TOWN OF PARADISE

5555 SKYWAY • PARADISE, CALIFORNIA 95969-4931
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Management Staff:
Lauren Gill, Town Manager
Dwight L. Moore, Town Attorney
Joanna Gutierrez, Town Clerk
Craig Baker, Community Development Director
Gabriela Tazzari-Dineen, Police Chief
Greg McFadden, Interim Chief, CAL FIRE/Butte County Fire/Paradise Fire
Gina Will, Finance Director/Town Treasurer

Town Council:
Scott Lotter, Mayor
Greg Bolin, Vice Mayor
Steve "Woody" Culleton, Council Member
John J. Rawlings, Council Member
Tim Titus, Council Member

TOWN COUNCIL AGENDA

REGULAR MEETING – 6:00 PM – January 14, 2014

In accordance with the Americans with Disabilities Act, if you need a special accommodation to participate, please contact the Town Clerk's Department, at 872-6291 x101 or x102 at least 48 hours in advance of the meeting. Hearing assistance devices for the hearing impaired are available from the Town Clerk.

Town Council Meetings are held at the Paradise Town Hall located at 5555 Skyway, Paradise, California. Members of the public may address the Town Council on any agenda item, including closed session. If you wish to address the Town Council on any matter on the Agenda, it is requested that you complete a "Request to Address Council" card and give it to the Town Clerk prior to the beginning of the Council Meeting. The Mayor or Presiding Chair will introduce each agenda item, and following a report from staff, ask the Clerk to announce each speaker. Agendas and request cards are located outside the entrance door to the Council Chamber.

All writings or documents which are related to any item on an open session agenda and which are distributed to a majority of the Town Council within 72 hours of a Regular Meeting will be available for public inspection at the Town Hall in the Town Clerk Department located at 5555 Skyway, Room 3, at the time the subject writing or document is distributed to a majority of the subject body. Regular business hours are Monday through Thursday from 8:00 a.m. to 5:00 p.m. Agendas and supporting information is posted on the Town's website at www.townofparadise.com in compliance with California's open meeting laws. Click on the Agenda and Minutes button.

1. OPENING

a. Call to Order
b. Pledge of Allegiance to the Flag of the United States of America
c. Invocation

d. Roll Call

e. Proclamations/Presentations:

(1) Presentation by Butte County relating to Development Impact Fee Collection for Butte County

2. ITEMS DEFERRED FROM PREVIOUS MEETINGS

3. CONSENT CALENDAR

One roll call vote will be taken for all items placed on the consent calendar.

3a. Approve the Minutes of the December 10, 2013, Regular Council meeting.

3b. Approve Cash Disbursements in the amount of $1,227,743.99.

3c. (1) Waive second reading of the entire Town Ordinance No. 535 and approve reading by title only; and, (2) Adopt Town Ordinance No. 535, "An Ordinance Rezoning Certain Real Property From Community Services (CS) to Central Business (CB) Zone Pursuant to Paradise Municipal Code Sections 17.45.500 Et. Seq. (PL12-00020; Gilkey)".

3d. (1) Waive the second reading of Town Ordinance No. 536 and approve reading by title only; and, (2) Adopt Town Ordinance No. 536, "An Ordinance Amending Section 10.02.060 of the Paradise Municipal Code Regarding Vehicular Speed Limits".

3e. (1) Waive second reading of the entire Town Ordinance No. 537 and approve by reading and title only; and, (2) Adopt Town Ordinance No. 537, "An Ordinance Adding Chapter 10.38 to the Paradise Municipal Code relating to Pedestrians Using Crosswalks in Identified Zones ".

3f. Adopt Resolution No. 14-01 authorizing the Mayor to execute a legal services agreement with Douglas R. Thorn relating to public nuisance abatement lawsuits.

3g. Acknowledge receipt of the annual Northern California Cities Self Insurance Fund (NCCSIF) Annual Report.

3h. Accept and acknowledge a donation from Paradise Community House to the Town's Animal Control operation in the amount of $600.00.

3i. Accept donation of $382.00 from Jeff Rolls Logging for the Tree Replacement fund, 7623.00.0000.5203 to offset costs for dead tree replacement within the Town right of way.

4. PUBLIC HEARING PROCEDURE

The Town Council has adopted the following procedure for public hearings:

a. Staff report to Council (15 minutes total maximum)
b. Mayor or Presiding Chair opens the hearing for public comment in the following order:
    1. Project proponents or in favor of(15-minute time limit)
    2. Project opponents or against (15-minute time limit)
    3. Rebuttals - when requested
       (15-minute time limit or 3 minutes per speaker)
c. Close hearing to the public
d. Council discussion
e. Motion
f. Vote

5. PUBLIC HEARINGS

5a. Conduct the first of two public hearings on the Town's Community Development Block Grant Funding for the 2014-2015 program year to solicit input and public comments. As a HUD established entitlement community, the Town of Paradise receives annual Community Development Block Grant (CDBG) funding from the Department of Housing and Urban Development (HUD). As a condition of funding, the Town must establish an Annual Plan, or budget, outlining how the community will use its CDBG funds. The second public hearing is scheduled for February 11, 2014 and final action scheduled for April 8, 2014.

6. PUBLIC COMMUNICATION

This is the time for members of the audience who have completed a "Request to Address Council" card and given it to the Clerk to present items not on the Agenda. Comments should be limited to a maximum of three minutes duration. The Town Council is prohibited by State Law from taking action on any item presented if it is not listed on the Agenda.

