requirements with assistance from IPS Advisors.
- Reinsurance Fee will reduce to \$44 per plan participant payable January 15, 2016 and the third and final annual installment payable in 2017 will be determined at a later date depending on total aggregate employer collections received by HHS.
- Form 6065 - Minimum Essential Coverage and Form 6056 - Employer Sponsored Coverage filing with HHS required by March 31, 2016 or penalties will apply.
- The PCORI fee will continue at \$2 per plan participant until 2020.
- IPS Advisors will continue monitoring plan costs to ensure compliance with “Cadillac Tax” thresholds which apply to high cost plans starting in 2018.

Employee Engagement Strategy

Engaging and educating Employees, Retirees and Spouses so that they are not only aware of the health and welfare benefits available, but also effectively and efficiently utilizing them is an important component to our benefits strategy. Human Resources currently provides participants guidance and information through open enrollment communication meetings, health fairs, benefits communication guides, monthly newsletters, lunch and learns and carrier self-help tools (87% of Employees registered currently on MyCigna.com).

Short Term Strategies:

- Continue to maintain current resources for employee communication and engagement.
- Consider implementation of total compensation statements so that participants are fully aware of the benefits and total compensation provided by Sample Company. Work with SmartBen to include TMRS data in existing online tool.
- Consider implementation of Compass Professional Health Services for those participating in the Health Savings Account plan. Services provided by Compass include telephonic access to a specialist who assists the participant with benefits, provider and claims questions. Most importantly the service provides Medical, Prescription and Dental pricing and quality information for employees to make informed choices which will in turn save dollars for both the Sample Company and employees.
Activate additional functions on SmartBen, the on-line benefits administration platform to provide additional tools and resources to employees and their dependents

Long Term Strategies:

- Educational resources will continue to be reviewed and modified as necessary to ensure participants are aware and able to utilize benefits available.

Catastrophic Risk Strategy

Health Plan

The Sample Company currently provides two Health Plan options, the Kelsey Care HMO plan and the Health Savings Account plan, for employees and retirees to choose from. The Kelsey Care plan is crafted upon the principles of a Medical Home, which is designed to eliminate inefficiency of the fragmented PPO system and deliver higher quality care. The Health Savings Account plan is a consumer driven health plan designed to engage participants in health care purchasing decisions by shifting away from traditional copay based structure to deductible and coinsurance based plan structures.

The Sample Company funds the Kelsey Care premium cost at 92.8% for employee only costs and 68.0% for dependents (the Houston area average is 62% for dependents). In comparison, the Sample Company funds the Health Savings Account premium cost at 92.1% for employee only costs and 76.0% for dependents. An additional \$1,000 account contribution for employee and \$2,000 for employee and dependents is funded into the employees' HSA account. Retirees may participate in either program at the group insurance rates with no employer funding.

Short Term Strategies:

- Adjustment of the premium rate structures for the HSA plan are recommended as it is the highest cost plan when HSA contributions of \$1,000 for an individual and \$2,000 for a family are factored in. It is recommended to evaluate implementation of equitable funding

between the HSA Plan and Kelsey Care Plan where the Sample Company establishes a consistent funding amount across both plans. – Rate structures were re-developed based upon plan utilization and the Sample Company standardized its contribution to all plans at 93.9% of the employee only rate and 72.9% of dependent rates. Employee rates for the HSA were increased by 7.8% for Employee Only and approximately 44% for dependents. There were not increases to the Kelsey Care rates. Further the Sample Company discontinued its contribution to the HSA plan in order to continue its migration to a cost neutral funding strategy.

- Gradual reductions in dependent subsidies are recommended to align with benchmarks. – The Sample Company took a first step in evaluation of dependents subsidies and standardized its subsidies at 72.9% across all plans. The Sample Company continues to exceed benchmarks of approximately 62% (2015 Benchmark).
- Cost sharing adjustments are recommended to the Kelsey Care plan to encourage efficient utilization of benefits. See Exhibit D for adjustments made in 2016. The Sample Company
- Consider implementation of coinsurance and increasing the out of pocket maximum amount.) for the Health Savings Account Consumer Driven Health Plan. This change will encourage continued consumerism after the deductible has been met. – Completed – coinsurance was implemented of 90% and out of pocket maximums were increased January 2016.
- Consider changing the amount of Sample Company contributions to the employee's HSA, or the schedule of these contributions: consider quarterly or semi-annual contributions for HSA enrollees who have held an account for one or more years. – Completed – HSA contributions discontinued as of January 2016.
- Consider implementation of programs targeting musculoskeletal spend as it is the highest cost diagnostic category at the Sample Company. The Airrosti program is recommended for evaluation as their treatment approach has had significant success in mitigating surgeries, high cost imaging and pharmaceuticals. Airrosti is part of the Cigna network for the HSA Plan, however not part of the Cigna network for Kelsey Care Plan. A direct contract with Airrosti is recommended for consideration. – Completed – Airrosti has been added as an in-network provider at a \$20 copay level for Kelsey Care.
- Obtain annual performance guarantees from Cigna surrounding claims processing, account management, network discounts and client / participant satisfaction. – Completed and are being offered by Cigna Annually.
- Consider implementation of a Telemedicine program as an alternative to using ER and urgent care for minor illnesses and conditions. – Telemedicine currently implemented for Kelsey Care – evaluation for HSA participants is also recommended for 2017.
- Conduct a request for proposal process for the partial self-insured health plan for the 1/1/17 renewal date. – Scheduled to be released April 2016.
- Begin using Zywave data warehousing tools through IPS Advisors to monitor Health and Prescription claims to provide greater insight into plan cost drivers and utilization patterns. - Zywave Reporting scheduled for delivery in March 2016.

Long Term Strategies:

- Evaluate direct contracting with local high quality hospital providers to provide bundled / all-inclusive pricing for targeted health conditions (musculoskeletal, obesity, etc.)

- Conduct health claims and pharmacy claims audits of Cigna through independent third party providers. Audits are performed to ensure payments are made timely, accurately and in accordance with the plan document / provider contracts.
- Evaluate risk adjusted group insurance rates for retiree populations that participate within the health plan.
- Consider implementation of a Private Insurance Exchange for Employee and Retiree populations with a defined contribution approach to providing health and welfare benefits.
- Consider implementation of a base Bronze Level/Catastrophic insurance option with low monthly premiums and gap insurance to cover deductible liability.

Life Insurance Plan

The Sample Company provides employees with a flat \$50,000 of life and accident insurance benefits. Through TMRS, the Sample Company also provides a 1 x base annual earnings benefit for active employees and a flat \$10,000 benefit upon retirement. In addition, the Sample Company provides supplemental life and accident coverage where an employee may purchase coverage on themselves, a spouse, or dependent(s).

Short Term Strategies:

- Consider increasing the basic employer paid life insurance from \$50,000 to 1 X BAE benefit with a minimum of \$50,000 to better align with benchmarks.
- Conduct a request for proposal process for the basic and supplemental life insurance for the 1/1/16 renewal date.

Long Term Strategies:

- Monitor claims, participation levels, benefit levels and premiums costs annually.

Disability Plan

The Sample Company currently does not participate in Social Security Program therefore; employees do not receive supplemental retirement of disability benefits. To offset for this loss, the Sample Company pays for a Long Term Disability Policy through Cigna providing a monthly income replacement ratio of 66.7% for Executives and 60% for all other employees upon meeting a 90 day elimination period. The monthly maximum benefit is \$6,000 for Executives and \$5,000 for all other employees. These major provisions of Sample Company's LTD contract substantially exceed the benefits otherwise available through Social Security Disability.

An Optional STD is also offered at the employees' expense with a weekly benefit of 70% to a \$1,000 maximum. Multiple elimination periods are offered for selection; however the maximum among both options is 90 days.

Short Term Strategies:

- Consider increasing the STD and LTD maximums to accommodate higher income employees is recommended.
- Conduct a request for proposal process for disability insurance for the 1/1/16 renewal date.

Long Term Strategies:

- Monitor claims, benefit levels and premium costs annually.

Catastrophic Leave Policy

The Sample Company implemented a Catastrophic Leave policy in 2013 which is funded by employee's donations of their accrued vacation time. When an employee experiences a catastrophic illness, injury or other medical condition that prevents the employee from working for a period of time, the incapaSample Company may necessitate that the employee take leave without pay and/or experience hardships related to the catastrophic condition. This program is intended to bridge the waiting periods to the onset of STD or LTD for those employees who have not accrued enough, or previously exhausted, their paid leave. The impact of this policy is to those employees dealing with a catastrophic condition who: have not elected STD or STD does not apply, new employees that have not had the opportunity to accrue enough paid time off, or who have exhausted their time because of dealing with a long-term catastrophic condition.

Long Term Strategies:

- Monitor catastrophic leave usage and review policy annually.

Retirement Plan

All eligible full-time employees contribute 7% of gross pretax earnings to TMRS and the Sample Company matches the contribution 2:1 with 5 year vesting. Two 457 plans are offered in addition to TMRS and are administered by Dearborn & Creggs and ICMA-RC. Employees may contribute tax-deferred to the 457 plan or to an after-tax ROTH 457 plan. Up to \$17,500 (plus an additional \$5,500 if age 50 and older) can be invested annually.

Short Term Strategies:

- Consider contracting with consulting firm to conduct independent review of both programs including compliance requirements, investment due diligence, fee review with report and recommendations.

Long Term Strategies:

- Monitor investment returns, investment options, and compliance requirements annually.
-

Ancillary Program Strategy

Dental Plan Design

The Sample Company offers a fully insured Core DHMO and Buy Up DPPO plan through Cigna. The DHMO plan provides access to a restricted group of providers with copay levels for services. The Buy Up DPPO plan provides employees access to a broad network of plan providers; preventive services, basic services and major services are covered at 100%, 80% and 50% respectively after a deductible is met.

The Sample Company funds a portion of the employee only premium costs (60% & 70% respectively) and 50% & 40% (respectively) for dependents. Retirees may continue coverage at 100% of established monthly rate.

Short Term Strategies:

- Consider increasing the DPPO annual plan maximum from \$1,000 to \$1,500 with completion of a preventive exam. The increase in annual maximum would occur the plan year immediately following the preventive exam.
- Conduct a request for proposal process for dental insurance for the 1/1/16 renewal date.

Long Term Strategies:

- Monitor claims, participation levels, benefit levels and premium costs annually.

Vision Plan

The Sample Company offers a fully insured optional vision plan for Employees through Cigna. The Vision plan provides coverage including but not limited to exams, contact lenses and frames.

The Sample Company provides no funding for Vision Benefits. Retirees may continue coverage at 100% of established monthly rate.

Short Term Strategies:

- The current plan of benefits and funding levels are in line with benchmarks.
- Conduct a request for proposal process for vision insurance for the 1/1/16 renewal date.

Long Term Strategies:

- Monitor claims, participation levels, benefit levels and premium costs annually.

Employee Assistance Program

The Sample Company provides employees and dependents with 24 hour work/life guidance and confidential counseling through a comprehensive Employee Assistance Program (EAP) through Cigna. Participants receive up to five (5) counseling sessions per issue, per year. The program

also includes resources for legal and financial assistance, health and wellness and personal and professional support. The Sample Company funds the entire cost of this program which is available to employees and all members of their households.

Short Term Strategies:

- The current plan of benefits and funding levels are in line with benchmarks.
- Conduct a request for proposal process for EAP services for the 1/1/16 renewal date.

Long Term Strategies:

- Monitor plans, participation, benefit levels and financial costs annually.

Indemnity Insurance

The Sample Company offers access to Aflac for supplementary voluntary indemnity insurance coverage. Cancer Indemnity and Accident plans are offered with no Sample Company funding. A voluntary legal access plan through Legal Shield also provides discounts for the most common legal needs encountered by employees and their families.

The Sample Company provides no funding for the program for employees.

Short Term Strategies:

- The current plan of benefits and funding levels are in line with benchmarks.

Long Term Strategies:

- Monitor plans, participation, benefit levels and financial costs annually.

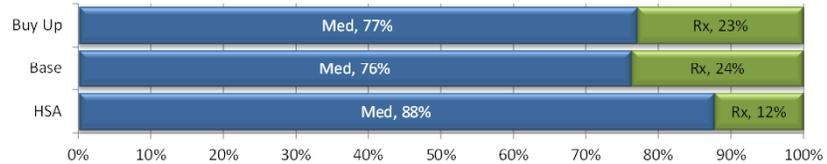
Sample Company

Net Employer Cost and Budget Exhibit - Medical, Rx
2014 Plan Year

	A	B	C	D = A+B+C	E	F	G	H	I = E+F+G-H	J	K	L = J+K	M	N = I+L-M	O = I+L	P	Q = P-O
	ENROLLMENT ¹				CLAIMS DATA					FIXED COST			EMPLOYER NET COST		BUDGET DATA		
Month	HSA	Base	Buy Up	Total	HSA	Base	Buy Up	Stop Loss	Total	Admin ²	Stop Loss	Total	EE Contribs ³	Net Cost	Total Cost	Budget ⁴	Surplus
2014-01	53	468	62	583	\$12,037	\$214,684	\$151,709	\$0	\$378,431	\$25,097	\$48,768	\$73,865	(\$71,611)	\$380,685	\$452,296	\$394,460	(\$57,836)
2014-02	54	466	61	581	\$20,650	\$153,856	\$64,278	\$0	\$238,785	\$24,153	\$48,601	\$72,754	(\$70,619)	\$240,919	\$311,538	\$390,954	\$79,415
2014-03	55	462	60	577	\$10,381	\$243,250	\$40,683	\$0	\$294,314	\$23,972	\$48,266	\$72,239	(\$69,787)	\$296,766	\$366,553	\$387,491	\$20,939
2014-04	54	459	59	572	\$4,616	\$181,997	\$41,784	\$0	\$228,396	\$24,787	\$47,848	\$72,634	(\$69,107)	\$231,924	\$301,031	\$383,839	\$82,808
2014-05	54	460	59	573	\$4,441	\$324,002	\$88,449	(\$47,053)	\$369,839	\$23,779	\$47,931	\$71,711	(\$69,150)	\$372,400	\$441,549	\$384,254	(\$57,295)
2014-06	53	457	56	566	\$4,348	\$311,299	\$124,622	(\$44,785)	\$395,483	\$23,506	\$47,346	\$70,851	(\$68,821)	\$397,514	\$466,335	\$381,692	(\$84,643)
2014-07	53	459	55	567	\$6,950	\$270,269	\$133,536	(\$105,449)	\$305,305	\$25,237	\$47,430	\$72,666	(\$68,831)	\$309,140	\$377,971	\$382,145	\$4,173
2014-08	53	467	54	574	\$23,694	\$270,797	\$39,523	(\$173,236)	\$160,778	\$23,783	\$48,015	\$71,798	(\$69,024)	\$163,552	\$232,577	\$384,804	\$152,228
2014-09	49	468	56	573	\$7,694	\$233,088	\$47,962	(\$65,621)	\$223,123	\$23,747	\$47,931	\$71,679	(\$69,692)	\$225,110	\$294,802	\$385,666	\$90,865
2014-10	49	471	55	575	\$5,772	\$199,834	\$26,587	(\$83,656)	\$148,537	\$31,047	\$48,099	\$79,146	(\$69,840)	\$157,842	\$227,683	\$386,885	\$159,202
2014-11	48	473	55	576	\$18,074	\$233,100	\$35,139	(\$40,369)	\$245,944	\$23,943	\$48,182	\$72,125	(\$69,722)	\$248,347	\$318,069	\$386,622	\$68,553
2014-12	48	471	55	574	\$8,627	\$250,073	\$71,908	(\$36,477)	\$294,131	\$33,095	\$48,015	\$81,110	(\$69,823)	\$305,417	\$375,241	\$386,492	\$11,252
Total	623	5581	687	6891	\$127,285	\$2,886,248	\$866,178	(\$596,646)	\$3,283,065	\$306,146	\$576,432	\$882,578	(\$836,028)	\$3,329,616	\$4,165,643	\$4,635,304	\$469,660
Avg/PEPM	52	465	57	574	\$204.31	\$517.16	\$1,260.81	(\$86.58)	\$476.43	\$44.43	\$83.65	\$128.08	(\$121.32)	\$483.18	\$604.50	\$672.66	\$68.16

Budget and Contribution Data				
HSA Plan	EE	EESp	EECh	Fam
2014 Expected Claims	\$461.06			
Employee Contributions	\$19.67	\$111.32	\$87.01	\$180.31
Employer Contributions	\$322.56	\$597.95	\$543.91	\$817.64
Premium Equivalents	\$342.23	\$709.27	\$630.92	\$997.95
Fixed Costs - Admin	\$41.54	\$41.54	\$41.54	\$41.54
Fixed Costs - Stop Loss	\$83.65	\$83.65	\$83.65	\$83.65
Base Plan	EE	EESp	EECh	Fam
2014 Expected Claims	\$559.53			
Employee Contributions	\$42.94	\$162.15	\$136.37	\$257.40
Employer Contributions	\$372.38	\$698.61	\$629.32	\$953.71
Premium Equivalents	\$415.32	\$860.76	\$765.69	\$1,211.11
Fixed Costs - Admin	\$36.43	\$36.43	\$36.43	\$36.43
Fixed Costs - Stop Loss	\$83.65	\$83.65	\$83.65	\$83.65
Buy Up Plan	EE	EESp	EECh	Fam
2014 Expected Claims	\$637.30			
Employee Contributions	\$101.10	\$375.70	\$317.59	\$601.03
Employer Contributions	\$371.95	\$604.70	\$554.52	\$778.42
Premium Equivalents	\$473.05	\$980.40	\$872.11	\$1,379.45
Fixed Costs - Admin	\$36.43	\$36.43	\$36.43	\$36.43
Fixed Costs - Stop Loss	\$83.65	\$83.65	\$83.65	\$83.65

Year to Date Summary		Total	PEPM
Total Net Paid Claims		\$3,283,065	\$476.43
Total Fixed Costs		\$882,578	\$128.08
Subtotal - Total Costs		\$4,165,643	\$604.50
Total Cost as % of Budget		89.9%	
Employee Contributions		(\$836,027.58)	(\$121.32)
Total - Net Employer Costs		\$3,329,616	\$483.18



ASO and Stop Loss Detail	
Administration	
Administrator	Cigna
Network	Cigna OAP
Stop Loss	
Carrier	Cigna
Specific Stop Loss Deductible	\$130,000
Contract	Paid
Coverage	Medical / Rx
Aggregate Stop Loss	None

¹ Due to carrier enrollment reporting, figures such as Contributions and Budget may vary slightly.

² Accounts for estimated administrative fees and MSI (high-end radiology) capitation fees.

³ Employee Contributions represent an estimate based on the monthly headcounts multiplied by the monthly employee contributions, not the actual employee contributions collected by Sample Company.

⁴ Budget represents the monthly headcounts multiplied by the 2014 HSA, Base and Buy Up fully-insured equivalent rates. Does not include HSA contributions.

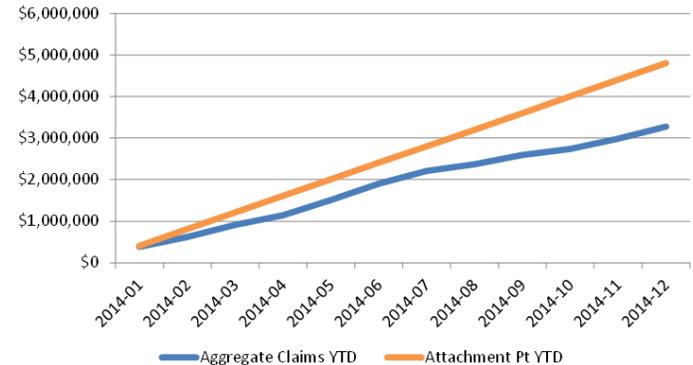
Sample Company

Stop Loss Exhibit
2014 Plan Year

	A	B	C	D = A+B+C	E	F	G	H = E+F+G	I	J = H-I	K	L	M = K/J
	ENROLLMENT				CLAIMS DATA				AGGREGATE ACCUMULATION				
Month	HSA	Base	Buy Up	Total	HSA	Base	Buy Up	Total	Specific Stop Loss	Aggregate Claims	Attachment Point ¹	% of Expected Claims	% of Maximum Claims
2014-01	53	468	62	583	\$12,037	\$214,684	\$151,709	\$378,431	\$0	\$378,431	\$407,260	116%	93%
2014-02	54	466	61	581	\$20,650	\$153,856	\$64,278	\$238,785	\$0	\$238,785	\$405,641	74%	59%
2014-03	55	462	60	577	\$10,381	\$243,250	\$40,683	\$294,314	\$0	\$294,314	\$402,623	91%	73%
2014-04	54	459	59	572	\$4,616	\$181,997	\$41,784	\$228,396	\$0	\$228,396	\$399,152	72%	57%
2014-05	54	460	59	573	\$4,441	\$324,002	\$88,449	\$416,892	(\$47,053)	\$369,839	\$399,851	116%	92%
2014-06	53	457	56	566	\$4,348	\$311,299	\$124,622	\$440,268	(\$44,785)	\$395,483	\$394,787	125%	100%
2014-07	53	459	55	567	\$6,950	\$270,269	\$133,536	\$410,754	(\$105,449)	\$305,305	\$395,389	97%	77%
2014-08	53	467	54	574	\$23,694	\$270,797	\$39,523	\$334,014	(\$173,236)	\$160,778	\$400,187	50%	40%
2014-09	49	468	56	573	\$7,694	\$233,088	\$47,962	\$288,744	(\$65,621)	\$223,123	\$400,175	70%	56%
2014-10	49	471	55	575	\$5,772	\$199,834	\$26,587	\$232,193	(\$83,656)	\$148,537	\$401,476	46%	37%
2014-11	48	473	55	576	\$18,074	\$233,100	\$35,139	\$286,313	(\$40,369)	\$245,944	\$402,299	76%	61%
2014-12	48	471	55	574	\$8,627	\$250,073	\$71,908	\$330,607	(\$36,477)	\$294,131	\$400,900	92%	73%
Total	623	5581	687	6891	\$127,285	\$2,886,248	\$866,178	\$3,879,711	(\$596,646)	\$3,283,065	\$4,809,739	85%	68%
Avg/PEPM	52	465	57	574	\$204.31	\$517.16	\$1,260.81	\$563.01	(86.58)	\$476.43	\$697.97		

Budget and Contribution Data				
HSA Plan	EE	EESp	EECh	Fam
2014 Expected Claims			\$461.06	
2014 Maximum Claims			\$576.32	
Base Plan	EE	EESp	EECh	Fam
2014 Expected Claims			\$559.53	
2014 Maximum Claims			\$699.41	
Buy Up Plan	EE	EESp	EECh	Fam
2014 Expected Claims			\$637.30	
2014 Maximum Claims			\$796.63	

ASO and Stop Loss Detail	
Administration	
Administrator	Cigna
Network	Cigna OAP
Stop Loss	
Carrier	Cigna
Specific Stop Loss Deductible	\$130,000
Contract	Paid
Coverage	Medical / Rx
Aggregate Stop Loss	None

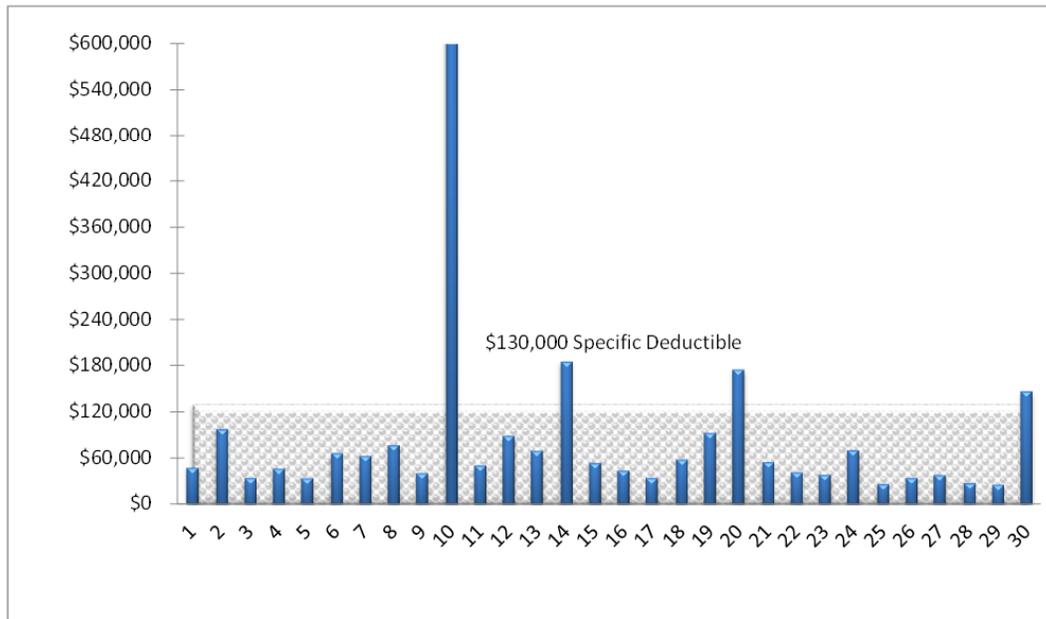


¹ Attachment Point represents an estimate based on the monthly headcounts multiplied by the monthly maximum claims factor.

Sample Company

Large Claimants > \$25,000
January 1 - December 31, 2014

Claimant	Total Paid	Over / Under ISL	Diagnosis Code	Diagnosis	Plan
1	\$47,071	(\$82,929)	71536	LOC OA NOS-LOWER LEG	Buy-Up
2	\$97,527	(\$32,473)	V700	ROUTINE MEDICAL EXAM	Base
3	\$33,865	(\$96,135)	72210	LUMBAR DISC DISPLACEMENT	Base
4	\$45,790	(\$84,210)	9962	MECH COMP NERV SYST DEV	Buy-Up
5	\$33,308	(\$96,692)	311	DEPRESSIVE DISORDER NEC	Base
6	\$66,328	(\$63,672)	42731	ATRIAL FIBRILLATION	Buy-Up
7	\$62,744	(\$67,256)	3384	CHRONIC PAIN SYNDROME	Base
8	\$76,850	(\$53,150)	20510	CML W/O REMISSION	Base
9	\$40,015	(\$89,985)	34690	MIGRAINE NOS W/O SM	Base
10	\$609,609	\$479,609	5856	ESRD	Base
11	\$50,293	(\$79,707)	1478	NASOPHARYNX CA NEC	Buy-Up
12	\$88,883	(\$41,117)	42833	AC & CHR DIASTOLIC HF	Base
13	\$69,195	(\$60,805)	41401	COR AS- NATIVE VESSEL	Base
14	\$185,367	\$55,367	4240	MITRAL VALVE DISORDER	Base
15	\$53,627	(\$76,373)	25000	DM2/NOS UNCOMP NSU	Buy-Up
16	\$43,629	(\$86,371)	71885	JT DERANG NEC-PELVIS	Buy-Up
17	\$33,753	(\$96,248)	5849	ACUTE KIDNEY FAILURE NOS	Base
18	\$57,863	(\$72,137)	6120	RECONST BREAST DEFORMITY	Buy-Up
19	\$92,490	(\$37,510)	81000	CLSD FX CLAVICLE NOS	Buy-Up
20	\$174,948	\$44,948	4240	MITRAL VALVE DISORDER	Base
21	\$54,547	(\$75,453)	44021	AS EXT W INTERMITT CLAUD	Buy-Up
22	\$41,224	(\$88,776)	V5881	FIT/ADJUST VASC CATH	Buy-Up
23	\$38,154	(\$91,846)	V5789	REHABILITATION PX NEC	Base
24	\$70,060	(\$59,940)	1960	2ND/NOS HEAD/NECK LN CA	Base
25	\$26,041	(\$103,959)	5569	ULCERATIVE COLITIS NOS	Base
26	\$33,920	(\$96,080)	57511	CHRONIC CHOLECYSTITIS	Base
27	\$37,608	(\$92,392)	72610	ROTATOR CUFF SYND NOS	Base
28	\$27,245	(\$102,755)	85180	OTH CEREB LAC/CONTU-NOS	Base
29	\$25,286	(\$104,714)	57411	GB CAL W CHOL NEC-OBSTR	Base
30	\$146,722	\$16,722	1418	TONGUE CA NEC	Base



Sample Company

**Medical Historical Experience Analysis - HSA, Base & Buy Up PPO Plans, Combined
Data through December 2014**

Month	Enrollment					Claims Data				
	EE	EESp	EECh	Fam	Total	Medical	Rx	Stop Loss	Total Paid	Rolling PEPM
2012-01	309	70	99	108	586	\$224,762	\$59,733	\$0	\$284,495	\$505.64
2012-02	313	70	95	107	585	\$165,943	\$57,404	\$0	\$223,347	\$502.04
2012-03	319	70	94	109	592	\$274,461	\$60,556	\$0	\$335,017	\$512.19
2012-04	317	69	95	106	587	\$199,345	\$63,188	\$0	\$262,533	\$510.27
2012-05	314	70	95	106	585	\$217,963	\$49,329	\$0	\$267,292	\$490.62
2012-06	316	70	93	107	586	\$249,906	\$53,624	(\$7,808)	\$295,722	\$486.40
2012-07	316	72	91	108	587	\$186,173	\$57,798	(\$20,525)	\$223,446	\$469.45
2012-08	311	71	91	109	582	\$240,546	\$62,526	(\$25,625)	\$277,447	\$478.21
2012-09	314	70	90	109	583	\$407,041	\$72,844	(\$70,779)	\$409,106	\$505.49
2012-10	316	71	90	107	584	\$260,345	\$49,993	(\$18,895)	\$291,444	\$514.87
2012-11	313	69	92	106	580	\$276,447	\$62,592	(\$51,381)	\$287,657	\$505.50
2012-12	309	69	91	105	574	\$475,675	\$69,665	(\$239,812)	\$305,528	\$493.94
2013-01	314	80	88	108	590	\$375,349	\$60,275	(\$8,913)	\$426,711	\$513.93
2013-02	311	78	87	107	583	\$263,560	\$56,440	(\$12,854)	\$307,146	\$526.03
2013-03	313	78	90	107	588	\$204,970	\$54,297	(\$30,912)	\$228,355	\$511.11
2013-04	319	78	90	108	595	\$347,968	\$62,799	(\$67,207)	\$343,559	\$522.08
2013-05	315	81	89	106	591	\$210,863	\$56,344	(\$17,567)	\$249,640	\$519.12
2013-06	311	80	90	106	587	\$206,140	\$54,354	(\$10,931)	\$249,562	\$512.47
2013-07	305	80	89	104	578	\$233,636	\$58,301	(\$16,222)	\$275,715	\$520.58
2013-08	308	79	89	108	584	\$222,498	\$85,628	(\$17,779)	\$290,346	\$522.27
2013-09	304	78	90	108	580	\$223,413	\$64,248	(\$7,898)	\$279,763	\$504.05
2013-10	306	80	90	106	582	\$181,979	\$61,440	(\$19,468)	\$223,952	\$494.57
2013-11	305	80	89	104	578	\$416,480	\$60,551	(\$49,950)	\$427,081	\$514.60
2013-12	306	80	89	104	579	\$217,948	\$64,427	(\$40,537)	\$241,839	\$505.16
2014-01	298	84	99	102	583	\$296,835	\$81,595	\$0	\$378,431	\$498.77
2014-02	299	83	100	99	581	\$185,224	\$53,560	\$0	\$238,785	\$489.16
2014-03	299	80	99	99	577	\$230,880	\$63,434	\$0	\$294,314	\$499.35
2014-04	295	81	100	96	572	\$164,891	\$63,505	\$0	\$228,396	\$484.48
2014-05	296	81	100	96	573	\$323,705	\$93,187	(\$47,053)	\$369,839	\$503.02
2014-06	290	80	98	98	566	\$308,201	\$132,067	(\$44,785)	\$395,483	\$525.59
2014-07	291	81	97	98	567	\$345,445	\$65,309	(\$105,449)	\$305,305	\$530.70
2014-08	299	78	98	99	574	\$273,150	\$60,864	(\$173,236)	\$160,778	\$512.73
2014-09	295	82	99	97	573	\$211,553	\$77,190	(\$65,621)	\$223,123	\$505.04
2014-10	297	82	98	98	575	\$159,305	\$72,888	(\$83,656)	\$148,537	\$494.62
2014-11	300	80	98	98	576	\$215,066	\$71,247	(\$40,369)	\$245,944	\$468.50
2014-12	296	80	100	98	574	\$266,119	\$64,488	(\$36,477)	\$294,131	\$476.43

Begin	End	Enrollment					Claims Data				
		EE	EESp	EECh	Fam	Total	Medical	Rx	Stop Loss	Total Paid	Period PEPM
Experience Periods - January 2013 through December 2014											
Jan-14	Dec-14	3555	972	1186	1178	6891	\$2,980,375	\$899,336	(\$596,646)	\$3,283,065	\$476.43
Jan-13	Dec-13	3717	952	1070	1276	7015	\$3,104,804	\$739,103	(\$300,238)	\$3,543,669	\$505.16
Plan Year - January through December											
Jan-13	Dec-13	3717	952	1070	1276	7015	\$3,104,804	\$739,103	(\$300,238)	\$3,543,669	\$505.16
Jan-12	Dec-12	3767	841	1116	1287	7011	\$3,178,608	\$719,252	(\$434,825)	\$3,463,035	\$493.94
Year-to-Date - January through December											
Jan-14	Dec-14	3555	972	1186	1178	6891	\$2,980,375	\$899,336	(\$596,646)	\$3,283,065	\$476.43
Jan-13	Dec-13	3717	952	1070	1276	7015	\$3,104,804	\$739,103	(\$300,238)	\$3,543,669	\$505.16
Jan-12	Dec-12	3767	841	1116	1287	7011	\$3,178,608	\$719,252	(\$434,825)	\$3,463,035	\$493.94

Sample Company

**Medical Historical Experience Analysis - HSA Plan
Data through December 2014**

Month	Enrollment					Claims Data				
	EE	EESp	EECh	Fam	Total	Medical	Rx	Stop Loss	Total Paid	Rolling PEPM
2013-01	17	3	5	3	28	\$147	\$0	\$0	\$147	\$5.25
2013-02	17	3	5	3	28	\$730	\$129	\$0	\$859	\$17.96
2013-03	17	3	6	3	29	\$1,269	\$720	\$0	\$1,989	\$35.23
2013-04	16	4	6	3	29	\$19,227	\$62	\$0	\$19,289	\$195.47
2013-05	16	4	6	3	29	\$15,027	\$581	\$0	\$15,608	\$264.98
2013-06	16	4	6	3	29	\$510	\$848	\$0	\$1,358	\$228.20
2013-07	16	4	6	3	29	\$3,765	\$310	\$0	\$4,075	\$215.55
2013-08	15	4	6	3	28	\$3,992	\$971	\$0	\$4,963	\$210.86
2013-09	15	4	6	3	28	\$8,819	\$1,078	\$0	\$9,897	\$226.40
2013-10	15	4	6	3	28	\$6,193	\$965	\$0	\$7,157	\$229.27
2013-11	14	4	6	3	27	\$3,966	\$1,770	\$0	\$5,736	\$227.81
2013-12	14	4	6	3	27	\$23,011	\$2,024	\$0	\$25,035	\$283.52
2014-01	28	6	12	7	53	\$11,620	\$418	\$0	\$12,037	\$296.71
2014-02	29	6	12	7	54	\$20,493	\$158	\$0	\$20,650	\$327.68
2014-03	30	6	13	6	55	\$9,977	\$404	\$0	\$10,381	\$327.37
2014-04	29	6	13	6	54	\$3,879	\$737	\$0	\$4,616	\$275.54
2014-05	29	6	13	6	54	\$3,887	\$554	\$0	\$4,441	\$236.80
2014-06	28	6	13	6	53	\$3,420	\$928	\$0	\$4,348	\$231.30
2014-07	28	6	13	6	53	\$4,802	\$2,147	\$0	\$6,950	\$226.09
2014-08	28	6	13	6	53	\$20,123	\$3,571	\$0	\$23,694	\$250.36
2014-09	26	5	13	5	49	\$6,551	\$1,143	\$0	\$7,694	\$237.04
2014-10	26	5	13	5	49	\$4,642	\$1,131	\$0	\$5,772	\$226.08
2014-11	26	5	13	4	48	\$16,513	\$1,561	\$0	\$18,074	\$238.69
2014-12	26	5	13	4	48	\$5,714	\$2,913	\$0	\$8,627	\$204.31

Begin	End	Enrollment					Claims Data				
		EE	EESp	EECh	Fam	Total	Medical	Rx	Stop Loss	Total Paid	Period PEPM
Experience Periods - January 2013 through December 2014											
Jan-14	Dec-14	333	68	154	68	623	\$111,620	\$15,664	\$0	\$127,285	\$204.31
Jan-13	Dec-13	188	45	70	36	339	\$86,655	\$9,457	\$0	\$96,112	\$283.52
Plan Year - January through December											
Jan-13	Dec-13	188	45	70	36	339	\$86,655	\$9,457	\$0	\$96,112	\$283.52
Year-to-Date - January through December											
Jan-14	Dec-14	333	68	154	68	623	\$111,620	\$15,664	\$0	\$127,285	\$204.31
Jan-13	Dec-13	188	45	70	36	339	\$86,655	\$9,457	\$0	\$96,112	\$283.52

Sample Company

**Medical Historical Experience Analysis - Base Plan
Data through December 2014**

Month	Enrollment					Claims Data				
	EE	EESp	EECh	Fam	Total	Medical	Rx	Stop Loss	Total Paid	Rolling PEPM
2012-01	242	57	95	97	491	\$133,745	\$41,866	\$0	\$175,611	\$470.38
2012-02	244	57	92	96	489	\$109,677	\$34,206	\$0	\$143,883	\$467.60
2012-03	250	56	91	98	495	\$175,092	\$43,105	\$0	\$218,197	\$479.00
2012-04	250	55	92	95	492	\$145,875	\$45,014	\$0	\$190,889	\$478.15
2012-05	248	56	92	95	491	\$157,218	\$32,240	\$0	\$189,458	\$446.35
2012-06	249	56	90	96	491	\$203,116	\$41,550	\$0	\$244,666	\$444.73
2012-07	249	58	88	97	492	\$131,501	\$40,520	\$0	\$172,021	\$427.55
2012-08	245	57	88	98	488	\$178,798	\$40,376	\$0	\$219,175	\$438.29
2012-09	248	56	87	98	489	\$185,922	\$51,619	\$0	\$237,541	\$448.72
2012-10	253	57	87	96	493	\$203,118	\$37,095	\$0	\$240,214	\$456.32
2012-11	252	55	89	95	491	\$126,472	\$33,873	\$0	\$160,345	\$429.89
2012-12	251	55	88	94	488	\$204,305	\$56,421	\$0	\$260,726	\$416.42
2013-01	243	63	79	96	481	\$244,507	\$41,674	(\$8,913)	\$277,268	\$434.42
2013-02	242	63	78	95	478	\$131,921	\$46,631	(\$12,854)	\$165,698	\$438.95
2013-03	241	63	80	95	479	\$134,569	\$30,440	(\$30,912)	\$134,097	\$425.78
2013-04	246	62	79	97	484	\$199,002	\$48,398	(\$16,868)	\$230,531	\$433.15
2013-05	243	65	78	95	481	\$160,875	\$38,865	(\$9,159)	\$190,581	\$434.08
2013-06	238	65	79	95	477	\$162,070	\$37,309	(\$10,039)	\$189,340	\$425.62
2013-07	234	65	78	93	470	\$184,327	\$42,459	(\$15,297)	\$211,489	\$434.04
2013-08	235	64	78	97	474	\$154,908	\$49,399	(\$17,399)	\$186,908	\$429.51
2013-09	234	63	77	97	471	\$177,894	\$51,110	(\$7,770)	\$221,234	\$428.03
2013-10	235	65	77	95	472	\$142,054	\$47,714	(\$19,337)	\$170,431	\$417.45
2013-11	238	65	76	93	472	\$314,042	\$52,305	(\$49,906)	\$316,441	\$446.09
2013-12	239	65	76	93	473	\$130,688	\$49,030	(\$40,406)	\$139,312	\$426.00
2014-01	228	68	84	88	468	\$164,741	\$49,943	\$0	\$214,684	\$415.99
2014-02	228	68	85	85	466	\$114,456	\$39,400	\$0	\$153,856	\$414.79
2014-03	227	66	83	86	462	\$193,445	\$49,805	\$0	\$243,250	\$435.28
2014-04	225	67	84	83	459	\$133,974	\$48,022	\$0	\$181,997	\$428.61
2014-05	226	67	84	83	460	\$243,447	\$80,555	(\$47,053)	\$276,949	\$445.57
2014-06	224	66	82	85	457	\$208,474	\$102,825	(\$44,785)	\$266,514	\$460.93
2014-07	226	67	81	85	459	\$220,426	\$49,843	(\$105,449)	\$164,819	\$453.49
2014-08	235	64	82	86	467	\$227,094	\$43,703	(\$173,236)	\$97,561	\$438.07
2014-09	233	68	82	85	468	\$176,306	\$56,782	(\$65,621)	\$167,467	\$428.67
2014-10	236	68	81	86	471	\$135,892	\$63,942	(\$83,656)	\$116,178	\$419.03
2014-11	239	66	81	87	473	\$185,000	\$48,100	(\$40,369)	\$192,731	\$396.80
2014-12	235	66	83	87	471	\$198,074	\$51,999	(\$36,477)	\$213,596	\$410.25

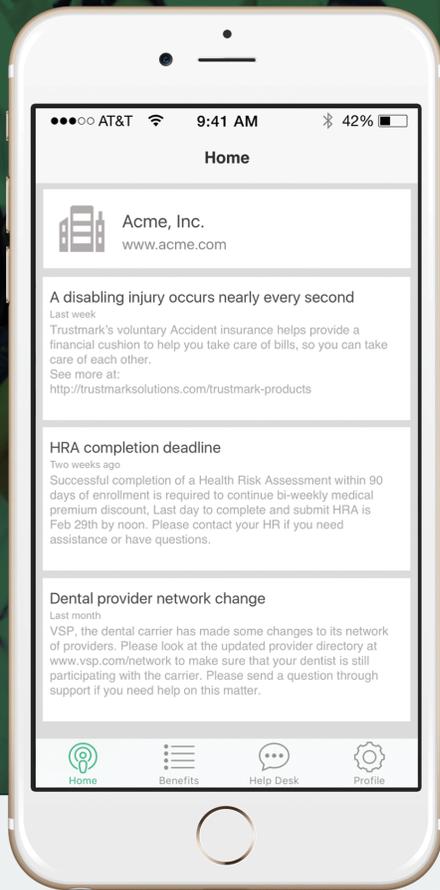
Begin	End	Enrollment					Claims Data				
		EE	EESp	EECh	Fam	Total	Medical	Rx	Stop Loss	Total Paid	Period PEPM
Experience Periods - January 2013 through December 2014											
Jan-14	Dec-14	2762	801	992	1026	5581	\$2,201,328	\$684,920	(\$596,646)	\$2,289,603	\$410.25
Jan-13	Dec-13	2868	768	935	1141	5712	\$2,136,857	\$535,334	(\$238,861)	\$2,433,331	\$426.00
Plan Year - January through December											
Jan-13	Dec-13	2868	768	935	1141	5712	\$2,136,857	\$535,334	(\$238,861)	\$2,433,331	\$426.00
Jan-12	Dec-12	2981	675	1079	1155	5890	\$1,954,840	\$497,887	\$0	\$2,452,727	\$416.42
Year-to-Date - January through December											
Jan-14	Dec-14	2762	801	992	1026	5581	\$2,201,328	\$684,920	(\$596,646)	\$2,289,603	\$410.25
Jan-13	Dec-13	2868	768	935	1141	5712	\$2,136,857	\$535,334	(\$238,861)	\$2,433,331	\$426.00
Jan-12	Dec-12	2981	675	1079	1155	5890	\$1,954,840	\$497,887	\$0	\$2,452,727	\$416.42

Sample Company

**Medical Historical Experience Analysis - Buy Up Plan
Data through December 2014**

Month	Enrollment					Claims Data				
	EE	EESp	EECh	Fam	Total	Medical	Rx	Stop Loss	Total Paid	Rolling PEPM
2012-01	67	13	4	11	95	\$91,017	\$17,867	\$0	\$108,884	\$661.72
2012-02	69	13	3	11	96	\$56,267	\$23,198	\$0	\$79,465	\$656.19
2012-03	69	14	3	11	97	\$99,369	\$17,451	\$0	\$116,820	\$662.66
2012-04	67	14	3	11	95	\$53,470	\$18,174	\$0	\$71,644	\$658.12
2012-05	66	14	3	11	94	\$60,745	\$17,089	\$0	\$77,833	\$697.93
2012-06	67	14	3	11	95	\$46,790	\$12,074	(\$7,808)	\$51,055	\$684.92
2012-07	67	14	3	11	95	\$54,672	\$17,277	(\$20,525)	\$51,424	\$671.85
2012-08	66	14	3	11	94	\$61,748	\$22,150	(\$25,625)	\$58,273	\$673.50
2012-09	66	14	3	11	94	\$221,119	\$21,225	(\$70,779)	\$171,565	\$786.88
2012-10	63	14	3	11	91	\$57,227	\$12,898	(\$18,895)	\$51,230	\$809.90
2012-11	61	14	3	11	89	\$149,975	\$28,719	(\$51,381)	\$127,312	\$894.08
2012-12	58	14	3	11	86	\$271,370	\$13,244	(\$239,812)	\$44,802	\$901.26
2013-01	54	14	4	9	81	\$130,695	\$18,601	\$0	\$149,296	\$949.16
2013-02	52	12	4	9	77	\$130,909	\$9,680	\$0	\$140,589	\$1,021.92
2013-03	55	12	4	9	80	\$69,132	\$23,138	\$0	\$92,270	\$1,015.21
2013-04	57	12	5	8	82	\$129,739	\$14,339	(\$50,339)	\$93,739	\$1,048.57
2013-05	56	12	5	8	81	\$34,961	\$16,898	(\$8,408)	\$43,451	\$1,028.71
2013-06	57	11	5	8	81	\$43,560	\$16,196	(\$892)	\$58,864	\$1,050.26
2013-07	55	11	5	8	79	\$45,544	\$15,532	(\$925)	\$60,151	\$1,075.41
2013-08	58	11	5	8	82	\$63,598	\$35,257	(\$380)	\$98,475	\$1,128.36
2013-09	55	11	7	8	81	\$36,700	\$12,061	(\$129)	\$48,632	\$1,019.00
2013-10	56	11	7	8	82	\$33,733	\$12,761	(\$130)	\$46,364	\$1,023.39
2013-11	53	11	7	8	79	\$98,472	\$6,476	(\$44)	\$104,904	\$1,010.85
2013-12	53	11	7	8	79	\$64,249	\$13,373	(\$131)	\$77,492	\$1,052.10
2014-01	42	10	3	7	62	\$120,475	\$31,234	\$0	\$151,709	\$1,075.81
2014-02	42	9	3	7	61	\$50,275	\$14,003	\$0	\$64,278	\$1,012.19
2014-03	42	8	3	7	60	\$27,459	\$13,224	\$0	\$40,683	\$977.71
2014-04	41	8	3	7	59	\$27,038	\$14,746	\$0	\$41,784	\$944.45
2014-05	41	8	3	7	59	\$76,370	\$12,079	\$0	\$88,449	\$1,020.58
2014-06	38	8	3	7	56	\$96,307	\$28,315	\$0	\$124,622	\$1,129.37
2014-07	37	8	3	7	55	\$120,217	\$13,319	\$0	\$133,536	\$1,252.67
2014-08	36	8	3	7	54	\$25,934	\$13,589	\$0	\$39,523	\$1,222.33
2014-09	36	9	4	7	56	\$28,696	\$19,266	\$0	\$47,962	\$1,261.55
2014-10	35	9	4	7	55	\$18,771	\$7,816	\$0	\$26,587	\$1,280.99
2014-11	35	9	4	7	55	\$13,553	\$21,586	\$0	\$35,139	\$1,226.11
2014-12	35	9	4	7	55	\$62,331	\$9,577	\$0	\$71,908	\$1,260.81

Begin	End	Enrollment					Claims Data				
		EE	EESp	EECh	Fam	Total	Medical	Rx	Stop Loss	Total Paid	Period PEPM
Experience Periods - January 2013 through December 2014											
Jan-14	Dec-14	460	103	40	84	687	\$667,426	\$198,752	\$0	\$866,178	\$1,260.81
Jan-13	Dec-13	661	139	65	99	964	\$881,292	\$194,313	(\$61,377)	\$1,014,227	\$1,052.10
Plan Year - January through December											
Jan-13	Dec-13	661	139	65	99	964	\$881,292	\$194,313	(\$61,377)	\$1,014,227	\$1,052.10
Jan-12	Dec-12	786	166	37	132	1121	\$1,223,768	\$221,365	(\$434,825)	\$1,010,308	\$901.26
Year-to-Date - January through December											
Jan-14	Dec-14	460	103	40	84	687	\$667,426	\$198,752	\$0	\$866,178	\$1,260.81
Jan-13	Dec-13	661	139	65	99	964	\$881,292	\$194,313	(\$61,377)	\$1,014,227	\$1,052.10
Jan-12	Dec-12	786	166	37	132	1121	\$1,223,768	\$221,365	(\$434,825)	\$1,010,308	\$901.26



Benefitcloud

The Mobile Communication App

IMPROVE PLAN-OUTCOMES



Reduce Cost

You incur a significant cost for producing, printing and distributing Benefits Information throughout the year and for communicating with your employees.

Whether its an Enrollment Guide, a Notice, a Reminder, SPDs or a Handbook; cost easily adds up.

Now with Benefitcloud through Trustmark, you can reduce this cost to only \$0.50 per employee per month.



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You can streamline employee benefits support with Benefitcloud. No more knocking on the door, ad-hoc Emails or busy phone lines.

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The ease of access and use of Benefits through Benefitcloud significantly increases Employees' satisfaction and perceived value of their Employee Benefits Package.



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Benefitcloud provides the most effective Mobile Communication Experience to Educate, Remind and Engage Employees throughout the year.

Whether it's awareness leading to Open Enrollment, reminders for HRA completion after Enrollment, HSA contribution deadlines, monthly education topics; Benefitcloud delivers all communication through effective Push-notifications on your Employees' mobile device.

Benefitcloud, LLC
14681 Midway Rd.
Addison TX 75001

 (469) 500-5105
 contact@benefitcloud.com
 www.benefitcloud.com



REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested: June 13, 2016 Appropriation
Requested By: Kathy Powell Source of Funds: N/A
Department: Finance Account Number:
Report: Resolution: Ordinance: Amount Budgeted:
Other: Amount Requested:
Budgeted Item: YES NO

Attachments :

1. Resolution
2. Resale P162
3. Resale P163
4. Resale P284

SUMMARY & RECOMMENDATIONS

If a property is sold or struck off to a taxing unit that is party to the judgment, the taxing unit may sell the property at any time by public or private sale. The City of La Porte has had these properties on our public resale list for more than an adequate amount of time and has received a bid for the minimum bid amount set by the judgment or higher; at this time we are asking the city council to pass a resolution to approve the sale of these properties for the amount that has been offered.

P162 – Lot 23 Block 1219 Town of La Porte– Offer \$1,600.00

(Adjudged Value \$1,600, Cost +Taxes \$2,931.96)

P163 – Lot 24 Block 1219 Town of La Porte – Offer \$1,600.00

(Adjudged Value \$3,100, Cost +Taxes \$1,585.05)

P284 – Tr 18, 19 & 20 Block 715 Town of La Porte – Offer \$15,100.00

(Adjudged Value \$20,248, Cost +Taxes \$15,059.97)

Action Required of Council:

Consider approval or other action of the Resolution authorizing the sale on the properties listed above.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

RESOLUTION 2016- .

RESOLUTION AUTHORIZING THE RESALE OF CERTAIN PROPERTY

WHEREAS the City of La Porte (City), in the course of its function as a taxing entity in the State of Texas, obtains title to real property in the capacity as Trustee for itself and other taxing units that tax the property; and

WHEREAS it is necessary for various reasons that some of the property so obtained must be resold by the taxing units for less than the aggregate amounts of taxes, penalties, interest and costs; and

WHEREAS Section 34.05 of the Texas Property Tax Code requires that when real property is sold for less than the aggregate amount of taxes, penalties, interest and costs, the sale must be approved by all taxing units that tax the property; and

WHEREAS the City has adopted procedures designed to provide all parties the opportunity to submit offers to purchase such real property and to secure the best offer for such property that is sufficient to pay at least the costs of suit and sale of such property; and

WHEREAS it is desirable that resale of the property be free and clear of all claims of the taxing units, for all taxes, penalties interest and costs that have accrued up to the date of resale

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LA PORTE,

Section 1. That the City of La Porte, as Trustee, resells the real properties described in the attached Exhibit "A", for the amounts set for on said Exhibit "A", in full satisfaction of taxes, penalties, interest and costs that have accrued on the property up to the date of sale.

Section 2. That the City Council officially finds, determines, recites and declares that a sufficient written notice of the date, hour, place and subject of this meeting of the City Council was posted at a place convenient to the public at the offices of City of La Porte for the time required by law preceding this meeting, as required by the Open Meetings Law, Chapter 551, Texas Government Code; and that this meeting has been open to the public as required by law at all times during which this resolution and the subject matter thereof has been discussed, considered and formally acted upon. The City Council further ratifies, approves and confirms such written notice and the contents and posting thereof.

PASSED AND APPROVED this the 13th day of June 2016.

CITY OF LA PORTE, TEXAS

Louis R. Rigby, Mayor

ATTEST:

Patrice Fogarty, City Secretary

APPROVED:



Clark Askins, City Attorney

EXHIBIT A

TAX RESALE PROPERTY TO BE SOLD

- TRACT 1: Resale Property P162
Legal Description: Lot 23 Block 1219 Town of La Porte
HCAD #024-235-019-0029
Offer Amount: \$1,600.00
- TRACT 2: Resale Property P163
Legal Description: Lot24 Block 1219 Town of La Porte
HCAD #024-235-019-0041
Offer Amount: \$1,600.00
- TRACT 3: Resale Property P284
Legal Description: Tr 18, 19& 20 Block 715 Town of La Porte
HCAD #024-087-015-0018
Offer Amount: \$15,100.00

SUMMARY OF FORECLOSURE ACTIVITY

HCAD ACCOUNT NO: 024-235-019-0029
 CAUSE NO: 1999-37587
 PLAINTIFF(S): City of La Porte & La Porte Independent School District
 JUDGMENT AGAINST: La Porte - Houston Realty Co
 JUDGMENT DATE: August 14, 2001 STRUCK OFF DATE: July 2, 2002
 ORDER OF SALE: March 22, 2002
 DEED RECORDED DATE: STRUCK OFF TO: City of La Porte
 CONSTABLE: Bill Bailey, Constable Precint No 8
 PROPERTY ADDRESS: South Broadway Street
 LEGAL DESCRIPTION: Lot 23 Block 1219 La Porte

ADJUDGED VALUE (IN JUDGMENT): \$ 1,600.00
 SQUARE FOOTAGE: 3,125

SUMMARY OF SALE ACTIVITY

BIDDER: Enoc Guerra BIDDER'S ADDRESS: 12422 Corning Dr
 AMOUNT OF BID: \$1,600.00 Houston, TX 77089-6101
 AMOUNT OF DEPOSIT: \$160.00
 AMOUNT DUE: \$1,440.00 BIDDER'S PHONE NO: 832-691-5045

PRORATED PERCENTAGED OF TAXES DUE TO EACH JURISDICTION BASED UPON JUDGMENT

JUDGMENT TO	COUNTY, ET AL.	%	SCHOOL	%	CITY	%	TOTAL
AMOUNT DUE	\$571.35	22.79%	\$1,298.04	51.78%	\$637.57	25.43%	\$2,506.96

ASSOCIATED COSTS ON ORIGINAL AND SEALED BID SALES

AMOUNT OF BID	COURT COST	CONSTABLE/PUBLICA TION FEE (TISD)	AD LITEM FEE	RESEARCH FEE & DEED RECORDING FEE	ESTIMATED AMOUNT TO BE PRORATED TO TAXES
\$1,600.00	\$0.00	\$175.00	\$0.00	\$250.00	\$1,175.00

PRORATED TAX AMOUNTS TO EACH JURISDICTION

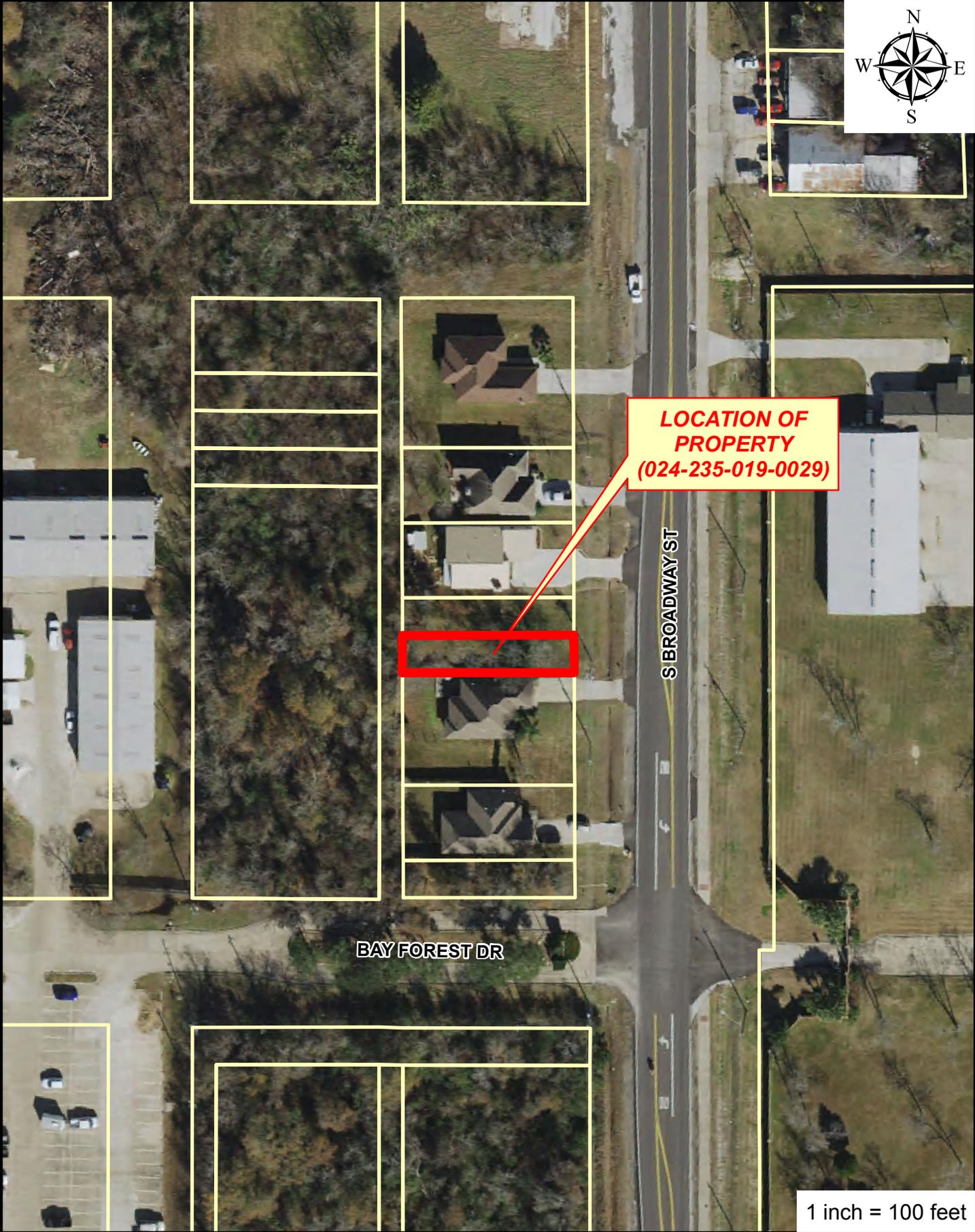
OWED TO	COUNTY	%	SCHOOL	%	CITY	%	TOTAL
PRORATED AMOUNT	\$267.79	22.79%	\$608.39	51.78%	\$298.83	25.43%	\$1,175.00

Amount of Bid: \$1,600.00
 Costs:
 -District Clerk \$0.00
 -Tax Master \$0.00
 -Constable Fee \$0.00
 -Publication \$175.00
 -Abstract Fee \$250.00
 -Cost \$0.00
 -Ad Litem Fee \$0.00
 Total: \$1,175.00

Taxing Jurisdictions:	Amount in Judgment:	%	Amount Received
City of La Porte	\$637.57	25.43%	\$298.83
La Porte ISD	\$1,298.04	51.78%	\$608.39
Harris County	\$488.59	19.49%	\$229.00
San Jacinto CCD	\$82.76	3.30%	\$38.79
State of Texas	\$0.00	0.00%	\$0.00
	<u>\$2,506.96</u>	100.00%	<u>\$1,175.00</u>

Costs + Taxes \$2,931.96
 Adjudged Value \$ 1,600.00

AREA MAP P162



**LOCATION OF
PROPERTY
(024-235-019-0029)**

S BROADWAY ST

BAY FOREST DR

1 inch = 100 feet

Notice of confidentiality rights: If you are a natural person, you may remove or strike any of the following information from this instrument before it is filed for record in the public records: your social security number or your driver's license number
(Language pursuant section 11.008 of the Texas Property Code)

THE STATE OF TEXAS

§

TAX RESALE DEED

COUNTY OF HARRIS

§

§

KNOW ALL MEN BY THESE PRESENTS that the CITY OF LA PORTE, TRUSTEE, for the use and benefit of itself, the, LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, STATE OF TEXAS and SAN JACINTO COMMUNITY COLLEGE DISTRICT, acting by and through its duly elected officials ("GRANTOR") as authorized by Section 34.05, Texas Property Tax Code, for and in consideration of the sum of TEN DOLLARS AND 00/100 (\$10.00) AND OTHER GOOD AND VALUABLE CONSIDERATION, in hand paid by ENOC GUERRA ("GRANTEE") the receipt of which is hereby acknowledged and confessed, has conveyed and quitclaimed and by these presents do convey and quitclaim unto said Grantees all right, title and interest of the CITY OF LA PORTE, LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, STATE OF TEXAS and SAN JACINTO COMMUNITY COLLEGE DISTRICT in the property herein conveyed, acquired by tax foreclosure sale heretofore held, in Cause No. 1999-37587, styled *City of La Porte, La Porte Independent School District, the State of Texas, the San Jacinto Community College District, and Harris County vs. Norman Adoue, et al* said property being described as:

TRACT 20: LOT 23, BLOCK 1219, OF THE TOWN OF LA PORTE, AN ADDITION IN HARRIS COUNTY, TEXAS ACCORDING TO THE PLAT OR MAP THEREOF FILED IN THE REAL PROPERTY RECORDS OF HARRIS COUNTY, TEXAS. (ACCOUNT NUMBER 0242350190029)

This conveyance is made and accepted subject to the following matters to the extent that the same are in effect at this time: any and all rights of redemption, restrictions, covenants, conditions, easements, encumbrances and outstanding mineral interests, if any, relating to the hereinabove described property, but only to the extent they are still in effect, shown of record in the hereinabove mentioned County and State, and to all zoning laws, regulations and ordinances of municipal and/or other governmental authorities, if any but only to the extent that they are still in effect, relating to the hereinabove described property.

TO HAVE AND TO HOLD said premises, together with all and singular the rights, privileges and appurtenances thereto in any manner belonging unto the said ENOC GUERRA, his heirs and assigns forever, so that neither the CITY OF LA PORTE, LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, STATE OF TEXAS and SAN JACINTO COMMUNITY COLLEGE DISTRICT nor any person claiming under it shall at any time hereafter have, claim or demand any right or title to the aforesaid premises or appurtenances, or any part thereof.

Grantee accepts the property in "AS IS, WHERE IS" condition and subject to any environmental conditions that might have or still exist on said property, and subject to any title defects and deficiencies, and

subject to the right of redemption, if any, provided under the Texas Property Tax Code. Grantee acknowledge and agree that this conveyance is expressly made without warranty.

This transaction is in full satisfaction of all taxes, penalties, interest, and costs that have accrued until the date hereof.

IN TESTIMONY WHEREOF, CITY OF LA PORTE, TRUSTEE, for the use and benefit of itself LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, STATE OF TEXAS and SAN JACINTO COMMUNITY COLLEGE DISTRICT has caused these presents to be executed this _____ day of _____ 2016.

CITY OF LA PORTE, TRUSTEE

LOUIS R. RIGBY, MAYOR,
CITY OF LA PORTE

ACCEPTED:

ENOC GUERRA

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared LOUIS R. RIGBY, Mayor, City of La Porte, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purposes and consideration therein expressed, in the capacity therein stated, and with the conditions and the limitations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2016.

NOTARY PUBLIC, in and for the
STATE OF TEXAS
My Commission Expires: _____

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared ENOC GUERRA, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purposes and consideration therein expressed, in the capacity therein stated, and with the conditions and the limitations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2016.

NOTARY PUBLIC, in and for the
STATE OF TEXAS
My Commission Expires: _____

After Recording
Return To: Enoc Guerra
 12422 Coming Dr
 Houston, TX 77089-6101

SUMMARY OF FORECLOSURE ACTIVITY

HCAD ACCOUNT NO: 024-235-019-0041
 CAUSE NO: 1999-37587
 PLAINTIFF(S): City of La Porte & La Porte Independent School District
 JUDGMENT AGAINST: La Porte - Houston Realty Co
 JUDGMENT DATE: August 14, 2001 STRUCK OFF DATE: July 2, 2002
 ORDER OF SALE: March 22, 2002
 DEED RECORDED DATE: STRUCK OFF TO: City of La Porte
 CONSTABLE: Bill Bailey, Constable Precint No 8
 PROPERTY ADDRESS: South Broadway Street
 LEGAL DESCRIPTION: Lot 24 Block 1219 La Porte

ADJUDGED VALUE (IN JUDGMENT): \$ 3,100.00
 SQUARE FOOTAGE: 3,125

SUMMARY OF SALE ACTIVITY

BIDDER: Enoc Guerra BIDDER'S ADDRESS: 12422 Corning Dr
 AMOUNT OF BID: \$1,600.00 Houston, TX 77089-6101
 AMOUNT OF DEPOSIT: \$160.00
 AMOUNT DUE: \$1,440.00 BIDDER'S PHONE NO: 832-691-5045

PRORATED PERCENTAGED OF TAXES DUE TO EACH JURISDICTION BASED UPON JUDGMENT

JUDGMENT TO	COUNTY, ET AL.	%	SCHOOL	%	CITY	%	TOTAL
AMOUNT DUE	\$285.12	24.58%	\$605.10	52.16%	\$269.83	23.26%	\$1,160.05

ASSOCIATED COSTS ON ORIGINAL AND SEALED BID SALES

AMOUNT OF BID	COURT COST	CONSTABLE/PUBLICA TION FEE (TISD)	AD LITEM FEE	RESEARCH FEE & DEED RECORDING FEE	ESTIMATED AMOUNT TO BE PRORATED TO TAXES
\$1,600.00	\$0.00	\$175.00	\$0.00	\$250.00	\$1,175.00

PRORATED TAX AMOUNTS TO EACH JURISDICTION

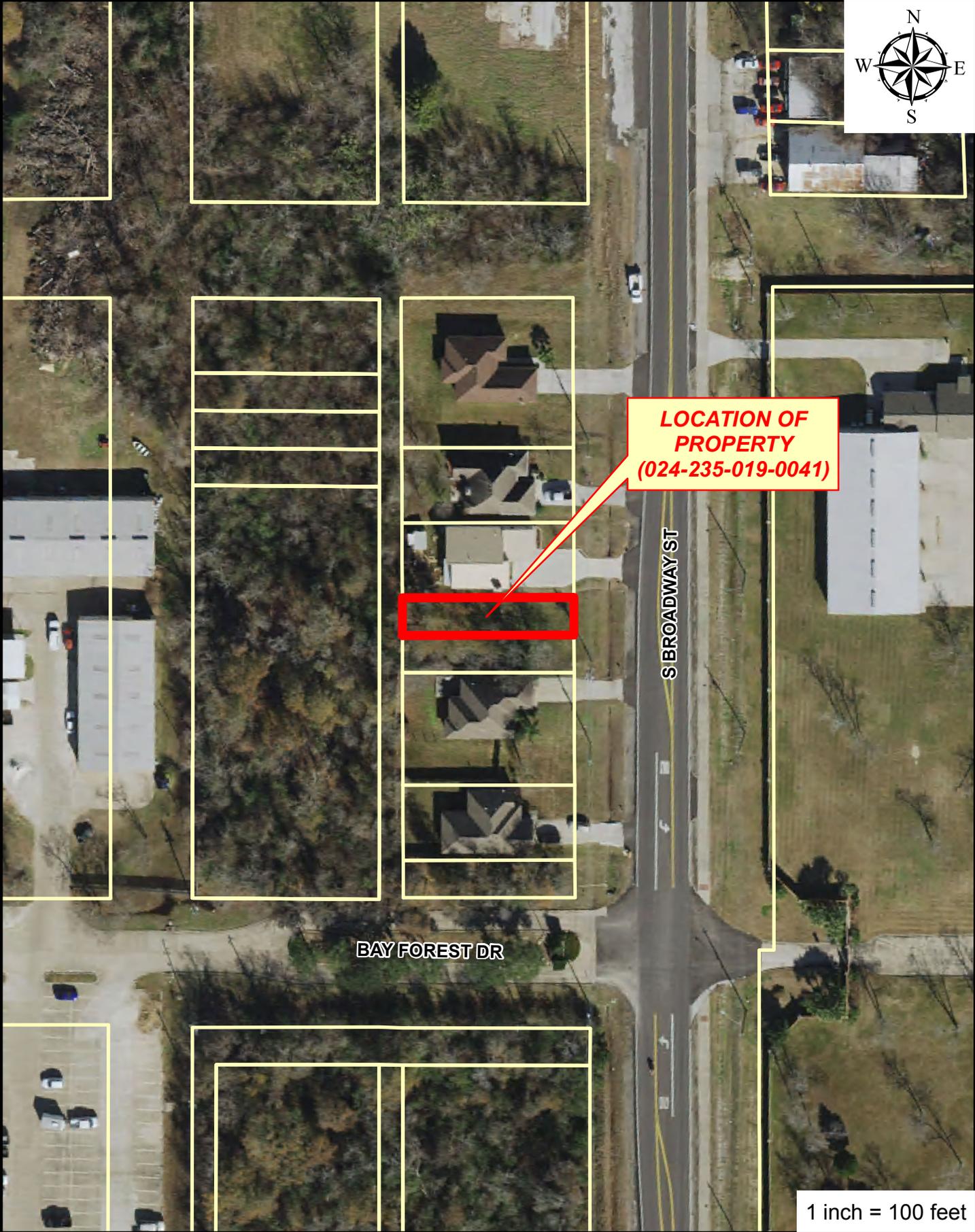
OWED TO	COUNTY	%	SCHOOL	%	CITY	%	TOTAL
PRORATED AMOUNT	\$288.79	24.58%	\$612.90	52.16%	\$273.31	23.26%	\$1,175.00

Amount of Bid: \$1,600.00
 Costs:
 -District Clerk \$0.00
 -Tax Master \$0.00
 -Constable Fee \$0.00
 -Publication \$175.00
 -Abstract Fee \$250.00
 -Cost \$0.00
 -Ad Litem Fee \$0.00
 Total: \$1,175.00

Taxing Jurisdictions:	Amount in Judgment:	%	Amount Received
City of La Porte	\$269.83	23.26%	\$273.31
La Porte ISD	\$605.10	52.16%	\$612.90
Harris County	\$243.32	20.97%	\$246.46
San Jacinto CCD	\$41.80	3.60%	\$42.34
State of Texas	\$0.00	0.00%	\$0.00
	<u>\$1,160.05</u>	100.00%	<u>\$1,175.00</u>

Costs + Taxes \$1,585.05
 Adjudged Value \$ 3,100.00

AREA MAP P163



subject to the right of redemption, if any, provided under the Texas Property Tax Code. Grantee acknowledge and agree that this conveyance is expressly made without warranty.

This transaction is in full satisfaction of all taxes, penalties, interest, and costs that have accrued until the date hereof.

IN TESTIMONY WHEREOF, CITY OF LA PORTE, TRUSTEE, for the use and benefit of itself LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, STATE OF TEXAS and SAN JACINTO COMMUNITY COLLEGE DISTRICT has caused these presents to be executed this _____ day of _____ 2016.

CITY OF LA PORTE, TRUSTEE

LOUIS R. RIGBY, MAYOR,
CITY OF LA PORTE

ACCEPTED:

ENOC GUERRA

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared LOUIS R. RIGBY, Mayor, City of La Porte, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purposes and consideration therein expressed, in the capacity therein stated, and with the conditions and the limitations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2016.

NOTARY PUBLIC, in and for the
STATE OF TEXAS
My Commission Expires: _____

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared ENOC GUERRA, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purposes and consideration therein expressed, in the capacity therein stated, and with the conditions and the limitations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2016.

NOTARY PUBLIC, in and for the
STATE OF TEXAS
My Commission Expires: _____

After Recording
Return To: Enoc Guerra
 12422 Coming Dr
 Houston, TX 77089-6101

SUMMARY OF FORECLOSURE ACTIVITY

HCAD ACCOUNT NO:	024-087-015-0018	Property Struck off for:	Taxes
CAUSE NO:	2012-14670		+ Post Judgment Taxes
PLAINTIFF(S):	City of La Porte & La Porte Independent School District		
JUDGMENT AGAINST:	Cornlious Michell		
JUDGMENT DATE:	December 13, 2013	STRUCK OFF DATE:	June 3, 2014
ORDER OF SALE:	March 12, 2014		
DEED RECORDED DATE:	June 27, 2014	STRUCK OFF TO:	City of La Porte
CONSTABLE:	Phil Sandlin, Constable Precinct No 8		
PROPERTY ADDRESS:	0 West Main Street		
LEGAL DESCRIPTION:	Trs 18, 19 & 20 Block 715 Town of La Porte		
ADJUDGED VALUE (IN JUDGMENT):	\$ 20,248.00		
SQUARE FOOTAGE:	5,785		

SUMMARY OF SALE ACTIVITY

BIDDER:	Mark Domingue	BIDDER'S ADDRESS:	4903 Linden Street
AMOUNT OF BID:	\$15,100.00		Bellaire, TX 77401
AMOUNT OF DEPOSIT:	\$1,510.00		
AMOUNT DUE:	\$13,590.00	BIDDER'S PHONE NO:	281-470-2778

PRORATED PERCENTAGED OF TAXES DUE TO EACH JURISDICTION BASED UPON JUDGMENT

JUDGMENT TO	COUNTY, ET AL.	%	SCHOOL	%	CITY	%	TOTAL
AMOUNT DUE	\$2,535.59	20.11%	\$6,777.78	53.76%	\$3,294.05	26.13%	\$12,607.42

ASSOCIATED COSTS ON ORIGINAL AND SEALED BID SALES

AMOUNT OF BID	COURT COST	CONSTABLE/ PUBLICATION FEE (TISD)	AD LITEM FEE	RESEARCH FEE & DEED RECORDING FEE	ESTIMATED AMOUNT TO BE PRORATED TO TAXES
\$15,100.00	\$523.00	\$575.00	\$1,000.00	\$354.55	\$12,647.45

PRORATED TAX AMOUNTS TO EACH JURISDICTION

OWED TO	COUNTY	%	SCHOOL	%	CITY	%	TOTAL
PRORATED AMOUNT	\$2,543.64	20.11%	\$6,799.30	53.76%	\$3,304.51	26.13%	\$12,647.45

Amount of Bid:	\$15,100.00	
Costs:		
-District Clerk	\$523.00	
-Tax Master	\$0.00	
-Constable Fee	\$400.00	
-Publication	\$175.00	
-Abstract Fee	\$250.00	
-Cost	\$4.55	
-Advertising Fee/Deed Recording	\$100.00	
-Ad Litem Fee	\$1,000.00	Daejan-Elizabeth Crisby
Total:	\$12,647.45	

Taxing			
Jurisdictions:	Amount in Judgment:	%	Amount Received
City of La Porte	\$3,294.05	26.13%	\$3,304.51
La Porte ISD	\$6,777.78	53.76%	\$6,799.30
Harris County	\$2,535.59	20.11%	\$2,543.64
San Jacinto CCD	\$0.00	0.00%	\$0.00
State of Texas	\$0.00	0.00%	\$0.00
	<u>\$12,607.42</u>	100.00%	<u>\$12,647.45</u>

Costs + Taxes	\$15,059.97
Adjudged Value	\$ 20,248.00

AREA MAP P284



**LOCATION OF
PROPERTY
(024-087-015-0018)**

1 inch = 100 feet

Notice of confidentiality rights: If you are a natural person, you may remove or strike any of the following information from this instrument before it is filed for record in the public records: your social security number or your driver's license number
(Language pursuant section 11.008 of the Texas Property Code)

THE STATE OF TEXAS

§

TAX RESALE DEED

COUNTY OF HARRIS

§

§

KNOW ALL MEN BY THESE PRESENTS that the CITY OF LA PORTE, TRUSTEE, for the use and benefit of itself, the, LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY EDUCATION DISTRICT (LA PORTE – HCED), HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, and SAN JACINTO COMMUNITY COLLEGE DISTRICT, acting by and through its duly elected officials (“GRANTOR”) as authorized by Section 34.05, Texas Property Tax Code, for and in consideration of the sum of TEN DOLLARS AND 00/100 (\$10.00) AND OTHER GOOD AND VALUABLE CONSIDERATION, in hand paid by MARK DOMINGUE (“GRANTEE”) the receipt of which is hereby acknowledged and confessed, has conveyed and quitclaimed and by these presents do convey and quitclaim unto said Grantees all right, title and interest of the CITY OF LA PORTE, LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY EDUCATION DISTRICT (LA PORTE – HCED), HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, and SAN JACINTO COMMUNITY COLLEGE DISTRICT in the property herein conveyed, acquired by tax foreclosure sale heretofore held, in Cause No. 2012-14670, styled *La Porte Independent ISD vs. Cornelious Michell, Deceased* said property being described as:

TRACT 21: LOTS NO. EIGHTEEN (18), NINETEEN (19) AND TWENTY (20), IN BLOCK NO. SEVEN HUNDRED FIFTEEN (715), TOWN OF LA PORTE, IN HARRIS COUNTY, TEXAS ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN THE OFFICE OF THE COUNTY CLERK OF SAID COUNTY, TO WHICH REFERENCE IS HERE MADE FOR ALL PURPOSES, SAVE AND EXCEPT THE PORTIONS THEREOF DEDICATED FOR ROADWAYS. (ACCOUNT NUMBER 0240870150018)

This conveyance is made and accepted subject to the following matters to the extent that the same are in effect at this time: any and all rights of redemption, restrictions, covenants, conditions, easements, encumbrances and outstanding mineral interests, if any, relating to the hereinabove described property, but only to the extent they are still in effect, shown of record in the hereinabove mentioned County and State, and to all zoning laws, regulations and ordinances of municipal and/or other governmental authorities, if any but only to the extent that they are still in effect, relating to the hereinabove described property.

TO HAVE AND TO HOLD said premises, together with all and singular the rights, privileges and appurtenances thereto in any manner belonging unto the said MARK DOMINGUE, his heirs and assigns forever, so that neither the CITY OF LA PORTE, LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY EDUCATION DISTRICT (LA PORTE – HCED), HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, and SAN JACINTO COMMUNITY COLLEGE DISTRICT nor any person claiming under it shall at any time hereafter have, claim or demand any right or title to the aforesaid premises or appurtenances, or any part thereof.

Grantee accepts the property in "AS IS, WHERE IS" condition and subject to any environmental conditions that might have or still exist on said property, and subject to any title defects and deficiencies, and subject to the right of redemption, if any, provided under the Texas Property Tax Code. Grantee acknowledge and agree that this conveyance is expressly made without warranty.

This transaction is in full satisfaction of all taxes, penalties, interest, and costs that have accrued until the date hereof.

IN TESTIMONY WHEREOF, CITY OF LA PORTE, TRUSTEE, for the use and benefit of itself LA PORTE INDEPENDENT SCHOOL DISTRICT, HARRIS COUNTY EDUCATION DISTRICT (LA PORTE – HCED), HARRIS COUNTY, HARRIS COUNTY EDUCATION DEPARTMENT, PORT OF HOUSTON OF HARRIS COUNTY AUTHORITY, HARRIS COUNTY FLOOD CONTROL DISTRICT, THE HARRIS COUNTY HOSPITAL DISTRICT, and SAN JACINTO COMMUNITY COLLEGE DISTRICT has caused these presents to be executed this _____ day of _____ 2016.

CITY OF LA PORTE, TRUSTEE

LOUIS R. RIGBY, MAYOR,
CITY OF LA PORTE

ACCEPTED:

MARK DOMINGUE

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared LOUIS R. RIGBY, Mayor, City of La Porte, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purposes and consideration therein expressed, in the capacity therein stated, and with the conditions and the limitations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2016.

NOTARY PUBLIC, in and for the
STATE OF TEXAS
My Commission Expires: _____

THE STATE OF TEXAS §
 §
COUNTY OF HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared MARK DOMINGUE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purposes and consideration therein expressed, in the capacity therein stated, and with the conditions and the limitations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2016.

NOTARY PUBLIC, in and for the
STATE OF TEXAS
My Commission Expires: _____

After Recording
Return To: Mark Domingue
 4903 Linden St
 Bellaire, TX 77401

Resale P284

REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested: _____ Requested By: <u>Rene Valdez</u> Department: <u>Administration</u> Report: _____ Resolution: _____ Ordinance: _____	<u>Budget</u> Source of Funds: <u>Technology Fund</u> Account Number: <u>Refer Project Funds</u> Amount Budgeted: <u>\$684,357.26</u> Amount Requested: <u>\$680,002.05</u> Budgeted Item: YES NO
<hr/> Exhibits <u>DataVox, Inc. SOW's (attached)</u>	

SUMMARY & RECOMMENDATION

On May 9, 2016, City Council passed the proposal to upgrade the City's technology infrastructure.

These improvements included improvements to the Police Department datacenter electrical and cooling systems, refresh the server farm, upgrade to existing switching and routing hardware, an upgrade to the existing Voice over IP (VoIP) telephone system, an offsite disaster recovery (DR) system, and an upgrade to the wide area network communication links. Due to the fact that each of the budgeted projects is related to the others, staff requested DataVox to develop a comprehensive project to address all of these needs. This project uses Texas Department of Information Resources contracts. Staff recommended approval of the contract with Datavox in the amount of \$647,621 and a 5% project contingency amount (\$32,381) for a total project budget of \$680,002. Council took action on and passed all except the Power and Cooling portion due to Council questions regarding the price for this component. Staff was directed to revisit this part of the project to determine options.

With further review, Information Technology (IT) discovered that all information pertaining to the power and cooling project quotation was not presented during the May 9th City Council meeting. It was discovered that the equipment costs were not included and only the installation was included in the Council packet at the May meeting. When taking the equipment cost into account, the total cost of the project increased from \$92,425.00 to \$177,278.27. The total amount omitted was \$84,853.27. IT has worked with Datavox to redesign the deliverables for the power and cooling project.

The power and cooling component, as presented tonight, includes an increase in the tonnage for the air conditioning units and a full redesign of the duct work and venting. Instead of venting to the exterior of the building as originally proposed, the new design vents the warm air into the building plenum. The redesigned project can be installed at a lower cost than the proposal originally proposed - \$86,701.68 instead of \$92,425.00.

Staff not only reviewed the project design, but informal quotes were sought from another vendor to identify if the pricing quoted by Datavox and the DIR contract were competitive. The costs

quoted by the other vendor were significantly higher than the cost included in the proposal under consideration now.

Staff recommends approval of the power and cooling proposal in the amount of \$86,701.68.

Action Required by Council:

Consider approval or other action of technology infrastructure project as proposed.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

APC UPC, AC and Rack

Scope of Work

Prepared for: City of La Porte.

Presented on: 5/24/2016

Version 1.0

Quote Number OP42990



City of La Porte. APC UPC, AC and Rack SOW

Revision History

Revision	Date	Name	Description of Change
1.0	5/18/2016	Kyle Sandoval	Initial draft

City of La Porte. APC UPC, AC and Rack SOW

Acceptance of Scope of Work

The use of signatures on this Scope of Work is to ensure agreement by City of La Porte. on project objectives and the work to be performed by DataVox.

Parties to Agreement

This Scope of Work (SOW) is made and entered into between DataVox, Inc., 6650 West Sam Houston Parkway South, Houston, Texas 77072 ("DataVox") and City of La Porte. , 3001 N 23rd St, La Porte, TX 77571("Customer"), as of the date listed on the title page of this document.

Terms

When (but only when) signed by Customer and an authorized representative of DataVox this shall be a binding, legal contract.

The prices, specifications, and conditions in this SOW are satisfactory, and are hereby accepted in their entirety. Customer hereby agrees to purchase the Equipment and authorizes DataVox to do the work, and provide the materials specified, and payment will be made as outlined in the Payment section of this document. The price quoted in this SOW is based upon the Equipment included in the attached Bill of Material. Any changes in the Equipment or installation may result in a change in the price. Any such change must be in writing, and signed by all parties.

DataVox reserves the right to modify payment terms at any time based on a review of the Customer's credit.

THIS AGREEMENT, WHEN SIGNED BY BOTH PARTIES (BELOW), SHALL BE GOVERNED BY THE TERMS AND CONDITIONS SET FORTH IN SECTION 5.0 . THE AGREEMENT IS INCORPORATED BY REFERENCE AS IF FULLY SET FORTH HEREIN. THERE ARE NO OTHER AGREEMENTS, OR WARRANTIES, ORAL OR WRITTEN, EXCEPT AS EXPRESSLY STATED IN THIS DOCUMENT. THIS AGREEMENT CANNOT BE MODIFIED EXCEPT IN WRITING AND SIGNED BY BOTH PARTIES.

Customer acknowledges having read and understood all of the terms and conditions specified in this SOW and acknowledges receipt of a complete executed copy of this SOW. Customer understands and agrees that this SOW and all of the terms and conditions hereof shall be a binding, enforceable contract when signed by Customer and by an authorized representative of DataVox.

Approval Signatures

IN WITNESS WHEREOF, the duly authorized representatives of the parties hereto have caused this SOW to be duly executed.



OP42990

City of La Porte. APC UPC, AC and Rack SOW

DataVox, Inc.

City of La Porte.

By: _____
(Signature)

By: _____
(Signature)

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Date: _____ Technical validation provided by _____

Quote file name: _____

City of La Porte. APC UPC, AC and Rack SOW

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City of La Porte. APC UPC, AC and Rack SOW

1.0 Executive Summary

This Scope of Work (SOW) defines the services that DataVox will provide City of La Porte. and the pricing for these services.

1.1 DataVox Assumptions

This section lists project assumptions.

- Pricing in this scope of work is based on work being performed during normal business hours, Monday through Friday, 7:00AM through 3:30PM.
- Price Does Not include any cabling services other than what is outlined in this SOW.

1.2 Primary Project Contacts

The table lists the primary DataVox and City of La Porte. contacts for this project.

DataVox		City of La Porte.	
Name/Role	Contact Information	Name/Role	Contact Information
Steve Weber / Account Manager	Phone: 713.881.7140 Email: steve@datavox.net	TBD	Phone: Email:

2.0 In Scope Services

This section lists the in-scope services that DataVox will provide City of La Porte.

2.1 Equipment Cabinet Hardware

This section describes the Equipment Cabinet hardware that DataVox will provide and install.

Provide and install:

- (2), AR3357, NetShelter SX 48U 750mm Wide x 1200mm Deep Enclosure
- (4), AP8861, Rack PDU 2G, Metered, ZeroU, 5.7kW, 208V, (36) C13 & (6) C19 & 5-20
- (1), AR8165ABLK, Cable Ladder 12" (30cm) Wide w/ Ladder Attachment Kit (AR8166ABLK)
- (1), AR8560, Cable Trough, Open Bottom, 600mm
- (3), AR8571, Cable Trough, 750mm

Sub-Total

\$7,098.84

City of La Porte. APC UPC, AC and Rack SOW

2.2 UPS and PDU Hardware

This section describes the PDU hardware that DataVox will provide and install.

Provide and install:

- (1), ISX-20KF208V, 20kW UPS w/ Bypass and Distribution
- (1), ISX-20KF, BASE UPS W DistributionISX-20KF BASE UPS W DISTR
- (1), 0G-SY20KF, GENERIC ASSY SYM 20KVA 3PH 208V W/DIST
- (1), DISTRIBUTION BREAKERS 120V, TYPE & AMP OF DISTRIBUTION CKT BRKS
- (6), 0M-4264,3-POLE, 20A BOLT-ON SQUARE D BREAKER
- (21), 0M-0218, S/A BLANK PNL 1P CKTBRK NAM PSX-PDU
- (1), DISTRIBUTION CORDSETS 120V, OVERHEAD DISTRIBUTION CORDSETS
- (2), 0M-5350-005, TC 5WIRE W/L21-20 5 FOOT
- (2), 0M-5350-009, TC 5WIRE W/L21-20 9FOOT
- (2), 0M-5350-011, TC 5WIRE W/L21-20 11FOOT
- (1), ISX-20KF OPTIONS & ACCESSORIES, ISX-20KF OPTIONS & ACCESSORIES
- (1), 0M-5011, ASSY ISX-20KF FINAL ITEMS
- (2), SYPM10KF2, Symmetra PX 10kW Power Module, 208V, High Efficiency
- (3), SYBT4, Battery Module for Symmetra PX, Smart-UPS VT or Galaxy 3500

Sub-Total

\$28,545.48

2.3 APC In-Row Self Contained Air Conditioner

This section describes the APC AC hardware that DataVox will provide and install.

Provide and Install:

- (3), ACSC100, In-Row SC, 300mm, Air Cooled, Self-contained 200-240V 60Hz
- (3), ACAC10007, In-Row Roof Height Adapter, SX42U to SX48U 300 MM
- (1), ACDC2517, Roof Height Adapter, VX42U to SX48U, 600mm

Sub-Total

\$19,234.80

City of La Porte. APC UPC, AC and Rack SOW

2.4 APC Assembly, Startup Services & Warranty, Electrical & Mechanical Services

This section describes the APC services that DataVox will provide.

- (1), WSITECOORD, Site Coordination Service
- (1), WSTRUP-PX-21, Start-Up Service 5X8 for (1) Symmetra 40kW UPS and/or (1) PDU
- (1), WUPGSTRUP7-UG-01, Scheduling Upgrade to 7X24 for Existing Startup Service for up to 40 kVA UPS or Battery Frame
- (1), WASSEMUPS5X8-PX-21, Scheduled 5X8 Assembly Service for Symmetra PX 40 kW UPS and/or PDU
- (1), WASSEM5X8-5R-PX-20,5X8 Scheduled Assembly Service for 1-5 Racks
- (2), WUPGASSEM7-UG-01, Scheduling Upgrade to 7X24 for Existing Assembly Service for up to 40 kVA UPS or Battery Frame
- (1), WUPG8HR7X24-UG-01, 1 Year 8HR 7X24 Response Upgrade to Factory Warranty or Existing Service Contract for up to 40 kVA
- Provide new electrical services from existing gray-space at north side of La Porte Police Department building into the existing server room located near the south side of the building.
- Provide condensate drain lines from three (3) new in-row self-contained air conditioners to sewer drain line in call-center break room

Sub-Total

\$31,822.56

3.0 Baseline Responsibilities

This section provides a general list of DataVox and Customer responsibilities that are common to many services described in this SOW.

3.1 DataVox Responsibilities

This section lists DataVox responsibilities per this SOW.

- Coordinate with electrical and mechanical/plumbing contractors for installation of all APC hardware
- Installation of any cabling will comply with the Building Industry Consulting Services International (BICSI) standards
- Coordinate labeling scheme with the Customer
- Label all APC hardware with a mechanically generated labeling device

3.2 Customer Responsibilities

This section lists the Customer responsibilities per this SOW.

- Sign off on this SOW prior to installation of equipment
- Will not require work that is in conflict with any existing agreements with other trades or labor unions
- Provide DataVox personnel with access, keys, and/or escorts to perform the work in a timely and cost effective manner.
- Appoint a representative to act as a single point of contact for the DataVox onsite foreman or personnel. The Customer representative will have the authority to execute written change-orders upon mutual agreement of both parties.
- Provide space for receipt of project equipment at installation sites.
- Security of project equipment after it is delivered to the customer's site
- Provide adequate workspace for the DataVox project team while they are onsite at the Customer's facility

City of La Porte. APC UPC, AC and Rack SOW

- Pay a 25% restocking fee on all returned items

4.0 Payment

This is a fixed price contract based on the criteria and assumptions in this scope of work. This price (*cost excludes sales tax*) covers all hardware as well as electrical, mechanical, and plumbing services required to complete this solution.