7. COUNCIL CONSIDERATION

7a. Consider (1) Acknowledging the Transportation & Safety Study prepared by Traffic Works for the Downtown Paradise Safety Project along Skyway between Vista Way and Elliott Road; and (2) Authorizing staff to proceed with final design and public outreach plan. **(ROLL CALL VOTE)**

7b. Review the purpose of Council appointed Citizen Advisory Committees and consider direction to staff.

7c. Consider options in accordance with California Government Code Section 36512 to fill the upcoming vacancy on the Town Council caused by the pending resignation of Councilmember Timothy Titus and provide direction to staff.

8. COUNCIL COMMUNICATION (Council Initiatives)

8a. Consider annual appointments for Council representation on various local and regional committees/commissions.

8b. Council oral reports of their representation on Committees/Commissions.

8c. Discussion of future agenda items

9. STAFF/COMMISSION/COMMITTEE COMMUNICATION

9a. Town Manager oral reports

10. CLOSED SESSION

10a. Pursuant to Government Code Section 54956.9(d)(1), the Town Council will hold a closed session relating to the following pending litigation: Brinkerhoff v. Town of Paradise, U.S. District Court, Eastern District of California, Case No. 2:10-cv-00023-MCE-GGH.

11. ADJOURNMENT

STATE OF CALIFORNIA) SS.
COUNTY OF BUTTE)

I declare under penalty of perjury that I am employed by the Town of Paradise in the Town Clerk's Department and that I posted this Agenda on the bulletin Board both inside and outside of Town Hall on the following date:

_____

_____
TOWN/ASSISTANT TOWN CLERK SIGNATURE

MINUTES
PARADISE TOWN COUNCIL
REGULAR MEETING – 6:00 PM – December 10, 2013

1. OPENING

The Regular Meeting of the Paradise Town Council was called to order by Mayor Timothy Titus at 6:01 p.m. Following the Pledge of Allegiance to the Flag of the United States of America, an invocation was offered by Council Member John Rawlings.

COUNCIL MEMBERS PRESENT: Steve "Woody" Culleton, Scott Lotter, John J. Rawlings and Timothy Titus, Mayor.

COUNCIL MEMBERS ABSENT: Greg Bolin.

STAFF PRESENT: Town Clerk Joanna Gutierrez, Town Manager Lauren Gill, Town Attorney Dwight Moore, Police Chief Gabriela Tazzari-Dineen, Finance Director Gina Will, Community Development Director Craig Baker, Assistant Town Clerk Dina Volenski, Town Engineer Marc Mattox, Public Works Manager Paul Derr, Human Resources/Risk Management Manager Crystal Peters, IT Manager Josh Marquis, Housing Supervisor Kate Anderson, and Code Enforcement Officer Rick Trent.

Mayor Titus read and presented the following proclamations:

(1) Proclamation recognizing George Morris, Jr., Unit Chief, CAL FIRE/Butte Unit for his service to the Town of Paradise

(2) Proclamation recognizing Rob Cone, Northern Division Chief, CAL FIRE/Butte Unit for his service to the Town of Paradise

(3) Proclamation recognizing Paradise Adventist Academy Students for volunteer work to clean up a portion of the Paradise Memorial Trailway.

Mayor Titus Year End Town Address

Mayor Timothy Titus thanked the community for support they have shown the Council and employees of the Town. The decisions the Council has had to make have been difficult but have resulted in a balanced budget which is key to the future of the community. He thanked the employees for working with the new leadership of the Town, Lauren Gill, and for quickly agreeing to sacrifices that were necessary to achieve a balanced budget. Mayor Titus also thanked the Council for the support shown to him personally as he faced the illness and death of a family member. He highlighted the accomplishments of the Town during the last year - the road improvements, road standards adopted, grants received for future construction projects, pedestrian safety improvements, and the new businesses that have started up – which he believes is a sign of health in the community. The ice skating rink has brought many people to Paradise. The Paradise Community Village project is a testament to the vision of the

developers that affordable housing projects can be something that adds value to a community in providing housing for young families. The Council has added transparency to the meeting process through live streaming the Council meetings which makes the decision process fully open to all citizens. Mayor Titus stated that he has taken the opportunity to present financial information relating to the Town budget to community service groups. He concluded by stating it has been an honor and privilege to serve as the Town's Mayor.

Vice Mayor Scott Lotter presented Mayor Titus recognition of his service to the Town as Mayor for a one-year term.

Mayor/Vice Mayor Election for 2014

Town Clerk Gutierrez informed the Council of the process for Mayor/Vice Mayor selection and opened nominations for the position of Mayor for a one-year term.

Council Member Culleton nominated Scott Lotter for the position of Mayor.

MOTION by Culleton, seconded by Titus, closed the nominations for the position of Mayor. Roll call vote was unanimous, Bolin absent and not voting.

Roll call vote on the nomination of Scott Lotter to serve a one-year term ending December 9, 2014 was unanimous; Bolin absent and not voting.

Mayor Lotter opened nominations for the position of Vice Mayor for a one-year term.

Mayor Lotter nominated Greg Bolin for the position of Vice Mayor.

MOTION by Culleton, seconded by Titus, closed the nominations for position of Vice Mayor. Roll call vote was unanimous; Bolin absent and not voting.

Roll call vote on the nomination of Greg Bolin to serve as Vice Mayor for a one-year term ending December 9, 2014 was unanimous; Bolin absent and not voting.

Town Manager Gill introduced the Town's recently hired Code Enforcement Officer Rick Trent.

2. ITEMS DEFERRED FROM PREVIOUS MEETINGS - None.

3. CONSENT CALENDAR

MOTION by Titus, seconded by Culleton, adopted all consent calendar items as presented. Roll call vote was unanimous; Bolin absent and not voting.

3a. Approved the Minutes of the November 12, 2013, Regular Council Meeting.