Total Contract Price: **\$86,701.68**

5.0 Terms and Conditions

The *DataVox Standard Terms and Conditions* shall govern the execution of this scope of work.

http://www.datavox.net/DataVox_Standard_Terms_and_Conditions.pdf

REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested: June 13, 2016 Appropriation
Requested By: Michael Dolby Source of Funds: N/A
Department: Finance Account Number:
Report: Resolution: Ordinance: Amount Budgeted:
Other: Amount Requested:
Budgeted Item: YES NO

Attachments :

1. Spreadsheet
2. Contract
3. PowerPoint

SUMMARY & RECOMMENDATIONS

The City's Revenue Manager is retiring effective September 6, 2016. Due to the impending retirement, staff feels the best course of action for the City is to outsource tax collections to a consortium that will provide the City with a satellite office. Based upon current pricing for this service, the City will save approximately \$211,232 dollars over the next three years. The cost for collections is based on \$3.40 per account charge. The City has 17,056 accounts, which calculates to a total cost of \$57,990.40. ($\$3.40 \times 17,056 = \$57,990.40$)

In addition to the upcoming retirement and cost savings, a few other factors have influenced staff's recommendation to outsource collections. First, the current software that the City is using cannot handle new regulations that have been enacted over the last several years. This requires staff to utilize spreadsheets to complete calculations regarding over 65 exemptions. The One Solution software package currently has no plans to develop a tax application. Secondly, participating in a consortium would allow for greater efficiencies of the billing and collection functions. Details of the process are outlined in the attached PowerPoint presentation.

La Porte citizens will still be able to make tax payments at City Hall and receive answers to inquiries. Furthermore, if La Porte citizens need to sign up for a payment plan, they can do so at Goose Creek ISD. Ms. Piggot with Goose Creek Independent School District Tax Office will be present to answer any questions and provide information on how the process would work. Ms. Piggot has over thirty years of experience as a registered tax assessor collector.

Should the Council desire to move forward with outsourced tax collections, staff recommends approval of the attached inter-local agreement. The initial term of the agreement is a three year term with one year renewals thereafter. Fees may not be increased during the initial year; after that, the charges may not increase more than \$0.10 per year and not more than \$0.25 over a three-year period. Each party agrees to a 180 day termination agreement. Goose Creek ISD will contract to provide daily deposits of the City's tax collections during the peak season, and will provide off-season deposits as collections reach \$10,000.

Action Required of Council:

Consider approval or other action authorizing the Mayor to execute an inter-local agreement with Goose Creek ISD for collection of property taxes.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

**Estimated Savings Associated with Outsourcing Tax Services to Goose Creek ISD
3 Year Projection**

	Year 1	Year 2	Year 3
<i>Revenue Collections Manager</i>			
Salary	85,885.54	88,462.11	91,115.97
Benefits	30,974.41	31,590.98	32,226.05
Memberships & Training	2,280.00	2,280.00	2,280.00
<i>Printing & Postage</i>	11,000.00	11,000.00	11,000.00
<i>Software</i>	325.00	325.00	325.00
<i>Resale Maintenance</i>	250.00	250.00	250.00
Total Budget Reduction	130,714.95	133,908.09	137,197.02
GCISD Costs for Collections	(57,990.40)	(59,696.00)	(61,401.60)
One-time Set-up Fee	(7,000.00)		
Annual Cash Bonding Fee	(1,500.00)	(1,500.00)	(1,500.00)
Estimated Net Savings	64,224.55	72,712.09	74,295.42
Cumulative Savings for 3 Year Period			211,232.06

STATE OF TEXAS

COUNTY OF HARRIS

INTERLOCAL CONTRACT FOR PROPERTY TAX COLLECTION SERVICES

On this the 13th day of June, 2016, Goose Creek Consolidated Independent School District, located in Harris and Chambers Counties, Texas, hereafter called the "SCHOOL DISTRICT," and City of La Porte, Texas, located in Harris County, Texas, hereinafter called the "TAXING UNIT," enter into the following agreement pursuant to the authority granted by Sections 6.23 and 6.24 of the Texas Tax Code and Chapter 791 of the Texas Government Code.

WITNESSETH

WHEREAS, the SCHOOL DISTRICT and the TAXING UNIT are local political subdivisions established and existing under the constitution and laws of the State of Texas and are governed by duly elected boards or councils who are authorized to enter into interlocal agreements; and

WHEREAS, the TAXING UNIT and the SCHOOL DISTRICT, the parties to this agreement, wish to consolidate the assessment and collection of property taxes under one agency, the SCHOOL DISTRICT, and the parties enter into this Interlocal Contract for Property Tax Collection Services (this "Agreement") to eliminate duplication of the existing systems and to promote governmental efficiency and economy;

NOW THEREFORE, the parties do hereby agree as follows:

I.
TERM

2.01 The initial term of this Agreement shall be from September 1, 2016 through August 31, 2019 ("Primary Term"), and shall automatically renew thereafter for successive one (1) year terms, commencing on September 1st of each year of the applicable one (1) year renewal term ("Renewal Term"), unless the cancelling party gives notice of its intention to not renew the Agreement to the other party at least one hundred and eighty (180) days before the end of the Primary Term or a Renewal term, as the case may be.

2.02 Either party may terminate this Agreement without cause, but in such event notice of termination must be provided at least one hundred and eighty (180) days before August 31st of the then current contract year. Such notice shall be in writing and directed to the presiding officer of the governing body of the other party. Such termination shall be effective at the end of the contract year (August 31) in which such notice is provided. Upon the effective date of termination, the TAXING UNIT shall be liable for the remaining payments due to SCHOOL DISTRICT for services provided in the contract year that concludes at the date of termination and the SCHOOL DISTRICT shall be responsible for providing the services

required under this Agreement until such termination date. Upon termination, the SCHOOL DISTRICT shall provide to the TAXING UNIT without charge copies of the TAXING UNIT's current and delinquent tax records in a tab delineated flat file format and other formats, as designated by the TAXING UNIT and approved by SCHOOL DISTRICT.

II. SERVICES TO BE PERFORMED

2.01 The SCHOOL DISTRICT agrees to assess and collect the property taxes owing to the TAXING UNIT.

2.02 For each contract year that this Agreement is in effect, the SCHOOL DISTRICT shall perform all responsibilities required by law of the TAXING UNIT's Tax Assessor and Collector, including, but not limited to, the following: submission of the tax appraisal roll to the governing body of the TAXING UNIT; calculation of tax; preparation of current and delinquent tax rolls; proration of taxes; correction of tax rolls; collection of current and delinquent tax rolls; issuance of tax refunds; issuance of tax certificates; remittance of funds collected to the TAXING UNIT's depository; assist the TAXING UNIT in matters dealing with the tax roll and the Central Appraisal District, and furnish the TAXING UNIT collection reports as required by law as well as other reports required by the TAXING UNIT, including, but not limited to, reports concerning assessed values, corrections/supplements, collections, delinquent accounts, and top ten taxpayers.

2.03 The SCHOOL DISTRICT agrees to prepare current and delinquent tax statements, individual or consolidated, for each taxpayer within the TAXING UNIT's jurisdiction beginning with the 2016 tax statements. The SCHOOL DISTRICT shall mail said tax statements to each taxpayer or authorized agent for property within the TAXING UNIT in accordance with the Texas Property Tax Code.

2.04 The SCHOOL DISTRICT on behalf of the TAXING UNIT shall receive information from the Harris County Appraisal District for the purposes of the certified appraisal roll and monthly changes thereto and provide tax roll and payment data to mortgage companies, property owners and tax representatives.

2.05 The SCHOOL DISTRICT shall be responsible for preparing and publishing all notices that are required for setting the TAXING UNIT's tax rate unless TAXING UNIT notifies SCHOOL DISTRICT in writing to the contrary. The TAXING UNIT expressly agrees to set and deliver notice of its tax rate to the SCHOOL DISTRICT within sixty (60) days of receipt of certified roll delivery provided by the Harris County Appraisal District.

2.06 The TAXING UNIT hereby designates the Tax Assessor-Collector of the SCHOOL DISTRICT as the person responsible for calculating the effective and rollback tax rates for the TAXING UNIT as required by Section 26.04 of the Texas Tax Code. The TAXING UNIT shall provide the SCHOOL DISTRICT with the amount needed to pay principal and interest on

debt and the amount needed to pay any contractual obligations for debt issued by the TAXING UNIT on behalf of another political subdivision, which amounts are required by law for calculation of the effective tax rate. The TAXING UNIT shall also furnish the SCHOOL DISTRICT with the estimated fund balances required to be published with the effective tax rate.

2.07 The SCHOOL DISTRICT shall at all times maintain the TAXING UNIT's tax roll on an appropriate computer system in the same manner and form as the SCHOOL DISTRICT's tax roll is maintained. The SCHOOL DISTRICT shall, at the TAXING UNIT's option, provide the TAXING UNIT's collection attorney's data at the TAXING UNIT's collection attorney's expense.

2.08 The SCHOOL DISTRICT shall provide values of all land and all other tangible property, real, personal or mixed, in TAXING UNIT.

2.09 The SCHOOL DISTRICT shall train designated employee of City of La Porte to collect taxes at the TAXING UNIT Administration Building, 604 W. Fairmont Parkway, La Porte, Texas. The SCHOOL DISTRICT shall also provide TAXING UNIT with access to SCHOOL DISTRICT'S tax collection software and equipment, as necessary, to allow both parties to perform under the terms of this Agreement.

2.10 The SCHOOL DISTRICT shall provide secure connection to the TAXING UNIT at the TAXING UNIT location.

III. REMITTANCE OF FUNDS COLLECTED

3.01 The SCHOOL DISTRICT agrees to receive and post on a timely basis all tax payments, depositing such in the TAXING UNIT's depository in accordance with this article. TAXING UNIT agrees to receive and post on a timely basis all tax payments received at TAXING UNIT location and in accordance with procedures designated by SCHOOL DISTRICT.

3.02 The SCHOOL DISTRICT agrees to electronically transfer to TAXING UNIT the taxes, penalties and interest collected by deposit into a depository selected by TAXING UNIT. Such payments shall be made when a total of \$10,000.00 is collected, but not more often than once a day or less often than once a week during the entire collection year. A report of each deposit will be completed to show the amount and distribution of monies deposited. This report will be forwarded to TAXING UNIT with each electronic deposit transfer to TAXING UNIT.

IV. BOND

The SCHOOL DISTRICT shall maintain a bond conditioned on the faithful performance of its duties as Assessor and Collector of the TAXING UNIT. TAXING UNIT

agrees to maintain a bond conditioned on the faithful performance of their assigned employee, for its duties as a Tax Collection Clerk.

V. ACCOUNTING

5.01 The SCHOOL DISTRICT shall provide a monthly and annual accounting of all funds collected and payments received from the TAXING UNIT. A copy of the accounting report shall be provided to the

TAXING UNIT at no additional cost. TAXING UNIT will provide accounting report of all funds collected each business day at the TAXING UNIT location by assigned employee in format designated by SCHOOL DISTRICT at no additional cost.

5.02 The SCHOOL DISTRICT shall make available to the TAXING UNIT all records of funds collected and payments received from the TAXING UNIT. Such records shall be made available to the TAXING UNIT or its auditor upon request at no additional charge.

5.03 The SCHOOL DISTRICT shall provide and make available to the TAXING UNIT all records which relate in any way to the initial one-time set-up fee assessed in Section 6.01 and any increase in the per account charge as authorized by Section 6.03. A copy of the records shall be provided to the TAXING UNIT at no additional cost.

VI. PAYMENT

6.01 In consideration of the services to be provided to the TAXING UNIT by the SCHOOL DISTRICT pursuant to this Agreement, the TAXING UNIT will pay the SCHOOL DISTRICT:

- a. a one-time initial branch set up fee based upon the set-up costs actually incurred by the SCHOOL DISTRICT to perform services required in this Agreement SCHOOL DISTRICT will provide TAXING UNIT with a detailed accounting of all set-up costs; and, a one-time software conversion fee of \$7,000;
- b. during each contract year THREE DOLLARS AND 40/100 CENTS (\$3.40) per annum per TAXING UNIT property account which is within the current boundaries of the TAXING UNIT or any future account(s) which is within the boundaries of the TAXING UNIT, which amount the parties agree does not exceed the SCHOOL DISTRICT's actual cost incurred in performing the services required under this Agreement.

6.02 The SCHOOL DISTRICT shall have the option of increasing the per property account charge established in Section 6.01(b) above, no more than one time during any contract year (other than in the first year of the Primary Term, when SCHOOL DISTRICT shall not have the option of increasing the per property account charge), that the SCHOOL DISTRICT and the TAXING UNIT have contracted for tax collections services under the terms of this Agreement if

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the costs of collection increase, provided that at all times during the term of this Agreement, (i) the per property account charge shall never exceed the SCHOOL DISTRICT's actual cost incurred in performing the services required under this Agreement, and (ii) the per property account charge shall never increase more than \$0.10 per year and not more than \$0.25 over a three-year period.

6.03 In the event such collection costs increase, the SCHOOL DISTRICT shall furnish the TAXING UNIT the calculations reflecting such increases at least thirty (30) days prior to June 1 in the contract year in which such increases are to take effect.

6.04 The payments for services rendered by the SCHOOL DISTRICT under this Agreement shall be billed to the TAXING UNIT annually at the tax year-end. The TAXING UNIT agrees to pay for such services within thirty (30) days of receipt of such billing nonpayment will result in applicable interest being charged as allowed by law.

6.05 Further, if the TAXING UNIT does not have sufficient sums of money in its collected tax account at the SCHOOL DISTRICT to cover its share of taxes refunded, TAXING UNIT agrees to reimburse the SCHOOL DISTRICT for the TAXING UNIT's share of the tax refunds within thirty (30) days of receipt of a notice this such refund has been paid.

6.06 Pursuant to Section 791.011 of the Texas Government Code, the TAXING UNIT shall pay all sums required herein from its then current revenues.

VII. ADMINISTRATIVE PROVISIONS

7.01 The SCHOOL DISTRICT shall retain all fees charged for the issuance of tax certificates and other charges made by the SCHOOL DISTRICT for collection of taxes. All such fees and charges shall not exceed the actual cost of the service provided and shall not exceed the charge assessed by the SCHOOL DISTRICT for the same services to its taxpayers.

7.02 The TAXING UNIT may authorize the SCHOOL DISTRICT to contract with an attorney or law firm recommended by the SCHOOL DISTRICT for the collection of delinquent taxes due the TAXING UNIT or may retain its own attorney or law firm for the collection of delinquent taxes due the TAXING UNIT. The SCHOOL DISTRICT is authorized to forward from the funds collected under this Agreement, all sums payable to the TAXING UNIT's collection attorney or law firm for the collection of the TAXING UNIT's delinquent taxes.

7.03 The TAXING UNIT shall provide to the SCHOOL DISTRICT, without charge, copies of all records necessary for performance by the SCHOOL DISTRICT under this Agreement, including, but not limited to, hard copies and computer files (if available) containing all current and delinquent tax records for the TAXING UNIT. Such records shall be kept in accordance with all applicable record retention policies.

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VIII. MISCELLANEOUS PROVISIONS

8.01 This instrument contains the entire Agreement between the parties relating to the rights hereunder granted and the obligations herein assumed. Any oral representation or modifications concerning this Agreement shall be of no force or effect, excepting a subsequent modification in writing signed by all parties hereto.

8.02 The SCHOOL DISTRICT and the TAXING UNIT shall comply with all rules, regulations, and laws of the United States of America, the State of Texas, and all laws, policies, regulations, and ordinances of the TAXING UNIT, and SCHOOL DISTRICT as they now exist or may hereafter be enacted or amended.

8.03 Except as otherwise provided herein, all notices required to be given hereunder shall be given in writing either by electronic mail, overnight, or facsimile transmission, certified or registered mail at the respective addresses of the parties set forth herein or at such other address as may be designated in writing by either party. Notice given by mail shall be deemed received five (5) days after the date of mailing thereof to the following addresses:

DISTRICT
Goose Creek Consolidated Independent School District
Attn: Superintendent
P. O. Box 30
Baytown, TX 77522
Fax No. (281) 420-4854

TAX ENTITY
City of La Porte, Texas
Attn: City Manager
604 E. Fairmont Parkway
La Porte, TX 77571
Fax No. (281) 842-1259

8.04 Failure of either party hereto to insist on the strict performance of any of the agreements herein or to exercise any rights or remedies accruing thereunder upon default or failure of performance shall not be considered a waiver of the right to insist on and to enforce by an appropriate remedy, strict compliance with any other obligation hereunder to exercise any right or remedy occurring as a result of any future default or failure of performance. The rights and remedies contained in this Agreement shall not be exclusive but shall be cumulative of all other rights and remedies, now or hereinafter existing, whether by statute, at law, or in equity; provided that the parties shall not terminate this Agreement except in accordance with the provisions hereof.

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8.05 This Agreement shall in all respects be interpreted and construed in accordance with and governed by the laws of the State of Texas. The place of making and the place of performance for all purposes shall be Baytown, Harris County, Texas, venue for any legal proceeding relating to this Agreement shall be in Harris County, Texas.

8.06 All parties agree that should any provision of this Agreement be determined to be invalid or unenforceable, such determination shall not affect any other term of this Agreement, which shall continue in full force and effect.

8.07 This Agreement shall not bestow any rights upon any third party, but rather, shall bind and benefit the SCHOOL DISTRICT and the TAXING UNIT only.

8.08 The article and section headings are used in this Agreement for convenience and reference purposes only and are not intended to define, limit or describe the scope or intent of any provision of this Agreement and shall have no meaning or effect upon its interpretation.

8.09 In the event of any ambiguity in any of the terms of this Agreement, it shall not be construed for or against any party hereto on the basis that such party did or did not author the same.

8.10 The parties acknowledge that they have read, understand and intend to be bound by the terms and conditions of this Agreement.

8.11 The officers executing this Agreement on behalf of the parties hereby represent that such officers have full authority to execute this Agreement and to bind the party he/she represents.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in multiple copies, each of which shall be deemed to be an original, but all of which shall constitute but one and the same Agreement on this 13th day of June, 2016, the date of execution by the Mayor of City of La Porte.

GOOSE CREEK CONSOLIDATED
INDEPENDENT SCHOOL DISTRICT

CITY OF LA PORTE, TEXAS

Board President

Mayor

ATTEST

Board Secretary

City Clerk

GC TAX SERVICES

Tax Assessor/Collector

Charlene Piggott



OUR MISSION STATEMENT

A shared service arrangement that provides savings to the governmental tax entities we serve as well as our District with excellence in our processes, efficiencies, and public service both to our governmental tax entities and the taxpayer.

- ▶ **We currently provide services to:**

- ▶ Municipal
- ▶ Junior College
- ▶ Public School Districts

- ▶ We operate as a true interlocal shared service arrangement for the purpose and focus to **reduce same service costs.**

Through shared service arrangements - **duplication of costs do not occur** and this allows for a steady low cost to each entity for this service function.

WE HAVE MORE THAN 30 YEARS
EXPERIENCE DOING MULTI-JURISDICTION
COLLECTIONS



OPERATION PROCESSES – WHY ARE WE DIFFERENT?

- **Automated OCR/Electronic Post/Scan/Depository**
- **Branch Service Options**
- **Governmental Analysis and Reporting**
- **Speed of Funds Distribution**

- ❖ **Spindlemedia Inc., (1994) Tax Program** - currently provides services to over 1000 tax entities across the State of Texas on a Microsoft program platform.
- ❖ **RT Lawrence - OCR/Post/Electronic Depository**
Processes and website credit card services
- ❖ **J P Morgan Chase** Depository, and Smart Safe solutions
- ❖ **Official Payments** – Phone pay/bilingual translation services provided for credit/electronic check

OUR SERVICE DELIVERY PARTNERS

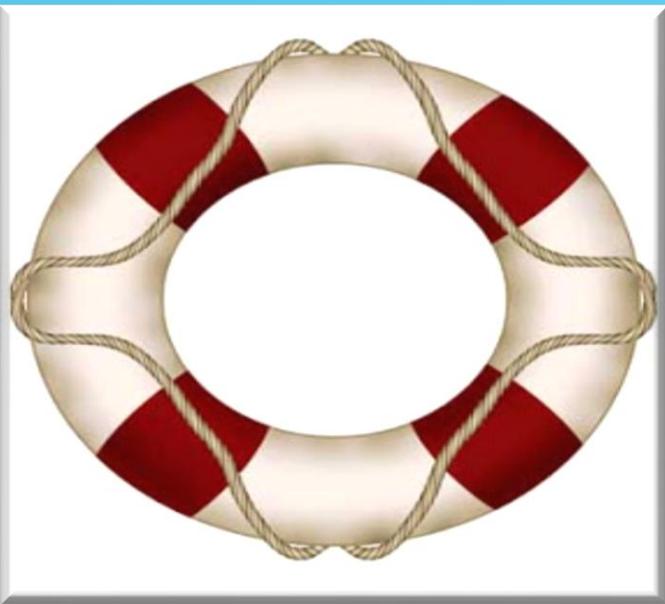
Taxpayer Services

- ▶ **Local branch service** at your location if requested
- ▶ **Multiple payment drop box locations**
- ▶ **Pay by website**/review account information
- ▶ **Pay by phone** (bilingual services provided)
- ▶ **Pay in person**
- ▶ **Pay by Mail**

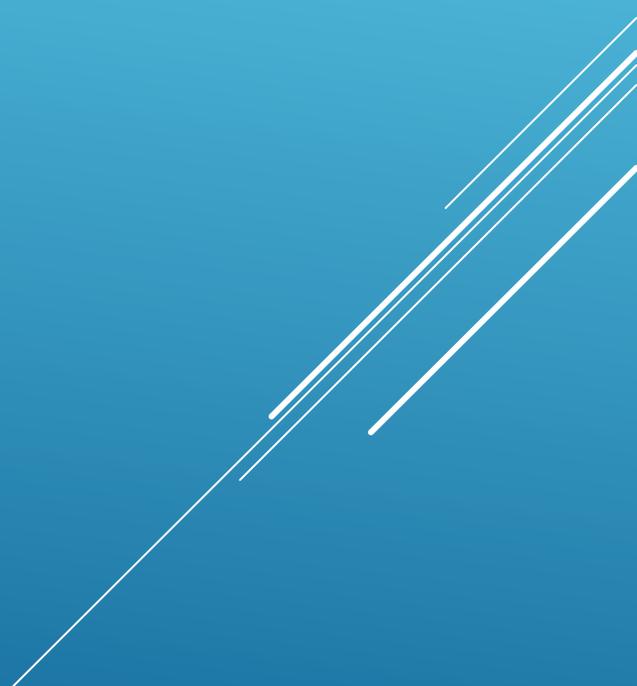
Follow Up Services

- ▶ **All billing activity is time stamped** and logged by taxpayer account reflecting type of action and detail of item
- ▶ **Return mail program** provides forwarding is logged into taxpayer account, postal service delivery information of return is noted in detail – this enhances collections and litigation services for your law firm
- ▶ **Electronic scan library of all processes** including the post mark on the envelope if the amount paid is incorrect for the payment period.

WHAT ARE YOUR SERVICE OPTIONS?



QUESTIONS?



REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested: June 13, 2016 Appropriation
Requested By: Traci E. Leach Source of Funds: Hotel/Motel
Department: Administration Account Number: _____
Report: Resolution: Ordinance: Amount Budgeted: \$250,000.00
Other: Amount Requested: \$288,925.00
Attachments : Budgeted Item: YES NO

1. Contract

SUMMARY & RECOMMENDATIONS

The centerpiece of many of the proposed events for the 125th Anniversary Celebration will be musical entertainment. Staff is working with Mark Taylor, owner of the Brock Agency, Inc. and a producer with over 40 years of experience to provide turn-key services for acquisition, management, and implementation of all facets of musical entertainment. The contract calls for the producer to provide two headliner bands (one for Saturday and one for Friday nights), a band for the gospel brunch, band for the Black Tie gala, and all opening acts on Saturday, May 12. The producer would handle acquisition of staging, lighting, and sound for all musicians. The producer would also handle all payments.

The producer will be working from a list of approved entertainers that were selected by the Committee for Council consideration and were approved earlier this evening. The list includes:

- Friday night headliner options at Battleship: Cody Johnson, Claire Dunn, Aaron Watson, John Pardi, Eric Paslay, Junior Gordon
- Friday night band for Black Tie: Mambo Jazz Kings
- Saturday night headliner options: Clay Walker, Sam Hunt, Eli Young Band, Josh Abbott Band

The estimated contract price for all producer services is \$288,925. The contract specifies a substantial percentage of the fee upfront at the time of contract execution. This is required to allow Brock Agency to formally book talent, as each performer requires a deposit to guarantee a spot on the calendar. In order to protect the City, the contract requires a fidelity bond that would guarantee the funds that are fronted for the purposes of payment to third party vendors by Brock Agency. For the current fiscal year, it is estimated that total expenditures under this contract will total \$144,462.50, which is within the budget currently allocated.

LGC 252.022 defines this type of service as a personal service that is exempted from formal bidding process. The Brock Agency has been the producer for the Sylvan Beach Festival for many years and is familiar with the park for set up purposes. The Chamber highly recommended this company and specifically Mr. Taylor.

Staff recommends approval of the contract with Brock Agency, Inc for the presentation of the

entertainment production for all musical talent for the 125th Anniversary Celebration.

Action Required of Council:

Consider approval or other action authorizing the City Manager to execute a Contract with the Brock Agency Inc. for turn-key presentation of the entertainment production for the 125th Anniversary Celebration in an amount not to exceed \$288,925.00.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

CONTRACT

THIS CONTRACT for the presentation of the entertainment production described below by the BROCK AGENCY, INC., a Texas LLC (herein called "Producer") and the City of La Porte, Texas (herein called "Purchaser") is entered into on this ____ Day of _____, 2016 as follows:

1. PRODUCTION TO CONSIST OF:

Headline Performer & 1 opening performer (Friday, May 12, 2017)

Headline Performer & 2 opening performers (Saturday, May 13, 2017)

Opening Performers: performance times approx. 60 minutes each.

Complete Sound and Lighting system rental at both locations identified in Section 4 below to meet or exceed performer specifications (sound system coverage up to 10,000 people)

Stage rental for both locations identified in section 4 below to meet or exceed performer specifications

Labor - stage hands, loaders, prod. manager, riggers – both locations identified is sec. 4 below

Misc. equipment (fork lift rental) – both locations identified in section 4 below

Backstage tent, tables & chairs – both locations identified in section 4 below

Crew catering –both locations identified in section 4 below

Performer catering, hospitality & hotel rms – both locations identified in section 4 below

Barricade – front of stage & cable track –both locations identified in section 4 below

Power – generator(s) rental – both locations identified in section 4 below

Runner & vehicle rental – both locations identified in section 4 below

Producer Fee: 10% of the aggregate of all items listed above, as stated in item 6a of this contract.

2. DATES OF PERFORMANCES: Friday, May 12, 2017 and Saturday, May 13, 2017

3. Hours of Performances:

Production load in - To be determined (early a.m. 48 hours prior to day of show)

Performances:

Friday, May 12, 2017: 6 pm gates open (Battleship TEXAS/San Jacinto State Park)

6:30pm opening act (approx. 60 min)

8:30pm Headline Performer (approx. 90 minutes)

Friday, May 12, 2017: (Sylvan Beach Pavilion)

7:00pm – 10:00pm

Saturday, May 13, 2017: 3 pm gates open

4:30 pm Opening Act (approx. 60 min.)

6:45 pm Opening Act (approx. 60 min.)

8:30 pm Headline Performer (approx. 90 Minutes)

4. Names and Addresses of Places/Locations of Performances:

Friday, May 12, 2017: Battleship TEXAS/San Jacinto State Park

Friday, May 12, 2017: Sylvan Beach Pavilion (Black Tie)

Saturday, May 13, 3027: Sylvan Beach Park, LaPorte, Texas

5. Type of Production: Battleship location Friday, May 12, 2017: Free Public event
Sylvan Beach Pavilion Black Tie dinner/dance Friday, May 12, 2017:
Ticketed event
Sylvan Beach Park Saturday, May 13, 2017: Ticketed event

6. Contract Price:

- a. Total Cost: The total cost for services rendered under this contract shall not exceed \$288,925. This cost includes all items, duties, and responsibilities to ensure that Production of the event (as listed in Section 1 above) is satisfactorily completed
- b. Payment and Deposits
 - i. A deposit of \$144,462.50 shall be due to Brock Agency within 15 days of contract execution. Due.
 - ii. All payments to performers and other third parties listed in Section 1 above, including deposits, shall be handled and paid directly to Brock Agency. The balance of \$144,425.50 shall be due to Brock Agency 15 calendar days before day of show.

7. Prohibition on Recording Performances:

No performance on the engagement shall be recorded, reproduced or transmitted from the place of performance, in any means whatsoever in the absence of a specific written agreement relating to and permitting such recording, reproduction or transmission.

8. This contract may not be changed, modified or altered except in writing and signed by both parties.

9. Documentation:

The City reserves the right to request documentation of any costs related to the services outlined in Section 1. Documents to be requested could include, but are not limited to invoices and receipts for services/equipment, contracts with artists, insurance documents, and internal accounting documenting Producer's fee. Producer shall cooperate and comply with such requests within fifteen (15) business days.

10. Termination: This contract is non-cancelable by either party except as follows:

If Purchaser wishes to cancel, written notice of such intent shall be given to the Brock Agency, Inc. Deposits paid to Brock Agency, Inc. are non-refundable. Except in the event that Brock Agency, Inc. or any third party set forth in Section 1 above fail to perform as required.

11. Miscellaneous Terms and Conditions

- A) If any contracted performer is unable to perform for any reason, Brock Agency shall substitute another performer from list of approved performers acceptable to Purchaser.
- B) All commissions and fees owed may be deducted from gross contract and/or deposit.

- C) The Performer(s) shall at all times have complete supervision of, direction, control over and responsibility for the services of their personnel on the engagement and are responsible for payments of payroll taxes, appropriate insurance and charges under applicable federal law and local law.
- D) Purchaser is responsible for obtaining and maintaining all applicable insurances to cover all City of La Porte equipment and City of La Porte personnel while on the premises described in Section 4 above.
- E) Purchaser to provide all security required for event including stage and backstage areas as may be required by Producer.
- F) Purchaser is responsible for site cleanup and repairs.
- G) This constitutes the sole, complete and binding agreement between the parties to the contract. This contract shall be construed to be in accordance with the laws of the State of Texas. In the event of any such dispute, either party may effect service of process on the other party by certified mail, return receipt requested.

12. Indemnity Hold Harmless

- a. Producer covenants and agrees to defend, indemnify, keep and hold harmless to the fullest extent of the law Purchaser its officers, agents, servants, officials, employees, elected officials, successors, assigns and guarantors, and shall pay, defend, indemnify and hold harmless Purchaser its officers, agents, servants, officials, employees, elected officials, successors, assigns and guarantors from and against all allegations, demands, proceedings, suits, actions, claims, including claims of patent or copyright infringement, damages, losses, expenses, including but not limited to attorney's fees, court costs, and the cost of appellate proceedings, and all claim adjusting and handling expenses, related to, arising from or out of or resulting from any actions, acts, errors, mistakes or omissions caused in whole or part by Producer relating to work, services, and/or products provided in the performance of this Contract, including but not limited to, any Subcontractor or anyone directly or indirectly employed by or working as an independent contractor for Producer or said Subcontractors or anyone for whose acts any of them may be liable and any injury or damages claimed by any of Producer's and Subcontractor's employees or independent contractors.

The Contractor expressly understands and agrees that any insurance policies required by this contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the City of La Porte, its Council members, officers, agents and employees and herein provided.

13. Bonding

At time of Contract execution and extending through the term of the Contract, Producer shall obtain a Fidelity Bond for the total cost of the Contract, as defined in Section 6a.

X _____
Signature of Purchaser
Mr. Corby D. Alexander
City of La Porte
604 W. Fairmont Parkway
La Porte, Texas 77571
281-470-5012

X _____
Signature of Producer
Mark W. Taylor
Brock Agency, Inc.
P.O. Box 58865
Houston, Texas
281-487-9955

REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested <u>June 13, 2016</u>	<u>Appropriation</u>
Requested By <u>Traci E. Leach</u>	Source of Funds: <u>Hotel/Motel</u>
Department: <u>Administration</u>	Account Number: _____
Report _____ Resolution: _____ Ordinance: _____	Amount Budgeted: <u>\$250,000</u>
Exhibits: _____	Amount Requested: <u>\$525,625</u>
Exhibits: _____	Budgeted Item: YES NO

SUMMARY & RECOMMENDATION

In order to move forward with the planning of the 125th Anniversary Celebration, Council appointed a brainstorming committee to assist in identifying events and ideas that the community would find meaningful and entertaining. The Committee members include: Dottie Kaminski, Kristin Martin, George Watkins, Shane Steger, Jeannie Earp, Stephanie Zemanek, Terri Cook, and Nancy Lotze. The Committee met on May 10 and again on May 26.

The following is the Committee's recommendation for Council consideration:

Dates of the Celebration: May 12-14, 2017 and August 10, 2017

The Committee discussed the dates that were initially discussed during the Council meeting. There were concerns raised about weather (particularly the heat) that would adversely impact the success and attendance of the main events. The Committee is proposing that the main celebration occur in May and then have a smaller scale recognition on the actual "founders' day."

Concert Entertainment:

The centerpiece of many of the proposed events below will be musical entertainment. Staff is working with Brock Agency, Inc., a producer with over 40 years of experience, to provide turn-key services for acquisition, management, and implementation of all facets of musical entertainment. The contract calls for the producer to provide two headliner bands (one for Saturday and one for Friday nights), a band for the gospel brunch, and all opening acts on Saturday, May 12. The producer would handle acquisition of staging, lighting, and sound for all musicians.

The producer will be working from a list of "approved" entertainers that were selected by the Committee for Council consideration. The list includes:

- Friday night headliner options at Battleship: Cody Johnson, Claire Dunn, Aaron Watson, John Pardi, Eric Paslay, Junior Gordon
- Friday night band for Black Tie: Mambo Jazz Kings
- Saturday night headliner options: Clay Walker, Sam Hunt, Eli Young Band, Josh Abbott Band

The estimated contract price for all producer services is \$288,925.

Event Components for May 12-14, 2017:

For the main celebration weekend, the Committee is proposing a number of different events spread throughout the City and throughout the entire weekend. The top recommendation for the headliner for the Friday night concert is Cody Johnson and Clay Walker for the Saturday evening concert. Estimated and very preliminary budget figures for these events (excluding musicians, which are accounted for above) is \$172,700.

Friday, May 12, 2017:

Venue	Event Option(s)	Preliminary Budget and Event Pricing	Comments
Sylvan Beach Pavilion	Black Tie Gala	Event pricing: \$125 per couple Budget: \$26,500	We are penciled in at the Pavilion to hold date. If approved by Council, staff will begin formalizing reservation.
Battleship TEXAS or San Jacinto Monument	Concert and Fireworks/Light Show	Event Pricing: Free Budget: \$39,200	Since State Park prohibits alcohol, this event can be targeted towards an under 21 audience.
Lomax Arena	Carnival	Event Pricing: Free admission- pay for rides Budget: \$4,000	Could have this run the entire weekend.
Pecan Park/LCB Fields	Softball Tournament	Event pricing: \$200 per team Budget: \$7,500	Would extend out the entire weekend
Various Locations	Geo-cache event	Budget: \$1,500	

Saturday, May 13, 2017:

Venue	Event Option(s)	Preliminary Budget and Event Pricing	Comments
Sylvan Beach Park	Concerts starting at 4:30 pm	Event Pricing: \$15 non-LP \$10 LP Budget: \$53,000	Event would not be free. Tiered pricing for LP residents.
La Porte Airport	Airshow/Car Show	Event Pricing: Free Budget: \$7,000	Car show could be done without issue.

Lomax Arena	Carnival	Event Pricing: Free admission- pay for rides Budget: \$4,000	Could have this run the entire weekend.
	Concert w/Local Talent	Event Pricing: Free Budget: \$7,000	Would provide entertainment option for patrons between parade and Sylvan concerts
S. Broadway/Main	Parade	Event Pricing: Free Budget: \$3,000 (OT)	Art Cars; solicit Governor as Grand Marshal; solicit local athletes and celebrities to be a part
	Fun Run	Event Pricing: TBD Budget: 5,000	Before the parade

Sunday May 14, 2017

Venue	Event	Pricing and Budget	Comments
Sylvan Beach Pavilion	Gospel Brunch	Event Pricing: \$40 per ticket Budget: \$19,000	Could be on Sunday morning for Mothers' Day

Event Components for August 10, 2017:

The Committee is proposing that the City commemorate the actual day of incorporation as a "Founder's Day." This single day celebration would be much smaller in scale. The estimated and very preliminary budget for the Founders Day events is \$8,500.

Venue	Event	Pricing and Budget	Comments
LPHS Football Field	Founder's Day Family event	Event Pricing: Free Budget: \$5,000	Idea is to host a family-friendly event at the stadium
TBD	Time Capsule Dedication	Budget: \$500	Could include important mementos from the events held in May
S. Broadway/Main Street	Parade	Event pricing: Free Budget: \$3,000	Follow historic route that "Octoberfest" parade used to take up Broadway

Miscellaneous Costs:

There additional costs that the City will likely incur in order to make these events happen. The estimated and very preliminary budget for these items is \$55,500.

- Mural to both advertise the event and commemorate the anniversary after the events are over. (\$5,500)
- Advertising and marketing for the events (\$40,000)
- Ticketing software (Event Brite or similar service) (\$10,000)

The total estimated and very preliminary budget for the entire Anniversary Celebration, as presented, is \$525,625. This is more than the anticipated budget for the events. However, with conservative revenue estimates from ticket sales of these events (\$78,950) plus any potential sponsorships, it is highly likely that all events will be well below the \$500,000 budget.

Under the proposed scenario, City staff would be coordinating all events with the exception of the musician component.

Action Required by Council:

Provide input/direction regarding the Committee's recommended approach and schedule of events for the 125th Anniversary Celebration.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

REQUEST FOR CITY COUNCIL AGENDA ITEM

Agenda Date Requested: June 13, 2016

Appropriation

Requested By: Tim Tietjens

Source of Funds:

Department: Planning & Development

Account Number:

Report: Resolution: Ordinance:

Amount Budgeted:

Other:

Amount Requested:

Budgeted Item: YES NO

Attachments :

1. Project Description Letter
2. Conceptual Master Plan
3. Traffic Impact Analysis
4. TIA Review Letter (Staff Prepared)
5. PPG Response Letter to Staff's TIA Review

SUMMARY & RECOMMENDATIONS

The Planning and Development Department received an inquiry from PPG requesting the City consider inclusion of a portion of Bay Area Boulevard as a truck route. The applicant is making such request in hopes of developing 80.8 acres of land east of Bay Area Boulevard and south of Spencer Highway with warehouse/distribution facilities. The development would be a portion of the overall PPG tract which is proposed to develop as residential subdivisions west of Bay Area Boulevard. The applicant has provided a Conceptual Master Plan intended to show possible development of the site. Additionally, a Traffic Impact Analysis (TIA) was performed to show the impact of the proposed development on Bay Area Boulevard. PPG's request is for inclusion of only a portion of Bay Area Boulevard from Fairmont Parkway to the entrance to their site as a truck route.

Staff has included its analysis of the proposed TIA along with this agenda item. There were a couple general discussion items that staff identified, including 1) a discussion as to why the proposed development could not access Spencer Highway, which is already a Truck Route; and 2) consideration of interaction with future development on the west side of Bay Area Boulevard. Also attached is a letter from PPG representatives in response to staff's comments on the TIA.

Representatives from PPG will present their proposal as a discussion with the City Council in order to gauge whether or not there is interest in or objection to the proposal. If there is interest, a subsequent action of City Council would be necessary to amend the ordinance.

Action Required of Council:

Receive presentation by PPG representatives and provide input regarding whether or not there is interest in or objection to the proposal to include of a portion of Bay Area Boulevard as a truck route.

Approved for City Council Agenda

Corby D. Alexander, City Manager

Date

WILSON CRIBBS + GOREN

Real Estate Attorneys

2500 Fannin Street
Houston, Texas 77002

713.222.9000 *main*
713.229.8824 *fax*

May 26, 2016

Via Email: TietjensT@laportetx.gov

Mr. Tim Tietjens, Director
City of La Porte, Texas
604 W Fairmont Parkway
La Porte, Texas 77571

Re: **Modification of Truck Routes**
City Code of Ordinances Chapter 70

Mr. Tietjens:

Our Firm represents PPG Industries, Inc. which owns real property on both sides of Bay Area Blvd. between Spencer Highway and Fairmont Parkway, as depicted on the enclosed Traffic Impact Analysis ("TIA") by Traffic Engineers, Inc., the pre-eminent traffic engineering firm in Houston.

PPG has interest in selling all of the land to a single party. PPG is not willing to sell the site in parcels. As proposed, the west side would be developed as single family residential. The east side would be developed in separate phases, separated by the pipeline corridor, which creates a meaningful barrier to unified development. The north east portion will be industrial with need for heavy truck access. The south east portion is proposed for less intense usage such as service center.

The City's Future Land Use Plan contemplates Business Industrial and Light Industrial uses on the east side. The development would occur through a SCUP, so the City will have control over the development details. In order to successfully implement those uses on the north east portion of the site, reasonable access to a Truck Route is critical. The City's Truck Routes do not currently include the portion of Bay Area Blvd. between Spencer Highway and Fairmont Parkway, despite the contrary recommendations of prior City committees created to study the circulation of truck traffic within the City.

For functional reasons, neither Spencer Highway nor Fairmont Parkway are desirable for exclusive heavy truck access to the site. The east portion of the PPG property is an unusual shape with little frontage on either roadway for drives. On both roadways, the railroad bridge impairs the east side of the site and placing an exclusive heavy truck access too close to the intersections with Bay Area Boulevard is not desirable. On Fairmont Parkway, the proposed uses on the south east portion of the site are not likely to require large amounts of heavy truck traffic. A through driveway on that portion of the site to serve the more industrial north east portion of the site is not desirable. Additionally, the cost to cross the pipeline corridor and the large east west county drainage ditch by bridge makes the Fairmont Parkway alternative cost prohibitive.

We understand citizens voiced concern that the designation of Bay Area Blvd. as a Truck Route would ultimately lead to the extension of the Truck Route north of Spencer Highway to Sens Road, or repeated violations of the ban on heavy trucks on Sens Road. To alleviate these concerns, the TIA includes a truck traffic circulation concept that does not require the extension of the Truck Route all the way to Spencer Highway. Specifically, the infrastructure would be designed such that trucks exiting the Property onto Bay Area Blvd. would be directed southbound to Fairmont Parkway and not be permitted to travel north to Spencer Highway in the direction of Sens Road.

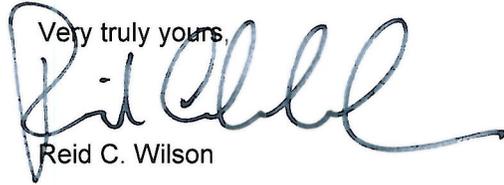
Mr. Tim Tietjens, Director
City of La Porte, Texas
May 26, 2016
Page 2

As the TIA demonstrates, this proposal will have no material adverse impact on the operation of City streets. Both the 2014 Freese & Nichols report and the 2015 Citizen Committee report supported adding Bay Area Boulevard to the Truck Route. The citizen concerns are addressed by not extending the Truck Route to Spencer Highway and including infrastructure forcing trucks to turn south when exiting the site. We believe this is a "win-win" solution.

With this adjustment, the PPG site can be sold and placed into productive use. Estimated development value is approx. \$260,000,000, producing almost \$2,000,000 in additional tax revenue to the City and almost \$4,000,000 additional tax revenue to the School District (plus new revenue for the County, Port and other taxing authorities).

We appreciate your consideration of this request and hope that our proposed solution regarding the denial of truck access to Spencer Highway from Bay Area Blvd. will help facilitate the modification of the City's Truck Routes in accordance with this letter. On behalf of PPG, we respectfully request that this matter be placed on the agenda for consideration in a workshop session at the June 13th City Council meeting. Dustin Qualls of Traffic Engineers, Inc. will present his report and findings, respond to the questions in your Memorandum sent to me yesterday, and respond to any questions for City Staff or City Council.

Please do not hesitate to contact me with any questions regarding this letter.

Very truly yours,

Reid C. Wilson

RCW/dms
G:\Clients\8834\002\Tietjens Ltr re La Porte Truck Routes (5-25-16)(revised).docx

Enclosed Traffic Impact Analysis

cc: Mr. Eric Ensey, City Planner
 City of La Porte, Texas

 Mr. Corby Alexander, City Manager
 City of La Porte, Texas

 Mr. Thomas Butera
 Buchanan Ingersoll & Rooney PC

 Ms. Joann Ladesic
 PPG Industries, Inc.