3b. Approved cash disbursements in the amount of $701,243.17. (310-10-29)

3c. (1) Waived second reading of proposed Ordinance No. 534 and approved reading by title only; and, (2) Adopted Ordinance No. 534, An Ordinance Amending Text Regulations within Paradise Municipal Code Chapter

17.04 Relating to the Definitions of Major and Minor Utility Services. The intent of the proposed amendment is to create the ability for the Town to authorize establishment of privately owned and operated clustered wastewater treatment plants and other utilities as primary land uses on independent parcels in order to assist in establishment of new commercial and residential land uses within the Town of Paradise. (540-16-103)

3d. Adopted Resolution No. 13-56, A Resolution of the Town Council of the Town of Paradise Authorizing Disposal of Certain Town Records Maintained in the Town Clerk Department Pursuant to Government Code Section 34090. (160-20-16)

3e. Acknowledged receipt of the Valuation of Retiree Health Benefits, the Governmental Accounting Standards Board (GASB) Actuary Report, as of July 1, 2013, as submitted by staff. (630-10-21 & 510-20-20)

3f. (1) Approved the purchase of a used 1991 Ford F-700 with Tymco 600 Regenerative Air Street Sweeper, and a used 1997 Ford F450 with SD Telsta A28D Telescopic Bucket Truck from TRUCKSITE, Heavy Equipment Truck Dealer Sacramento, California for the sum not to exceed $34,000 including all applicable taxes; AND; (2) Adopt Resolution No. 13-57, declaring Public Works 1987 Dodge Boom Truck as surplus and authorizing the Town Manager or her designee to dispose of vehicle through sale or donation. (380-10-04)

3g. (1) Awarded a Professional Services Contract to Pacific Municipal Consultants for preparation of the mandated Paradise General Plan Housing Element Update; (2) Authorized the Town Attorney to draft a Professional Services Agreement between the Town and Pacific Mutual Consultants; and, (3) Authorized the Town Manager to execute the agreement on behalf of the Town of Paradise. Fiscal Impact: $29,680 from funds allocated for this purpose in the 2013/14 budget. (510-20-69 & 760-70-57)

4. PUBLIC HEARING PROCEDURE

Mayor Lotter informed the public of the Town Council's public hearing procedure.

5. PUBLIC HEARINGS

5a. Community Development Director Baker reported to Council that the purpose of the public hearing is for Council to solicit public comment and consider a proposed General Plan Amendment and Property Rezone for an application identified as PL12-00020 (Gilkey) that would accommodate a lot line adjustment that is intended to resolve conflicting legal descriptions for two adjacent properties and to relocate a property boundary that currently lies beneath an existing commercial building. No physical development is proposed. The property involved is improved with a portion of the Paradise Memorial Trailway in Paradise; APN 052-223-

017. The property is located on the south side of Pearson Road between Black Olive and Sierra Park Drive.

Mayor Lotter opened the public hearing at 6:28 pm. There were no speakers on the matter and Mayor Lotter closed the hearing at 6:28 pm.

MOTION by Rawlings, seconded by Titus, (1) Concurred with the Planning Commission's finding that the proposed General Plan amendment and property rezone is exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to CEQA Section 15061 (General rule exemption); (2) Concurred with the recommended General Plan land use map amendment and rezone action adopted by the Planning Commission on November 19, 2013, and embodied within Planning Commission Resolution No. 13-06; (3) Adopted Resolution No. 13-58, A Resolution of the Town Council of the Town of Paradise Amending the Land Use Map of the 1994 Paradise General Plan (PL12-00020:Gilkey); (4) Waived the first reading of proposed Ordinance No. 535 and approved reading by title only; and, (5) Introduced Ordinance No. 535, An Ordinance Rezoning Certain Real Property From Community Services (CS) to Central Business (CB) Zone Pursuant to Paradise Municipal Code Sections 17.45.500 et. seq. (PL12-00020: Gilkey". Roll call vote was unanimous; Bolin absent and not voting. (540-16-104, 760-40-38 & 760-40-58)

6. PUBLIC COMMUNICATION

1. Tom Kelly thanked the Town's public works department for their work in clearing the roads after the recent snowstorm.

Mayor Lotter noted the works efforts of Council Member Culleton, Fleet Manager Dinsmore and Building Official/Fire Marshal Lindsey in helping to plow the roads.

7. COUNCIL CONSIDERATION

7a. Council concurred to defer consideration of appointing Council representatives to various local committees to the January meeting to provide Vice Mayor Bolin an opportunity to participate.

7b. Council concurred to direct staff to bring the list of the various Town Council appointed Committees/Commissions back to Council with pertinent data in order to determine which committees are required or necessary.

7c. **MOTION by Titus, seconded by Rawlings**, adopted Resolution No. 13-59, A Resolution of the Town Council of the Town of Paradise Relating to Appointment of Citizens to Advisory Committees. Roll call vote was unanimous; Bolin absent and not voting. The policy provides for two Council Members to conduct an interview of applicants.

7d. Council concurred to appoint Vice Mayor Bolin and Council Member Rawlings to conduct an interview process for the applicant to the Access Appeals Board, Christopher Clifford and to schedule consideration of the recommendation on the February 11, 2014 Council agenda. (120-10-09)

Public comment on item 7e:

1. Tom Kelly stated that he thinks the speed limit on Skyway should be 25 mph as it is very difficult to cross the Skyway when shopping downtown.
2. Cassandra Alfers stated that she thinks there should be more bike lanes and sidewalks in Paradise and more enforcement efforts by the Police Department to slow traffic.