 Mr. Doug Nicholson
 Newmark Grubb Knight Frank

MASTERPLAN - OPTION 1

SITE AREA IN SCOPE = APPROX. 80.8 ACRES

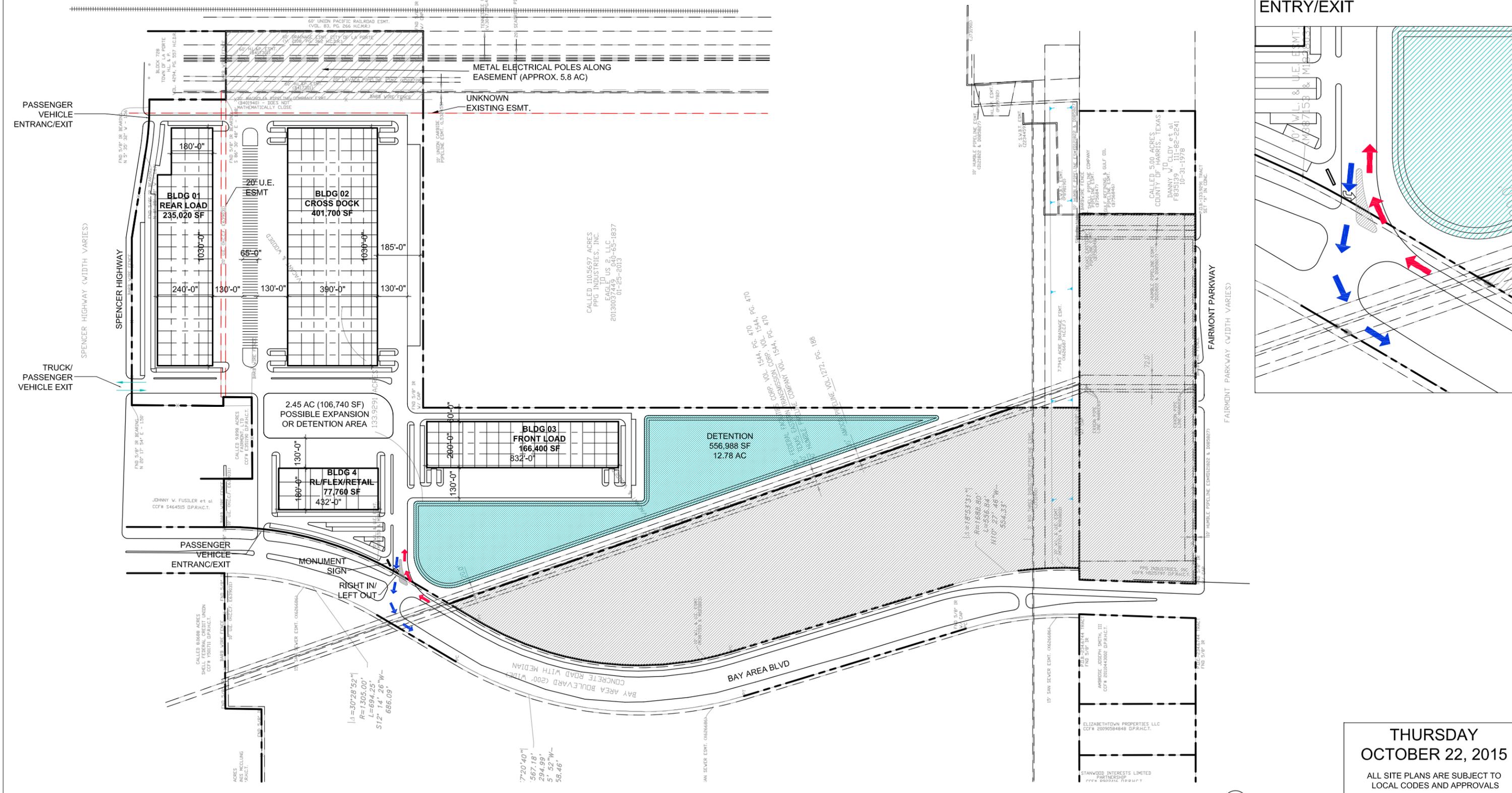
BUILDING AREA = 880,880 SF

COVERAGE = 25.03%

DETENTION: 12.7 AC (556,988 SF) @ 15.7% OF SITE IN SCOPE

TOTAL SITE AREA = 133.9291 ACRES

ZOOM IN OF BAY AREA BLVD ENTRY/EXIT



THURSDAY
OCTOBER 22, 2015

ALL SITE PLANS ARE SUBJECT TO
LOCAL CODES AND APPROVALS



BAY AREA CORPORATE CENTER
a project for
AVERA



powers
brown
archit
ecture

Traffic Impact Analysis Spencer Highway at Bay Area Boulevard



TRAFFIC ENGINEERS, INC.

INNOVATIVE TRANSPORTATION SOLUTIONS

**TBPE Registration #F-3158
801 Congress, Suite 325
Houston, Texas 77002
PH: (713) 270-8145**



May 2016

Dustin W. Qualls, PE, PTOE

EXECUTIVE SUMMARY

INTRODUCTION

This report presents an analysis of traffic impacts of the proposed warehouse/distribution center located near the southeast corner of the intersection of Bay Area Boulevard and Spencer Highway (see **Figure 1**) in La Porte, Texas. The timeframe for development is uncertain, but for purposes of this study was assumed to occur in 2017. The existing land use on the subject site is undeveloped land. A court house and a police department are located to the north of the site across Spencer Highway. West of the site is undeveloped land. The developments to the south and east of the site are business/industrial.

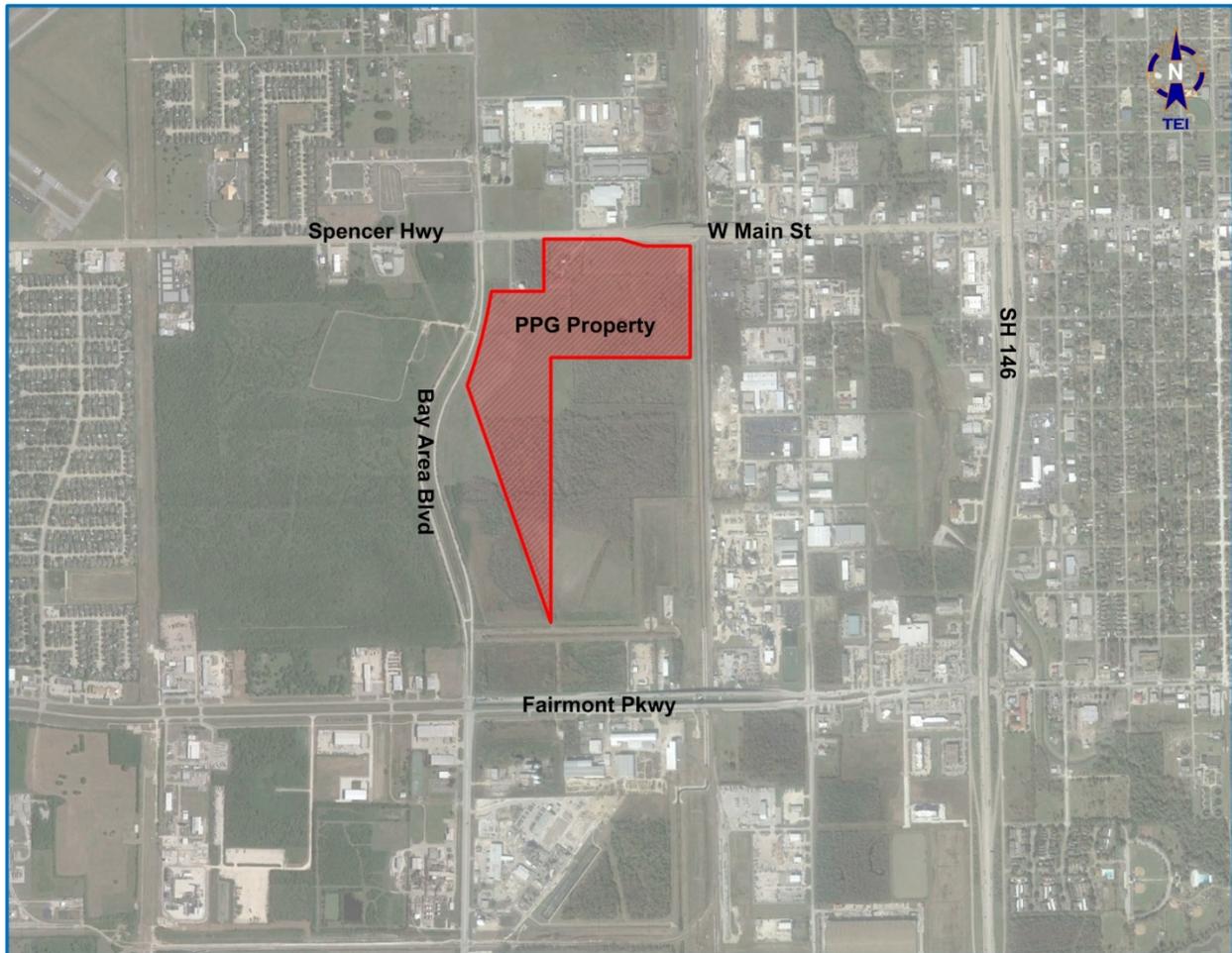


FIGURE 1 SITE LOCATION

Driveway access to the site is proposed to be provided by two driveways on Bay Area Boulevard, and two driveways on Spencer Highway. The southern driveway on Bay Area Boulevard will provide access for heavy trucks, while the other three driveways will serve the other vehicles.

SH 146, Spencer Highway, and Fairmont Parkway all serve as established City Truck Routes according to *Chapter 70 of the Code of Ordinances of the City of La Porte, Texas*. Bay Area Boulevard is currently not included as a City Truck Route. To use the subject land as a warehouse/distribution center, the portion

of Bay Area Boulevard between the southern driveway of the site and Fairmont Parkway will need to function as a City Truck Route. This study will evaluate the traffic impacts associated with the build-out of the warehouse/distribution center on the roadways and intersections within the study area.

FINDINGS AND RECOMMENDATIONS

The following findings and recommendations are based upon the forecast 2017 traffic operations in the study area:

- The warehouse/distribution center will not have significant traffic impacts on the surrounding roadway network. No improvements are recommended to mitigate the traffic impacts associated with the development. There are no foreseen adverse effects of establishing Bay Area Boulevard as a Truck Route from the proposed heavy truck driveway to Fairmont Parkway.
- The projected queue lengths could be accommodated by the existing storage lengths on the left-turn lanes at the critical intersections of the site.
- The median opening on Bay Area Boulevard at the Heavy Truck Driveway should be constructed to allow ingress right-turns and egress left-turns only, as shown in **Figure 3**.
- Two-stage gap-acceptance could be performed by the left-turn movement of heavy trucks exiting to Bay Area Boulevard. The required sight distance for the Heavy Truck Driveway is 741 feet looking left (south) at the first stage and 761 feet looking right (north) at the second stage on Bay Area Boulevard.

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INTRODUCTION

This report presents an analysis of traffic impacts of the proposed warehouse/distribution center located near the southeast corner of the intersection of Bay Area Boulevard and Spencer Highway (see **Figure 1**) in La Porte, Texas. The timeframe for development is uncertain, but for purposes of this study was assumed to occur in 2017. Driveway access to the site will be provided by two driveways on Bay Area Boulevard, and two driveways on Spencer Highway. The southern driveway on Bay Area Boulevard will serve the heavy truck traffic, while the other three driveways will provide access to the employee and visitor vehicles.

SH 146, Spencer Highway, and Fairmont Parkway serve as the City Truck Routes according to *Chapter 70 of the Code of Ordinances of the City of La Porte, Texas*. Bay Area Boulevard is currently not included in the City Truck Routes. To use the subject land as a warehouse/distribution center, the portion of Bay Area Boulevard between the heavy truck driveway of the site to Fairmont Parkway will need to function as a City Truck Route.

The purpose of this study is to determine the traffic impacts associated with the build-out of the warehouse/distribution center on the roadways and intersections within the study area.

EXISTING LAND USES

The land uses to the north of the subject site are a court house, a police department, as well as undeveloped land. The developments to the south and east of the site are business/industrial. West of the site is undeveloped land, but anticipated to be residential single family.

EXISTING ROADWAY CONDITIONS

The portion of Bay Area Boulevard between Spencer Highway and Fairmont Parkway is a four-lane, divided roadway with a curb-and-gutter cross-section. The roadway transitions to a two-lane undivided roadway north of Spencer Highway. Bay Area Boulevard south of Fairmont Parkway is constructed as a five-lane cross-section with Two Way Left-Turn Lane (TWLTL). The posted speed limit on Bay Area Boulevard is 45 mph. Bay Area Boulevard is currently not included in the City Truck Routes.

SH 146 Northbound and Southbound Frontage Road, are one-way roadways contain three lanes each. Each roadway expands at the intersections to four lanes to provide a U-turn lane. The posted speed limit on both SH 146 frontage roads is 40 mph. SH 146 functions as a City Truck Route of the City of La Porte. Total volumes in both directions on SH 146 were approximately 76,000 vehicles per day, consisting of over 11% heavy trucks (5 axles or more) – nearly 9,000 heavy trucks per day.

Spencer Highway is a seven-lane cross-section with TWLTL. The posted speed limit on Spencer Highway is 45 mph. Spencer Highway is included in the City Truck Routes. It carries about 1,350 heavy trucks per day.

Fairmont Parkway is a four-lane divided roadway with open ditches. The posted speed limit on Fairmont Parkway is 55 mph. Fairmont Parkway is also a City Truck Route. The roadway carries about 1,800 heavy trucks per day. Spencer Highway and Fairmont Parkway (west of SH 146) are the two primary east-west truck routes providing access to and from SH 146 to and from the west of La Porte.

Existing critical intersections within the study area are as follows:

- Bay Area Boulevard at Fairmont Parkway
- Bay Area Boulevard at Spencer Highway
- Fairmont Parkway at SH 146 (two intersections)
- Spencer Highway at SH 146 (two intersections)

Traffic control and lane assignment of existing intersections are shown in **Figure 2**.

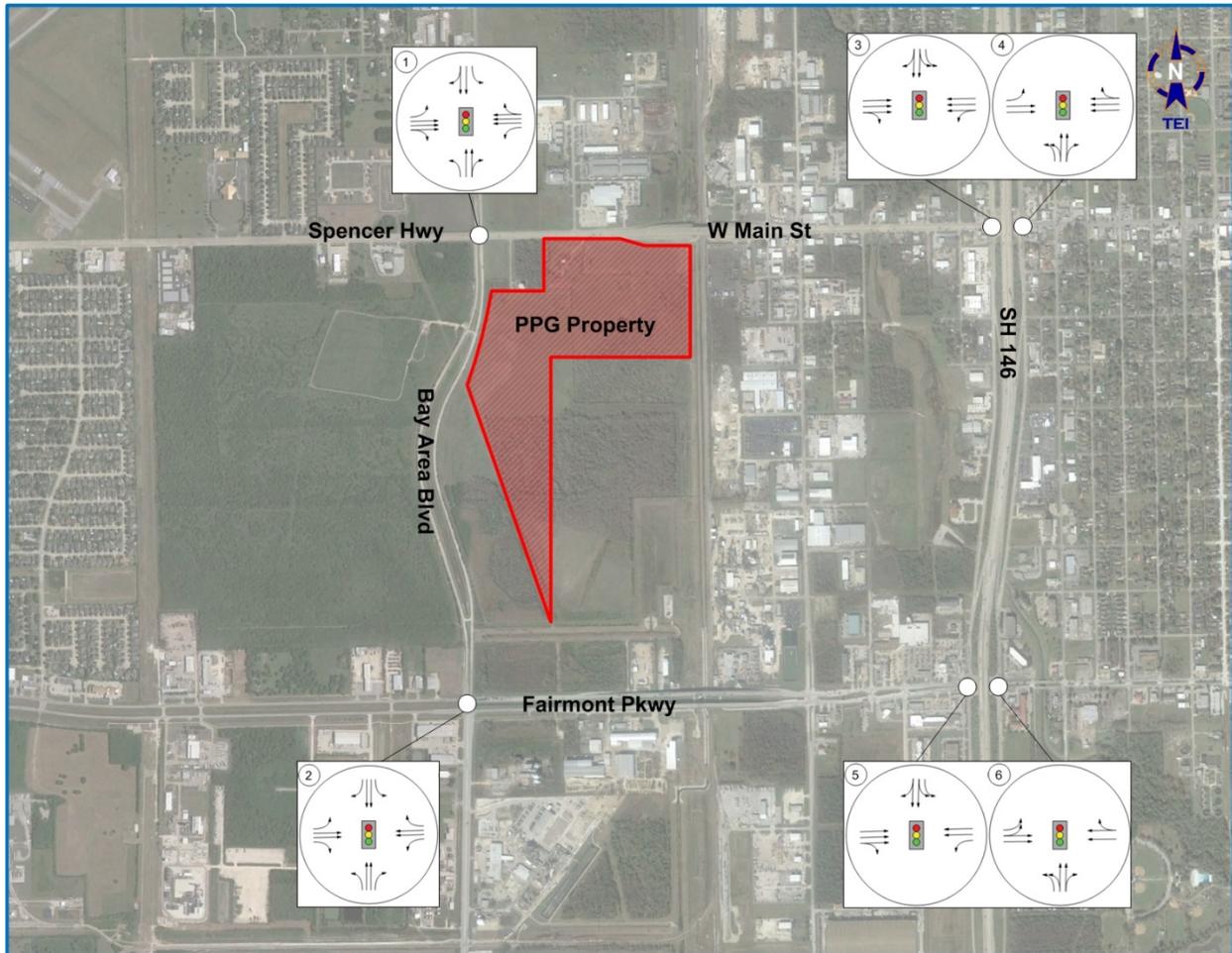


FIGURE 2 TRAFFIC CONTROL AND LANE ASSIGNMENTS OF EXISTING INTERSECTIONS

EXISTING SITE TURNING MOVEMENT COUNTS

Turning movement counts (TMCs) were collected in March 2016 at the study intersections for AM and PM peak hours (see **Appendix A**). According to the 2016 TMCs, the peak hours on the adjacent streets of the site are 7:00-8:00 AM and 4:15-5:15 PM.

SITE PLAN

The warehouse/distribution center is proposed to be composed of four buildings with a total area of +/- 900,000 square feet. Driveway access will be provided by two driveways on Bay Area Boulevard and two

driveways on Spencer Highway. The southern driveway on Bay Area Boulevard will be a right-in, left-out driveway that would only serve the heavy truck traffic. The other three driveways will provide access to employee vehicles. It is recommended that the Heavy Truck Driveway at the site should be configured to allow ingress right-turns and egress left-turns only, as illustrated in Figure 3.

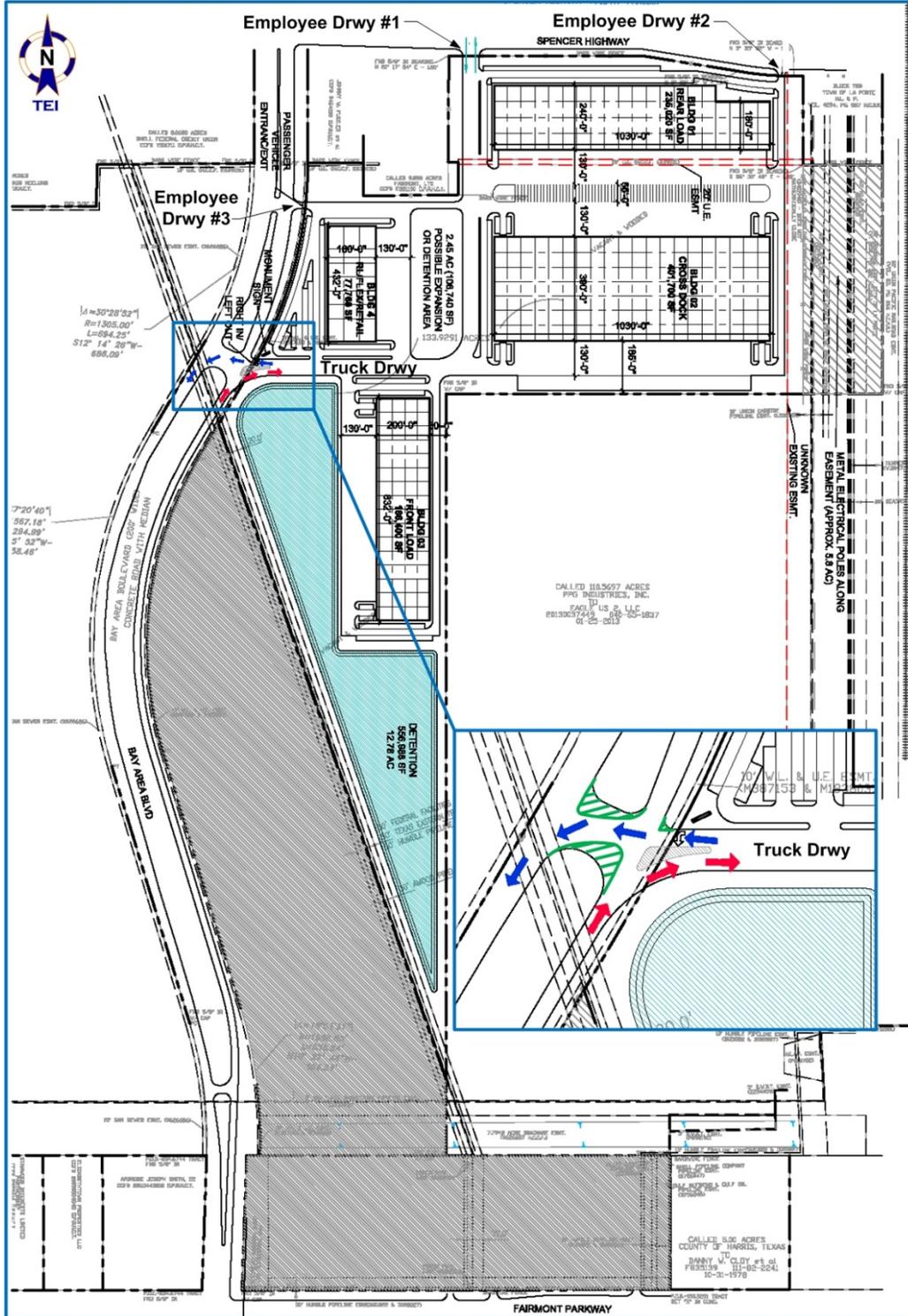


FIGURE 3 SITE PLAN

ANALYSIS

TRIP GENERATION

Trip generation for the employees of the warehouse/distribution center was calculated based on the trip generation rates included in the *Institute of Traffic Engineers (ITE), Trip Generation, 9th Edition*. Generated truck trips were estimated based on a typical number of truck trips in the peak hour for a tract of this size (estimated to be 20 trucks in and out) but with a buffer multiplier factor of three; resulting in the analysis of 60 trucks entering and exiting in the peak hours.

TABLE 1 TRIP GENERATION

ITE Trip Generation Rate	AM Peak Hour 8:00-9:00 AM		PM Peak Hour 5:00-6:00 PM	
	Enter	Exit	Enter	Exit
Employee (ITE Trip Generation Rate based on 900,000 SF)	209	56	70	211
Heavy Truck (Estimated)	60	60	60	60
Trips Added to Adjacent Street	269	111	135	271

TRIP DISTRIBUTION AND TRIP ASSIGNMENT

The global trip distributions were developed for the warehouse/distribution center employee and heavy truck traffic, as shown in **Figure 6**. The distributions were developed considering of the surrounding roadway network and the truck route ordinance. The trip distribution reflects the assumption that the portion of Bay Area Boulevard between the Heavy Truck Driveway and Fairmont Parkway is permitted by the city to function as a Truck Route.

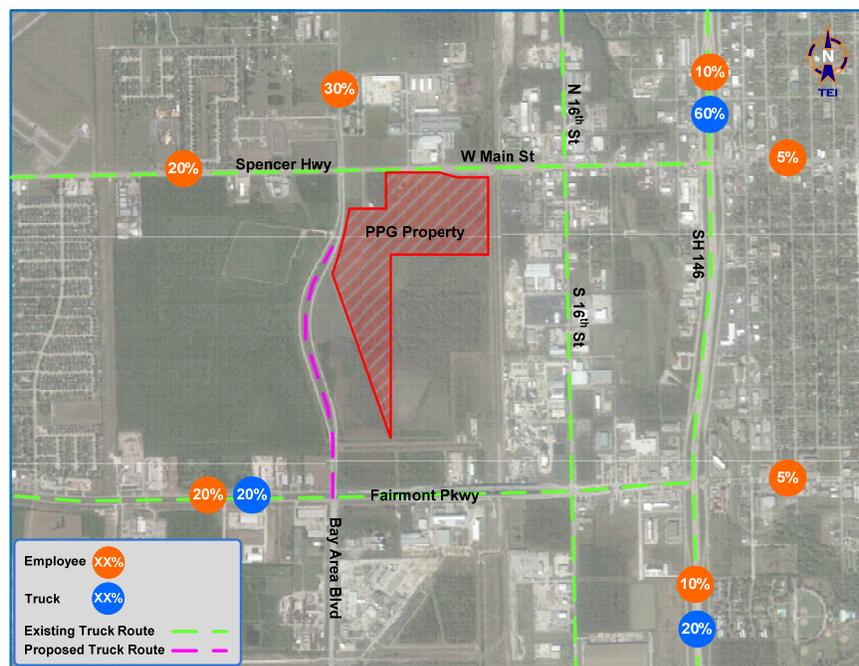


FIGURE 4 TRIP DISTRIBUTION AND ASSIGNMENT

PROJECTED SITE TURNING MOVEMENT COUNTS

Traffic projections were developed for the 2017 Background and Build-out conditions at the study area intersections. Traffic projections for Background conditions include 2016 traffic volumes increased two percent annually by one year. The two percent annual growth is estimated to be appropriate for the next several years.

Traffic projections for Build-out conditions include Background traffic projections and trips that are expected to be generated by distribution center. **Figure 5 – 10**, as well as **Appendices B** and **C** illustrate intersection traffic volumes for 2017 Background conditions, 2017 site generated trips, and 2017 Built-out volumes.

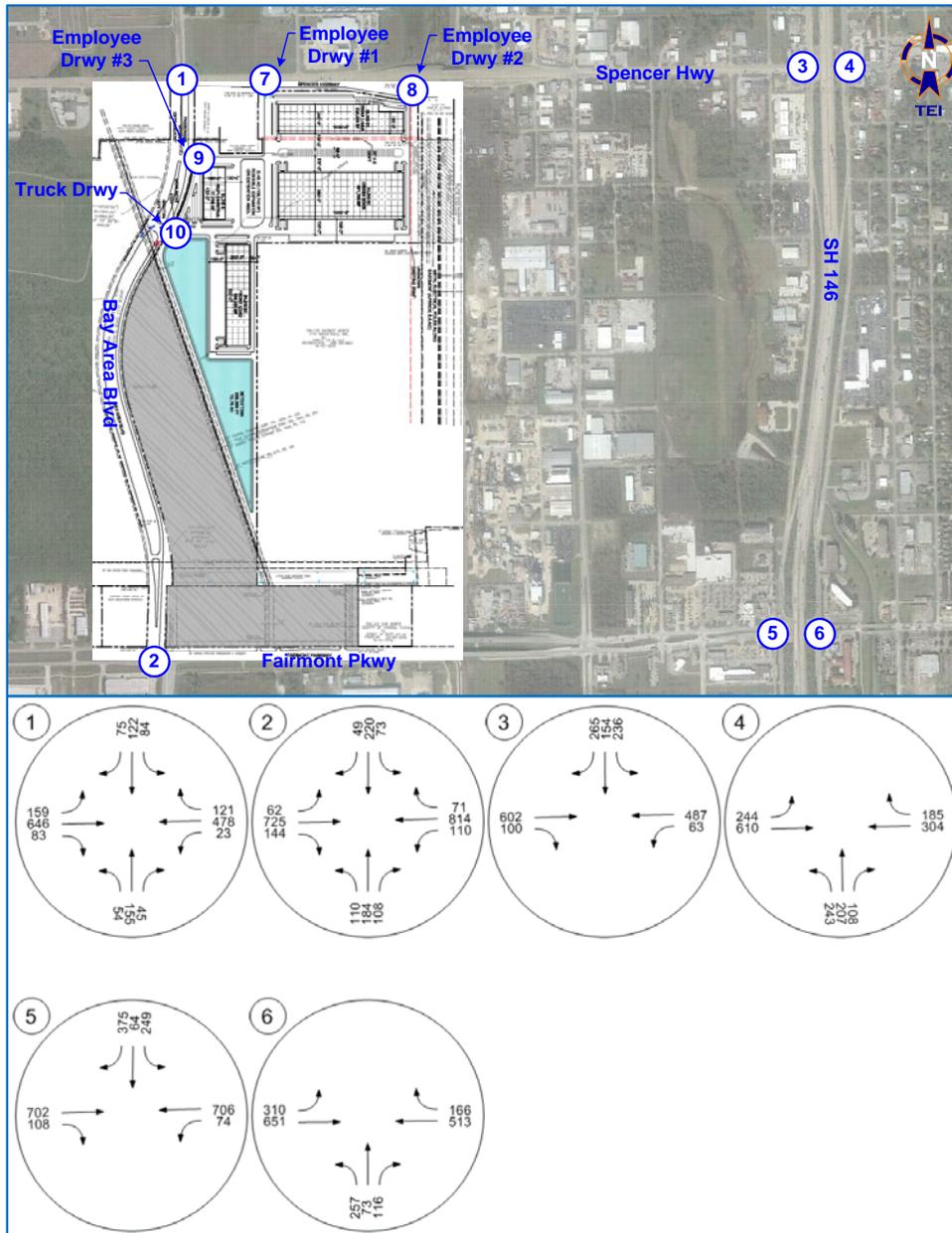


FIGURE 5 BACKGROUND AM PEAK VOLUMES

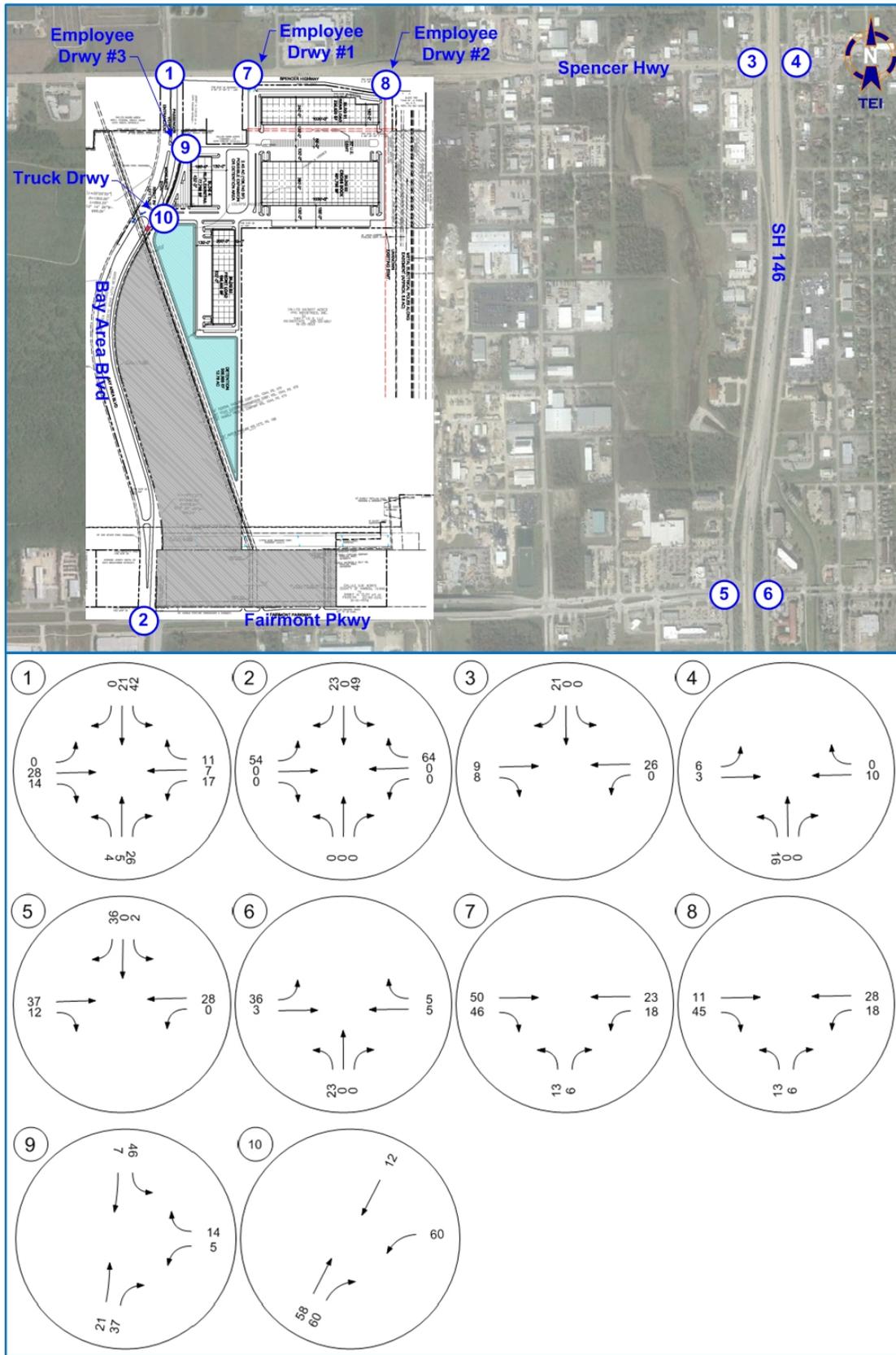


FIGURE 6 SITE-GENERATED AM PEAK VOLUMES

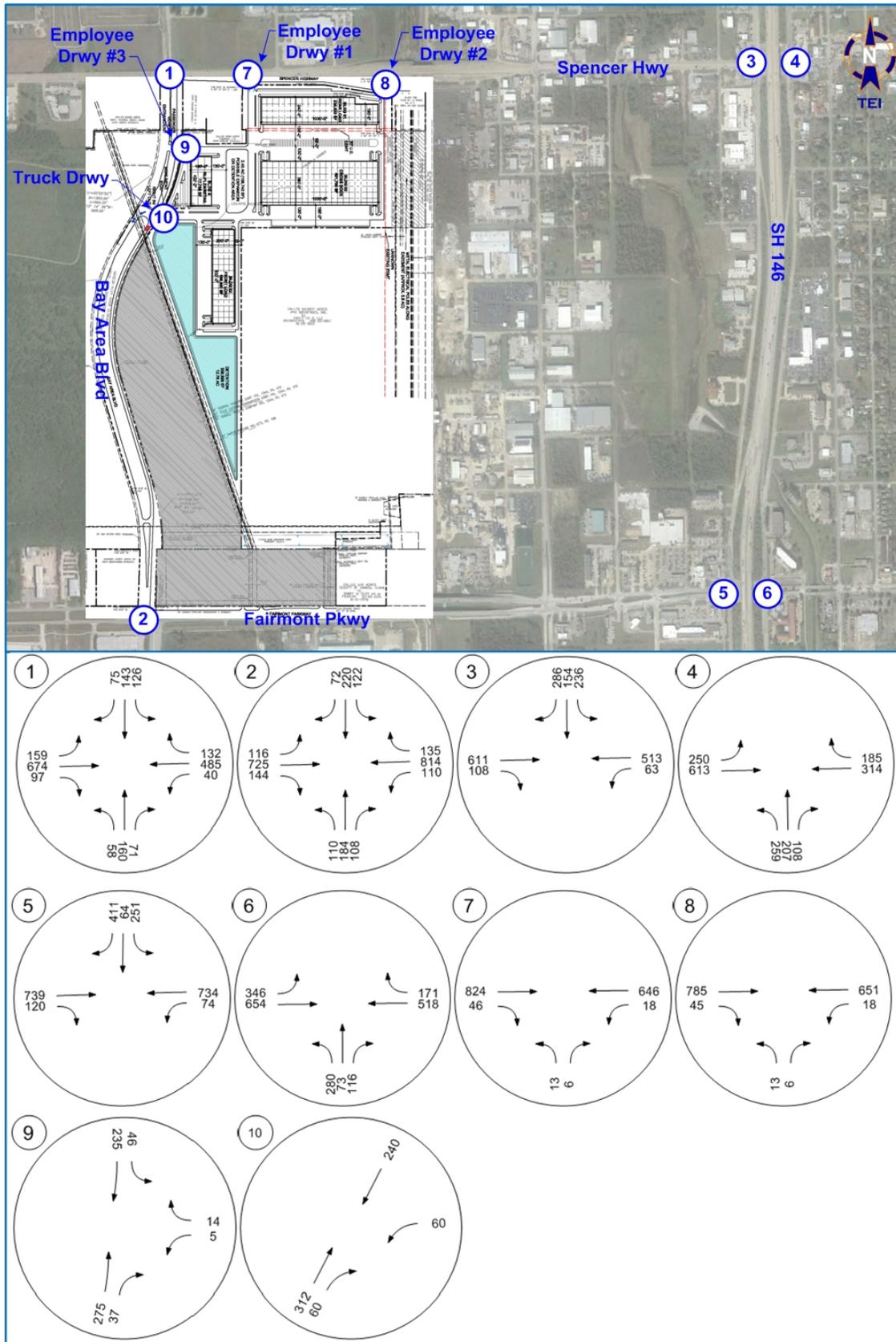


FIGURE 7 BUILT-OUT AM PEAK VOLUMES

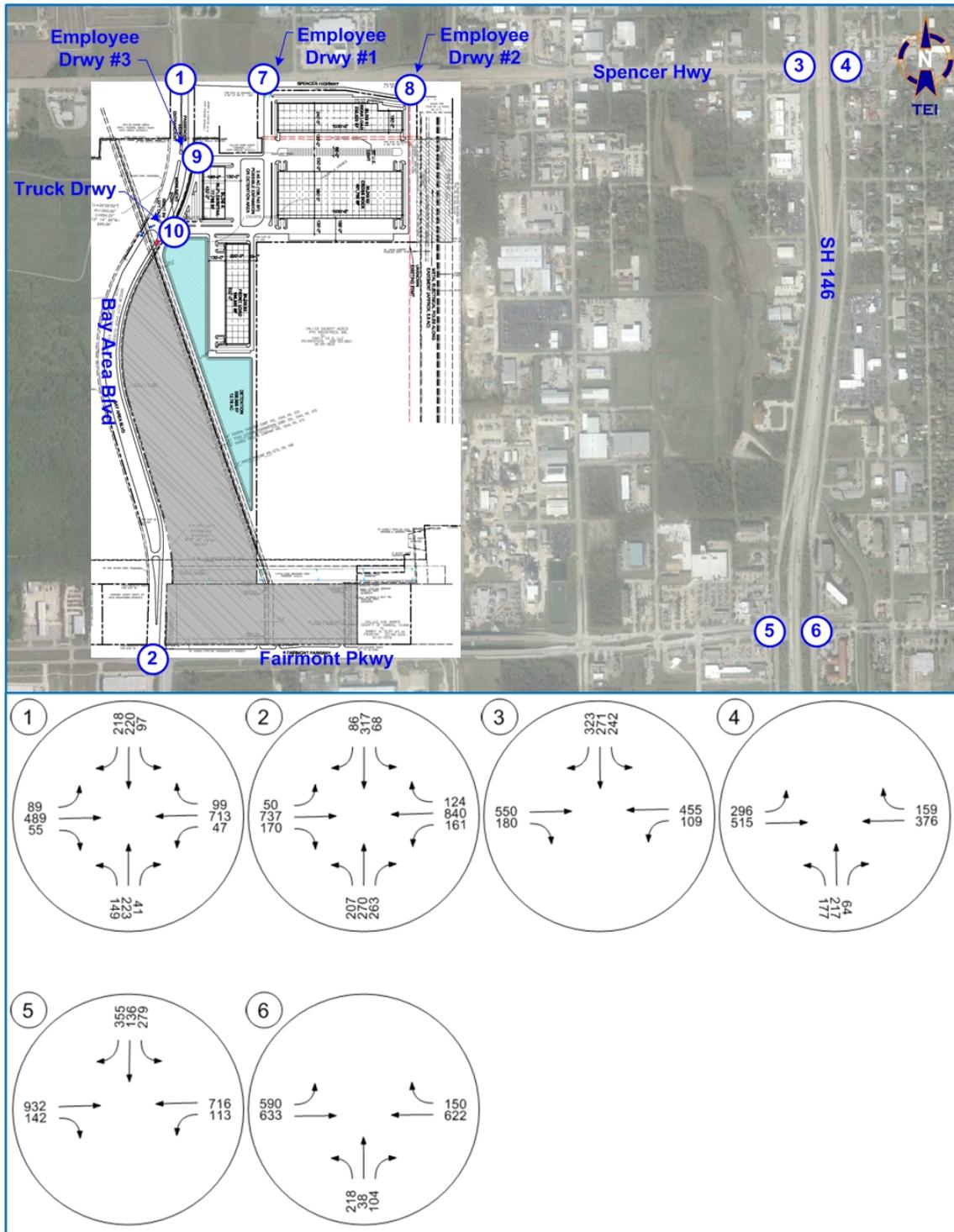


FIGURE 8 BACKGROUND PM PEAK VOLUMES

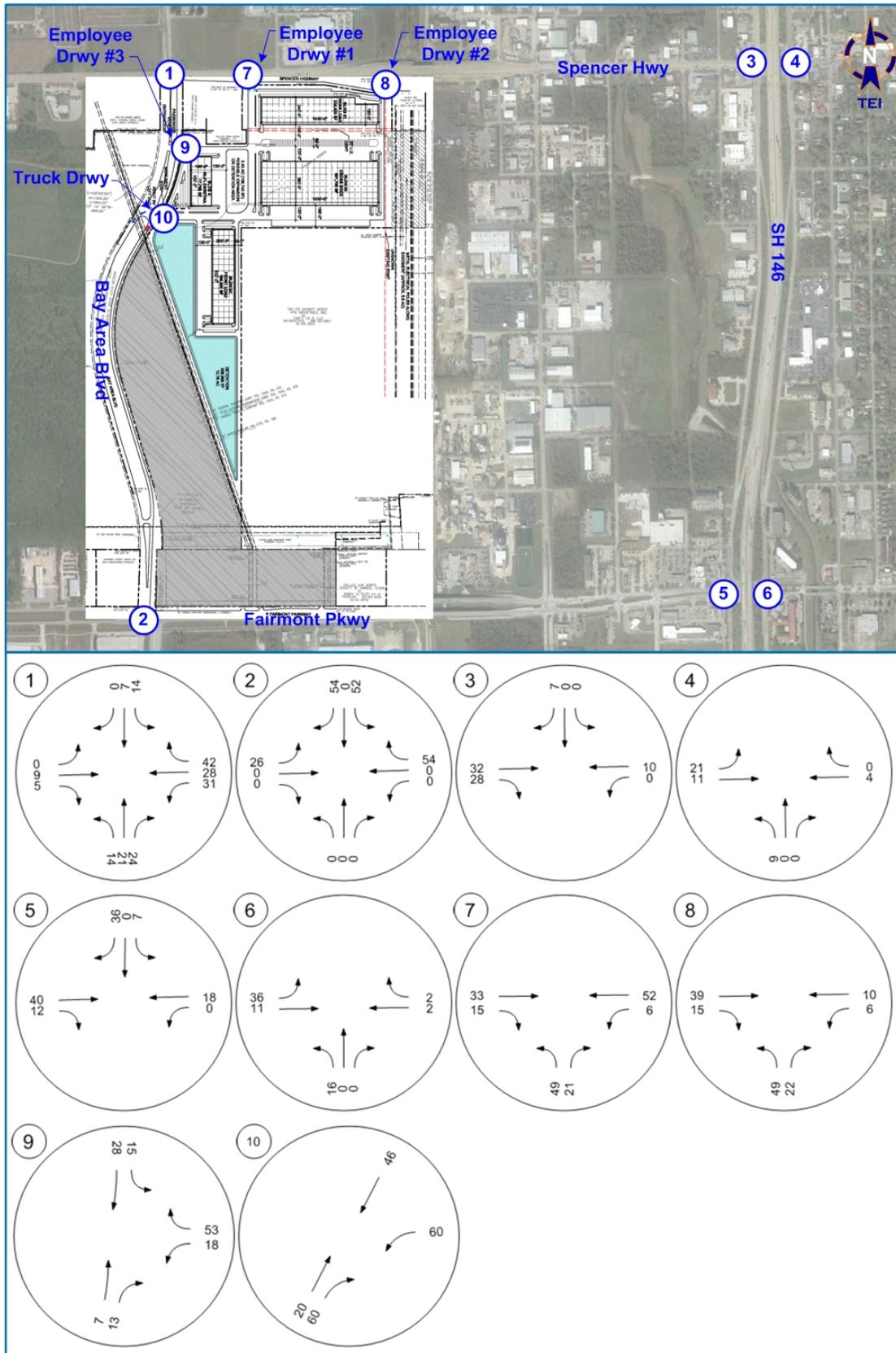


FIGURE 9 SITE-GENERATED PM PEAK VOLUMES

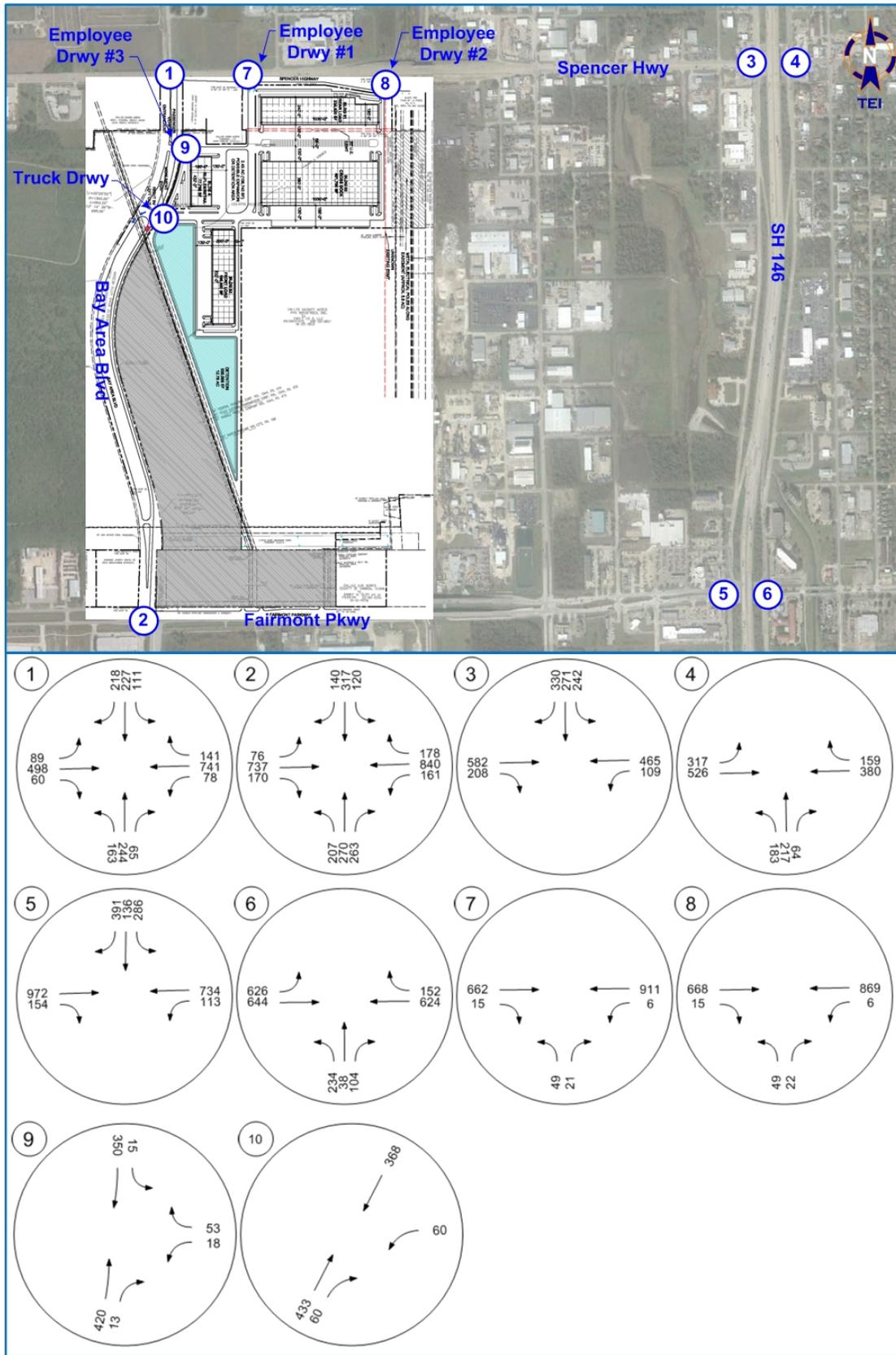


FIGURE 10 BUILT-OUT PM PEAK VOLUMES

2017 TRAFFIC OPERATIONS

Capacity analyses were conducted for Background and Build-out conditions at the study area intersections. Capacity analysis provides information regarding traffic operations at an intersection and is expressed in terms of the level-of-service (LOS). The level-of-service indicates the average seconds of delay experienced by a motorist at a signalized intersection or at the stop controlled approaches of an unsignalized intersection. As a frame of reference, intersection levels-of-service range from A to F, with LOS A representing free flow conditions and LOS F representing highly congested conditions. In general, a signalized intersection operating at LOS D or better in an urban area is characterized by acceptable delays.