7e. **MOTION by Rawlings, seconded by Titus,** (1) Accepted the Town of Paradise 2014 Engineering & Traffic Survey; (2) Waived the first reading of proposed Ordinance No. 536 and approved reading by title only; and, (3) Introduced Ordinance No. 536, An Ordinance Amending Paradise Municipal Code Section 10.02.060 Regarding Vehicular Speed Limits. Roll call vote was unanimous; Bolin absent and not voting. (540-16-105)

7f. **MOTION by Culleton, seconded by Rawlings,** (1) Waived the first reading of Town Ordinance No. 537 and approved reading by title only; and (2) Introduced Ordinance No. 537, An Ordinance Amending Chapter 10.38 to the Paradise Municipal Code Relating to Pedestrians Using Crosswalks in Identified Zones. Roll call vote was unanimous; Bolin absent and not voting. (540-16-106)

7g. **MOTION by Titus, seconded by Culleton,** approved the Memorandum Of Understanding between the County of Butte and the Town of Paradise for use of the county-wide mass notification system (Reverse 911 services provided by Cassidian Communications). Roll call vote was unanimous; Bolin absent and not voting. (510-20-70)

7h. Manager Josh Marquis presented information relating to the Geographical Information System (GIS) Web Services provided to the Town of Paradise by Chico State University, Chico Research Foundation, Geographic Information Center (GIC). Jason Schwenkler from the GIC explained that the system has been improved at no extra cost to the Town to provide the staff and the public access to the GIS data base for parcel map information contained within the data base. The access will allow citizens to look up certain information about their property without having to contact Town staff. Staff will be able to generate mailing lists without having to rely on the GIC staff. (110-10-36)

7i. **MOTION by Rawlings, seconded by Titus,** approved budget adjustments that will increase the General Fund net income and increase the General Fund reserves by $16,974. Roll call vote was unanimous; Bolin absent and not voting. (340-40-13)

8. COUNCIL COMMUNICATION (Council Initiatives)

Mayor Titus reported the he attended and presented a recognition at a birthday party at the invitation of a 105-year old citizen who wanted the Mayor of Paradise at his celebration.

Council Member Culleton reported that the Recreation and Park District ice skating rink is bringing people to Paradise, making the Town a destination spot; that he participated in the annual Shop with a Cop and commended the Police Officers Association for the community outreach.

Council Member Rawlings reported that has been appointed to a League of California Cities policy committee.

Mayor Lotter reported on his and Council Members Rawlings' attendance at the VIPS Awards Dinner and that David Saul was honored as the Volunteer of the Year.

9. STAFF/COMMISSION/COMMITTEE COMMUNICATION – None.

10. CLOSED SESSION - None.

11. ADJOURNMENT

The Town Council meeting was adjourned at 8:10 p.m.

Date approved:

By: _____
Scott Lotter, Mayor

_____
Joanna Gutierrez, CMC, Town Clerk

TOWN OF PARADISE

CASH DISBURSEMENTS REPORT

FOR THE PERIOD OF

DECEMBER 1, 2013 - DECEMBER 31, 2013

December 1, 2013 - December 31, 2013

Check Date	Pay Period End	DESCRIPTION	AMOUNT	
12/06/13	12/01/13	Net Payroll - Direct Deposits & Checks	$102,369.21	
12/20/13	12/15/13	Net Payroll - Direct Deposits & Checks	$105,523.98	
		TOTAL NET WAGES PAYROLL		**$207,893.19**

Accounts Payble

PAYROLL VENDORS: TAXES, PERS, DUES, INSURANCE, ETC.	$232,905.29	
OPERATIONS VENDORS: SUPPLIES, CONTRACTS, UTILITIES, ETC.	$786,945.51	
TOTAL CASH DISBURSEMENTS - ACCOUNTS PAYABLE (Detail attached)		**$1,019,850.80**
GRAND TOTAL CASH DISBURSEMENTS		**$1,227,743.99**