Results of the capacity analyses are provided in **Appendix B** (Background Conditions) and **Appendix C** (Built-out Conditions) and **Tables 2 - 3**.

TABLE 2 AM PEAK INTERSECTION LEVEL OF SERVICE

AM Peak	2017 Background				2017 Built-out			
Signalized Intersection	LOS	Delay (sec)			LOS	Delay (sec)		
Bay Area Blvd at Spencer Hwy	B	15.8			B	17.1		
Bay Area Blvd at Fairmont Pkwy	C	21.8			C	22.8		
SH 146 SBFR at Spencer Hwy	B	19.3			C	20.3		
SH 146 NBFR at Spencer Hwy	B	17.9			B	18.1		
SH 146 SBFR at Fairmont Pkwy	D	36.0			D	48.5		
SH 146 NBFR at Fairmont Pkwy	C	26.9			C	29.0		
Unsignalized Intersection	NB	SB	EB	WB	NB	SB	EB	WB
Spencer Hwy at Employee Drwy #1	-	-	-	-	C	-	-	B ¹
Spencer Hwy at Employee Drwy #2	-	-	-	-	C	-	-	B ¹
Bay Area Blvd at Employee Drwy #3	-	-	-	-	-	A ¹	-	A
Bay Area Blvd at Heavy Truck Drwy	-	-	-	-	-	-	-	C

¹ Left-turn Level of Service

TABLE 3 PM PEAK INTERSECTION LEVEL OF SERVICE

PM Peak	2017 Background				2017 Built-out			
Signalized Intersection	LOS	Delay (sec)			LOS	Delay (sec)		
Bay Area Blvd at Spencer Hwy	C	20.6			C	22.2		
Bay Area Blvd at Fairmont Pkwy	C	31.9			C	34.7		
SH 146 SBFR at Spencer Hwy	C	23.0			C	24.4		
SH 146 NBFR at Spencer Hwy	B	16.3			B	16.7		
SH 146 SBFR at Fairmont Pkwy	D	38.3			D	49.2		
SH 146 NBFR at Fairmont Pkwy	C	26.8			C	28.6		
Unsignalized Intersection	NB	SB	EB	WB	NB	SB	EB	WB
Spencer Hwy at Employee Drwy #1	-	-	-	-	C	-	-	B ¹
Spencer Hwy at Employee Drwy #2	-	-	-	-	C	-	-	B ¹
Bay Area Blvd at Employee Drwy #3	-	-	-	-	-	A ¹	-	B
Bay Area Blvd at Heavy Truck Drwy	-	-	-	-	-	-	-	C

¹ Left-turn Level of Service

A comparison between 2017 Background and Built-out scenarios reflects the traffic impact associated with the warehouse/distribution center. As shown in **Tables 2** and **3**, all study intersections operate at LOS D or better under the 2017 built-out conditions. No improvements are recommended to mitigate the traffic impacts associated with the development.

QUEUE LENGTH ANALYSES

The 95th percentile queue length analyses for 2017 Build-out conditions were conducted at intersections mostly impacted by the site generated traffic volumes (see **Appendix C**). The longest queue length of the AM and PM peak hour is provided in **Table 4**.

The queue length analyses indicate that all projected queues could be accommodated by existing storages on the left-turn lanes at the analyzed intersections.

TABLE 4 95TH PERCENTILE QUEUE LENGTHS

Intersection	Northbound	Southbound	Eastbound	Westbound
Bay Area Blvd at Spencer Hwy	118 ft	80 ft	71 ft	56 ft
Bay Area Blvd at Fairmont Pkwy	205 ft	131 ft	99 ft	192 ft
Spencer Hwy at Employee Drwy #1	-	-	-	20 ft
Spencer Hwy at Employee Drwy #2	-	-	-	20 ft
Bay Area Blvd at Employee Drwy #3	-	20 ft	-	-

Notes: Queue lengths are longest for AM and PM peak hour. Queue lengths shorter than 20 feet are shown as 20 feet.

SIGHT DISTANCE ANALYSIS

Sight distance analysis was conducted at intersection of Bay Area Boulevard and Heavy Truck Driveway in accordance with the guidelines in *A Policy on Geometric Design of Highways and Streets, (The Green Book) 6th Edition*. As the median width on Bay Area Boulevard is 100 feet, two stage gap acceptance could be performed by the left-turn movement of heavy trucks exiting from the driveway. The required sight distance is 741 feet looking left at the first stage and 761 feet looking right at the second stage on Bay Area Boulevard with a speed limit of 45 mph (see **Figure 11** and **Appendix D**).

FINDINGS AND RECOMMENDATIONS

The warehouse/distribution center could be composed of four buildings with an area of 900,000 square feet. Driveway access to the site will be provided by two driveways on Bay Area Boulevard and two driveways on Spencer Highway. The southern driveway on Bay Area Boulevard will be a right-in/left-out driveway that only serves heavy truck traffic. The other three driveways will provide access to employee vehicles.

The following findings and recommendations are based upon the traffic operations analyses conducted for warehouse/distribution center:

- The warehouse/distribution center will not have significant traffic impacts on the surrounding roadway network. No improvements are recommended to mitigate the traffic impacts associated with the development. There are no foreseen adverse effects of establishing Bay Area Boulevard as a Truck Route from the proposed Heavy Truck Driveway to Fairmont Parkway.
- The projected queue lengths could be accommodated by the existing storage lengths on the left-turn lanes at the mostly impacted intersections of the site.
- The median opening on Bay Area Boulevard at Heavy Truck Driveway should be constructed to allow ingress right-turns and egress left-turns only, as shown in **Figure 3**.
- Two-stage gap-acceptance could be performed by the left-turn movement of heavy trucks exiting to Bay Area Boulevard. The required sight distance for the Heavy Truck Driveway is 741 feet looking left at the first stage and 761 feet looking right at the second stage on Bay Area Boulevard.

Appendices

Appendix A 2016 Traffic Counts

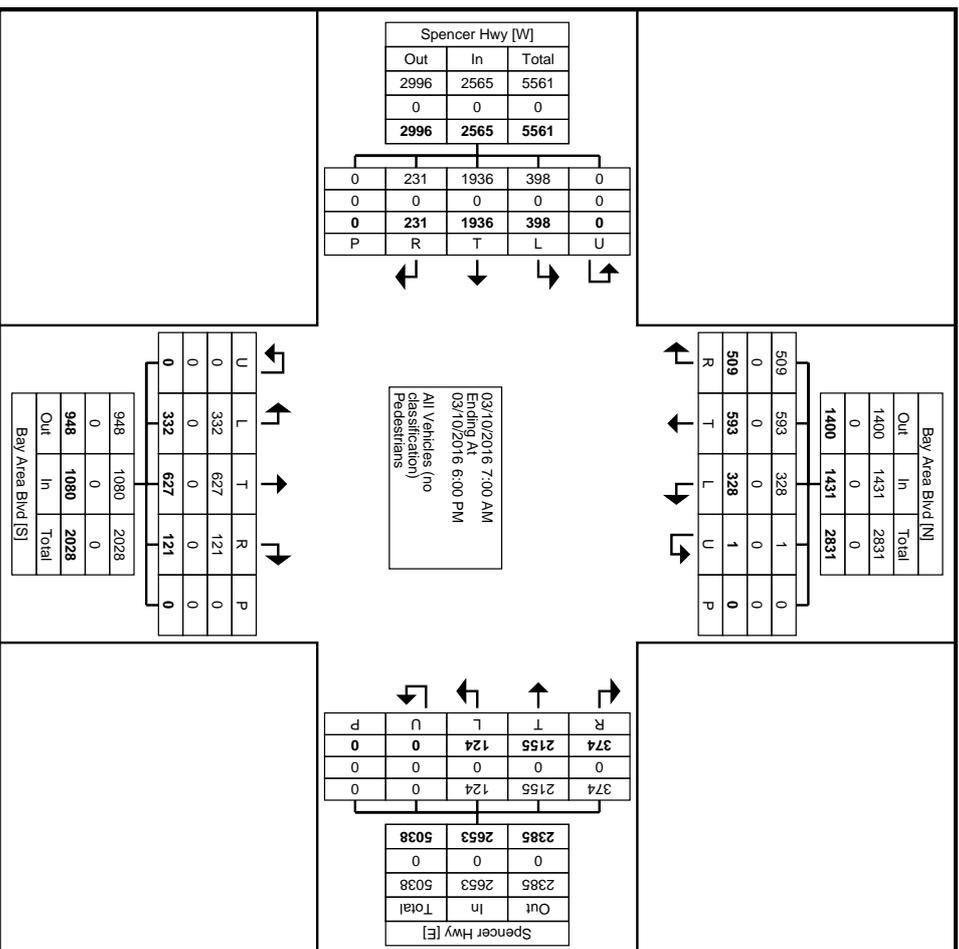


5215 Sycamore Avenue
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 281-487-5417 susan@trafficengineers.com

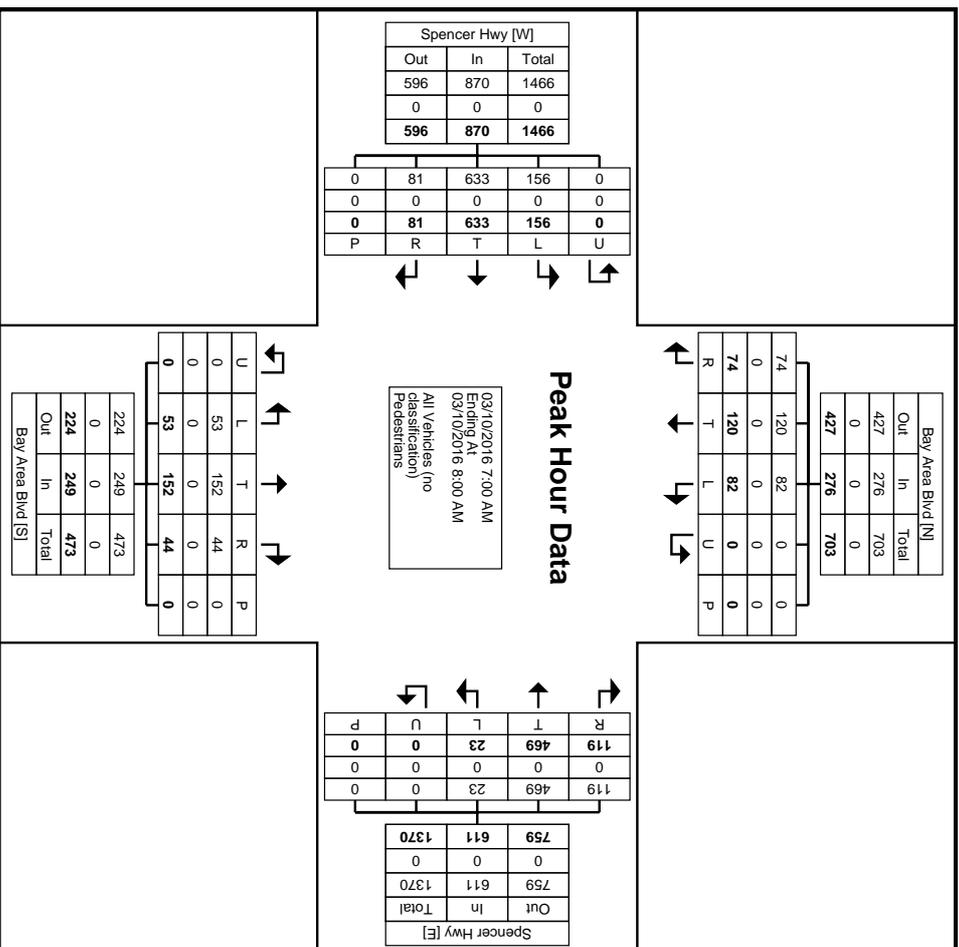
Count Name: Bay Area Blvd at Spencer Hwy
 Site Code:
 Start Date: 03/10/2016
 Page No: 1

Turning Movement Data

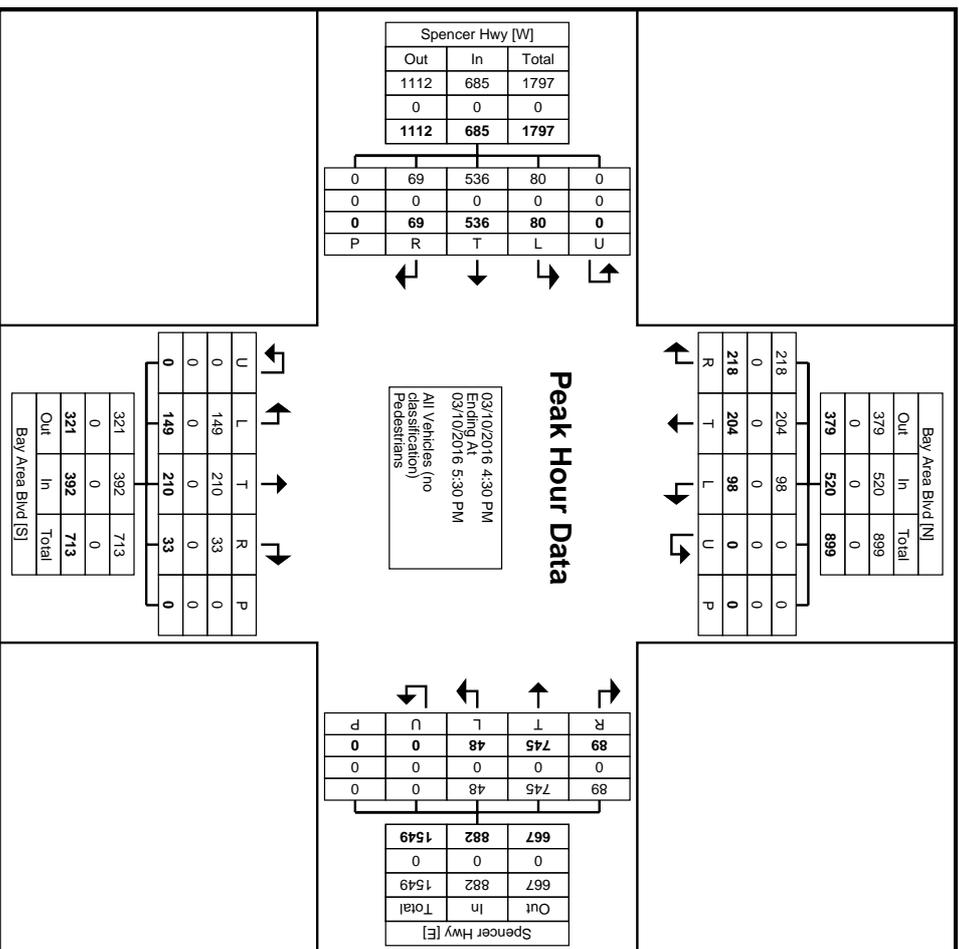
Start Time	Bay Area Blvd Southbound					Spencer Hwy Westbound					Bay Area Blvd Northbound					Spencer Hwy Eastbound					Int. Total				
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total							
7:00 AM	29	29	11	0	0	69	7	108	26	0	0	141	10	26	11	0	0	47	33	205	30	0	0	288	525
7:15 AM	15	32	22	0	0	69	8	127	31	0	0	166	20	38	12	0	0	70	40	128	18	0	0	186	491
7:30 AM	19	38	23	0	0	80	3	114	31	0	0	148	12	44	8	0	0	64	50	145	15	0	0	210	502
7:45 AM	19	21	18	0	0	58	5	120	31	0	0	156	11	44	13	0	0	68	33	155	18	0	0	206	488
Hourly Total	82	120	74	0	0	276	23	469	119	0	0	611	53	152	44	0	0	249	156	633	81	0	0	870	2006
8:00 AM	20	24	7	0	0	51	6	133	20	0	0	159	7	27	8	0	0	42	32	109	10	0	0	151	403
8:15 AM	16	26	26	0	0	68	7	110	26	0	0	143	6	19	5	0	0	30	12	83	9	0	0	104	345
8:30 AM	16	30	13	0	0	59	7	85	24	0	0	116	9	25	3	0	0	37	12	51	7	0	0	70	282
8:45 AM	20	25	17	0	0	62	5	65	18	0	0	88	11	26	2	0	0	39	20	72	6	0	0	98	287
Hourly Total	72	105	63	0	0	240	25	393	88	0	0	506	33	97	18	0	0	148	76	315	32	0	0	423	1317
*** BREAK ***																									
4:00 PM	25	32	40	0	0	97	12	150	21	0	0	183	20	39	7	0	0	66	30	117	17	0	0	164	510
4:15 PM	20	49	40	0	0	109	3	137	22	0	0	162	35	44	12	0	0	91	21	104	8	0	0	133	495
4:30 PM	21	50	46	0	0	117	14	149	32	0	0	195	43	69	9	0	0	121	26	123	17	0	0	166	599
4:45 PM	28	55	59	0	0	142	10	149	21	0	0	180	30	66	10	0	0	106	19	129	9	0	0	157	585
Hourly Total	94	186	185	0	0	465	39	585	96	0	0	720	128	218	38	0	0	384	96	473	51	0	0	620	2189
5:00 PM	26	62	69	0	0	157	19	264	22	0	0	305	38	40	9	0	0	87	21	123	20	0	0	164	713
5:15 PM	23	37	44	0	0	104	5	183	14	0	0	202	38	35	5	0	0	78	14	161	23	0	0	198	582
5:30 PM	20	42	35	1	0	98	7	138	21	0	0	166	18	48	4	0	0	70	19	112	11	0	0	142	476
5:45 PM	11	41	39	0	0	91	6	123	14	0	0	143	24	37	3	0	0	64	16	119	13	0	0	148	446
Hourly Total	80	182	187	1	0	450	37	708	71	0	0	816	118	160	21	0	0	299	70	515	67	0	0	652	2217
Grand Total	328	593	509	1	0	1431	124	2155	374	0	0	2653	332	627	121	0	0	1080	398	1936	231	0	0	2565	7729
Approach %	22.9	41.4	35.6	0.1	-	-	4.7	81.2	14.1	0.0	-	-	30.7	58.1	11.2	0.0	-	-	15.5	75.5	9.0	0.0	-	-	-
Total %	4.2	7.7	6.6	0.0	-	18.5	1.6	27.9	4.8	0.0	-	34.3	4.3	8.1	1.6	0.0	-	14.0	5.1	25.0	3.0	0.0	-	33.2	-
All Vehicles (no classification)	328	593	509	1	-	1431	124	2155	374	0	-	2653	332	627	121	0	-	1080	398	1936	231	0	-	2565	7729
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-



Turning Movement Data Plot



Turning Movement Peak Hour Data Plot (7:00 AM)



Turning Movement Peak Hour Data Plot (4:30 PM)

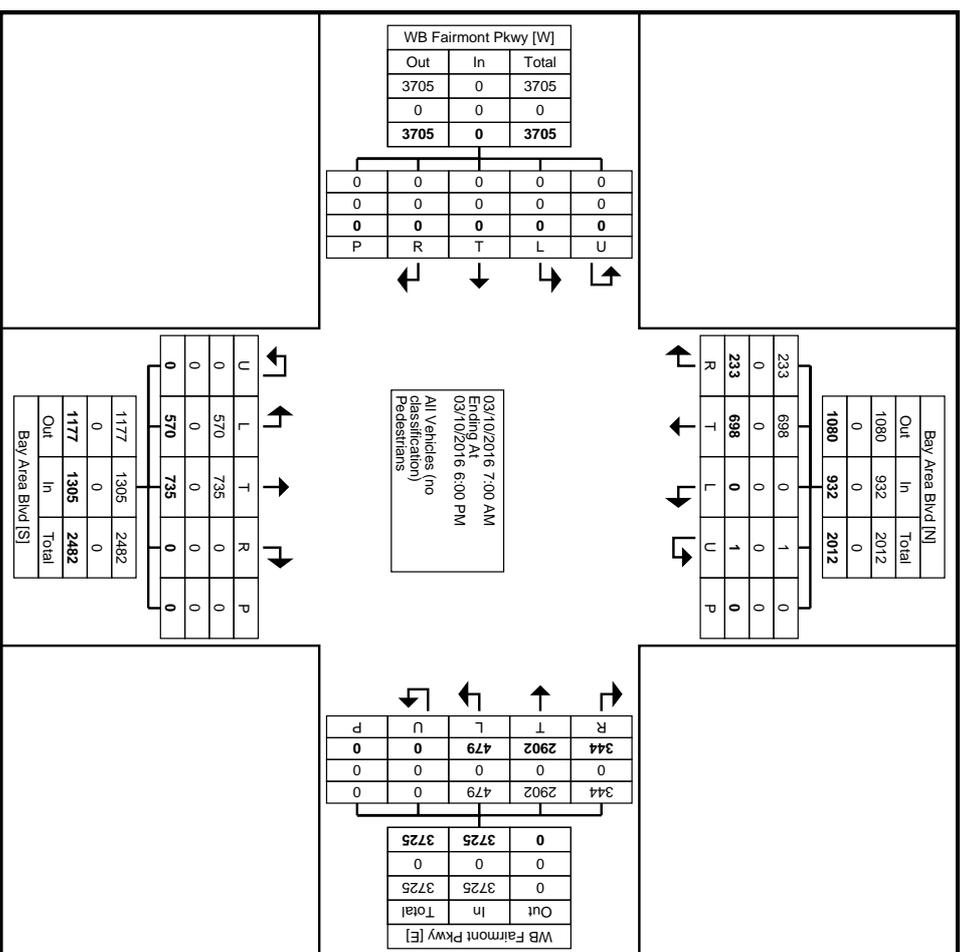


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 Pasadena, Texas, United States 77503
 281-487-5417 susan@trafficengineers.com

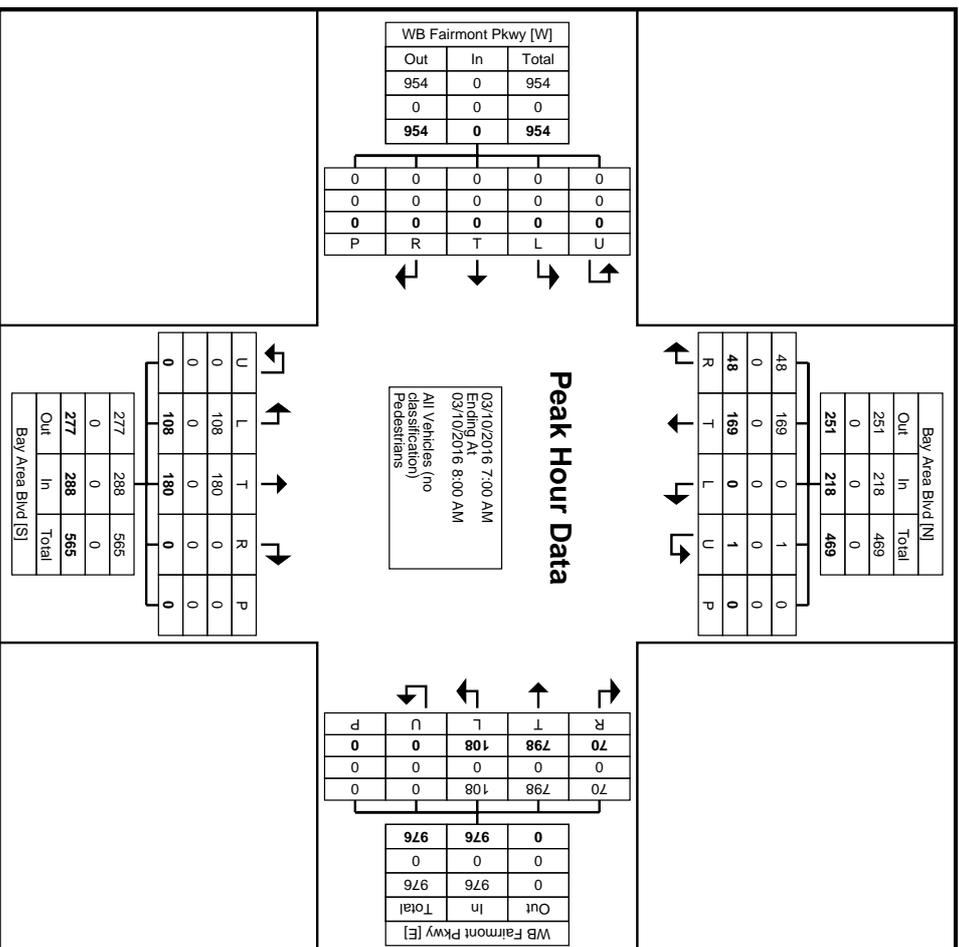
Count Name: Bay Area at WB Fairmont Pkwy
 Site Code:
 Start Date: 03/10/2016
 Page No: 1

Turning Movement Data

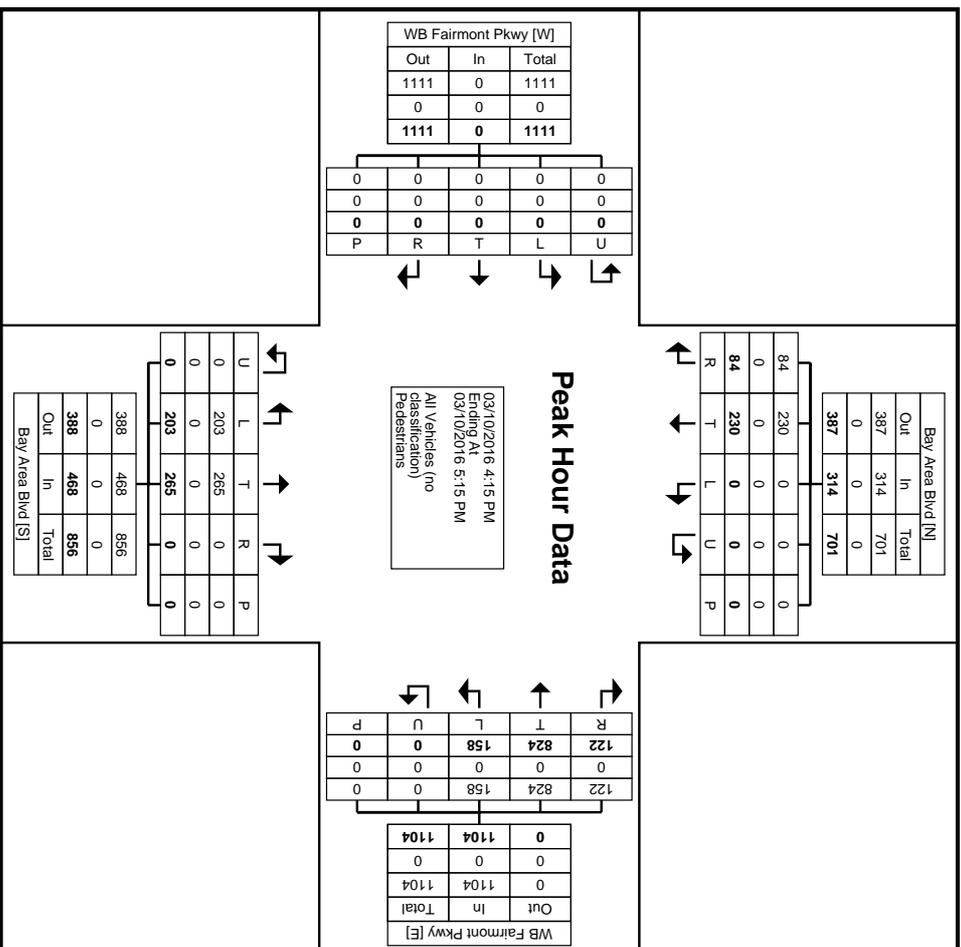
Start Time	Bay Area Blvd Southbound						WB Fairmont Pkwy Westbound						Bay Area Blvd Northbound						WB Fairmont Pkwy Eastbound						Int. Total	
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total		
7:00 AM	0	49	15	1	0	65	27	146	20	0	0	133	29	35	0	0	0	64	0	0	0	0	0	0	0	322
7:15 AM	0	37	17	0	0	54	27	228	20	0	0	275	25	45	0	0	0	70	0	0	0	0	0	0	0	399
7:30 AM	0	46	12	0	0	58	28	189	15	0	0	232	29	49	0	0	0	78	0	0	0	0	0	0	0	368
7:45 AM	0	37	4	0	0	41	26	235	15	0	0	276	25	51	0	0	0	76	0	0	0	0	0	0	0	393
Hourly Total	0	169	48	1	0	218	108	798	70	0	0	976	108	180	0	0	0	288	0	0	0	0	0	0	0	1482
8:00 AM	0	29	13	0	0	42	30	140	9	0	0	179	27	30	0	0	0	57	0	0	0	0	0	0	0	278
8:15 AM	0	33	11	0	0	44	28	141	11	0	0	180	22	17	0	0	0	39	0	0	0	0	0	0	0	263
8:30 AM	0	26	15	0	0	41	17	113	7	0	0	137	18	36	0	0	0	54	0	0	0	0	0	0	0	232
8:45 AM	0	23	12	0	0	35	18	128	18	0	0	164	18	22	0	0	0	40	0	0	0	0	0	0	0	239
Hourly Total	0	111	51	0	0	162	93	522	45	0	0	660	85	105	0	0	0	190	0	0	0	0	0	0	0	1012
*** BREAK ***																										
4:00 PM	0	46	11	0	0	57	35	202	33	0	0	270	33	54	0	0	0	87	0	0	0	0	0	0	0	414
4:15 PM	0	36	14	0	0	50	47	219	29	0	0	295	36	50	0	0	0	86	0	0	0	0	0	0	0	431
4:30 PM	0	63	18	0	0	81	33	192	38	0	0	263	80	91	0	0	0	171	0	0	0	0	0	0	0	515
4:45 PM	0	59	15	0	0	74	32	196	23	0	0	251	46	68	0	0	0	114	0	0	0	0	0	0	0	439
Hourly Total	0	204	58	0	0	262	147	809	123	0	0	1079	195	263	0	0	0	458	0	0	0	0	0	0	0	1799
5:00 PM	0	72	37	0	0	109	46	217	32	0	0	295	41	56	0	0	0	97	0	0	0	0	0	0	0	501
5:15 PM	0	50	11	0	0	61	29	192	38	0	0	259	54	43	0	0	0	97	0	0	0	0	0	0	0	417
5:30 PM	0	45	14	0	0	59	31	184	18	0	0	233	53	49	0	0	0	102	0	0	0	0	0	0	0	394
5:45 PM	0	47	14	0	0	61	25	180	18	0	0	223	34	39	0	0	0	73	0	0	0	0	0	0	0	357
Hourly Total	0	214	76	0	0	290	131	773	106	0	0	1010	182	187	0	0	0	369	0	0	0	0	0	0	0	1669
Grand Total	0	698	233	1	0	932	479	2902	344	0	0	3725	570	735	0	0	0	1305	0	0	0	0	0	0	0	5962
Approach %	0.0	74.9	25.0	0.1	-	-	12.9	77.9	9.2	0.0	-	-	43.7	56.3	0.0	0.0	-	-	NaN	NaN	NaN	NaN	-	-	-	-
Total %	0.0	11.7	3.9	0.0	-	15.6	8.0	48.7	5.8	0.0	-	62.5	9.6	12.3	0.0	0.0	-	21.9	0.0	0.0	0.0	0.0	-	-	-	-
All Vehicles (no classification)	0	698	233	1	-	932	479	2902	344	0	-	3725	570	735	0	0	-	1305	0	0	0	0	-	-	0	5962
% All Vehicles (no classification)	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	-	100.0	-	-	-	-	-	-	-	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-



Turning Movement Data Plot



Turning Movement Peak Hour Data Plot (7:00 AM)



Turning Movement Peak Hour Data Plot (4:15 PM)



TEI

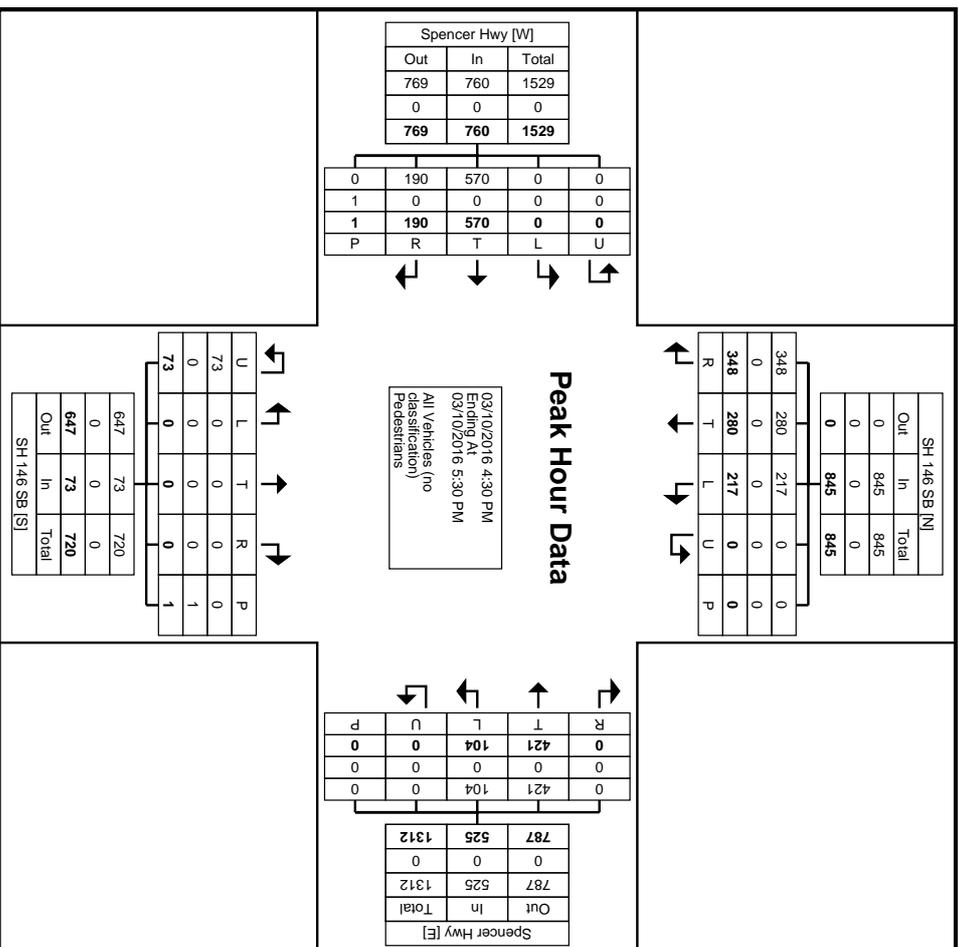
5215 Sycamore Avenue

Pasadena, Texas, United States 77503
 281-487-5417 susan@trafficengineers.com

Count Name: Spencer Hwy at SH 146 SB
 Site Code:
 Start Date: 03/10/2016
 Page No: 5

Turning Movement Peak Hour Data (4:30 PM)

Start Time	SH 146 SB Southbound						Spencer Hwy Westbound						SH 146 SB Northbound						Spencer Hwy Eastbound						Int. Total		
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total			
4:30 PM	58	72	62	0	0	192	37	115	0	0	0	152	0	0	0	0	10	1	10	0	118	40	0	0	1	158	512
4:45 PM	41	62	88	0	0	191	25	97	0	0	0	122	0	0	0	23	0	23	0	131	45	0	0	0	176	512	
5:00 PM	62	92	96	0	0	250	28	123	0	0	0	151	0	0	0	23	0	23	0	161	50	0	0	0	211	635	
5:15 PM	56	54	102	0	0	212	14	86	0	0	0	100	0	0	0	17	0	17	0	160	55	0	0	0	215	544	
Total	217	280	348	0	0	845	104	421	0	0	0	525	0	0	0	73	1	73	0	570	190	0	0	1	760	2203	
Approach %	25.7	33.1	41.2	0.0	-	-	19.8	80.2	0.0	0.0	-	-	0.0	0.0	0.0	100.0	-	-	0.0	75.0	25.0	0.0	-	-	-	-	
Total %	9.9	12.7	15.8	0.0	-	38.4	4.7	19.1	0.0	0.0	-	23.8	0.0	0.0	0.0	3.3	-	-	3.3	0.0	25.9	8.6	0.0	-	34.5	-	
PHF	0.875	0.761	0.853	0.000	-	0.845	0.703	0.856	0.000	0.000	-	0.863	0.000	0.000	0.000	0.793	-	-	0.793	0.000	0.885	0.864	0.000	-	0.884	0.867	
All Vehicles (no classification)	217	280	348	0	-	845	104	421	0	0	-	525	0	0	0	73	-	-	73	0	570	190	0	-	760	2203	
% All Vehicles (no classification)	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	-	100.0	-	-	-	100.0	-	-	100.0	-	100.0	100.0	-	-	100.0	100.0	
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	100.0	-	-	



Turning Movement Peak Hour Data Plot (4:30 PM)

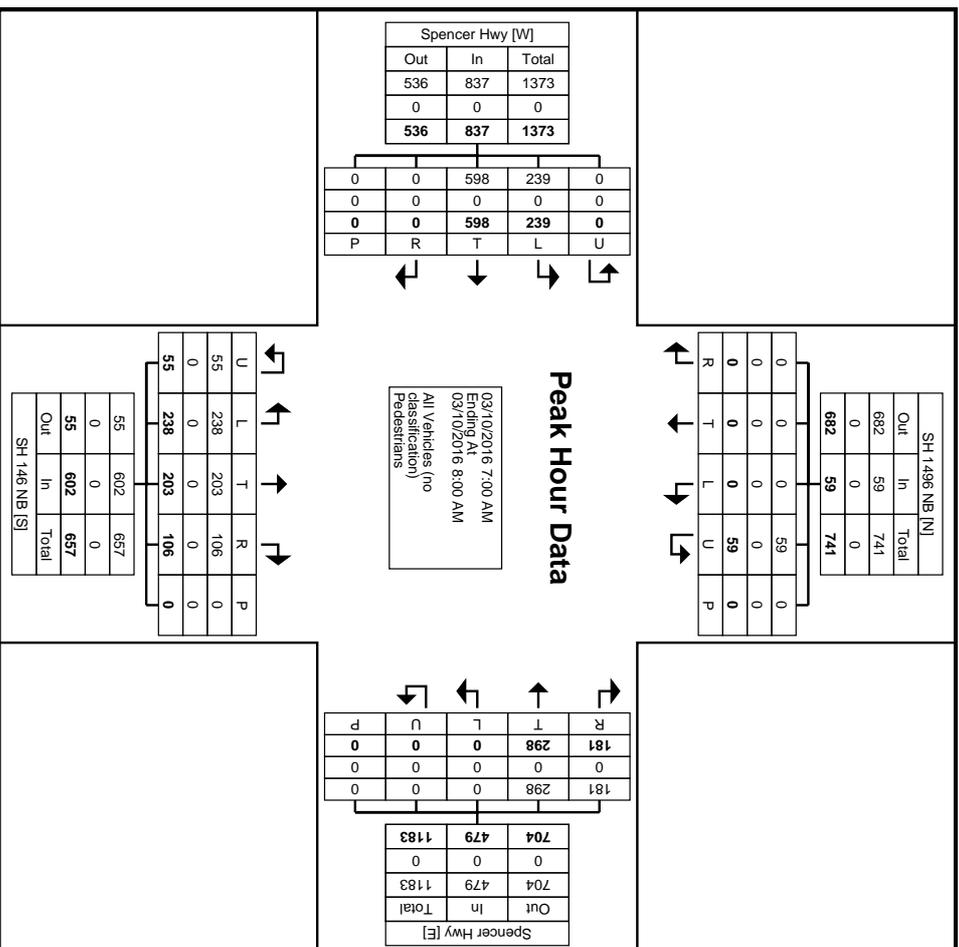


5215 Sycamore Avenue
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 281-487-5417 susan@trafficengineers.com

Count Name: Spencer Hwy at SH 146 NB
 Site Code:
 Start Date: 03/10/2016
 Page No: 1

Turning Movement Data

Start Time	SH 1496 NB Southbound					Spencer Hwy Westbound					SH 146 NB Northbound					Spencer Hwy Eastbound					Int. Total				
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total							
7:00 AM	0	0	0	15	0	15	0	56	38	0	0	94	48	38	23	11	0	120	62	221	0	0	0	283	512
7:15 AM	0	0	0	10	0	10	0	85	43	0	0	128	55	59	21	15	0	150	59	121	0	0	0	180	468
7:30 AM	0	0	0	16	0	16	0	76	54	0	0	130	65	54	34	17	0	170	57	113	0	0	0	170	486
7:45 AM	0	0	0	18	0	18	0	81	46	0	0	127	70	52	28	12	0	162	61	143	0	0	0	204	511
Hourly Total	0	0	0	59	0	59	0	298	181	0	0	479	238	203	106	55	0	602	239	598	0	0	0	837	1977
8:00 AM	0	0	0	16	0	16	0	84	37	0	0	121	40	64	21	10	0	135	42	124	0	0	0	166	438
8:15 AM	0	0	0	9	0	9	0	61	27	0	0	88	35	51	13	5	0	104	38	94	0	0	0	132	333
8:30 AM	0	0	0	8	0	8	0	63	28	0	0	91	38	44	26	8	0	116	34	65	0	0	0	99	314
8:45 AM	0	0	0	11	0	11	0	50	23	0	0	73	33	45	21	12	0	111	32	67	0	0	0	99	294
Hourly Total	0	0	0	44	0	44	0	258	115	0	0	373	146	204	81	35	0	466	146	350	0	0	0	496	1379
*** BREAK ***																									
4:00 PM	0	0	0	9	0	9	0	91	34	0	0	125	36	42	16	23	0	117	79	114	0	0	0	193	444
4:15 PM	0	0	0	14	0	14	0	95	44	0	0	139	44	45	22	20	0	131	68	140	0	0	0	208	492
4:30 PM	0	0	0	14	0	14	0	95	50	0	0	145	41	60	10	9	1	120	60	122	0	0	0	182	461
4:45 PM	0	0	0	15	0	15	0	79	28	0	0	107	35	60	15	20	0	130	71	112	0	0	0	183	435
Hourly Total	0	0	0	52	0	52	0	360	156	0	0	516	156	207	63	72	1	498	278	488	0	0	0	766	1832
5:00 PM	0	0	0	13	0	13	0	100	34	0	0	134	54	48	16	19	0	137	91	131	0	0	0	222	506
5:15 PM	0	0	0	10	0	10	0	75	33	0	0	108	35	47	17	17	0	116	70	145	0	0	0	215	449
5:30 PM	0	0	0	11	0	11	0	66	37	0	0	103	43	48	21	12	0	124	88	130	0	0	0	198	436
5:45 PM	0	0	0	5	0	5	0	71	31	0	0	102	29	52	17	22	0	120	56	137	0	0	0	193	420
Hourly Total	0	0	0	39	0	39	0	312	135	0	0	447	161	195	71	70	0	497	285	543	0	0	0	828	1811
Grand Total	0	0	0	194	0	194	0	1228	587	0	0	1815	701	809	321	232	1	2063	948	1979	0	0	0	2927	6999
Approach %	0.0	0.0	0.0	100.0	-	-	0.0	67.7	32.3	0.0	-	25.9	34.0	39.2	15.6	11.2	-	-	32.4	67.6	0.0	0.0	-	-	-
Total %	0.0	0.0	0.0	2.8	-	2.8	0.0	17.5	8.4	0.0	-	25.9	10.0	11.6	4.6	3.3	-	29.5	13.5	28.3	0.0	0.0	-	41.8	-
All Vehicles (no classification)	0	0	0	194	-	194	0	1228	587	0	-	1815	701	809	321	232	-	2063	948	1979	0	0	-	2927	6999
% All Vehicles (no classification)	-	-	-	100.0	-	100.0	-	100.0	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	-	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	0	-	-



Turning Movement Peak Hour Data Plot (7:00 AM)

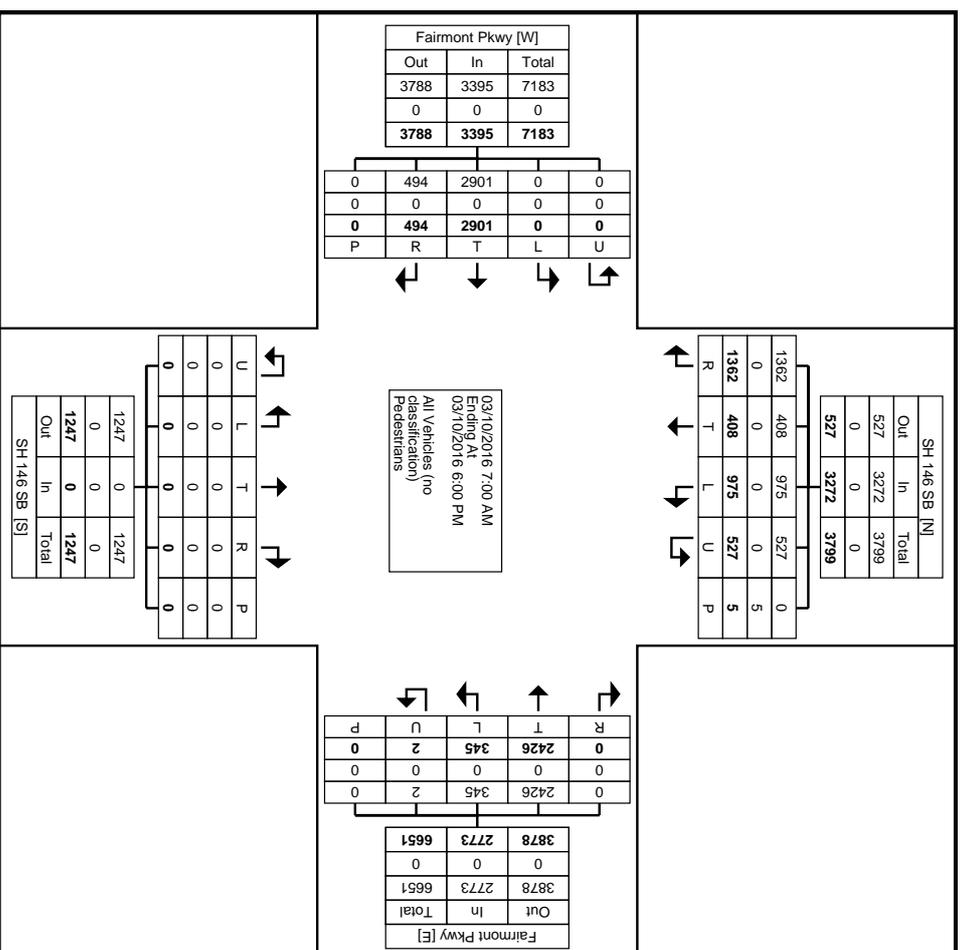


5215 Sycamore Avenue
 TEI
 Pasadena, Texas, United States 77503
 281-487-5417 susan@trafficengineers.com

Count Name: Fairmont Pkwy at SH 146 SB
 Site Code:
 Start Date: 03/10/2016
 Page No: 1

Turning Movement Data

Start Time	SH 146 SB Southbound						Fairmont Pkwy Westbound						SH 146 SB Northbound						Fairmont Pkwy Eastbound							
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total	
7:00 AM	103	14	64	23	0	204	16	167	0	0	0	183	0	0	0	0	0	0	0	220	15	0	0	0	235	622
7:15 AM	37	13	98	20	0	168	21	203	0	0	0	224	0	0	0	0	0	0	0	157	31	0	0	0	188	580
7:30 AM	55	24	96	32	0	207	21	149	0	0	0	170	0	0	0	0	0	0	0	165	29	0	0	0	194	571
7:45 AM	49	12	110	28	0	199	15	173	0	0	0	188	0	0	0	0	0	0	0	146	31	0	0	0	177	564
Hourly Total	244	63	368	103	0	778	73	692	0	0	0	765	0	0	0	0	0	0	0	688	106	0	0	0	794	2337
8:00 AM	54	21	74	24	0	173	17	131	0	0	0	148	0	0	0	0	0	0	0	137	22	0	0	0	159	480
8:15 AM	51	20	86	31	0	188	11	102	0	0	0	113	0	0	0	0	0	0	0	131	28	0	0	0	159	460
8:30 AM	27	14	79	21	0	141	10	71	0	0	0	81	0	0	0	0	0	0	0	110	24	0	0	0	134	356
8:45 AM	36	23	72	26	0	157	12	91	0	0	0	103	0	0	0	0	0	0	0	129	20	0	0	0	149	409
Hourly Total	168	78	311	102	0	659	50	395	0	0	0	445	0	0	0	0	0	0	0	507	94	0	0	0	601	1705
*** BREAK ***																										
4:00 PM	70	37	82	39	1	228	27	179	0	0	0	206	0	0	0	0	0	0	0	205	26	0	0	0	231	665
4:15 PM	73	29	84	41	1	227	26	186	0	1	0	213	0	0	0	0	0	0	0	242	34	0	0	0	276	716
4:30 PM	60	33	85	26	1	204	36	158	0	0	0	194	0	0	0	0	0	0	0	235	32	0	0	0	267	665
4:45 PM	63	30	94	29	0	216	22	162	0	1	0	185	0	0	0	0	0	0	0	243	35	0	0	0	278	679
Hourly Total	266	129	345	135	3	875	111	685	0	2	0	798	0	0	0	0	0	0	0	925	127	0	0	0	1062	2725
5:00 PM	78	41	85	48	2	252	27	196	0	0	0	223	0	0	0	0	0	0	0	194	38	0	0	0	232	707
5:15 PM	51	31	87	51	0	220	31	179	0	0	0	210	0	0	0	0	0	0	0	219	61	0	0	0	280	710
5:30 PM	98	37	83	52	0	270	18	145	0	0	0	163	0	0	0	0	0	0	0	186	37	0	0	0	223	656
5:45 PM	70	29	83	36	0	218	35	134	0	0	0	169	0	0	0	0	0	0	0	182	31	0	0	0	213	600
Hourly Total	297	138	338	187	2	960	111	654	0	0	0	765	0	0	0	0	0	0	0	781	167	0	0	0	948	2673
Grand Total	975	408	1362	527	5	3272	345	2426	0	2	0	2773	0	0	0	0	0	0	0	2901	494	0	0	0	3395	9440
Approach %	29.8	12.5	41.6	16.1	-	-	12.4	87.5	0.0	0.1	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.4	14.6	0.0	0.0	-	36.0	-
Total %	10.3	4.3	14.4	5.6	-	34.7	3.7	25.7	0.0	0.0	-	29.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.7	5.2	0.0	-	-	36.0	-
All Vehicles (no classification)	975	408	1362	527	-	3272	345	2426	0	2	-	2773	0	0	0	0	0	0	0	2901	494	0	-	-	3395	9440
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	-	-	-	-	-	-	-	100.0	100.0	-	-	-	100.0	100.0
Pedestrians	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-



Turning Movement Data Plot

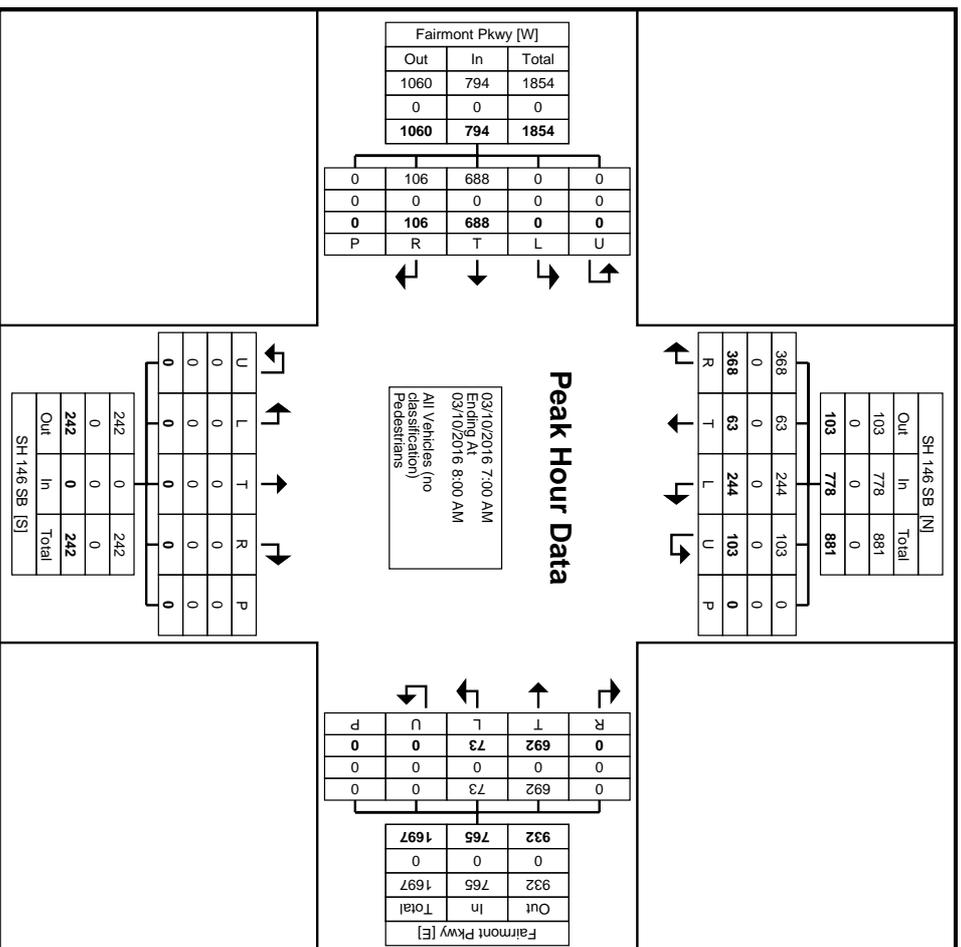


TEI
 5215 Sycamore Avenue
 Pasadena, Texas, United States 77503
 281-487-5417 susan@trafficengineers.com

Count Name: Fairmont Pkwy at SH 146 SB
 Site Code:
 Start Date: 03/10/2016
 Page No: 3

Turning Movement Peak Hour Data (7:00 AM)

Start Time	SH 146 SB Southbound						Fairmont Pkwy Westbound						SH 146 SB Northbound						Fairmont Pkwy Eastbound						Int. Total	
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total		
7:00 AM	103	14	64	23	0	204	16	167	0	0	0	183	0	0	0	0	0	0	0	220	15	0	0	0	235	622
7:15 AM	37	13	98	20	0	168	21	203	0	0	0	224	0	0	0	0	0	0	0	157	31	0	0	0	188	580
7:30 AM	55	24	96	32	0	207	21	149	0	0	0	170	0	0	0	0	0	0	0	165	29	0	0	0	194	571
7:45 AM	49	12	110	28	0	199	15	173	0	0	0	188	0	0	0	0	0	0	0	146	31	0	0	0	177	564
Total	244	63	368	103	0	778	73	692	0	0	0	765	0	0	0	0	0	0	0	688	106	0	0	0	794	2337
Approach %	31.4	8.1	47.3	13.2	-	-	9.5	90.5	0.0	0.0	-	-	NAN	NAN	NAN	NAN	-	-	0.0	86.6	13.4	0.0	-	-	-	-
Total %	10.4	2.7	15.7	4.4	-	33.3	3.1	29.6	0.0	0.0	-	32.7	0.0	0.0	0.0	0.0	-	-	0.0	29.4	4.5	0.0	-	-	34.0	-
PHF	0.592	0.656	0.836	0.805	-	0.940	0.869	0.852	0.000	0.000	-	0.854	0.000	0.000	0.000	0.000	-	-	0.000	0.782	0.855	0.000	-	-	0.845	0.939
All Vehicles (no classification)	244	63	368	103	-	778	73	692	0	0	-	765	0	0	0	0	-	-	0	688	106	0	-	-	794	2337
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	-	-	100.0	-	-	-	-	-	-	-	100.0	100.0	-	-	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-



Turning Movement Peak Hour Data Plot (7:00 AM)

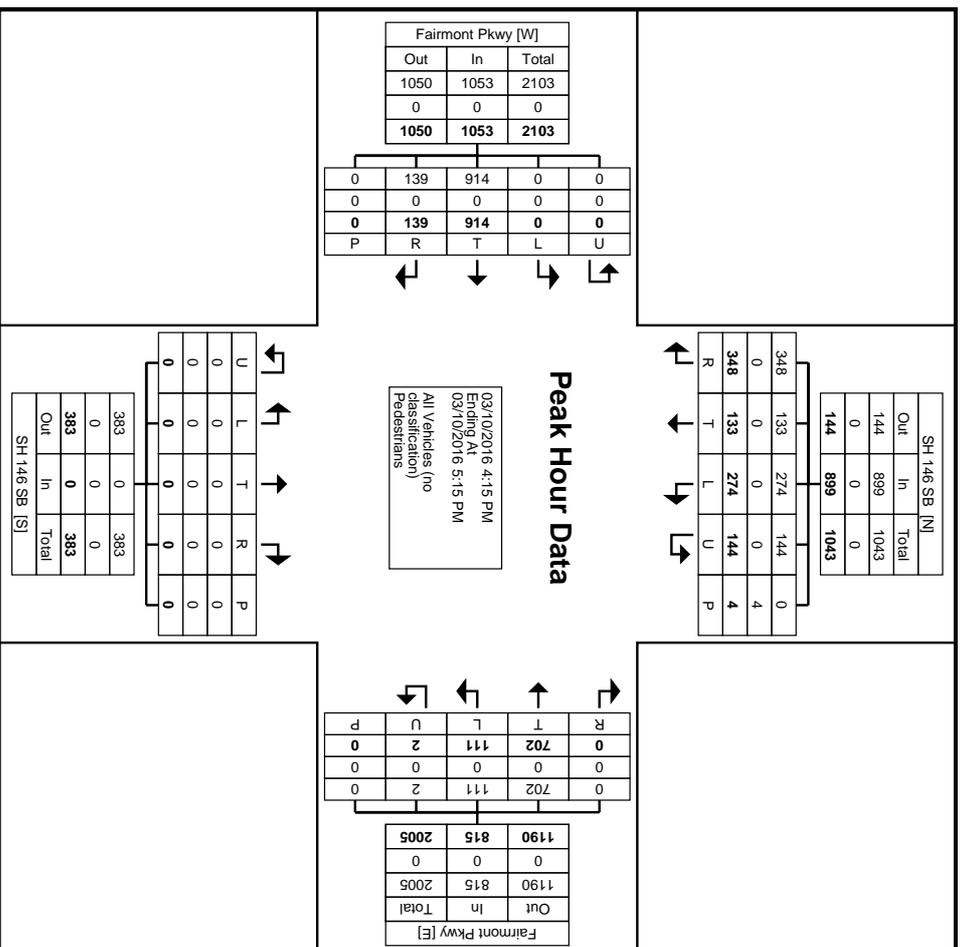


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Count Name: Fairmont Pkwy at SH 146 SB
 Site Code:
 Start Date: 03/10/2016
 Page No: 5

Turning Movement Peak Hour Data (4:15 PM)

Start Time	SH 146 SB Southbound						Fairmont Pkwy Westbound						SH 146 SB Northbound						Fairmont Pkwy Eastbound						Int. Total	
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total		
4:15 PM	73	29	84	41	1	227	26	186	0	1	0	213	0	0	0	0	0	0	0	242	34	0	0	0	276	716
4:30 PM	60	33	85	26	1	204	36	158	0	0	0	194	0	0	0	0	0	0	0	235	32	0	0	0	267	665
4:45 PM	63	30	94	29	0	216	22	162	0	1	0	185	0	0	0	0	0	0	0	243	35	0	0	0	278	679
5:00 PM	78	41	85	48	2	252	27	196	0	0	0	223	0	0	0	0	0	0	0	194	38	0	0	0	232	707
Total	274	133	348	144	4	899	111	702	0	2	0	815	0	0	0	0	0	0	0	914	139	0	0	0	1053	2767
Approach %	30.5	14.8	38.7	16.0	-	-	13.6	86.1	0.0	0.2	-	-	NAN	NAN	NAN	NAN	-	-	0.0	86.8	13.2	0.0	-	-	-	
Total %	9.9	4.8	12.6	5.2	-	32.5	4.0	25.4	0.0	0.1	-	29.5	0.0	0.0	0.0	0.0	-	-	0.0	33.0	5.0	0.0	-	-	38.1	
PHF	0.878	0.811	0.926	0.750	-	0.892	0.771	0.895	0.000	0.500	-	0.914	0.000	0.000	0.000	0.000	-	-	0.000	0.940	0.914	0.000	-	-	0.947	
All Vehicles (no classification)	274	133	348	144	-	899	111	702	0	2	-	815	0	0	0	0	-	-	0	914	139	0	-	-	1053	2767
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	-	-	-	-	-	-	-	100.0	100.0	-	-	-	100.0	100.0
Pedestrians	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-



Turning Movement Peak Hour Data Plot (4:15 PM)

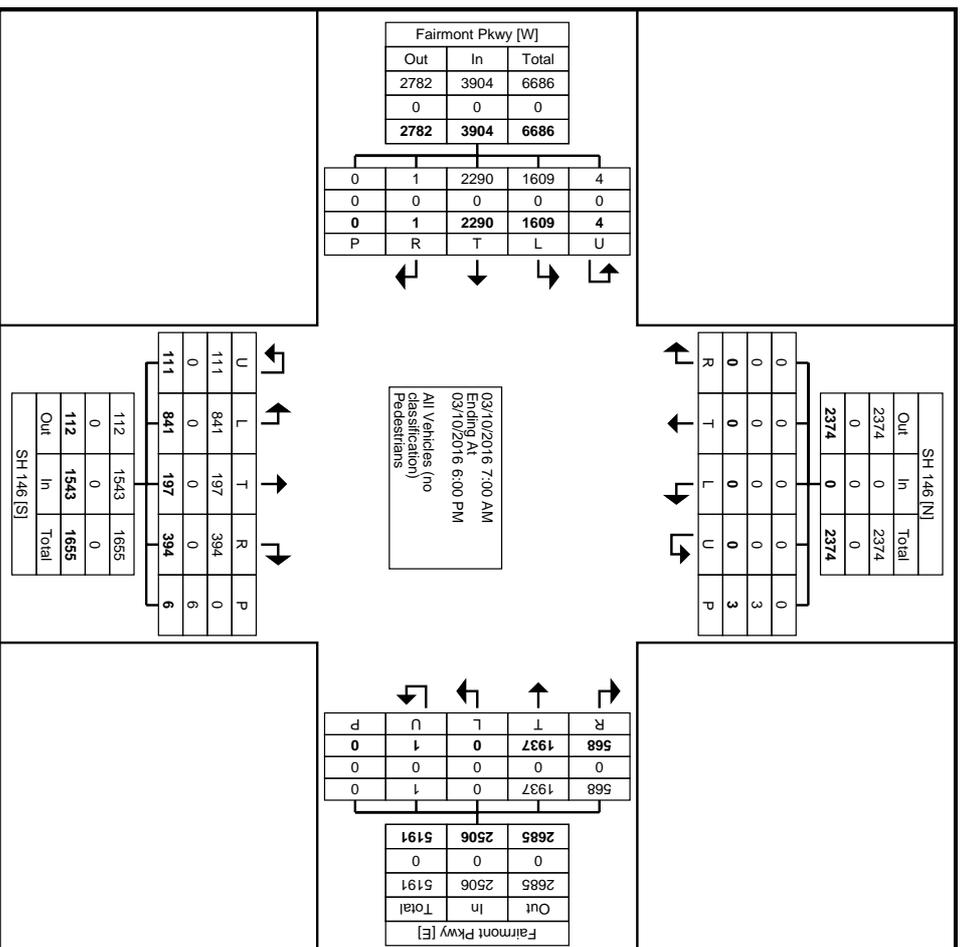


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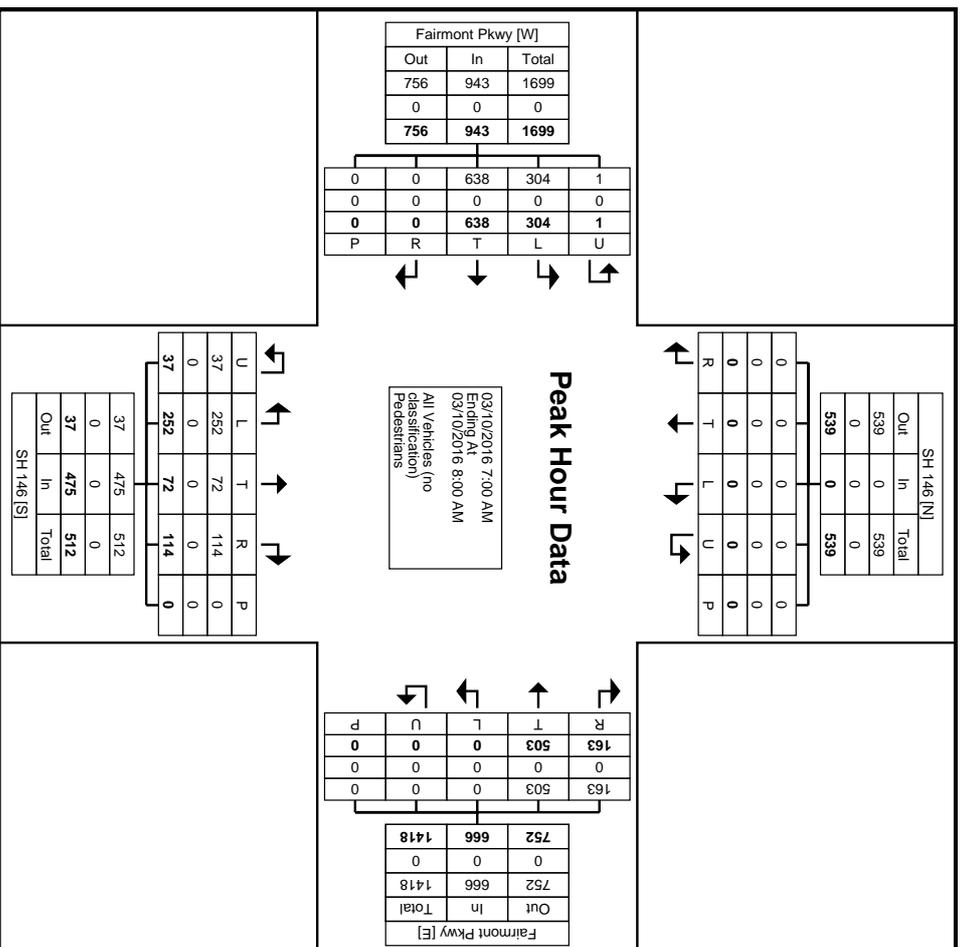
Count Name: Fairmont Pkwy at SH 146
 Site Code:
 Start Date: 03/10/2016
 Page No: 1

Turning Movement Data

Start Time	SH 146 Southbound						Fairmont Pkwy Westbound						SH 146 Northbound						Fairmont Pkwy Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
7:00 AM	0	0	0	0	0	0	0	149	42	0	0	191	33	17	19	9	0	78	72	256	0	1	0	329	598
7:15 AM	0	0	0	0	0	0	0	152	61	0	0	213	62	27	33	9	0	131	73	124	0	0	0	197	541
7:30 AM	0	0	0	0	0	0	0	107	31	0	0	138	72	17	32	8	0	129	82	136	0	0	0	218	485
7:45 AM	0	0	0	0	0	0	0	95	29	0	0	124	85	11	30	11	0	137	77	122	0	0	0	199	460
Hourly Total	0	0	0	0	0	0	0	503	163	0	0	666	252	72	114	37	0	475	304	638	0	1	0	943	2084
8:00 AM	0	0	0	0	0	0	0	91	37	0	0	128	57	15	30	6	0	108	71	120	0	0	0	191	427
8:15 AM	0	0	0	0	0	0	0	73	23	0	0	96	40	7	24	7	0	78	69	113	0	0	0	182	356
8:30 AM	0	0	0	0	0	0	0	53	32	0	0	85	39	10	18	8	1	75	63	75	0	0	0	138	298
8:45 AM	0	0	0	0	0	0	0	59	26	0	0	85	37	12	14	15	0	78	62	105	0	1	0	168	331
Hourly Total	0	0	0	0	1	0	0	276	118	0	0	394	173	44	86	36	1	339	265	413	0	1	0	679	1412
*** BREAK ***																									
4:00 PM	0	0	0	0	0	0	0	167	37	0	0	204	43	9	12	4	0	68	131	143	1	1	0	276	548
4:15 PM	0	0	0	0	1	0	0	159	42	0	0	201	58	7	23	3	1	91	147	173	0	0	0	320	612
4:30 PM	0	0	0	0	1	0	0	146	34	0	0	180	48	10	24	1	0	83	162	137	0	0	0	299	562
4:45 PM	0	0	0	0	0	0	0	127	31	0	0	158	55	8	23	9	0	95	146	164	0	0	0	310	563
Hourly Total	0	0	0	0	2	0	0	599	144	0	0	743	204	34	82	17	1	337	586	617	1	1	0	1205	2285
5:00 PM	0	0	0	0	0	0	0	178	40	1	0	219	53	12	32	3	2	100	123	147	0	1	0	271	590
5:15 PM	0	0	0	0	0	0	0	137	31	0	0	168	58	14	22	4	1	98	127	148	0	0	0	275	541
5:30 PM	0	0	0	0	0	0	0	131	35	0	0	166	49	6	34	7	1	96	107	172	0	0	0	279	541
5:45 PM	0	0	0	0	0	0	0	113	37	0	0	150	52	15	24	7	0	98	97	155	0	0	0	252	500
Hourly Total	0	0	0	0	0	0	0	559	143	1	0	703	212	47	112	21	4	392	454	622	0	1	0	1077	2172
Grand Total	0	0	0	0	3	0	0	1937	568	1	0	2506	841	197	394	111	6	1543	1609	2290	1	4	0	3904	7953
Approach %	NaN	NaN	NaN	NaN	-	-	0.0	77.3	22.7	0.0	-	-	54.5	12.8	25.5	7.2	-	-	41.2	58.7	0.0	0.1	-	-	-
Total %	0.0	0.0	0.0	0.0	-	0.0	0.0	24.4	7.1	0.0	-	31.5	10.6	2.5	5.0	1.4	-	19.4	20.2	28.8	0.0	0.1	-	-	49.1
All Vehicles (no classification)	0	0	0	0	-	0	0	1937	568	1	-	2506	841	197	394	111	-	1543	1609	2290	1	4	-	3904	7953
% All Vehicles (no classification)	-	-	-	-	-	-	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0
Pedestrians	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	6	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



Turning Movement Data Plot



Turning Movement Peak Hour Data Plot (7:00 AM)

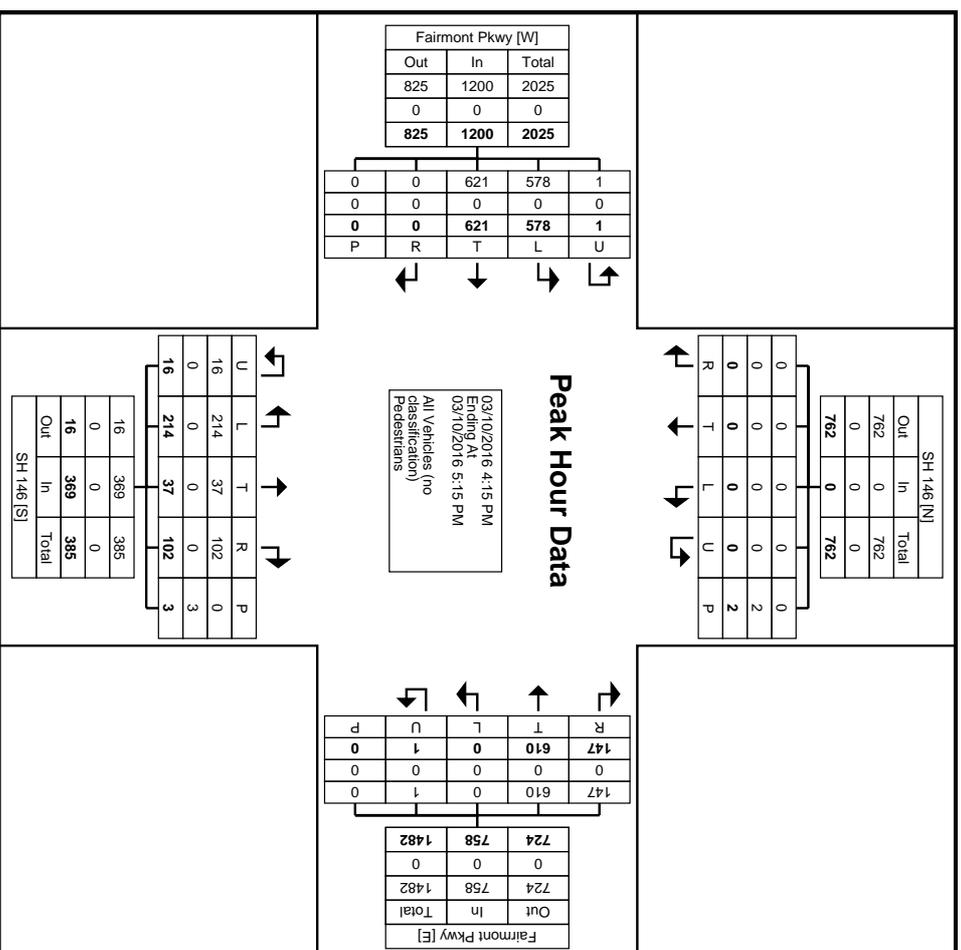


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Count Name: Fairmont Pkwy at SH 146
 Site Code:
 Start Date: 03/10/2016
 Page No: 5

Turning Movement Peak Hour Data (4:15 PM)

Start Time	SH 146 Southbound					Fairmont Pkwy Westbound					SH 146 Northbound					Fairmont Pkwy Eastbound					Int. Total		
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total					
4:15 PM	0	0	0	0	1	0	159	42	0	0	201	58	7	23	3	1	91	147	173	0	0	320	612
4:30 PM	0	0	0	0	1	0	146	34	0	0	180	48	10	24	1	0	83	162	137	0	0	299	562
4:45 PM	0	0	0	0	0	0	127	31	0	0	158	55	8	23	9	0	95	146	164	0	0	310	563
5:00 PM	0	0	0	0	0	0	178	40	1	0	219	53	12	32	3	2	100	123	147	0	1	271	590
Total	0	0	0	0	2	0	610	147	1	0	758	214	37	102	16	3	369	578	621	0	1	1200	2327
Approach %	NAN	NAN	NAN	NAN	-	-	0.0	80.5	19.4	0.1	-	58.0	10.0	27.6	4.3	-	-	48.2	51.8	0.0	0.1	-	-
Total %	0.0	0.0	0.0	0.0	-	0.0	26.2	6.3	0.0	-	32.6	9.2	1.6	4.4	0.7	-	15.9	24.8	26.7	0.0	0.0	-	51.6
PHF	0.000	0.000	0.000	0.000	-	0.000	0.857	0.875	0.250	-	0.865	0.922	0.771	0.797	0.444	-	0.923	0.892	0.897	0.000	0.250	-	0.938
All Vehicles (no classification)	0	0	0	0	-	0	610	147	1	-	758	214	37	102	16	-	369	578	621	0	1	1200	2327
% All Vehicles (no classification)	-	-	-	-	-	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0
Pedestrians	-	-	-	-	2	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	0	-



Turning Movement Peak Hour Data Plot (4:15 PM)

Appendix B

2017 Background Traffic Operations

Vistro File: E:\...\AM.vistro
Report File: E:\...\Background AM.pdf

Scenario: Base Scenario
5/3/2016

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bay Area Blvd at Spencer Hwy	Signalized	HCM 2010	WB Left	0.338	15.8	B
2	Bay Area Blvd at Fairmont Pkwy	Signalized	HCM 2010	WB Left	0.427	21.8	C
3	SH 146 SBFR at Spencer Hwy	Signalized	HCM 2010	WB Left	0.512	19.3	B
4	SH 146 NBFR at Spencer Hwy	Signalized	HCM 2010	WB Right	0.444	17.9	B
5	SH 146 SBFR at Fairmont Pkwy	Signalized	HCM 2010	SB Right	0.708	36.0	D
6	SH 146 NBFR at Fairmont Pkwy	Signalized	HCM 2010	NB Right	0.587	26.9	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report
Intersection 1: Bay Area Blvd at Spencer Hwy**

Control Type:	Signalized	Delay (sec / veh):	15.8
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.338

Intersection Setup

Name	Bay Area Blvd			Bay Area Blvd			Spencer Hwy			Spencer Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.	100.	100.	245.	100.	100.	230.	100.	100.	105.	100.	100.
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	Bay Area Blvd			Bay Area Blvd			Spencer Hwy			Spencer Hwy		
Base Volume Input [veh/h]	53	152	44	82	120	74	156	633	81	23	469	119
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	9.00	9.00	9.00	9.00	9.00	9.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	54	155	45	84	122	75	159	646	83	23	478	121
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Other Adjustment 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
Total 15-Minute Volume [veh/h]	14	41	12	22	32	20	42	169	22	6	125	32

Total Analysis Volume [veh/h]	57	162	47	88	128	79	166	676	87	24	501	127
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prote	Perm	Perm									
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									
Minimum Green [s]	7	8	0	7	8	0	7	8	0	7	8	0
Maximum Green [s]	16	40	0	40	64	0	30	70	0	20	60	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	65	0	0	0	0	0	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No										
Maximum Recall	No	No										
Pedestrian Recall	No	No										
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	3	7	7	5	8	8	6	13	13	2	9	9
g / C, Green / Cycle	0.08	0.17	0.17	0.11	0.20	0.20	0.14	0.30	0.30	0.04	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.03	0.06	0.06	0.05	0.06	0.06	0.10	0.15	0.15	0.01	0.13	0.13
s, saturation flow rate [veh/h]	1810	1900	1758	1810	1900	1667	1660	3319	1644	1660	3319	1572
c, Capacity [veh/h]	149	328	303	195	377	331	237	1009	500	69	675	320
d1, Uniform Delay [s]	18.6	15.5	15.5	17.9	14.5	14.6	17.4	12.2	12.2	19.9	15.5	15.6
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering 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
d2, Incremental Delay [s]	1.62	0.57	0.65	1.62	0.41	0.51	3.75	0.39	0.80	2.95	0.96	2.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression 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

Lane Group Results

X, volume / capacity	0.38	0.32	0.34	0.45	0.28	0.30	0.70	0.50	0.51	0.35	0.63	0.64
d, Delay for Lane Group [s/veh]	20.2	16.1	16.2	19.5	14.9	15.1	21.2	12.6	13.0	22.8	16.5	17.8
Lane Group LOS	C	B	B	B	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	0.50	0.76	0.73	0.74	0.72	0.68	1.46	1.46	1.52	0.25	1.51	1.59
50th-Percentile Queue Length [ft]	12.4	18.8	18.3	18.4	17.8	16.9	36.5	36.5	37.9	6.16	37.7	39.7
95th-Percentile Queue Length [veh]	0.89	1.36	1.32	1.32	1.29	1.22	2.63	2.63	2.73	0.44	2.72	2.86
95th-Percentile Queue Length [ft]	22.3	33.9	33.0	33.1	32.2	30.4	65.8	65.8	68.3	11.0	67.9	71.4

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.2	16.1	16.2	19.5	15.0	15.1	21.2	12.7	13.0	22.8	16.7	17.8
Movement LOS	C	B	B	B	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	17.03			16.39			14.29			17.17		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	15.79											
Intersection LOS	B											
Intersection V/C	0.338											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 2: Bay Area Blvd at Fairmont Pkwy

Control Type:	Signalized	Delay (sec / veh):	21.8
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.427

Intersection Setup

Name	Bay Area Blvd			Bay Area Blvd			Fairmont Pkwy			Fairmont Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	234.	100.	170.	150.	100.	100.	260.	100.	150.	450.	100.	380.
Speed [mph]	45.00			45.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	Bay Area Blvd			Bay Area Blvd			Fairmont Pkwy			Fairmont Pkwy		
Base Volume Input [veh/h]	108	180	106	72	216	48	61	711	141	108	798	70
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	10.0	10.0	10.0	10.0	10.0	10.0
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	184	108	73	220	49	62	725	144	110	814	71
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Other Adjustment 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
Total 15-Minute Volume [veh/h]	28	47	28	19	57	13	16	187	37	28	210	18

Total Analysis Volume [veh/h]	113	189	111	75	227	50	64	747	148	113	838	73
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0		0					
Bicycle Volume [bicycles/h]	0		0		0		0					

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm	Perm	Perm	Perm	Perm	Perm	Prote	Perm	Perm	Prote	Perm	Perm
Signal group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	8	0	0	8	0	7	8	0	7	8	0
Maximum Green [s]	0	35	0	0	35	0	25	55	0	50	80	0
Amber [s]	0.0	4.0	0.0	0.0	4.0	0.0	4.0	4.0	0.0	4.0	4.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	51	0	51	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	8	8	8	8	8	8	5	17	17	6	18	18
g / C, Green / Cycle	0.14	0.14	0.14	0.13	0.13	0.13	0.08	0.29	0.29	0.10	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.06	0.05	0.07	0.04	0.06	0.03	0.04	0.23	0.10	0.07	0.25	0.05
s, saturation flow rate [veh/h]	1810	3618	1615	1810	3618	1615	1645	3289	1468	1645	3289	1468
c, Capacity [veh/h]	244	488	218	243	486	217	128	956	427	166	1031	460
d1, Uniform Delay [s]	23.5	23.2	23.7	23.0	23.5	22.8	26.0	19.2	16.5	25.6	18.6	14.6
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering 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
d2, Incremental Delay [s]	1.36	0.50	1.84	0.71	0.70	0.53	2.97	1.44	0.48	4.81	1.60	0.16
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression 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

Lane Group Results

X, volume / capacity	0.46	0.39	0.51	0.31	0.47	0.23	0.50	0.78	0.35	0.68	0.81	0.16
d, Delay for Lane Group [s/veh]	24.9	23.8	25.5	23.7	24.2	23.3	29.0	20.6	16.9	30.4	20.2	14.7
Lane Group LOS	C	C	C	C	C	C	C	C	B	C	C	B
Critical Lane Group	No	No	Yes	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh]	1.37	1.09	1.37	0.88	1.33	0.58	0.84	3.86	1.31	1.52	4.29	0.57
50th-Percentile Queue Length [ft]	34.1	27.2	34.2	21.9	33.2	14.4	21.0	96.4	32.6	37.9	107.	14.3
95th-Percentile Queue Length [veh]	2.46	1.96	2.47	1.58	2.39	1.04	1.52	6.95	2.35	2.73	7.68	1.03
95th-Percentile Queue Length [ft]	61.5	48.9	61.7	39.4	59.8	26.0	37.9	173.	58.8	68.3	192.	25.8

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.9	23.8	25.5	23.7	24.2	23.3	29.0	20.6	16.9	30.4	20.2	14.7
Movement LOS	C	C	C	C	C	C	C	C	B	C	C	B
d_A, Approach Delay [s/veh]	24.57			24.04			20.64			20.99		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	21.80											
Intersection LOS	C											
Intersection V/C	0.427											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 3: SH 146 SBFR at Spencer Hwy**

Control Type:	Signalized	Delay (sec / veh):	19.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.512

Intersection Setup

Name	SH 146 SBFR			Spencer Hwy			Spencer Hwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 SBFR			Spencer Hwy			Spencer Hwy					
Base Volume Input [veh/h]	0	0	0	231	151	260	0	590	98	62	477	0
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	11.0	11.0	11.0	2.00	9.00	9.00	9.00	9.00	2.00
Growth Rate	1.00	1.00	1.00	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	236	154	265	0	602	100	63	487	0
Peak Hour Factor	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.90	0.90	0.90	0.90	1.00
Other Adjustment 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
Total 15-Minute Volume [veh/h]	0	0	0	65	43	74	0	167	28	17	135	0

Total Analysis Volume [veh/h]	0	0	0	262	171	294	0	668	111	70	541	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	0	0	0	4	0	0	2	0	1	1	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lag	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	5	5	0
Maximum Green [s]	0	0	0	0	40	0	0	40	0	86	86	0
Amber [s]	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	12	12	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	2.5	0.0	0.0	3.0	0.0	2.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	5	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	10	10	0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0	3.5	3.5	0.0
Minimum Recall					No			Yes			Yes	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	C	C	C	C	C
L, Total Lost Time per Cycle [s]		5.50	5.50	5.50	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.50	3.50	3.50	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]		14	14	14	11	11	9	9
g / C, Green / Cycle		0.27	0.27	0.27	0.22	0.22	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate		0.13	0.13	0.22	0.16	0.16	0.13	0.13
s, saturation flow rate [veh/h]		1630	1693	1324	3319	1621	1716	3020
c, Capacity [veh/h]		446	463	362	747	365	297	524
d1, Uniform Delay [s]		15.2	15.2	17.0	17.91	17.99	19.74	19.73
k, delay calibration		0.08	0.08	0.08	0.11	0.11	0.04	0.04
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.59	0.56	3.30	1.18	2.59	1.41	0.79
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.48	0.48	0.81	0.70	0.71	0.75	0.74
d, Delay for Lane Group [s/veh]		15.8	15.8	20.3	19.09	20.57	21.16	20.52
Lane Group LOS		B	B	C	B	C	C	C
Critical Lane Group		No	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh]		1.73	1.79	2.90	2.35	2.50	2.15	1.84
50th-Percentile Queue Length [ft]		43.3	44.8	72.5	58.82	62.55	53.73	45.88
95th-Percentile Queue Length [veh]		3.12	3.23	5.22	4.23	4.50	3.87	3.30
95th-Percentile Queue Length [ft]		78.0	80.7	130.	105.87	112.60	96.72	82.59

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	15.8	15.8	20.3	0.00	19.4	20.5	21.1	20.7	0.00
Movement LOS				B	B	C		B	C	C	C	
d_A, Approach Delay [s/veh]	0.00			17.66			19.58			20.75		
Approach LOS	A			B			B			C		
d_I, Intersection Delay [s/veh]	19.26											
Intersection LOS	B											
Intersection V/C	0.512											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: SH 146 NBFR at Spencer Hwy

Control Type:	Signalized	Delay (sec / veh):	17.9
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.444

Intersection Setup

Name	SH 146 NBFR						Spencer Hwy			Spencer Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 NBFR						Spencer Hwy			Spencer Hwy		
Base Volume Input [veh/h]	238	203	106	0	0	0	239	598	0	0	298	181
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	11.0	11.0	11.0	2.00	2.00	2.00	9.00	9.00	2.00	2.00	9.00	9.00
Growth Rate	1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.02	1.00	1.00	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	243	207	108	0	0	0	244	610	0	0	304	185
Peak Hour Factor	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	1.00	1.00	0.96	0.96
Other Adjustment 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
Total 15-Minute Volume [veh/h]	63	54	28	0	0	0	63	158	0	0	79	48

Total Analysis Volume [veh/h]	252	215	112	0	0	0	253	632	0	0	315	192
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	8	0	0	0	0	0	5	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	5	0	0	5	0
Maximum Green [s]	0	40	0	0	0	0	0	85	0	0	40	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0
All red [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall		No						No			Yes	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C	C	C
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50		5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50		3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	9	9	9		12	12	9	9
g / C, Green / Cycle	0.19	0.19	0.19		0.26	0.26	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.12		0.15	0.19	0.09	0.13
s, saturation flow rate [veh/h]	1630	1690	1398		1660	3319	3319	1482
c, Capacity [veh/h]	308	319	264		439	878	631	282
d1, Uniform Delay [s]	17.3	17.3	17.3		14.76	15.46	16.77	17.44
k, delay calibration	0.11	0.11	0.11		0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.31	2.19	2.75		1.19	1.13	0.61	2.90
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.65	0.65	0.66		0.58	0.72	0.50	0.68
d, Delay for Lane Group [s/veh]	19.6	19.5	20.1		15.96	16.58	17.39	20.34
Lane Group LOS	B	B	C		B	B	B	C
Critical Lane Group	No	No	Yes		No	Yes	No	Yes
50th-Percentile Queue Length [veh]	1.81	1.85	1.60		1.90	2.43	1.24	1.73
50th-Percentile Queue Length [ft]	45.1	46.3	39.9		47.44	60.71	31.03	43.31
95th-Percentile Queue Length [veh]	3.25	3.34	2.88		3.42	4.37	2.23	3.12
95th-Percentile Queue Length [ft]	81.3	83.3	71.8		85.39	109.27	55.86	77.96

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.6	19.7	20.1	0.00	0.00	0.00	15.9	16.5	0.00	0.00	17.3	20.3
Movement LOS	B	B	C				B	B			B	C
d_A, Approach Delay [s/veh]	19.76			0.00			16.40			18.51		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	17.93											
Intersection LOS	B											
Intersection V/C	0.444											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 5: SH 146 SBFR at Fairmont Pkwy

Control Type:	Signalized	Delay (sec / veh):	36.0
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	SH 146 SBFR			Fairmont Pkwy			Fairmont Pkwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	30.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 SBFR			Fairmont Pkwy			Fairmont Pkwy					
Base Volume Input [veh/h]	0	0	0	244	63	368	0	688	106	73	692	0
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	11.0	11.0	11.0	2.00	10.0	10.0	10.0	10.0	2.00
Growth Rate	1.00	1.00	1.00	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	249	64	375	0	702	108	74	706	0
Peak Hour Factor	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.93	0.93	0.93	0.93	1.00
Other Adjustment 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
Total 15-Minute Volume [veh/h]	0	0	0	66	17	100	0	187	29	20	188	0

Total Analysis Volume [veh/h]	0	0	0	265	68	399	0	748	115	79	752	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	0	0	0	4	0	0	2	0	1	1	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	35	0	68	68	0
Amber [s]	0.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	2.6	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	0	0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	4.6	0.0	0.0	4.0	0.0	3.0	3.0	0.0
Minimum Recall					Yes			Yes			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	C	C	C	L	C
L, Total Lost Time per Cycle [s]		6.60	6.60	6.60	6.00	6.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		4.60	4.60	4.60	4.00	4.00	3.00	3.00
g_i, Effective Green Time [s]		29	29	29	19	19	24	24
g / C, Green / Cycle		0.32	0.32	0.32	0.22	0.22	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate		0.10	0.10	0.30	0.17	0.18	0.05	0.23
s, saturation flow rate [veh/h]		1630	1662	1324	3289	1613	1645	3289
c, Capacity [veh/h]		525	535	426	708	347	436	871
d1, Uniform Delay [s]		22.7	22.7	29.2	33.21	33.34	25.26	31.18
k, delay calibration		0.11	0.11	0.32	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.34	0.33	22.4	2.31	5.06	0.20	2.70
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.31	0.31	0.94	0.81	0.83	0.18	0.86
d, Delay for Lane Group [s/veh]		23.1	23.0	51.7	35.52	38.40	25.46	33.87
Lane Group LOS		C	C	D	D	D	C	C
Critical Lane Group		No	No	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh]		2.51	2.55	10.3	5.58	5.86	1.20	7.21
50th-Percentile Queue Length [ft]		62.7	63.8	257.	139.50	146.55	29.91	180.33
95th-Percentile Queue Length [veh]		4.52	4.60	15.5	9.45	9.83	2.15	11.62
95th-Percentile Queue Length [ft]		112.	114.	389.	236.35	245.82	53.83	290.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	23.1	23.0	51.7	0.00	36.1	38.4	25.4	33.8	0.00
Movement LOS				C	C	D		D	D	C	C	
d_A, Approach Delay [s/veh]	0.00			38.70			36.48			33.07		
Approach LOS	A			D			D			C		
d_I, Intersection Delay [s/veh]	35.98											
Intersection LOS	D											
Intersection V/C	0.708											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: SH 146 NBFR at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	26.9
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.587

Intersection Setup

Name	SH 146 NBFR						Fairmont Pkwy			Fairmont Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	40.00			30.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 NBFR						Fairmont Pkwy			Fairmont Pkwy		
Base Volume Input [veh/h]	252	72	114	0	0	0	304	638	0	0	503	163
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	11.0	11.0	11.0	2.00	2.00	2.00	10.0	10.0	2.00	2.00	10.0	10.0
Growth Rate	1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.02	1.00	1.00	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	257	73	116	0	0	0	310	651	0	0	513	166
Peak Hour Factor	0.87	0.87	0.87	1.00	1.00	1.00	0.87	0.87	1.00	1.00	0.87	0.87
Other Adjustment 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
Total 15-Minute Volume [veh/h]	74	21	33	0	0	0	89	187	0	0	147	48

Total Analysis Volume [veh/h]	295	84	133	0	0	0	356	747	0	0	589	191
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0			0		0				
Bicycle Volume [bicycles/h]	0		0			0		0				

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	8	0	0	0	0	5	5	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	20	0	0	0	0	70	70	0	0	40	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.0	2.6	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	10	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		Yes						No			Yes	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C	C	C	C
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60		6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60		4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	10	10	10		19	19	19	20	20
g / C, Green / Cycle	0.15	0.15	0.15		0.28	0.28	0.28	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.11	0.11	0.11		0.22	0.23	0.22	0.23	0.25
s, saturation flow rate [veh/h]	1630	1659	1348		1645	1727	1572	1727	1590
c, Capacity [veh/h]	248	253	205		467	490	446	500	461
d1, Uniform Delay [s]	27.3	27.3	27.4		22.1	22.5	22.3	22.09	22.66
k, delay calibration	0.11	0.11	0.11		0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.94	3.83	5.08		2.61	3.24	3.10	2.68	4.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.72	0.72	0.74		0.76	0.81	0.79	0.78	0.85
d, Delay for Lane Group [s/veh]	31.3	31.1	32.5		24.8	25.8	25.4	24.77	27.05
Lane Group LOS	C	C	C		C	C	C	C	C
Critical Lane Group	No	No	Yes		No	Yes	No	No	Yes
50th-Percentile Queue Length [veh]	2.81	2.84	2.43		4.63	5.30	4.64	5.07	5.38
50th-Percentile Queue Length [ft]	70.1	70.9	60.8		115.	132.	116.	126.80	134.59
95th-Percentile Queue Length [veh]	5.05	5.11	4.38		8.16	9.07	8.18	8.77	9.19
95th-Percentile Queue Length [ft]	126.	127.	109.		203.	226.	204.	219.14	229.72

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	31.2	31.4	32.5	0.00	0.00	0.00	24.8	25.6	0.00	0.00	25.5	27.0
Movement LOS	C	C	C				C	C			C	C
d_A, Approach Delay [s/veh]	31.62			0.00			25.38			25.91		
Approach LOS	C			A			C			C		
d_I, Intersection Delay [s/veh]	26.89											
Intersection LOS	C											
Intersection V/C	0.587											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Vistro File: E:\...\PM.vistro

Scenario: Base Scenario

Report File: E:\...\Background PM.pdf

5/3/2016

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bay Area Blvd at Spencer Hwy	Signalized	HCM 2010	NB Left	0.520	20.6	C
2	Bay Area Blvd at Fairmont Pkwy	Signalized	HCM 2010	EB Left	0.641	31.9	C
3	SH 146 SBFR at Spencer Hwy	Signalized	HCM 2010	WB Left	0.580	23.0	C
4	SH 146 NBFR at Spencer Hwy	Signalized	HCM 2010	NB Right	0.422	16.3	B
5	SH 146 SBFR at Fairmont Pkwy	Signalized	HCM 2010	SB Right	0.728	38.3	D
6	SH 146 NBFR at Fairmont Pkwy	Signalized	HCM 2010	NB Right	0.594	26.8	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report
Intersection 1: Bay Area Blvd at Spencer Hwy**

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

Intersection Setup

Name	Bay Area Blvd			Bay Area Blvd			Spencer Hwy			Spencer Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.	100.	100.	245.	100.	100.	230.	100.	100.	105.	100.	100.
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	Bay Area Blvd			Bay Area Blvd			Spencer Hwy			Spencer Hwy		
Base Volume Input [veh/h]	146	219	40	95	216	214	87	479	54	46	699	97
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	9.50	9.50	9.50	9.50	9.50	9.50
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	149	223	41	97	220	218	89	489	55	47	713	99
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Other Adjustment 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
Total 15-Minute Volume [veh/h]	44	66	12	29	66	65	27	146	16	14	212	29

Total Analysis Volume [veh/h]	178	266	49	116	262	260	106	583	66	56	850	118
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prote	Perm	Perm									
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									
Minimum Green [s]	7	8	0	7	8	0	7	8	0	7	8	0
Maximum Green [s]	16	40	0	40	64	0	30	70	0	20	60	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	65	0	0	0	0	0	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No										
Maximum Recall	No	No										
Pedestrian Recall	No	No										
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	13	13	6	12	12	6	16	16	4	14	14
g / C, Green / Cycle	0.13	0.23	0.23	0.11	0.21	0.21	0.10	0.29	0.29	0.07	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.10	0.08	0.09	0.06	0.14	0.16	0.06	0.13	0.13	0.03	0.20	0.20
s, saturation flow rate [veh/h]	1810	1900	1799	1810	1900	1615	1653	3304	1647	1653	3304	1629
c, Capacity [veh/h]	232	445	422	193	404	344	170	967	482	122	871	430
d1, Uniform Delay [s]	23.0	17.5	17.5	23.3	19.6	20.2	23.5	15.7	15.7	24.2	18.4	18.4
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering 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
d2, Incremental Delay [s]	5.25	0.49	0.53	3.00	1.75	3.42	3.70	0.32	0.66	2.66	1.28	2.61
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression 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

Lane Group Results

X, volume / capacity	0.77	0.36	0.37	0.60	0.65	0.76	0.62	0.45	0.45	0.46	0.74	0.75
d, Delay for Lane Group [s/veh]	28.3	18.0	18.0	26.3	21.4	23.6	27.2	16.0	16.4	26.9	19.7	21.0
Lane Group LOS	C	B	B	C	C	C	C	B	B	C	B	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	2.24	1.47	1.42	1.40	2.74	2.92	1.31	1.82	1.88	0.70	3.21	3.35
50th-Percentile Queue Length [ft]	56.0	36.8	35.4	34.9	68.5	72.9	32.7	45.4	47.0	17.4	80.2	83.6
95th-Percentile Queue Length [veh]	4.04	2.65	2.55	2.51	4.93	5.25	2.36	3.27	3.39	1.25	5.78	6.03
95th-Percentile Queue Length [ft]	100.	66.3	63.8	62.8	123.	131.	58.9	81.8	84.7	31.3	144.	150.