APPROVED BY: _____
LAUREN GILL, TOWN MANAGER

APPROVED BY: _____
GINA S. WILL, FINANCE DIRECTOR/TOWN TREASURER

TOWN OF PARADISE

CASH DISBURSEMENTS REPORT

From Payment Date: 12/1/2013 - To Payment Date: 12/31/2013

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
AP - US Bank TOP AP Checking									
Check									
59506	12/02/2013	Open			Accounts Payable	BUZZARD , CHRIS	$687.61		
59507	12/02/2013	Open			Accounts Payable	GEBBIA, JOSEPH, C.	$2,688.55		
59508	12/02/2013	Open			Accounts Payable	HAUNSCHILD, MARK	$220.55		
59509	12/02/2013	Open			Accounts Payable	HOUSEWORTH, JERILYN	$76.85		
59510	12/02/2013	Open			Accounts Payable	Intermountain Slurry Seal, Inc	$16,387.06		
59511	12/02/2013	Open			Accounts Payable	MOBILITIE INVESTMENTS II, LLC	$112.49		
59512	12/02/2013	Open			Accounts Payable	MOORE, DWIGHT, L.	$13,110.00		
59513	12/02/2013	Open			Accounts Payable	US BANCORP OFFICE EQUIP FINANCE SERVICES	$572.03		
59514	12/02/2013	Open			Accounts Payable	WESTAMERICA BANK	$770.70		
59515	12/03/2013	Open			Accounts Payable	BLOOD SOURCE	$44.00		
59516	12/03/2013	Open			Accounts Payable	Met Life	$6,673.72		
59517	12/03/2013	Open			Accounts Payable	OPERATING ENGINEERS	$484.00		
59518	12/03/2013	Open			Accounts Payable	PARADISE POLICE OFFICERS ASSOCIATION	$2,024.29		
59519	12/03/2013	Open			Accounts Payable	SUN LIFE INSURANCE	$3,504.73		
59520	12/03/2013	Open			Accounts Payable	SUPERIOR VISION SVC NGLIC	$649.46		
59521	12/03/2013	Open			Accounts Payable	TOP CONFIDENTIAL MID MGMT ASSOCIATION	$150.00		
59522	12/06/2013	Open			Accounts Payable	ICMA 457 - VANTAGEPOINT	$550.00		
59523	12/06/2013	Open			Accounts Payable	STATE DISBURSEMENT UNIT	$314.76		
59524	12/06/2013	Open			Accounts Payable	STATE OF CALIFORNIA FRANCHISE TAX BOARD	$481.43		
59525	12/05/2013	Voided/Spoiled	New Bank	12/05/2013	Converted/Imported		$0.00	$0.00	$0.00
59526	12/09/2013	Open			Accounts Payable	Truck Site	$3,200.00		
59527	12/12/2013	Open			Accounts Payable	ACCESS INFORMATION MANAGEMENT	$51.36		
59528	12/12/2013	Open			Accounts Payable	ACCULARM SECURITY SYSTEMS	$292.50		
59529	12/12/2013	Open			Accounts Payable	ADVANCED DOCUMENT CONCEPTS	$199.73		
59530	12/12/2013	Open			Accounts Payable	AMERIGAS	$1,026.67		
59531	12/12/2013	Open			Accounts Payable	ARMSTRONG, JAMES SCOTT	$215.64		
59532	12/12/2013	Open			Accounts Payable	AT&T	$104.49		
59533	12/12/2013	Open			Accounts Payable	AT&T CALNET 2-REPEATER LINES	$200.01		
59534	12/12/2013	Open			Accounts Payable	AT&T-COMMUNITY PARK	$15.72		
59535	12/12/2013	Open			Accounts Payable	AT&T/CAL NET 2	$3,856.65		
59536	12/12/2013	Open			Accounts Payable	AWARDS COMPANY	$343.59		
59537	12/12/2013	Open			Accounts Payable	BACKGROUNDS & MORE	$325.00		
59538	12/12/2013	Open			Accounts Payable	Big O Tires	$618.00		
59539	12/12/2013	Open			Accounts Payable	BUTTE CO RECORDER	$18.00		
59540	12/12/2013	Open			Accounts Payable	BUTTE COUNTY CREDIT BUREAU	$28.00		
59541	12/12/2013	Open			Accounts Payable	BUTTE COUNTY PUBLIC HEALTH - OROVILLE	$48.00		
59542	12/12/2013	Open			Accounts Payable	BUTTE REGIONAL TRANSIT	$3,184.60		
59543	12/12/2013	Open			Accounts Payable	CALIFORNIA ASSOC. FOR PROPERTY & EVIDENCE, INC.	$45.00		
59544	12/12/2013	Open			Accounts Payable	CHOICE PROPERTY SERVICES	$150.00		
59545	12/12/2013	Open			Accounts Payable	CLEANING CONNECTION, THE	$280.00		
59546	12/12/2013	Open			Accounts Payable	COMCAST CABLE	$85.60		

TOWN OF PARADISE

CASH DISBURSEMENTS REPORT

From Payment Date: 12/1/2013 - To Payment Date: 12/31/2013

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
59547	12/12/2013	Open			Accounts Payable	DON'S SAW & MOWER	$41.60		
59548	12/12/2013	Open			Accounts Payable	ENLOE MEDICAL CENTER, INC.	$1,153.00		
59549	12/12/2013	Open			Accounts Payable	Goodyear Tire & Rubber Company	$373.58		
59550	12/12/2013	Open			Accounts Payable	GREAT AMERICA LEASING CORP.	$118.25		
59551	12/12/2013	Open			Accounts Payable	Hignell, Inc.	$100.00		
59552	12/12/2013	Open			Accounts Payable	Hignell, Inc.	$9,020.39		
59553	12/12/2013	Open			Accounts Payable	HINDERLITER, DE LLAMAS & ASSOCIATES INC.	$507.89		
59554	12/12/2013	Open			Accounts Payable	I.M.P.A.C. PAYMENTS IMPAC GOV SVCS/US BANCORP	$836.05		
59555	12/12/2013	Open			Accounts Payable	Idlewild Mobile Home Estates	$375.11		
59556	12/12/2013	Open			Accounts Payable	INDUSTRIAL SAFETY SUPPLY	$2,370.00		
59557	12/12/2013	Open			Accounts Payable	INLAND BUSINESS MACHINES	$123.76		
59558	12/12/2013	Open			Accounts Payable	INTERNATIONAL INSTITUTE OF MUNICIPAL CLERKS	$185.00		
59559	12/12/2013	Open			Accounts Payable	JC NELSON SUPPLY COMPANY	$53.64		
59560	12/12/2013	Open			Accounts Payable	KNIFE RIVER CONSTRUCTION	$478.45		
59561	12/12/2013	Open			Accounts Payable	KNOX COMPANY	$75.05		
59562	12/12/2013	Open			Accounts Payable	L.N. CURTIS & SONS	$215.00		
59563	12/12/2013	Open			Accounts Payable	LEHR AUTO ELECTRIC STOMMEL, INC.	$60.31		
59564	12/12/2013	Open			Accounts Payable	LOCATE PLUS CORPORATION	$75.00		
59565	12/12/2013	Open			Accounts Payable	Loerke Insulation Company, Inc.	$450.00		
59566	12/12/2013	Open			Accounts Payable	M.S. TEDESCO CONSTRUCTION	$2,320.00		
59567	12/12/2013	Open			Accounts Payable	MARQUIS, JOSH	$147.55		
59568	12/12/2013	Open			Accounts Payable	MATT WOLFE	$128.00		
59569	12/12/2013	Open			Accounts Payable	MATTOX, MARK	$114.57		
59570	12/12/2013	Open			Accounts Payable	MCGREGOR CONSTRUCTION CO INC	$13,230.00		
59571	12/12/2013	Open			Accounts Payable	MID VALLEY TITLE & ESCROW	$1,788.60		
59572	12/12/2013	Open			Accounts Payable	MID VALLEY TITLE & ESCROW	$195.00		
59573	12/12/2013	Open			Accounts Payable	MUNICIPAL CODE CORP	$996.00		
59574	12/12/2013	Open			Accounts Payable	Murillo, Holly	$25.22		
59575	12/12/2013	Open			Accounts Payable	Nesci Appraisal Service	$350.00		
59576	12/12/2013	Open			Accounts Payable	North Bay Pensions	$2,500.00		
59577	12/12/2013	Open			Accounts Payable	NORTHSTATE AGGREGATE, INC.	$451.31		
59578	12/12/2013	Open			Accounts Payable	O'REILLY AUTO PARTS	$148.34		
59579	12/12/2013	Open			Accounts Payable	OFFICE DEPOT ACCT#36233169	$557.61		
59580	12/12/2013	Open			Accounts Payable	PACIFIC GAS & ELECTRIC	$112.83		
59581	12/12/2013	Open			Accounts Payable	PARADISE IRRIGATION DIST	$772.87		
59582	12/12/2013	Open			Accounts Payable	PARADISE POST/NORTH VALLEY COMMTY MEDIA	$408.72		
59583	12/12/2013	Open			Accounts Payable	PARROTT, BUD	$9.45		
59584	12/12/2013	Open			Accounts Payable	PEERLESS BUILDING MAINT	$887.65		
59585	12/12/2013	Open			Accounts Payable	PETTY CASH CUSTODIAN, VIRGINIA MARABLE	$109.94		
59586	12/12/2013	Open			Accounts Payable	Ramage, Susan	$94.78		
59587	12/12/2013	Open			Accounts Payable	Riebes Auto Parts	$126.77		
59588	12/12/2013	Open			Accounts Payable	SIEMENS INDUSTRY, INC	$8,558.31		
59589	12/12/2013	Open			Accounts Payable	SIERRA HEATING & AIR CONDITIONING	$381.53		

TOWN OF PARADISE

CASH DISBURSEMENTS REPORT

From Payment Date: 12/1/2013 - To Payment Date: 12/31/2013

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
59590	12/12/2013	Open			Accounts Payable	THOMAS ACE HARDWARE - ENG. DEPT.	$14.04		
59591	12/12/2013	Open			Accounts Payable	THOMAS ACE HARDWARE - FIRE DEPT.	$7.30		
59592	12/12/2013	Open			Accounts Payable	THOMAS ACE HARDWARE - MOTORPOOL	$6.54		
59593	12/12/2013	Open			Accounts Payable	THOMAS ACE HARDWARE - POLICE DEPT.	$57.31		
59594	12/12/2013	Open			Accounts Payable	THOMAS HYDRAULIC & HARDWARE SUPPLY, INC.	$10.99		
59595	12/12/2013	Open			Accounts Payable	THRIFTY ROOTER	$121.25		
59596	12/12/2013	Open			Accounts Payable	UNIFORMS TUXEDOS & MORE	$56.27		
59597	12/12/2013	Open			Accounts Payable	VALLEY TOXICOLOGY SERVICE	$750.00		
59598	12/12/2013	Open			Accounts Payable	WEST COAST TRUCK EQUIPMENT, INC.	$202.22		
59599	12/12/2013	Open			Accounts Payable	WESTAMERICA BANK	$45,244.33		
59600	12/12/2013	Open			Accounts Payable	WITTMEIER AUTO CENTER	$2,531.19		
59601	12/17/2013	Open			Accounts Payable	MID VALLEY TITLE & ESCROW	$20.41		
59602	12/31/2013	Voided/Spoiled	Printer Error	12/31/2013	Converted/Imported		$0.00	$0.00	$0.00
59603	12/31/2013	Voided/Spoiled	Printer Error	12/31/2013	Converted/Imported		$0.00	$0.00	$0.00
59604	12/31/2013	Voided/Spoiled	Printer Error	12/31/2013	Converted/Imported		$0.00	$0.00	$0.00
59605	12/31/2013	Voided/Spoiled	Printer Error	12/31/2013	Converted/Imported		$0.00	$0.00	$0.00
59606	12/31/2013	Voided/Spoiled	Printer Error	12/31/2013	Converted/Imported		$0.00	$0.00	$0.00
59607	12/31/2013	Voided/Spoiled	Printer Error	12/31/2013	Converted/Imported		$0.00	$0.00	$0.00
59608	12/20/2013	Open			Accounts Payable	ICMA 457 - VANTAGEPOINT	$550.00		
59609	12/20/2013	Open			Accounts Payable	STATE DISBURSEMENT UNIT	$314.76		
59610	12/20/2013	Open			Accounts Payable	STATE OF CALIFORNIA FRANCHISE TAX BOARD	$505.99		
59611	12/23/2013	Open			Accounts Payable	ACCESS INFORMATION MANAGEMENT	$84.53		
59612	12/23/2013	Open			Accounts Payable	ACI ENTERPRISES, INC.	$463.32		
59613	12/23/2013	Open			Accounts Payable	AgendaPal Corporation	$399.00		
59614	12/23/2013	Open			Accounts Payable	ARAMARK UNIFORM SERV. INC.	$106.96		
59615	12/23/2013	Open			Accounts Payable	AT&T	$997.97		
59616	12/23/2013	Open			Accounts Payable	AWARDS COMPANY	$21.50		
59617	12/23/2013	Open			Accounts Payable	Big O Tires	$731.48		
59618	12/23/2013	Open			Accounts Payable	BUTTE COUNTY CREDIT BUREAU	$56.00		
59619	12/23/2013	Open			Accounts Payable	CALIFORNIA STATE DEPARTMENT OF JUSTICE	$362.00		
59620	12/23/2013	Open			Accounts Payable	CERTIFIED SECURITY SYSTEM INCORPORATED	$240.00		
59621	12/23/2013	Open			Accounts Payable	CERTIFION CORPORATION D.B.A. ENTERSECT	$84.95		
59622	12/23/2013	Open			Accounts Payable	Coast Gas	$931.35		
59623	12/23/2013	Open			Accounts Payable	COMCAST CABLE	$403.89		
59624	12/23/2013	Open			Accounts Payable	COMCAST CABLE	$90.35		
59625	12/23/2013	Open			Accounts Payable	COMCAST CABLE	$230.60		
59626	12/23/2013	Open			Accounts Payable	COPWARE, INC.	$400.00		
59627	12/23/2013	Open			Accounts Payable	DEPARTMENT OF FORESTRY & FIRE PROTECTION	$569,762.60		
59628	12/23/2013	Open			Accounts Payable	DON'S SAW & MOWER	$3.23		