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	28.3	18.0	18.0	26.3	21.4	23.6	27.2	16.1	16.4	26.9	20.0	21.0
Movement LOS	C	B	B	C	C	C	C	B	B	C	C	C
d_A, Approach Delay [s/veh]	21.75			23.21			17.74			20.55		
Approach LOS	C			C			B			C		
d_I, Intersection Delay [s/veh]	20.61											
Intersection LOS	C											
Intersection V/C	0.520											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Bay Area Blvd at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

Intersection Setup

Name	Bay Area Blvd			Bay Area Blvd			Fairmont Pkwy			Fairmont Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	234.	100.	170.	150.	100.	100.	260.	100.	150.	450.	100.	380.
Speed [mph]	45.00			45.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	Bay Area Blvd			Bay Area Blvd			Fairmont Pkwy			Fairmont Pkwy		
Base Volume Input [veh/h]	203	265	258	67	311	84	49	723	167	158	824	122
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	9.00	9.00	9.00	9.00	9.00	9.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	207	270	263	68	317	86	50	737	170	161	840	124
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Other Adjustment 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
Total 15-Minute Volume [veh/h]	58	76	74	19	89	24	14	207	48	45	236	35

Total Analysis Volume [veh/h]	233	304	296	77	357	97	56	830	191	181	946	140
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0		0					
Bicycle Volume [bicycles/h]	0		0		0		0					

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm	Perm	Perm	Perm	Perm	Perm	Prote	Perm	Perm	Prote	Perm	Perm
Signal group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	8	0	0	8	0	7	8	0	7	8	0
Maximum Green [s]	0	35	0	0	35	0	25	55	0	50	80	0
Amber [s]	0.0	4.0	0.0	0.0	4.0	0.0	4.0	4.0	0.0	4.0	4.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	51	0	51	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	19	19	19	12	12	12	5	26	26	12	32	32
g / C, Green / Cycle	0.22	0.22	0.22	0.13	0.13	0.13	0.06	0.29	0.29	0.13	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.13	0.08	0.18	0.04	0.10	0.06	0.03	0.25	0.13	0.11	0.29	0.09
s, saturation flow rate [veh/h]	1810	3618	1615	1810	3618	1615	1660	3319	1482	1660	3319	1482
c, Capacity [veh/h]	398	796	355	237	474	211	98	967	432	220	1210	540
d1, Uniform Delay [s]	31.0	29.4	33.0	35.0	37.1	35.6	40.6	29.7	25.5	37.5	25.0	19.7
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering 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
d2, Incremental Delay [s]	1.37	0.30	5.13	0.79	2.46	1.55	5.10	2.34	0.71	7.56	1.14	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression 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

Lane Group Results

X, volume / capacity	0.59	0.38	0.83	0.32	0.75	0.46	0.57	0.86	0.44	0.82	0.78	0.26
d, Delay for Lane Group [s/veh]	32.3	29.7	38.2	35.8	39.6	37.2	45.7	32.0	26.2	45.0	26.2	20.0
Lane Group LOS	C	C	D	D	D	D	D	C	C	D	C	C
Critical Lane Group	No	No	Yes	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh]	4.33	2.63	6.17	1.49	3.69	1.93	1.25	7.74	3.03	3.98	7.88	1.83
50th-Percentile Queue Length [ft]	108.	65.7	154.	37.1	92.2	48.2	31.2	193.	75.7	99.5	197.	45.8
95th-Percentile Queue Length [veh]	7.75	4.73	10.2	2.67	6.65	3.47	2.25	12.3	5.45	7.17	12.4	3.30
95th-Percentile Queue Length [ft]	193.	118.	256.	66.8	166.	86.8	56.1	307.	136.	179.	312.	82.5

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.3	29.7	38.2	35.8	39.6	37.2	45.7	32.0	26.2	45.0	26.2	20.0
Movement LOS	C	C	D	D	D	D	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	33.50			38.64			31.74			28.21		
Approach LOS	C			D			C			C		
d_I, Intersection Delay [s/veh]	31.92											
Intersection LOS	C											
Intersection V/C	0.641											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 3: SH 146 SBFR at Spencer Hwy**

Control Type:	Signalized	Delay (sec / veh):	23.0
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.580

Intersection Setup

Name	SH 146 SBFR			Spencer Hwy			Spencer Hwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 SBFR			Spencer Hwy			Spencer Hwy					
Base Volume Input [veh/h]	0	0	0	237	266	317	0	539	176	107	446	0
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	11.0	11.0	11.0	2.00	9.50	9.50	9.50	9.50	2.00
Growth Rate	1.00	1.00	1.00	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	242	271	323	0	550	180	109	455	0
Peak Hour Factor	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.90	0.90	0.90	0.90	1.00
Other Adjustment 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
Total 15-Minute Volume [veh/h]	0	0	0	67	75	90	0	153	50	30	126	0

Total Analysis Volume [veh/h]	0	0	0	269	301	358	0	610	200	121	505	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	0	0	0	4	0	0	2	0	1	1	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lag	-	-
Minimum Green [s]	0	0	0	0	7	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	40	0	0	40	0	85	85	0
Amber [s]	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	12	12	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	2.5	0.0	0.0	3.0	0.0	2.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	5	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	10	10	0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0	3.5	3.5	0.0
Minimum Recall					Yes			Yes			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	40.0	0.0	0.0	40.0	0.0	40.0	40.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	C	C	C	C	C
L, Total Lost Time per Cycle [s]		5.50	5.50	5.50	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.50	3.50	3.50	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]		21	21	21	15	15	11	11
g / C, Green / Cycle		0.32	0.32	0.32	0.24	0.24	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate		0.17	0.18	0.27	0.16	0.18	0.13	0.13
s, saturation flow rate [veh/h]		1630	1712	1324	3304	1535	1690	3006
c, Capacity [veh/h]		530	556	430	799	371	297	528
d1, Uniform Delay [s]		17.4	17.7	20.0	22.00	22.34	25.14	25.11
k, delay calibration		0.08	0.08	0.08	0.11	0.11	0.04	0.04
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.56	0.61	3.19	1.01	2.73	1.55	0.85
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.51	0.54	0.83	0.68	0.73	0.76	0.76
d, Delay for Lane Group [s/veh]		18.0	18.3	23.1	23.01	25.07	26.70	25.96
Lane Group LOS		B	B	C	C	C	C	C
Critical Lane Group		No	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh]		2.87	3.26	4.63	3.31	3.53	3.03	2.62
50th-Percentile Queue Length [ft]		71.7	81.3	115.	82.70	88.16	75.66	65.38
95th-Percentile Queue Length [veh]		5.17	5.86	8.16	5.95	6.35	5.45	4.71
95th-Percentile Queue Length [ft]		129.	146.	203.	148.86	158.69	136.19	117.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	18.0	18.3	23.1	0.00	23.2	25.0	26.7	26.1	0.00
Movement LOS				B	B	C		C	C	C	C	
d_A, Approach Delay [s/veh]	0.00			20.11			23.70			26.22		
Approach LOS	A			C			C			C		
d_I, Intersection Delay [s/veh]	22.96											
Intersection LOS	C											
Intersection V/C	0.580											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: SH 146 NBFR at Spencer Hwy

Control Type:	Signalized	Delay (sec / veh):	16.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.422

Intersection Setup

Name	SH 146 NBFR						Spencer Hwy			Spencer Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 NBFR						Spencer Hwy			Spencer Hwy		
Base Volume Input [veh/h]	174	213	63	0	0	0	290	505	0	0	369	156
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	11.0	11.0	11.0	2.00	2.00	2.00	9.50	9.50	2.00	2.00	9.50	9.50
Growth Rate	1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.02	1.00	1.00	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	177	217	64	0	0	0	296	515	0	0	376	159
Peak Hour Factor	0.93	0.93	0.93	1.00	1.00	1.00	0.93	0.93	1.00	1.00	0.93	0.93
Other Adjustment 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
Total 15-Minute Volume [veh/h]	47	58	17	0	0	0	79	138	0	0	100	42

Total Analysis Volume [veh/h]	189	232	68	0	0	0	316	550	0	0	402	170
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm	Overl	Perm									
Signal group	0	8	0	0	0	0	0	5	0	0	6	0
Auxiliary Signal Groups											6	
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	5	0	0	5	0
Maximum Green [s]	0	40	0	0	0	0	0	85	0	0	40	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0
All red [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall		Yes						No			Yes	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	40.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	40.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C	C	C
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50		5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50		3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	7	7	7		11	11	8	8
g / C, Green / Cycle	0.17	0.17	0.17		0.26	0.26	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.10	0.10	0.10		0.19	0.17	0.12	0.13
s, saturation flow rate [veh/h]	1630	1701	1442		1653	3304	3304	1499
c, Capacity [veh/h]	281	293	248		428	855	623	283
d1, Uniform Delay [s]	16.5	16.5	16.5		14.73	14.30	16.15	16.36
k, delay calibration	0.08	0.08	0.08		0.04	0.04	0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.50	1.41	1.73		0.95	0.30	0.36	1.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.59	0.60		0.74	0.64	0.61	0.67
d, Delay for Lane Group [s/veh]	18.0	17.9	18.3		15.68	14.60	16.51	17.41
Lane Group LOS	B	B	B		B	B	B	B
Critical Lane Group	No	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.35	1.39	1.22		2.20	1.80	1.37	1.43
50th-Percentile Queue Length [ft]	33.7	34.6	30.4		55.02	44.99	34.13	35.85
95th-Percentile Queue Length [veh]	2.43	2.50	2.19		3.96	3.24	2.46	2.58
95th-Percentile Queue Length [ft]	60.7	62.3	54.7		99.04	80.99	61.44	64.54

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.0	18.0	18.3	0.00	0.00	0.00	15.6	14.6	0.00	0.00	16.5	17.4
Movement LOS	B	B	B				B	B			B	B
d_A, Approach Delay [s/veh]	18.11			0.00			14.99			16.81		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	16.32											
Intersection LOS	B											
Intersection V/C	0.422											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: SH 146 SBFR at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	38.3
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.728

Intersection Setup

Name	SH 146 SBFR			Fairmont Pkwy			Fairmont Pkwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	30.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 SBFR			Fairmont Pkwy			Fairmont Pkwy					
Base Volume Input [veh/h]	0	0	0	274	133	348	0	914	139	111	702	0
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	11.0	11.0	11.0	2.00	9.00	9.00	9.00	9.00	2.00
Growth Rate	1.00	1.00	1.00	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	279	136	355	0	932	142	113	716	0
Peak Hour Factor	1.00	1.00	1.00	0.96	0.96	0.96	1.00	0.96	0.96	0.96	0.96	1.00
Other Adjustment 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
Total 15-Minute Volume [veh/h]	0	0	0	72	35	92	0	241	37	29	185	0

Total Analysis Volume [veh/h]	0	0	0	289	141	367	0	965	147	117	741	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	0	0	0	4	0	0	2	0	1	1	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	35	0	68	68	0
Amber [s]	0.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	2.6	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	0	0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	4.6	0.0	0.0	4.0	0.0	3.0	3.0	0.0
Minimum Recall					Yes			Yes			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	C	C	C	L	C
L, Total Lost Time per Cycle [s]		6.60	6.60	6.60	6.00	6.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		4.60	4.60	4.60	4.00	4.00	3.00	3.00
g_i, Effective Green Time [s]		29	29	29	25	25	25	25
g / C, Green / Cycle		0.30	0.30	0.30	0.26	0.26	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate		0.13	0.13	0.28	0.22	0.23	0.07	0.22
s, saturation flow rate [veh/h]		1630	1682	1324	3319	1629	1660	3319
c, Capacity [veh/h]		484	500	393	876	430	427	854
d1, Uniform Delay [s]		27.4	27.4	33.0	33.75	33.93	28.71	34.36
k, delay calibration		0.11	0.11	0.32	0.11	0.16	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.62	0.60	23.3	2.37	7.42	0.34	2.86
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.44	0.44	0.93	0.85	0.86	0.27	0.87
d, Delay for Lane Group [s/veh]		28.1	28.0	56.4	36.12	41.36	29.06	37.22
Lane Group LOS		C	C	E	D	D	C	D
Critical Lane Group		No	No	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh]		3.86	3.98	10.4	7.80	8.44	2.04	7.93
50th-Percentile Queue Length [ft]		96.5	99.4	260.	194.95	210.92	51.10	198.26
95th-Percentile Queue Length [veh]		6.95	7.16	15.7	12.38	13.20	3.68	12.55
95th-Percentile Queue Length [ft]		173.	179.	393.	309.45	330.01	91.98	313.72

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	28.0	28.0	56.4	0.00	37.3	41.3	29.0	37.2	0.00
Movement LOS				C	C	E		D	D	C	D	
d_A, Approach Delay [s/veh]	0.00			41.13			37.86			36.11		
Approach LOS	A			D			D			D		
d_I, Intersection Delay [s/veh]	38.26											
Intersection LOS	D											
Intersection V/C	0.728											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: SH 146 NBFR at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.594

Intersection Setup

Name	SH 146 NBFR						Fairmont Pkwy			Fairmont Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	40.00			30.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 NBFR						Fairmont Pkwy			Fairmont Pkwy		
Base Volume Input [veh/h]	214	37	102	0	0	0	578	621	0	0	610	147
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	11.0	11.0	11.0	2.00	2.00	2.00	9.00	9.00	2.00	2.00	9.00	9.00
Growth Rate	1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.02	1.00	1.00	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	218	38	104	0	0	0	590	633	0	0	622	150
Peak Hour Factor	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Other Adjustment 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
Total 15-Minute Volume [veh/h]	57	10	27	0	0	0	155	166	0	0	164	39

Total Analysis Volume [veh/h]	229	40	109	0	0	0	620	666	0	0	654	158
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0			0		0				
Bicycle Volume [bicycles/h]	0		0			0		0				

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	8	0	0	0	0	5	5	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	20	0	0	0	0	70	70	0	0	40	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.0	2.6	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	10	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		Yes						No			Yes	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C	C	C	C
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60		6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60		4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	8	8	8		22	22	22	20	20
g / C, Green / Cycle	0.12	0.12	0.12		0.32	0.32	0.32	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.08	0.08	0.08		0.26	0.26	0.26	0.23	0.25
s, saturation flow rate [veh/h]	1630	1652	1330		1660	1707	1586	1743	1631
c, Capacity [veh/h]	198	200	161		528	543	504	510	477
d1, Uniform Delay [s]	29.1	29.1	29.2		21.8	21.7	21.7	22.61	23.09
k, delay calibration	0.11	0.11	0.11		0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.89	3.79	5.32		3.21	3.08	3.27	2.88	4.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.67	0.67	0.70		0.82	0.82	0.81	0.80	0.85
d, Delay for Lane Group [s/veh]	33.0	32.9	34.5		25.0	24.8	25.0	25.49	27.44
Lane Group LOS	C	C	C		C	C	C	C	C
Critical Lane Group	No	No	Yes		Yes	No	No	No	Yes
50th-Percentile Queue Length [veh]	2.17	2.18	1.90		5.78	5.91	5.50	5.48	5.75
50th-Percentile Queue Length [ft]	54.1	54.4	47.4		144.	147.	137.	136.93	143.85
95th-Percentile Queue Length [veh]	3.90	3.92	3.42		9.73	9.89	9.35	9.32	9.69
95th-Percentile Queue Length [ft]	97.4	98.0	85.4		243.	247.	233.	232.89	242.20

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	32.9	33.0	34.5	0.00	0.00	0.00	24.9	24.9	0.00	0.00	26.2	27.4
Movement LOS	C	C	C				C	C			C	C
d_A, Approach Delay [s/veh]	33.45			0.00			24.97			26.47		
Approach LOS	C			A			C			C		
d_I, Intersection Delay [s/veh]	26.76											
Intersection LOS	C											
Intersection V/C	0.594											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C

2017 Build-out Traffic Operations

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bay Area Blvd at Spencer Hwy	Signalized	HCM 2010	EB Left	0.377	17.1	B
2	Bay Area Blvd at Fairmont Pkwy	Signalized	HCM 2010	WB Left	0.489	22.8	C
3	SH 146 SBFR at Spencer Hwy	Signalized	HCM 2010	WB Left	0.539	20.3	C
4	SH 146 NBFR at Spencer Hwy	Signalized	HCM 2010	WB Right	0.448	18.1	B
5	SH 146 SBFR at Fairmont Pkwy	Signalized	HCM 2010	SB Right	0.783	48.5	D
6	SH 146 NBFR at Fairmont Pkwy	Signalized	HCM 2010	NB Right	0.613	29.0	C
7	Spencer Hwy at Employee Drwy #1	Two-way stop	HCM 2010	NB Left	0.073	21.7	C
8	Spencer Hwy at Employee Drwy #2	Two-way stop	HCM 2010	NB Left	0.070	20.9	C
9	Bay Area Blvd at Employee Drwy #3	Two-way stop	HCM 2010	WB Left	0.012	11.3	B
10	Bay Area Blvd at Truck Drwy	Two-way stop	HCM 2010	WB Left	0.192	15.7	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: Bay Area Blvd at Spencer Hwy

Control Type:	Signalized	Delay (sec / veh):	17.1
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.377

Intersection Setup

Name	Bay Area Blvd			Bay Area Blvd			Spencer Hwy			Spencer Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.	100.	100.	245.	100.	100.	230.	100.	100.	105.	100.	100.
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	Bay Area Blvd			Bay Area Blvd			Spencer Hwy			Spencer Hwy		
Base Volume Input [veh/h]	53	152	44	82	120	74	156	633	81	23	469	119
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	9.00	9.00	9.00	9.00	9.00	9.00
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	5	26	42	21	0	0	28	14	17	7	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	58	160	71	126	143	75	159	674	97	40	485	132
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Other Adjustment 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
Total 15-Minute Volume [veh/h]	15	42	19	33	37	20	42	176	25	10	127	35

Total Analysis Volume [veh/h]	61	168	74	132	150	79	166	706	102	42	508	138
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prote	Perm	Perm									
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									
Minimum Green [s]	7	8	0	7	8	0	7	8	0	7	8	0
Maximum Green [s]	16	40	0	40	64	0	30	70	0	20	60	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	65	0	0	0	0	0	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No										
Maximum Recall	No	No										
Pedestrian Recall	No	No										
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	8	8	6	10	10	6	12	12	3	9	9
g / C, Green / Cycle	0.08	0.17	0.17	0.13	0.21	0.21	0.14	0.28	0.28	0.06	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.03	0.07	0.07	0.07	0.06	0.07	0.10	0.16	0.16	0.03	0.13	0.13
s, saturation flow rate [veh/h]	1810	1900	1710	1810	1900	1687	1660	3319	1633	1660	3319	1563
c, Capacity [veh/h]	153	325	292	231	406	361	230	924	455	108	680	320
d1, Uniform Delay [s]	19.3	16.4	16.5	18.3	14.7	14.7	18.4	13.9	13.9	20.0	16.2	16.3
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering 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
d2, Incremental Delay [s]	1.66	0.74	0.89	2.21	0.39	0.47	4.25	0.59	1.22	2.27	1.01	2.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression 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

Lane Group Results

X, volume / capacity	0.40	0.38	0.40	0.57	0.29	0.31	0.72	0.58	0.59	0.39	0.64	0.66
d, Delay for Lane Group [s/veh]	21.0	17.1	17.3	20.5	15.1	15.2	22.6	14.5	15.1	22.3	17.2	18.6
Lane Group LOS	C	B	B	C	B	B	C	B	B	C	B	B
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	0.56	0.96	0.92	1.17	0.82	0.77	1.58	1.81	1.87	0.41	1.67	1.74
50th-Percentile Queue Length [ft]	14.0	23.9	22.9	29.3	20.6	19.3	39.5	45.2	46.8	10.3	41.7	43.4
95th-Percentile Queue Length [veh]	1.01	1.72	1.65	2.11	1.48	1.39	2.85	3.26	3.37	0.74	3.00	3.13
95th-Percentile Queue Length [ft]	25.2	43.1	41.2	52.7	37.0	34.8	71.1	81.4	84.3	18.6	75.0	78.1

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.0	17.2	17.3	20.5	15.1	15.2	22.6	14.6	15.1	22.3	17.4	18.6
Movement LOS	C	B	B	C	B	B	C	B	B	C	B	B
d_A, Approach Delay [s/veh]	18.04			17.15			16.07			18.00		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	17.07											
Intersection LOS	B											
Intersection V/C	0.377											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Bay Area Blvd at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.489

Intersection Setup

Name	Bay Area Blvd			Bay Area Blvd			Fairmont Pkwy			Fairmont Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	234.	100.	170.	150.	100.	100.	260.	100.	150.	450.	100.	380.
Speed [mph]	45.00			45.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	Bay Area Blvd			Bay Area Blvd			Fairmont Pkwy			Fairmont Pkwy		
Base Volume Input [veh/h]	108	180	106	72	216	48	61	711	141	108	798	70
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	16.0	16.0	16.0	11.5	11.5	11.5	15.0	15.0	15.0
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	49	0	23	54	0	0	0	0	64
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	110	184	108	122	220	72	116	725	144	110	814	135
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Other Adjustment 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
Total 15-Minute Volume [veh/h]	28	47	28	31	57	19	30	187	37	28	210	35

Total Analysis Volume [veh/h]	113	189	111	126	227	74	119	747	148	113	838	139
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm	Perm	Perm	Perm	Perm	Perm	Prote	Perm	Perm	Prote	Perm	Perm
Signal group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	8	0	0	8	0	7	8	0	7	8	0
Maximum Green [s]	0	35	0	0	35	0	25	55	0	50	80	0
Amber [s]	0.0	4.0	0.0	0.0	4.0	0.0	4.0	4.0	0.0	4.0	4.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	51	0	51	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	8	8	8	8	8	8	6	20	20	6	20	20
g / C, Green / Cycle	0.13	0.13	0.13	0.13	0.13	0.13	0.10	0.32	0.32	0.10	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.06	0.05	0.07	0.08	0.07	0.05	0.07	0.23	0.10	0.07	0.27	0.10
s, saturation flow rate [veh/h]	1810	3618	1615	1560	3119	1392	1623	3244	1448	1573	3146	1404
c, Capacity [veh/h]	232	463	207	200	400	179	160	1054	471	153	1017	454
d1, Uniform Delay [s]	25.2	24.9	25.3	25.7	25.4	24.9	27.2	18.4	15.7	27.3	19.4	15.8
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering 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
d2, Incremental Delay [s]	1.59	0.58	2.16	3.25	1.27	1.53	6.64	0.89	0.38	6.83	1.75	0.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression 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

Lane Group Results

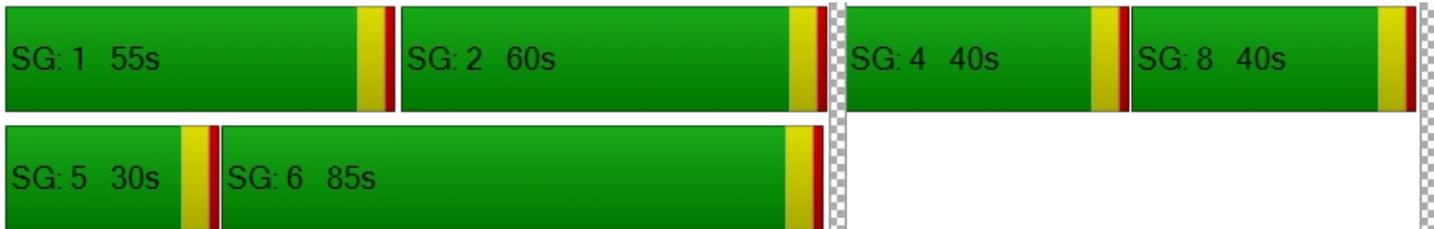
X, volume / capacity	0.49	0.41	0.54	0.63	0.57	0.41	0.74	0.71	0.31	0.74	0.82	0.31
d, Delay for Lane Group [s/veh]	26.7	25.5	27.5	28.9	26.7	26.4	33.9	19.3	16.1	34.1	21.1	16.1
Lane Group LOS	C	C	C	C	C	C	C	B	B	C	C	B
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	Yes	No
50th-Percentile Queue Length [veh]	1.48	1.18	1.49	1.75	1.47	0.97	1.78	3.83	1.31	1.70	4.62	1.23
50th-Percentile Queue Length [ft]	37.1	29.5	37.2	43.8	36.8	24.3	44.3	95.8	32.6	42.4	115.	30.7
95th-Percentile Queue Length [veh]	2.67	2.13	2.68	3.15	2.65	1.75	3.20	6.90	2.35	3.05	8.15	2.21
95th-Percentile Queue Length [ft]	66.8	53.1	67.0	78.8	66.3	43.7	79.9	172.	58.8	76.3	203.	55.3

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	26.7	25.5	27.5	28.9	26.7	26.4	33.9	19.3	16.1	34.1	21.1	16.1
Movement LOS	C	C	C	C	C	C	C	B	B	C	C	B
d_A, Approach Delay [s/veh]	26.41			27.35			20.55			21.86		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	22.84											
Intersection LOS	C											
Intersection V/C	0.489											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 3: SH 146 SBFR at Spencer Hwy**

Control Type:	Signalized	Delay (sec / veh):	20.3
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.539

Intersection Setup

Name	SH 146 SBFR			Spencer Hwy			Spencer Hwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 SBFR			Spencer Hwy			Spencer Hwy					
Base Volume Input [veh/h]	0	0	0	231	151	260	0	590	98	62	477	0
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	11.0	11.0	11.0	2.00	9.00	9.00	9.00	9.00	2.00
Growth Rate	1.00	1.00	1.00	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	21	0	9	8	0	26	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	236	154	286	0	611	108	63	513	0
Peak Hour Factor	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.90	0.90	0.90	0.90	1.00
Other Adjustment 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
Total 15-Minute Volume [veh/h]	0	0	0	65	43	79	0	170	30	17	142	0

Total Analysis Volume [veh/h]	0	0	0	262	171	317	0	678	120	70	569	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	0	0	0	4	0	0	2	0	1	1	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lag	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	5	5	0
Maximum Green [s]	0	0	0	0	40	0	0	40	0	86	86	0
Amber [s]	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	12	12	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	2.5	0.0	0.0	3.0	0.0	2.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	5	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	10	10	0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0	3.5	3.5	0.0
Minimum Recall					No			Yes			Yes	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	C	C	C	C	C
L, Total Lost Time per Cycle [s]		5.50	5.50	5.50	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.50	3.50	3.50	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]		15	15	15	12	12	9	9
g / C, Green / Cycle		0.29	0.29	0.29	0.23	0.23	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate		0.13	0.13	0.24	0.16	0.16	0.14	0.13
s, saturation flow rate [veh/h]		1630	1693	1324	3319	1615	1717	3020
c, Capacity [veh/h]		469	487	381	752	366	304	534
d1, Uniform Delay [s]		15.5	15.5	17.8	19.05	19.15	20.94	20.93
k, delay calibration		0.08	0.08	0.08	0.11	0.11	0.04	0.04
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.51	0.49	3.57	1.24	2.77	1.52	0.85
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.45	0.45	0.83	0.71	0.73	0.76	0.76
d, Delay for Lane Group [s/veh]		16.1	16.0	21.3	20.29	21.92	22.47	21.78
Lane Group LOS		B	B	C	C	C	C	C
Critical Lane Group		No	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh]		1.83	1.89	3.39	2.63	2.80	2.45	2.09
50th-Percentile Queue Length [ft]		45.7	47.3	84.6	65.79	69.93	61.20	52.30
95th-Percentile Queue Length [veh]		3.30	3.41	6.09	4.74	5.03	4.41	3.77
95th-Percentile Queue Length [ft]		82.4	85.2	152.	118.42	125.87	110.16	94.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	16.0	16.0	21.3	0.00	20.6	21.9	22.4	21.9	0.00
Movement LOS				B	B	C		C	C	C	C	
d_A, Approach Delay [s/veh]	0.00			18.33			20.83			22.03		
Approach LOS	A			B			C			C		
d_I, Intersection Delay [s/veh]	20.32											
Intersection LOS	C											
Intersection V/C	0.539											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: SH 146 NBFR at Spencer Hwy

Control Type:	Signalized	Delay (sec / veh):	18.1
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.448

Intersection Setup

Name	SH 146 NBFR						Spencer Hwy			Spencer Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 NBFR						Spencer Hwy			Spencer Hwy		
Base Volume Input [veh/h]	238	203	106	0	0	0	239	598	0	0	298	181
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	11.0	11.0	11.0	2.00	2.00	2.00	9.00	9.00	2.00	2.00	9.00	9.00
Growth Rate	1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.02	1.00	1.00	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	0	0	0	0	0	6	3	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	259	207	108	0	0	0	250	613	0	0	314	185
Peak Hour Factor	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	1.00	1.00	0.96	0.96
Other Adjustment 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
Total 15-Minute Volume [veh/h]	67	54	28	0	0	0	65	159	0	0	81	48

Total Analysis Volume [veh/h]	268	215	112	0	0	0	259	635	0	0	325	192
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	8	0	0	0	0	0	5	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	5	0	0	5	0
Maximum Green [s]	0	40	0	0	0	0	0	85	0	0	40	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0
All red [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall		No						No			Yes	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C	C	C
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50		5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50		3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	9	9	9		12	12	9	9
g / C, Green / Cycle	0.19	0.19	0.19		0.26	0.26	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.13	0.13	0.13		0.16	0.19	0.10	0.13
s, saturation flow rate [veh/h]	1630	1687	1402		1660	3319	3319	1482
c, Capacity [veh/h]	313	324	269		440	880	630	281
d1, Uniform Delay [s]	17.4	17.4	17.4		14.96	15.61	17.01	17.63
k, delay calibration	0.11	0.11	0.11		0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.34	2.23	2.77		1.25	1.13	0.65	2.91
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

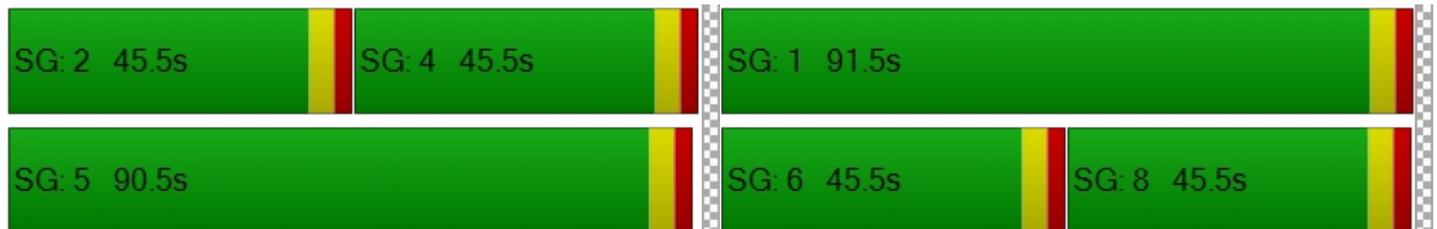
X, volume / capacity	0.66	0.65	0.66		0.59	0.72	0.52	0.68
d, Delay for Lane Group [s/veh]	19.8	19.6	20.2		16.21	16.74	17.66	20.54
Lane Group LOS	B	B	C		B	B	B	C
Critical Lane Group	No	No	Yes		No	Yes	No	Yes
50th-Percentile Queue Length [veh]	1.88	1.93	1.66		1.98	2.48	1.31	1.76
50th-Percentile Queue Length [ft]	47.0	48.1	41.5		49.55	61.96	32.66	43.92
95th-Percentile Queue Length [veh]	3.38	3.47	2.99		3.57	4.46	2.35	3.16
95th-Percentile Queue Length [ft]	84.6	86.6	74.8		89.19	111.53	58.79	79.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.7	19.8	20.2	0.00	0.00	0.00	16.2	16.7	0.00	0.00	17.6	20.5
Movement LOS	B	B	C				B	B			B	C
d_A, Approach Delay [s/veh]	19.89			0.00			16.59			18.73		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	18.12											
Intersection LOS	B											
Intersection V/C	0.448											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: SH 146 SBFR at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	48.5
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.783

Intersection Setup

Name	SH 146 SBFR			Fairmont Pkwy			Fairmont Pkwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	30.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 SBFR			Fairmont Pkwy			Fairmont Pkwy					
Base Volume Input [veh/h]	0	0	0	244	63	368	0	688	106	73	692	0
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	16.0	16.0	16.0	2.00	16.0	16.0	10.0	10.0	2.00
Growth Rate	1.00	1.00	1.00	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	36	0	37	12	0	28	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	251	64	411	0	739	120	74	734	0
Peak Hour Factor	1.00	1.00	1.00	0.93	0.93	0.93	1.00	0.93	0.93	0.93	0.93	1.00
Other Adjustment 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
Total 15-Minute Volume [veh/h]	0	0	0	67	17	109	0	197	32	20	195	0

Total Analysis Volume [veh/h]	0	0	0	267	68	438	0	787	128	79	782	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	0	0	0	4	0	0	2	0	1	1	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	35	0	68	68	0
Amber [s]	0.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	2.6	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	0	0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	4.6	0.0	0.0	4.0	0.0	3.0	3.0	0.0
Minimum Recall					Yes			Yes			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	C	C	C	L	C
L, Total Lost Time per Cycle [s]		6.60	6.60	6.60	6.00	6.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		4.60	4.60	4.60	4.00	4.00	3.00	3.00
g_i, Effective Green Time [s]		30	30	30	23	23	26	26
g / C, Green / Cycle		0.31	0.31	0.31	0.23	0.23	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate		0.11	0.11	0.35	0.20	0.20	0.05	0.24
s, saturation flow rate [veh/h]		1560	1590	1267	3119	1525	1645	3289
c, Capacity [veh/h]		485	495	394	731	358	448	895
d1, Uniform Delay [s]		25.6	25.6	33.2	35.14	35.33	26.85	33.53
k, delay calibration		0.11	0.11	0.47	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.42	0.41	77.9	2.58	5.80	0.19	2.86
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.34	0.34	1.11	0.83	0.85	0.18	0.87
d, Delay for Lane Group [s/veh]		26.0	26.0	111.	37.73	41.13	27.03	36.39
Lane Group LOS		C	C	F	D	D	C	D
Critical Lane Group		No	No	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh]		2.86	2.91	17.1	6.51	6.86	1.31	8.29
50th-Percentile Queue Length [ft]		71.4	72.7	429.	162.73	171.42	32.67	207.27
95th-Percentile Queue Length [veh]		5.15	5.24	25.5	10.69	11.15	2.35	13.01
95th-Percentile Queue Length [ft]		128.	130.	638.	267.33	278.78	58.81	325.33

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	26.0	26.0	111.	0.00	38.4	41.1	27.0	36.3	0.00
Movement LOS				C	C	F		D	D	C	D	
d_A, Approach Delay [s/veh]	0.00			74.30			38.86			35.53		
Approach LOS	A			E			D			D		
d_I, Intersection Delay [s/veh]	48.48											
Intersection LOS	D											
Intersection V/C	0.783											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: SH 146 NBFR at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	29.0
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.613

Intersection Setup

Name	SH 146 NBFR						Fairmont Pkwy			Fairmont Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	40.00			30.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 NBFR						Fairmont Pkwy			Fairmont Pkwy		
Base Volume Input [veh/h]	252	72	114	0	0	0	304	638	0	0	503	163
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	14.0	14.0	14.0	2.00	2.00	2.00	15.0	15.0	2.00	2.00	10.0	10.0
Growth Rate	1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.02	1.00	1.00	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	0	0	0	0	36	3	0	0	5	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	280	73	116	0	0	0	346	654	0	0	518	171
Peak Hour Factor	0.87	0.87	0.87	1.00	1.00	1.00	0.87	0.87	1.00	1.00	0.87	0.87
Other Adjustment 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
Total 15-Minute Volume [veh/h]	80	21	33	0	0	0	99	188	0	0	149	49

Total Analysis Volume [veh/h]	321	84	133	0	0	0	397	751	0	0	595	196
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	8	0	0	0	0	5	5	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	20	0	0	0	0	70	70	0	0	40	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.0	2.6	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	10	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		Yes						No			Yes	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C	C	C	C
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60		6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60		4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	11	11	11		21	21	21	21	21
g / C, Green / Cycle	0.16	0.16	0.16		0.29	0.29	0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.12		0.24	0.24	0.24	0.23	0.25
s, saturation flow rate [veh/h]	1587	1611	1322		1573	1649	1503	1727	1588
c, Capacity [veh/h]	251	254	209		464	486	443	502	461
d1, Uniform Delay [s]	29.1	29.1	29.1		23.7	23.7	23.7	23.63	24.26
k, delay calibration	0.11	0.11	0.11		0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.50	4.39	5.70		3.77	3.58	3.91	2.81	4.73
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.75	0.75	0.76		0.83	0.82	0.82	0.79	0.86
d, Delay for Lane Group [s/veh]	33.6	33.4	34.8		27.5	27.3	27.6	26.44	28.99
Lane Group LOS	C	C	C		C	C	C	C	C
Critical Lane Group	No	No	Yes		Yes	No	No	No	Yes
50th-Percentile Queue Length [veh]	3.21	3.24	2.79		5.61	5.84	5.37	5.64	5.99
50th-Percentile Queue Length [ft]	80.2	80.9	69.7		140.	146.	134.	140.88	149.73
95th-Percentile Queue Length [veh]	5.78	5.83	5.02		9.49	9.81	9.17	9.53	10.00
95th-Percentile Queue Length [ft]	144.	145.	125.		237.	245.	229.	238.21	250.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	33.5	33.9	34.8	0.00	0.00	0.00	27.5	27.5	0.00	0.00	27.3	28.9
Movement LOS	C	C	C				C	C			C	C
d_A, Approach Delay [s/veh]	33.94			0.00			27.52			27.72		
Approach LOS	C			A			C			C		
d_I, Intersection Delay [s/veh]	28.98											
Intersection LOS	C											
Intersection V/C	0.613											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Spencer Hwy at Employee Drwy #1**

Control Type:	Two-way stop	Delay (sec / veh):	21.7
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.073

Intersection Setup

Name	Employee Drwy #1		Spencer Hwy		Spencer Hwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

volumes

Name	Employee Drwy #1		Spencer Hwy		Spencer Hwy	
Base Volume Input [veh/h]	0	0	759	0	0	611
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	7.00	0.00	0.00	7.00
Growth Rate	1.00	1.00	1.02	1.00	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	6	50	46	18	23
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	6	824	46	18	646
Peak Hour Factor	0.7500	0.7500	0.9550	0.7500	0.7500	0.9550
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	216	15	6	169
Total Analysis Volume [veh/h]	17	8	863	61	24	676

Pedestrian Volume [ped/h]	0	0	0
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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.02	0.01	0.00	0.06	0.01
d_M, Delay for Movement [s/veh]	21.74	13.91	0.00	0.00	13.82	0.00
Movement LOS	C	B	A	A	B	A
95th-Percentile Queue Length [veh]	0.29	0.29	0.00	0.00	0.18	0.00
95th-Percentile Queue Length [ft]	7.35	7.35	0.00	0.00	4.40	0.00
d_A, Approach Delay [s/veh]	19.24		0.00		0.47	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	C					

**Intersection Level Of Service Report
Intersection 8: Spencer Hwy at Employee Drwy #2**

Control Type:	Two-way stop	Delay (sec / veh):	20.9
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.070

Intersection Setup

Name	Employee Drwy #2		Spencer Hwy		Spencer Hwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

volumes

Name	Employee Drwy #2		Spencer Hwy		Spencer Hwy	
Base Volume Input [veh/h]	0	0	759	0	0	611
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	7.00	0.00	0.00	7.00
Growth Rate	1.00	1.00	1.02	1.00	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	6	11	45	18	28
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	6	785	45	18	651
Peak Hour Factor	0.7500	0.7500	0.9550	0.7500	0.7500	0.9550
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	205	15	6	170
Total Analysis Volume [veh/h]	17	8	822	60	24	682