TOWN OF PARADISE

CASH DISBURSEMENTS REPORT

From Payment Date: 12/1/2013 - To Payment Date: 12/31/2013

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
59629	12/23/2013	Open			Accounts Payable	DOUG DANZ	$36.83		
59630	12/23/2013	Open			Accounts Payable	ENLOE MEDICAL CENTER, INC.	$440.00		
59631	12/23/2013	Open			Accounts Payable	EVERGREEN JANITORIAL SUPPLY, INC.	$107.33		
59632	12/23/2013	Open			Accounts Payable	FEATHER RIVER HOSPITAL	$704.00		
59633	12/23/2013	Open			Accounts Payable	GILBERT, MATT	$110.00		
59634	12/23/2013	Open			Accounts Payable	HASCO INTERNATIONAL INC	$243.46		
59635	12/23/2013	Open			Accounts Payable	HUNTERS PEST CONTROL	$55.00		
59636	12/23/2013	Open			Accounts Payable	Hupp Signs & Lighting Inc	$94.89		
59637	12/23/2013	Open			Accounts Payable	I.M.P.A.C. PAYMENTS IMPAC GOV SVCS/US BANCORP	$2,699.07		
59638	12/23/2013	Open			Accounts Payable	JAMES RIOTTO & ASSOCIATES	$85.00		
59639	12/23/2013	Open			Accounts Payable	JIMMY'S CUSTOM TROPHIES	$489.85		
59640	12/23/2013	Open			Accounts Payable	JOHN REGH INLAND LEASING	$427.85		
59641	12/23/2013	Open			Accounts Payable	KNIFE RIVER CONSTRUCTION	$247.97		
59642	12/23/2013	Open			Accounts Payable	Loom Moose Lodge	$364.00		
59643	12/23/2013	Open			Accounts Payable	MYERS STEVENS TOOHEY & COMPANY	$50.40		
59644	12/23/2013	Open			Accounts Payable	NORTH STATE RENDERING INC	$100.00		
59645	12/23/2013	Open			Accounts Payable	NORTHGATE PETROLEUM CO	$6,798.06		
59646	12/23/2013	Open			Accounts Payable	O'REILLY AUTO PARTS	$18.31		
59647	12/23/2013	Open			Accounts Payable	OFFICE DEPOT ACCT#36233169	$281.78		
59648	12/23/2013	Open			Accounts Payable	PACIFIC GAS & ELECTRIC	$111.67		
59649	12/23/2013	Open			Accounts Payable	PARADISE IRRIGATION DIST	$430.12		
59650	12/23/2013	Open			Accounts Payable	PARADISE POST/NORTH VALLEY COMMTY MEDIA	$106.70		
59651	12/23/2013	Open			Accounts Payable	PMAM CORPORATION	$281.00		
59652	12/23/2013	Open			Accounts Payable	RUNKLE, DOUG	$27.23		
59653	12/23/2013	Open			Accounts Payable	SIERRA SAFETY ASSOCIATES	$198.88		
59654	12/23/2013	Open			Accounts Payable	SKYWAY AUTO TUNE	$624.00		
59655	12/23/2013	Open			Accounts Payable	SKYWAY TOOL CENTER	$18.25		
59656	12/23/2013	Open			Accounts Payable	THOMAS ACE HARDWARE - ENG. DEPT.	$555.68		
59657	12/23/2013	Open			Accounts Payable	THOMAS ACE HARDWARE - FIRE DEPT.	$8.94		
59658	12/23/2013	Open			Accounts Payable	THOMAS HYDRAULIC & HARDWARE SUPPLY, INC.	$439.75		
59659	12/23/2013	Open			Accounts Payable	THOMSON-WEST/BARCLAYS	$135.00		
59660	12/23/2013	Open			Accounts Payable	THRIFTY ROOTER	$394.38		
59661	12/23/2013	Open			Accounts Payable	Traffic Works, LLC	$11,900.00		
59662	12/23/2013	Open			Accounts Payable	Truck Site	$31,369.75		
59663	12/23/2013	Open			Accounts Payable	VALLEY TOXICOLOGY SERVICE	$375.00		
59664	12/23/2013	Open			Accounts Payable	VERIZON WIRELESS	$570.15		
59665	12/23/2013	Open			Accounts Payable	VERIZON WIRELESS	$492.52		
59666	12/23/2013	Open			Accounts Payable	VERIZON WIRELESS	$294.58		
59667	12/23/2013	Open			Accounts Payable	Vigilant Canine Services	$175.00		
Type Check Totals:					162 Transactions		$802,442.65	$0.00	$0.00
EFT									
115	12/03/2013	Open			Accounts Payable	CALPERS	$105,344.78		
116	12/06/2013	Open			Accounts Payable	CALPERS - RETIREMENT	$31,339.79		