Pedestrian Volume [ped/h]	0	0	0
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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.02	0.01	0.00	0.05	0.01
d_M, Delay for Movement [s/veh]	20.90	13.56	0.00	0.00	13.40	0.00
Movement LOS	C	B	A	A	B	A
95th-Percentile Queue Length [veh]	0.28	0.28	0.00	0.00	0.17	0.00
95th-Percentile Queue Length [ft]	7.00	7.00	0.00	0.00	4.19	0.00
d_A, Approach Delay [s/veh]	18.55		0.00		0.46	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 9: Bay Area Blvd at Employee Drwy #3

Control Type:	Two-way stop	Delay (sec / veh):	11.3
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	Bay Area Blvd		Bay Area Blvd		Employee Drwy #3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

volumes

Name	Bay Area Blvd		Bay Area Blvd		Employee Drwy #3	
Base Volume Input [veh/h]	249	0	0	224	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	0.00	0.00	7.00	0.00	0.00
Growth Rate	1.02	1.00	1.00	1.02	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	37	46	7	5	14
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	275	37	46	235	5	14
Peak Hour Factor	0.9550	0.7500	0.7500	0.9550	0.7500	0.7500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	12	15	62	2	5
Total Analysis Volume [veh/h]	288	49	61	246	7	19

Pedestrian Volume [ped/h]	0	0	0
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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.00	0.01	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	8.07	0.00	11.29	9.39
Movement LOS	A	A	A	A	B	A
95th-Percentile Queue Length [veh]	0.00	0.00	0.16	0.00	0.11	0.11
95th-Percentile Queue Length [ft]	0.00	0.00	3.90	0.00	2.65	2.65
d_A, Approach Delay [s/veh]	0.00		1.60		9.90	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.12					
Intersection LOS	B					

**Intersection Level Of Service Report
Intersection 10: Bay Area Blvd at Truck Drwy**

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.192

Intersection Setup

Name	Heavy Truck Drwy		Bay Area Blvd		Bay Area Blvd	
Approach	Westbound		Northeastbound		Southwestbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

volumes

Name	Heavy Truck Drwy		Bay Area Blvd		Bay Area Blvd	
Base Volume Input [veh/h]	0	0	249	0	0	224
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	100.00	2.00	0.00	100.00	2.00	0.00
Growth Rate	1.00	1.00	1.02	1.00	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	60	0	58	60	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	0	312	60	0	240
Peak Hour Factor	0.7500	1.0000	0.9550	0.7500	1.0000	0.9550
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	0	82	20	0	63
Total Analysis Volume [veh/h]	80	0	327	80	0	251

Pedestrian Volume [ped/h]	0	0	0
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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.71	0.00	0.00	0.00	0.00	0.00
Movement LOS	C		A	A		A
95th-Percentile Queue Length [veh]	0.70	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	17.58	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.71		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.70					
Intersection LOS	C					

Vistro File: E:\...\AM.vistro
Report File: E:\...\Built-out AM.pdf

Scenario 1: Built-out AM
5/3/2016

Turning Movement Volume: Summary

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bay Area Blvd at Spencer Hwy	58	160	71	126	143	75	159	674	97	40	485	132	2220

ID	Intersection Name	Northbound			Southbound			Eastbound			Westbound			Total Volume
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bay Area Blvd at Fairmont Pkwy	110	184	108	122	220	72	116	725	144	110	814	135	2860

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
3	SH 146 SBFR at Spencer Hwy	236	154	286	611	108	63	513	1971

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
4	SH 146 NBFR at Spencer Hwy	259	207	108	250	613	314	185	1936

ID	Intersection Name	Southbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Thru	Right	Left	Thru	
5	SH 146 SBFR at Fairmont Pkwy	251	64	411	739	120	74	734	2393

ID	Intersection Name	Northbound			Eastbound		Westbound		Total Volume
		Left	Thru	Right	Left	Thru	Thru	Right	
6	SH 146 NBFR at Fairmont Pkwy	280	73	116	346	654	518	171	2158

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
7	Spencer Hwy at Employee Drwy #1	13	6	824	46	18	646	1553

ID	Intersection Name	Northbound		Eastbound		Westbound		Total Volume
		Left	Right	Thru	Right	Left	Thru	
8	Spencer Hwy at Employee Drwy #2	13	6	785	45	18	651	1518

ID	Intersection Name	Northbound		Southbound		Westbound		Total Volume
		Thru	Right	Left	Thru	Left	Right	
9	Bay Area Blvd at Employee Drwy #3	275	37	46	235	5	14	612

ID	Intersection Name	Westbound	Northeastbound		Southwestbound	Total Volume
		Left	Thru	Right	Thru	
10	Bay Area Blvd at Truck Drwy	60	312	60	240	672

Vistro File: E:\...\AM.vistro
Report File: E:\...\Built-out AM.pdf

Scenario 1: Built-out AM
5/3/2016

Turning Movement Volume: Detail

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
1	Bay Area Blvd at Spencer Hwy	Final Base	53	152	44	82	120	74	156	633	81	23	469	119	2006
		Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	4	5	26	42	21	0	0	28	14	17	7	11	175
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	58	160	71	126	143	75	159	674	97	40	485	132	2220

ID	Intersection Name	Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
2	Bay Area Blvd at Fairmont Pkwy	Final Base	108	180	106	72	216	48	61	711	141	108	798	70	2619
		Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	-
		In Process	0	0	0	0	0	0	0	0	0	0	0	0	0
		Net New Trips	0	0	0	49	0	23	54	0	0	0	0	64	190
		Other	0	0	0	0	0	0	0	0	0	0	0	0	0
		Future Total	110	184	108	122	220	72	116	725	144	110	814	135	2860

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
3	SH 146 SBFR at Spencer Hwy	Final Base	231	151	260	590	98	62	477	1869
		Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	0	0	21	9	8	0	26	64
		Other	0	0	0	0	0	0	0	0
		Future Total	236	154	286	611	108	63	513	1971

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
4	SH 146 NBFR at Spencer Hwy	Final Base	238	203	106	239	598	298	181	1863
		Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	16	0	0	6	3	10	0	35
		Other	0	0	0	0	0	0	0	0
		Future Total	259	207	108	250	613	314	185	1936

ID	Intersection Name	Volume Type	Southbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Thru	Right	Left	Thru	
5	SH 146 SBFR at Fairmont Pkwy	Final Base	244	63	368	688	106	73	692	2234
		Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	2	0	36	37	12	0	28	115
		Other	0	0	0	0	0	0	0	0
		Future Total	251	64	411	739	120	74	734	2393

ID	Intersection Name	Volume Type	Northbound			Eastbound		Westbound		Total Volume
			Left	Thru	Right	Left	Thru	Thru	Right	
6	SH 146 NBFR at Fairmont Pkwy	Final Base	252	72	114	304	638	503	163	2046
		Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	-
		In Process	0	0	0	0	0	0	0	0
		Net New Trips	23	0	0	36	3	5	5	72
		Other	0	0	0	0	0	0	0	0
		Future Total	280	73	116	346	654	518	171	2158

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
7	Spencer Hwy at Employee Drwy #1	Final Base	0	0	759	0	0	611	1370
		Growth Rate	1.00	1.00	1.02	1.00	1.00	1.02	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	13	6	50	46	18	23	156
		Other	0	0	0	0	0	0	0
		Future Total	13	6	824	46	18	646	1553

ID	Intersection Name	Volume Type	Northbound		Eastbound		Westbound		Total Volume
			Left	Right	Thru	Right	Left	Thru	
8	Spencer Hwy at Employee Drwy #2	Final Base	0	0	759	0	0	611	1370
		Growth Rate	1.00	1.00	1.02	1.00	1.00	1.02	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	13	6	11	45	18	28	121
		Other	0	0	0	0	0	0	0
		Future Total	13	6	785	45	18	651	1518

ID	Intersection Name	Volume Type	Northbound		Southbound		Westbound		Total Volume
			Thru	Right	Left	Thru	Left	Right	
9	Bay Area Blvd at Employee Drwy #3	Final Base	249	0	0	224	0	0	473
		Growth Rate	1.02	1.00	1.00	1.02	1.00	1.00	-
		In Process	0	0	0	0	0	0	0
		Net New Trips	21	37	46	7	5	14	130
		Other	0	0	0	0	0	0	0
		Future Total	275	37	46	235	5	14	612

ID	Intersection Name	Volume Type	Westbound	Northeastbound		Southwestbound	Total Volume
			Left	Thru	Right	Thru	
10	Bay Area Blvd at Truck Drwy	Final Base	0	249	0	224	473
		Growth Rate	1.00	1.02	1.00	1.02	-
		In Process	0	0	0	0	0
		Net New Trips	60	58	60	12	190
		Other	0	0	0	0	0
		Future Total	60	312	60	240	672

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bay Area Blvd at Spencer Hwy	Signalized	HCM 2010	EB Left	0.547	22.2	C
2	Bay Area Blvd at Fairmont Pkwy	Signalized	HCM 2010	EB Left	0.659	34.7	C
3	SH 146 SBFR at Spencer Hwy	Signalized	HCM 2010	WB Left	0.605	24.4	C
4	SH 146 NBFR at Spencer Hwy	Signalized	HCM 2010	NB Right	0.438	16.7	B
5	SH 146 SBFR at Fairmont Pkwy	Signalized	HCM 2010	SB Right	0.796	49.2	D
6	SH 146 NBFR at Fairmont Pkwy	Signalized	HCM 2010	NB Right	0.621	28.6	C
7	Spencer Hwy at Employee Drwy #1	Two-way stop	HCM 2010	NB Left	0.280	26.9	D
8	Spencer Hwy at Employee Drwy #2	Two-way stop	HCM 2010	NB Left	0.276	26.5	D
9	Bay Area Blvd at Employee Drwy #3	Two-way stop	HCM 2010	WB Left	0.048	13.1	B
10	Bay Area Blvd at Heavy Truck Drwy	Two-way stop	HCM 2010	WB Left	0.264	21.1	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. for all other control types, they are taken for the whole intersection.

**Intersection Level Of Service Report
Intersection 1: Bay Area Blvd at Spencer Hwy**

Control Type:	Signalized	Delay (sec / veh):	22.2
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.547

Intersection Setup

Name	Bay Area Blvd			Bay Area Blvd			Spencer Hwy			Spencer Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	136.	100.	100.	245.	100.	100.	230.	100.	100.	105.	100.	100.
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	Bay Area Blvd			Bay Area Blvd			Spencer Hwy			Spencer Hwy		
Base Volume Input [veh/h]	146	219	40	95	216	214	87	479	54	46	699	97
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	9.50	9.50	9.50	9.50	9.50	9.50
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	21	24	14	7	0	0	9	5	31	28	42
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	244	65	111	227	218	89	498	60	78	741	141
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Other Adjustment 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
Total 15-Minute Volume [veh/h]	49	73	19	33	68	65	27	148	18	23	221	42

Total Analysis Volume [veh/h]	194	291	77	132	271	260	106	594	72	93	883	168
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Prote	Perm	Perm									
Signal group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									
Minimum Green [s]	7	8	0	7	8	0	7	8	0	7	8	0
Maximum Green [s]	16	40	0	40	64	0	30	70	0	20	60	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	65	0	0	0	0	0	55	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No										
Maximum Recall	No	No										
Pedestrian Recall	No	No										
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	C	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	14	14	6	12	12	6	17	17	5	16	16
g / C, Green / Cycle	0.14	0.24	0.24	0.11	0.21	0.21	0.10	0.29	0.29	0.09	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.11	0.10	0.10	0.07	0.14	0.16	0.06	0.13	0.14	0.06	0.21	0.21
s, saturation flow rate [veh/h]	1810	1900	1766	1810	1900	1615	1653	3304	1642	1653	3304	1597
c, Capacity [veh/h]	249	458	426	192	399	339	163	944	469	155	927	448
d1, Uniform Delay [s]	24.4	18.7	18.7	25.2	21.3	21.7	25.4	17.2	17.2	25.4	19.2	19.3
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering 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
d2, Incremental Delay [s]	5.27	0.60	0.66	4.33	2.04	3.65	4.30	0.36	0.75	3.69	1.33	2.77
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression 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

Lane Group Results

X, volume / capacity	0.78	0.41	0.42	0.69	0.68	0.77	0.65	0.47	0.48	0.60	0.76	0.77
d, Delay for Lane Group [s/veh]	29.6	19.3	19.4	29.5	23.3	25.4	29.7	17.6	18.0	29.1	20.6	22.0
Lane Group LOS	C	B	B	C	C	C	C	B	B	C	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh]	2.63	1.92	1.81	1.79	3.15	3.21	1.45	2.10	2.17	1.26	3.82	3.89
50th-Percentile Queue Length [ft]	65.7	47.9	45.3	44.6	78.7	80.2	36.1	52.5	54.1	31.3	95.4	97.2
95th-Percentile Queue Length [veh]	4.73	3.45	3.26	3.22	5.67	5.78	2.60	3.78	3.90	2.26	6.87	7.00
95th-Percentile Queue Length [ft]	118.	86.3	81.6	80.3	141.	144.	65.0	94.5	97.4	56.4	171.	174.

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	29.6	19.3	19.4	29.5	23.3	25.4	29.7	17.7	18.0	29.1	20.9	22.0
Movement LOS	C	B	B	C	C	C	C	B	B	C	C	C
d_A, Approach Delay [s/veh]	22.92			25.41			19.40			21.74		
Approach LOS	C			C			B			C		
d_I, Intersection Delay [s/veh]	22.15											
Intersection LOS	C											
Intersection V/C	0.547											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 2: Bay Area Blvd at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	34.7
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.659

Intersection Setup

Name	Bay Area Blvd			Bay Area Blvd			Fairmont Pkwy			Fairmont Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	234.	100.	170.	150.	100.	100.	260.	100.	150.	450.	100.	380.
Speed [mph]	45.00			45.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	Bay Area Blvd			Bay Area Blvd			Fairmont Pkwy			Fairmont Pkwy		
Base Volume Input [veh/h]	203	265	258	67	311	84	49	723	167	158	824	122
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	10.5	10.5	10.5	10.5	10.5	10.5	13.0	13.0	13.0
Growth Rate	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	52	0	54	26	0	0	0	0	54
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	207	270	263	120	317	140	76	737	170	161	840	178
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Other Adjustment 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
Total 15-Minute Volume [veh/h]	58	76	74	34	89	39	21	207	48	45	236	50

Total Analysis Volume [veh/h]	233	304	296	135	357	158	86	830	191	181	946	200
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0		0		0		0	
Bicycle Volume [bicycles/h]	0		0		0		0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm	Perm	Perm	Perm	Perm	Perm	Prote	Perm	Perm	Prote	Perm	Perm
Signal group	0	8	0	0	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	0	8	0	0	8	0	7	8	0	7	8	0
Maximum Green [s]	0	35	0	0	35	0	25	55	0	50	80	0
Amber [s]	0.0	4.0	0.0	0.0	4.0	0.0	4.0	4.0	0.0	4.0	4.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	0	0	0	0	51	0	51	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Minimum Recall		No			No		No	No		No	No	
Maximum Recall		No			No		No	No		No	No	
Pedestrian Recall		No			No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	20	20	20	13	13	13	6	27	27	13	34	34
g / C, Green / Cycle	0.22	0.22	0.22	0.14	0.14	0.14	0.07	0.29	0.29	0.14	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.13	0.08	0.18	0.08	0.11	0.11	0.05	0.25	0.13	0.11	0.30	0.14
s, saturation flow rate [veh/h]	1810	3618	1615	1638	3274	1462	1638	3274	1462	1601	3201	1429
c, Capacity [veh/h]	394	788	352	233	466	208	110	958	428	217	1155	516
d1, Uniform Delay [s]	33.1	31.4	35.3	37.7	38.9	38.8	43.3	31.6	27.1	39.7	27.3	22.3
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering 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
d2, Incremental Delay [s]	1.42	0.31	5.47	2.27	2.66	5.61	11.5	2.53	0.73	8.23	1.50	0.48
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression 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

Lane Group Results

X, volume / capacity	0.59	0.39	0.84	0.58	0.77	0.76	0.78	0.87	0.45	0.84	0.82	0.39
d, Delay for Lane Group [s/veh]	34.5	31.8	40.7	40.0	41.5	44.4	54.8	34.1	27.8	47.9	28.8	22.8
Lane Group LOS	C	C	D	D	D	D	D	C	C	D	C	C
Critical Lane Group	No	No	Yes	No	Yes	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh]	4.67	2.83	6.65	2.92	3.95	3.66	2.20	8.38	3.27	4.29	8.76	3.02
50th-Percentile Queue Length [ft]	116.	70.8	166.	72.9	98.6	91.5	54.9	209.	81.6	107.	218.	75.4
95th-Percentile Queue Length [veh]	8.21	5.10	10.8	5.25	7.11	6.59	3.96	13.1	5.88	7.68	13.6	5.43
95th-Percentile Queue Length [ft]	205.	127.	272.	131.	177.	164.	98.9	328.	146.	192.	340.	135.

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	34.5	31.8	40.7	40.0	41.5	44.4	54.8	34.1	27.8	47.9	28.8	22.8
Movement LOS	C	C	D	D	D	D	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	35.75			41.96			34.66			30.54		
Approach LOS	D			D			C			C		
d_I, Intersection Delay [s/veh]	34.71											
Intersection LOS	C											
Intersection V/C	0.659											

Sequence

Ring 1	1	2	4	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 3: SH 146 SBFR at Spencer Hwy**

Control Type:	Signalized	Delay (sec / veh):	24.4
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.605

Intersection Setup

Name	SH 146 SBFR			Spencer Hwy			Spencer Hwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	30.00			40.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 SBFR			Spencer Hwy			Spencer Hwy					
Base Volume Input [veh/h]	0	0	0	237	266	317	0	539	176	107	446	0
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	11.0	11.0	11.0	2.00	9.50	9.50	9.50	9.50	2.00
Growth Rate	1.00	1.00	1.00	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	7	0	32	28	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	242	271	330	0	582	208	109	465	0
Peak Hour Factor	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.90	0.90	0.90	0.90	1.00
Other Adjustment 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
Total 15-Minute Volume [veh/h]	0	0	0	67	75	92	0	161	58	30	129	0

Total Analysis Volume [veh/h]	0	0	0	269	301	366	0	646	231	121	516	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	0	0	0	4	0	0	2	0	1	1	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lag	-	-
Minimum Green [s]	0	0	0	0	7	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	40	0	0	40	0	85	85	0
Amber [s]	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0	3.5	3.5	0.0
All red [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	12	12	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	2.5	0.0	0.0	3.0	0.0	2.0	2.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	5	5	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	10	10	0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0	3.5	3.5	0.0
Minimum Recall					Yes			Yes			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	40.0	0.0	0.0	40.0	0.0	40.0	40.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	C	C	C	C	C
L, Total Lost Time per Cycle [s]		5.50	5.50	5.50	5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		3.50	3.50	3.50	3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]		22	22	22	17	17	12	12
g / C, Green / Cycle		0.33	0.33	0.33	0.26	0.26	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate		0.17	0.18	0.28	0.18	0.19	0.14	0.14
s, saturation flow rate [veh/h]		1630	1712	1324	3304	1523	1691	3006
c, Capacity [veh/h]		533	560	433	847	390	296	527
d1, Uniform Delay [s]		18.5	18.7	21.4	22.97	23.40	26.93	26.89
k, delay calibration		0.08	0.08	0.08	0.11	0.11	0.04	0.04
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.55	0.60	3.46	1.02	2.89	1.68	0.92
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.50	0.54	0.85	0.69	0.75	0.78	0.77
d, Delay for Lane Group [s/veh]		19.0	19.3	24.8	23.99	26.29	28.61	27.81
Lane Group LOS		B	B	C	C	C	C	C
Critical Lane Group		No	No	Yes	No	Yes	Yes	No
50th-Percentile Queue Length [veh]		3.12	3.54	5.19	3.86	4.13	3.36	2.91
50th-Percentile Queue Length [ft]		77.9	88.4	129.	96.59	103.19	84.05	72.66
95th-Percentile Queue Length [veh]		5.61	6.37	8.92	6.95	7.43	6.05	5.23
95th-Percentile Queue Length [ft]		140.	159.	223.	173.86	185.74	151.29	130.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	19.0	19.3	24.8	0.00	24.2	26.2	28.6	27.9	0.00
Movement LOS				B	B	C		C	C	C	C	
d_A, Approach Delay [s/veh]	0.00			21.44			24.76			28.10		
Approach LOS	A			C			C			C		
d_I, Intersection Delay [s/veh]	24.36											
Intersection LOS	C											
Intersection V/C	0.605											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: SH 146 NBFR at Spencer Hwy

Control Type:	Signalized	Delay (sec / veh):	16.7
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.438

Intersection Setup

Name	SH 146 NBFR						Spencer Hwy			Spencer Hwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	40.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 NBFR						Spencer Hwy			Spencer Hwy		
Base Volume Input [veh/h]	174	213	63	0	0	0	290	505	0	0	369	156
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	11.0	11.0	11.0	2.00	2.00	2.00	9.50	9.50	2.00	2.00	9.50	9.50
Growth Rate	1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.02	1.00	1.00	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	0	0	0	21	11	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	183	217	64	0	0	0	317	526	0	0	380	159
Peak Hour Factor	0.93	0.93	0.93	1.00	1.00	1.00	0.93	0.93	1.00	1.00	0.93	0.93
Other Adjustment 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
Total 15-Minute Volume [veh/h]	49	58	17	0	0	0	85	140	0	0	101	42

Total Analysis Volume [veh/h]	196	232	68	0	0	0	339	562	0	0	406	170
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm	Overl	Perm									
Signal group	0	8	0	0	0	0	0	5	0	0	6	0
Auxiliary Signal Groups											6	
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	5	0	0	5	0
Maximum Green [s]	0	40	0	0	0	0	0	85	0	0	40	0
Amber [s]	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0
All red [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	2.5	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.5	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	3.5	0.0
Minimum Recall		Yes						No			Yes	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	40.0	0.0	0.0	0.0	0.0	0.0	40.0	0.0	0.0	40.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C	C	C
L, Total Lost Time per Cycle [s]	5.50	5.50	5.50		5.50	5.50	5.50	5.50
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.50	3.50	3.50		3.50	3.50	3.50	3.50
g_i, Effective Green Time [s]	8	8	8		12	12	8	8
g / C, Green / Cycle	0.17	0.17	0.17		0.27	0.27	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.10	0.10	0.10		0.21	0.17	0.12	0.13
s, saturation flow rate [veh/h]	1630	1699	1443		1653	3304	3304	1501
c, Capacity [veh/h]	280	292	248		448	896	621	282
d1, Uniform Delay [s]	17.1	17.1	17.1		14.94	14.31	16.70	16.92
k, delay calibration	0.08	0.08	0.08		0.04	0.04	0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.56	1.46	1.79		0.99	0.27	0.38	1.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.60	0.61		0.76	0.63	0.62	0.68
d, Delay for Lane Group [s/veh]	18.6	18.5	18.9		15.93	14.58	17.07	18.01
Lane Group LOS	B	B	B		B	B	B	B
Critical Lane Group	No	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh]	1.43	1.47	1.29		2.45	1.88	1.44	1.52
50th-Percentile Queue Length [ft]	35.8	36.7	32.3		61.37	47.12	36.11	37.90
95th-Percentile Queue Length [veh]	2.58	2.65	2.33		4.42	3.39	2.60	2.73
95th-Percentile Queue Length [ft]	64.4	66.1	58.1		110.47	84.82	65.00	68.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.6	18.6	18.9	0.00	0.00	0.00	15.9	14.5	0.00	0.00	17.1	18.0
Movement LOS	B	B	B				B	B			B	B
d_A, Approach Delay [s/veh]	18.71			0.00			15.09			17.38		
Approach LOS	B			A			B			B		
d_I, Intersection Delay [s/veh]	16.67											
Intersection LOS	B											
Intersection V/C	0.438											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 5: SH 146 SBFR at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	49.2
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.796

Intersection Setup

Name	SH 146 SBFR			Fairmont Pkwy			Fairmont Pkwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	30.00			40.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 SBFR			Fairmont Pkwy			Fairmont Pkwy					
Base Volume Input [veh/h]	0	0	0	274	133	348	0	914	139	111	702	0
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	15.5	15.5	15.5	2.00	13.5	13.5	9.00	9.00	2.00
Growth Rate	1.00	1.00	1.00	1.02	1.02	1.02	1.00	1.02	1.02	1.02	1.02	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	7	0	36	0	40	12	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	286	136	391	0	972	154	113	734	0
Peak Hour Factor	1.00	1.00	1.00	0.96	0.96	0.96	1.00	0.96	0.96	0.96	0.96	1.00
Other Adjustment 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
Total 15-Minute Volume [veh/h]	0	0	0	74	35	101	0	252	40	29	190	0

Total Analysis Volume [veh/h]	0	0	0	296	141	405	0	1006	159	117	760	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	0	0	0	4	0	0	2	0	1	1	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	0	30	0	0	35	0	68	68	0
Amber [s]	0.0	0.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	2.6	0.0	0.0	2.0	0.0	2.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	0	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	0	0
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	4.6	0.0	0.0	4.0	0.0	3.0	3.0	0.0
Minimum Recall					Yes			Yes			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		L	C	C	C	C	L	C
L, Total Lost Time per Cycle [s]		6.60	6.60	6.60	6.00	6.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]		4.60	4.60	4.60	4.00	4.00	3.00	3.00
g_i, Effective Green Time [s]		30	30	30	29	29	27	27
g / C, Green / Cycle		0.29	0.29	0.29	0.28	0.28	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate		0.14	0.14	0.32	0.24	0.25	0.07	0.23
s, saturation flow rate [veh/h]		1567	1616	1272	3187	1561	1660	3319
c, Capacity [veh/h]		452	466	367	895	438	434	868
d1, Uniform Delay [s]		30.5	30.5	37.0	35.57	35.81	30.51	36.78
k, delay calibration		0.11	0.11	0.47	0.11	0.24	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.78	0.76	76.3	2.73	12.16	0.33	2.99
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.48	0.48	1.10	0.87	0.89	0.27	0.88
d, Delay for Lane Group [s/veh]		31.3	31.2	113.	38.29	47.97	30.84	39.77
Lane Group LOS		C	C	F	D	D	C	D
Critical Lane Group		No	No	Yes	No	Yes	No	Yes
50th-Percentile Queue Length [veh]		4.38	4.51	16.6	8.93	10.13	2.22	8.88
50th-Percentile Queue Length [ft]		109.	112.	415.	223.25	253.26	55.40	222.04
95th-Percentile Queue Length [veh]		7.81	8.00	24.7	13.83	15.35	3.99	13.77
95th-Percentile Queue Length [ft]		195.	199.	618.	345.78	383.75	99.72	344.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	31.3	31.2	113.	0.00	40.5	47.9	30.8	39.7	0.00
Movement LOS				C	C	F		D	D	C	D	
d_A, Approach Delay [s/veh]	0.00			70.75			41.52			38.58		
Approach LOS	A			E			D			D		
d_I, Intersection Delay [s/veh]	49.16											
Intersection LOS	D											
Intersection V/C	0.796											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 6: SH 146 NBFR at Fairmont Pkwy**

Control Type:	Signalized	Delay (sec / veh):	28.6
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.621

Intersection Setup

Name	SH 146 NBFR						Fairmont Pkwy			Fairmont Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.	100.
Speed [mph]	40.00			30.00			55.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

volumes

Name	SH 146 NBFR						Fairmont Pkwy			Fairmont Pkwy		
Base Volume Input [veh/h]	214	37	102	0	0	0	578	621	0	0	610	147
Base Volume Adjustment 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
Heavy Vehicles Percentage [%]	14.5	14.5	14.5	2.00	2.00	2.00	13.0	13.0	2.00	2.00	9.00	9.00
Growth Rate	1.02	1.02	1.02	1.00	1.00	1.00	1.02	1.02	1.00	1.00	1.02	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	0	0	0	0	0	36	11	0	0	2	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	234	38	104	0	0	0	626	644	0	0	624	152
Peak Hour Factor	0.95	0.95	0.95	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	0.95
Other Adjustment 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
Total 15-Minute Volume [veh/h]	62	10	27	0	0	0	165	169	0	0	164	40

Total Analysis Volume [veh/h]	246	40	109	0	0	0	658	677	0	0	656	160
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Free Running
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Perm											
Signal group	0	8	0	0	0	0	5	5	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lag	-	-	-	-	-
Minimum Green [s]	0	5	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	0	20	0	0	0	0	70	70	0	0	40	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0
All red [s]	0.0	2.6	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
Split [s]	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	5	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	10	10	0	0	10	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	4.6	0.0	0.0	0.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		Yes						No			Yes	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C		L	C	C	C	C
L, Total Lost Time per Cycle [s]	6.60	6.60	6.60		6.00	6.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	4.60	4.60	4.60		4.00	4.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	9	9	9		25	25	25	22	22
g / C, Green / Cycle	0.12	0.12	0.12		0.33	0.33	0.33	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.09	0.09	0.09		0.28	0.28	0.28	0.23	0.25
s, saturation flow rate [veh/h]	1580	1598	1298		1601	1644	1530	1743	1630
c, Capacity [veh/h]	197	199	162		536	550	512	507	474
d1, Uniform Delay [s]	31.2	31.2	31.3		22.9	22.8	22.8	24.44	24.97
k, delay calibration	0.11	0.11	0.11		0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.47	4.37	6.03		3.59	3.43	3.62	3.06	4.71
d3, Initial Queue Delay [s]	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.70	0.70	0.72		0.84	0.84	0.83	0.80	0.86
d, Delay for Lane Group [s/veh]	35.7	35.6	37.3		26.5	26.3	26.4	27.50	29.68
Lane Group LOS	D	D	D		C	C	C	C	C
Critical Lane Group	No	No	Yes		Yes	No	No	No	Yes
50th-Percentile Queue Length [veh]	2.48	2.49	2.17		6.60	6.72	6.26	6.09	6.40
50th-Percentile Queue Length [ft]	61.9	62.2	54.3		165.	168.	156.	152.23	160.03
95th-Percentile Queue Length [veh]	4.46	4.48	3.91		10.8	10.9	10.3	10.14	10.55
95th-Percentile Queue Length [ft]	111.	112.	97.8		270.	274.	259.	253.40	263.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.6	35.9	37.3	0.00	0.00	0.00	26.4	26.4	0.00	0.00	28.3	29.6
Movement LOS	D	D	D				C	C			C	C
d_A, Approach Delay [s/veh]	36.17			0.00			26.43			28.59		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	28.63											
Intersection LOS	C											
Intersection V/C	0.621											

Sequence

Ring 1	2	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	-	6	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
Intersection 7: Spencer Hwy at Employee Drwy #1**

Control Type:	Two-way stop	Delay (sec / veh):	26.9
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.280

Intersection Setup

Name	Employee Drwy #1		Spencer Hwy		Spencer Hwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

volumes

Name	Employee Drwy #1		Spencer Hwy		Spencer Hwy	
Base Volume Input [veh/h]	0	0	617	0	0	842
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	7.00	0.00	0.00	7.00
Growth Rate	1.00	1.00	1.02	1.00	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	49	21	33	15	6	52
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	21	662	15	6	911
Peak Hour Factor	0.7500	0.7500	0.8390	0.7500	0.7500	0.8390
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	7	197	5	2	271
Total Analysis Volume [veh/h]	65	28	789	20	8	1086

Pedestrian Volume [ped/h]	0	0	0
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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.28	0.05	0.01	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	26.89	18.39	0.00	0.00	12.47	0.00
Movement LOS	D	C	A	A	B	A
95th-Percentile Queue Length [veh]	1.42	1.42	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft]	35.54	35.54	0.00	0.00	1.24	0.00
d_A, Approach Delay [s/veh]	24.33		0.00		0.09	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.18					
Intersection LOS	D					

**Intersection Level Of Service Report
Intersection 8: Spencer Hwy at Employee Drwy #2**

Control Type:	Two-way stop	Delay (sec / veh):	26.5
Analysis Method:	HCM 2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.276

Intersection Setup

Name	Employee Drwy #2		Spencer Hwy		Spencer Hwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

volumes

Name	Employee Drwy #2		Spencer Hwy		Spencer Hwy	
Base Volume Input [veh/h]	0	0	617	0	0	842
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	7.00	0.00	0.00	7.00
Growth Rate	1.00	1.00	1.02	1.00	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	49	22	39	15	6	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	22	668	15	6	869
Peak Hour Factor	0.7500	0.7500	0.8390	0.7500	0.7500	0.8390
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	7	199	5	2	259
Total Analysis Volume [veh/h]	65	29	796	20	8	1036

Pedestrian Volume [ped/h]	0	0	0
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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.28	0.06	0.01	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	26.51	18.27	0.00	0.00	12.53	0.00
Movement LOS	D	C	A	A	B	A
95th-Percentile Queue Length [veh]	1.41	1.41	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft]	35.28	35.28	0.00	0.00	1.25	0.00
d_A, Approach Delay [s/veh]	23.97		0.00		0.10	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.20					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 9: Bay Area Blvd at Employee Drwy #3

Control Type:	Two-way stop	Delay (sec / veh):	13.1
Analysis Method:	HCM 2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.048

Intersection Setup

Name	Bay Area Blvd		Bay Area Blvd		Employee Drwy #3	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00		45.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

volumes

Name	Bay Area Blvd		Bay Area Blvd		Employee Drwy #3	
Base Volume Input [veh/h]	405	0	0	316	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	7.00	0.00	0.00	7.00	0.00	0.00
Growth Rate	1.02	1.00	1.00	1.02	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	13	15	28	18	53
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	420	13	15	350	18	53
Peak Hour Factor	0.8390	0.7500	0.7500	0.8390	0.7500	0.7500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	4	5	104	6	18
Total Analysis Volume [veh/h]	501	17	20	417	24	71

Pedestrian Volume [ped/h]	0	0	0
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Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			Yes
Number of Storage Spaces in Median	0	0	2

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.02	0.00	0.05	0.10
d_M, Delay for Movement [s/veh]	0.00	0.00	8.47	0.00	13.08	10.73
Movement LOS	A	A	A	A	B	B
95th-Percentile Queue Length [veh]	0.00	0.00	0.06	0.00	0.50	0.50
95th-Percentile Queue Length [ft]	0.00	0.00	1.44	0.00	12.43	12.43
d_A, Approach Delay [s/veh]	0.00		0.39		11.32	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	1.19					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 10: Bay Area Blvd at Heavy Truck Drwy

Control Type:	Two-way stop	Delay (sec / veh):	21.1
Analysis Method:	HCM 2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.264

Intersection Setup

Name	Heavy Truck Drwy		Bay Area Blvd		Bay Area Blvd	
Approach	Westbound		Northeastbound		Southwestbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

volumes

Name	Heavy Truck Drwy		Bay Area Blvd		Bay Area Blvd	
Base Volume Input [veh/h]	0	0	405	0	0	316
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	100.00	2.00	0.00	100.00	2.00	0.00
Growth Rate	1.00	1.00	1.02	1.00	1.00	1.02
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	60	0	20	60	0	46
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	60	0	433	60	0	368
Peak Hour Factor	0.7500	1.0000	0.8390	0.7500	1.0000	0.8390
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	0	129	20	0	110
Total Analysis Volume [veh/h]	80	0	516	80	0	439

Pedestrian Volume [ped/h]	0	0	0
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Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	Yes		
Number of Storage Spaces in Median	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.26	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	21.11	0.00	0.00	0.00	0.00	0.00
Movement LOS	C		A	A		A
95th-Percentile Queue Length [veh]	1.04	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	25.97	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	21.11		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.51					
Intersection LOS	C					

Appendix E

Sight Distance Analysis

Intersection Sight Distance		
Location: Bay Area Boulevard at PPG Truck Driveway		
Number of lanes on major street: 4		
Median width: 100		
Vehicle Type: Truck		
ISD	=	Intersection Sight Distance (ft)
V_{major}	=	Design speed of major road (mph)
t_g	=	Time gap for minor road vehicle to enter the major road (seconds)
ISD	=	$1.47 \times V_{major} \times t_g$
Case B1 - Left Turn from Stop		
t_g for Passenger Car = 7.5 seconds (Two lane roadway with no median and less than 3% grade)		
t_g for Single-unit truck (or bus) = 9.5, t_g for Combination truck = 11.5		
For undivided, multilane highways, add 0.5 seconds for each additional lane to be crossed (0.7 for trucks).		
For medians that do not provide enough storage to store the vehicle, convert the median with to 12-foot equivalent lanes and add 0.5 seconds for each equivalent.		
For two stage gap acceptance (vehicle stores in median), calculate sight triangle using Case B3		
ISD	=	760.725 Calculated required sight distance (ft) to the right of the driver
V_{major}	=	45 Major Street Posted or Design Speed (MPH)
t_g	=	11.5 Enter calculated time gap here (seconds)
Case B2 - Right Turn from Stop		
t_g for Passenger Car = 6.5 seconds (Two lane roadway with no median and less than 3% grade)		
t_g for Single-unit truck (or bus) = 8.5, t_g for Combination truck = 10.5		
ISD	=	0 Calculated required sight distance (ft) to the left of the driver
V_{major}	=	0 Major Street Posted or Design Speed (MPH)
t_g	=	0 Enter calculated time gap here (seconds)
Case B3 - Crossing Maneuver from the minor road		
t_g for Passenger Car = 6.5 seconds (Two lane roadway with no median and less than 3% grade)		
t_g for Single-unit truck (or bus) = 8.5, t_g for Combination truck = 10.5		
For undivided, multilane highways, add 0.5 seconds for each additional lane to be crossed (0.7 for trucks).		
For medians that do not provide enough storage to store the vehicle, convert the median with to 12-foot equivalent lanes and add 0.5 seconds for each equivalent.		
For medians that do provide enough storage to store the vehicle, calculate as two-stage gap acceptance.		
ISD	=	740.88 Calculated required Intersection Sight Distance (ft)
V_{major}	=	45 Enter Major Road Design Speed here (MPH)
t_g	=	11.2 Enter calculated time gap here (seconds)

Source: Exhibit 9-55 and Exhibit 9-58, A policy on Geometric Design of Highways and Streets, 2004



May 25, 2016

Reid Wilson
Wilson Cribbs & Goren
2500 Fannin Street
Houston, Texas 77002

RE: Traffic Impact Analysis – Bay Area Boulevard Truck Route

Dear Mr. Wilson:

The City of La Porte received the Traffic Impact Analysis (TIA) submitted by PPG for consideration of Bay Area Boulevard as a City of La Porte designated Truck Route. The following are comments that resulted from the city's review of your TIA.

Report Comments:

1. Page 1: Please indicate the source of the daily truck traffic volumes and percent of heavy trucks.
2. Page 1: Per Google Earth, the posted speed limit on Spencer Highway changes from 35 MPH near 23rd Street. Please confirm that the analysis was performed with the correct speed limit.
3. Page 1: Per Google Earth, the posted speed limit on Fairmont Parkway from SH 146 to Bay Area Boulevard is 35 MPH. Please confirm that the analysis was performed with the correct speed limit.
4. Page 3: Please clarify how the access management at the truck driveway will be applied.
5. Page 4: Please specify the ITE Trip Generation Land Use Code, as the trip generation count not be confirmed. Also, in Table 1, the total Trips Added to Adjacent Street in the AM Peak Hour Exiting and PM Peak Hour Entering did not match the specific trip type's trip generation above. Also the peak hour times indicated within the table did not match the times indicated on Page 2 of the report.
6. Page 7, Figure 7: The northbound through movement traffic volumes at the site driveways on Bay Area Boulevard do not volume balance with the adjacent intersection. Please clarify how this volume was derived.
7. Page 9, Figure 9: The northbound through movement traffic volumes at the site driveways on Bay Area Boulevard do not volume balance with the adjacent intersection. Please clarify how this volume was derived.
8. Page 12: Based on measurements from Google Earth, the 95th percentile queue length will exceed the available storage not including taper at some locations. For example, at the intersection of Bay Area Boulevard at Fairmont Parkway in the southbound direction, the 95th percentile queue length is 131 feet while the measured storage area is 100 feet.
9. Please indicate that the need for turn lanes at the site driveways was evaluated.

Mr. Reid Wilson

May 25, 2016

Page 2

General Discussion:

10. Please be prepared to address a couple different discussion topics:

- a. With Spencer Highway already designated as a Truck Route, why should the city add Bay Area Boulevard? The proposed development could be designed in a manner where access to and from the site could be accommodated directly at Spencer Highway.
- b. Consideration should be given to how the traffic generated from this site will interact with future development that will take place on the west side of Bay Area Boulevard.

As we discussed on the phone earlier today, we have you scheduled for a workshop discussion with City Council at their June 13, 2016 meeting at 6:00 p.m. Please provide me any additional information that you would like me to include in the packet of information presented to City Council by the end of the day on Thursday, May 26th. If you have any further questions, please don't hesitate to contact me directly at 281-470-5063 or via email at enseye@laportetx.gov.

Sincerely,



Eric J. Ensey, AICP
City Planner



MEMO

To: Mr. Eric Ensey, AICP
City Planner, City of La Porte, Texas

From: Dustin Qualls, PE, PTOE
Principal, Traffic Engineers, Inc.

Date: May 26, 2016

Re: Traffic Impact Analysis – Bay Area Boulevard Truck Route

The following comments in bold were received from Mr. Eric Ensey on May 25, 2016. Comments are in regards to the draft Traffic Impact Analysis (TIA) submitted for the tract on the southeast corner of Spencer Highway at Bay Area Boulevard. A response from TEI will be given after each comment from Mr. Ensey.

Comments + Responses:

Comment 1. Page 1: Please indicate the source of the daily truck traffic volumes and percent of heavy trucks.

Response: Daily truck traffic volumes and truck percentages were reported from the study entitled “Truck Traffic, Route, Truck Parking & Ordinance Update Study” as prepared by Freese and Nichols, Inc., in September of 2014.

Comment 2. Page 1: Per Google Earth, the posted speed limit on Spencer Highway changes from 35 MPH near 23rd Street. Please confirm that the analysis was performed with the correct speed limit.

Response: The correct speed limits of both 45 MPH west of 23rd Street and 35 MPH east of 23rd Street were utilized in the traffic model for Spencer Highway adjacent to the tract. TEI can revise the TIA to correct the reference.

Comment 3. Page 1: Per Google Earth, the posted speed limit on Fairmont Parkway from SH 146 to Bay Area Boulevard is 35 MPH. Please confirm that the analysis was performed with the correct speed limit.

Response: Actually, the posted speed limit on Fairmont Parkway both west of Bay Area Boulevard and to a point approximately 400' east of Bay Area Boulevard is 55 MPH. At approximately 400' east of Bay Area Boulevard, the posted speed limit drops to 45 MPH and continues at 45 MPH to the east towards SH 146, where the speed limit then drops to 35 MPH prior to SH 146. The correct speed limits were utilized in the traffic model for Fairmont Parkway.

Comment 4. Page 3: Please clarify how the access management at the truck driveway will be applied.

Response: Access management will be applied by directional median openings and directional curb design and construction. When constructed, the necessary truck turning radii should prevent trucks from trying to circumvent the access management techniques. The proposed curb design should not allow turns opposite of what is intended.

Comment 5. Page 4: Please specify the ITE Trip Generation Land Use Code, as the trip generation count not be confirmed. Also, in Table 1, the total Trips Added to Adjacent Street in the AM Peak Hour Exiting and PM Peak Hour Entering did not match the specific trip type's trip generation above. Also the peak hour times indicated within the table did not match the times indicated on Page 2 of the report.

Response: The ITE Trip Generation Land Use Code is 150 Warehousing. The totals and individual trips generated are based on 880,880 SF of development (a number given to us by the client). The development size was then rounded up to 900,000 SF in the TIA at the request of the client since 880,880 seems to be an odd number (but was based on actual estimated development). We can revise the TIA to state 880,880. The difference between the numbers will be nominal.

Comment 6. Page 7, Figure 7: The northbound through movement traffic volumes at the site driveways on Bay Area Boulevard do not volume balance with the adjacent intersection. Please clarify how this volume was derived.

Response: Background traffic volumes for the northbound and southbound through movements at the location of the proposed driveways on Bay Area Boulevard were derived from the background turning movement counts at the nearest critical intersection of Bay Area Boulevard at Spencer Highway. The traffic volumes are balanced both northbound and southbound using this intersection as the basis for background through volumes.

Comment 7. Page 9, Figure 9: The northbound through movement traffic volumes at the site driveways on Bay Area Boulevard do not volume balance with the adjacent intersection. Please clarify how this volume was derived.

Response: Background traffic volumes for the northbound and southbound through movements at the location of the proposed driveways on Bay Area Boulevard were derived from the background turning movement counts at the nearest critical intersection of Bay Area Boulevard at Spencer Highway. The traffic volumes are balanced both northbound and southbound using this intersection as the basis for background through volumes.

Comment 8. Page 12: Based on measurements from Google Earth, the 95th percentile queue length will exceed the available storage not including taper at some locations. For example, at the intersection of Bay Area Boulevard at Fairmont Parkway in the southbound direction, the 95th percentile queue length is 131 feet while the measured storage area is 100 feet.

Response: Existing storage lengths of the critical left-turn lanes can be added to Table 4, as well as 95th percentile queue lengths from background traffic conditions alone, in a revised TIA or a supplement to the TIA.

Comment 9. Please indicate that the need for turn lanes at the site driveways was evaluated.

Response: The possible need of turn lanes at the site driveways were evaluated, but not included in the report. Due to both the relatively low through traffic volumes on Bay Area Boulevard as well as the low number of turns into and out of the site driveways, no proposed turn lanes are recommended on Bay Area Boulevard. Existing left-turn lanes exist on Spencer Highway for westbound left-turn ingress, in the form of a two-way left-turn lane.

Should you have any questions regarding the responses in this memo, please do not hesitate to contact me.

Thank you,

A handwritten signature in purple ink that reads "Dustin W. Qualls, PE, PTOE". The signature is written in a cursive style.

Dustin W. Qualls

Principal, Traffic Engineers, Inc.

713-398-7461

dustin@trafficengineers.com



**Council Agenda Item
June 13, 2016**

9. ADMINISTRATIVE REPORTS

- Planning and Zoning Commission Meeting, Thursday, June 16, 2016
- Zoning Board of Adjustment Meeting, Thursday, June 23, 2016
- La Porte Development Corporation Board Meeting, Monday, June 27, 2016
- City Council Meeting, Monday, June 27, 2016

10. COUNCIL COMMENTS regarding matters appearing on the agenda; recognition of community members, city employees, and upcoming events; inquiry of staff regarding specific factual information or existing policies – Councilmembers Earp, Clausen, J. Martin, K. Martin, Kaminski, Zemanek, Leonard, Engelken and Mayor Rigby

11. ADJOURN