TOWN OF PARADISE

CASH DISBURSEMENTS REPORT

From Payment Date: 12/1/2013 - To Payment Date: 12/31/2013

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
117	12/06/2013	Open			Accounts Payable	EMPLOYMENT DEVELOPMENT DEPARTMENT	$4,075.75		
118	12/06/2013	Open			Accounts Payable	ING LIFE INS & ANNUITY COMPANY	$1,911.94		
119	12/06/2013	Open			Accounts Payable	INTERNAL REVENUE SERVICE	$18,155.49		
120	12/13/2013	Open			Accounts Payable	FP/FRANCOTYP-POSTALIA MAILING SOLUTIONS	$750.00		
121	12/20/2013	Open			Accounts Payable	CALPERS - RETIREMENT	$31,465.75		
122	12/20/2013	Open			Accounts Payable	EMPLOYMENT DEVELOPMENT DEPARTMENT	$4,112.89		
123	12/20/2013	Open			Accounts Payable	ING LIFE INS & ANNUITY COMPANY	$1,911.94		
124	12/20/2013	Open			Accounts Payable	INTERNAL REVENUE SERVICE	$18,339.82		
Type EFT Totals:					10 Transactions		$217,408.15		

AP - US Bank TOP AP Checking Totals

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	155	$802,442.65	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	7	$0.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	162	$802,442.65	$0.00

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	10	$217,408.15	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	0	$0.00	$0.00
	Total	10	$217,408.15	$0.00

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	165	$1,019,850.80	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	7	$0.00	$0.00
	Stopped	0	$0.00	$0.00

TOWN OF PARADISE

CASH DISBURSEMENTS REPORT

From Payment Date: 12/1/2013 - To Payment Date: 12/31/2013

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source		Payee Name	Transaction Amount	Reconciled Amount	Difference
					Total	172		$1,019,850.80	$0.00	

Grand Totals:

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	155	$802,442.65	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	7	$0.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	162	$802,442.65	$0.00

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	10	$217,408.15	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	0	$0.00	$0.00
	Total	10	$217,408.15	$0.00

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	165	$1,019,850.80	$0.00
	Reconciled	0	$0.00	$0.00
	Voided	7	$0.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	172	$1,019,850.80	$0.00

TOWN OF PARADISE
Council Agenda Summary
Date: January 14, 2014 **Agenda No. 3(c)**

ORIGINATED BY: Craig Baker, Community Development Director

REVIEWED BY: Lauren Gill, Town Manager

SUBJECT: Adoption of Town Ordinance No. 535

COUNCIL ACTION REQUESTED: Adopt a **MOTION TO**:

1. Waive second reading of the entire Town Ordinance No. 535 and approve reading by title only [roll call vote]; **AND**

2. Adopt Town Ordinance No. 535, "An Ordinance Rezoning Certain Real Property From Community Services (CS) to Central Business (CB) Zone Pursuant to Paradise Municipal Code Sections 17.45.500 Et. Seq. (PL12-00020; Gilkey)".

BACKGROUND: On **December 10, 2013**, the Town Council introduced the above-noted town ordinance for purposes of eventual adoption.

DISCUSSION: Town staff recommends that the Town Council waive the second reading of this entire ordinance; read it by title only; and formally adopt Town Ordinance No. 535 (copy attached). Once adopted, the provisions of this ordinance will be in legal effect and force thirty days thereafter.

FINANCIAL IMPACT: An approximate cost of $85.00 will be borne by the Town of Paradise for publication of the ordinance within the local newspaper.

Attachment

TOWN OF PARADISE
ORDINANCE NO. 535

AN ORDINANCE REZONING CERTAIN REAL PROPERTY FROM COMMUNITY SERVICES (CS) TO CENTRAL BUSINESS (CB) ZONE PURSUANT TO PARADISE MUNICIPAL CODE SECTIONS 17.45.500 ET. SEQ. (PL12-00020; GILKEY)

The Town Council of the Town of Paradise, State of California, does hereby **ORDAIN AS FOLLOWS:**

SECTION 1. The hereinafter described real property situated in the Town of Paradise, State of California, shall be and is hereby zoned Central Business (CB) as described in Chapter 17.20 of the Paradise Municipal Code and such land area shall be subject to the restrictions, restricted uses and regulations of such chapter. The real property so zoned is located adjacent to Pearson Road and the Paradise Memorial Trailway, identified as a portion of AP No. 052-223-017 and more particularly described in Exhibit "A" attached hereto.

SECTION 2. This ordinance shall take effect thirty (30) days beyond the date of its passage. Before the expiration of fifteen (15) days after its passage, this ordinance shall be published in a newspaper of general circulation and circulated within the Town of Paradise along with the names of the members of the Town Council of Paradise voting for and against same.

PASSED AND ADOPTED by the Town Council of the Town of Paradise, County of Butte, State of California, on this 14th day of January, 2014, by the following vote:

AYES:

NOES:

ABSENT:

NOT VOTING:

_____
Scott Lotter, Mayor

ATTEST:

By:_____
Joanna Gutierrez, Town Clerk

APPROVED AS TO FORM:

By:_____
Dwight L. Moore, Town Attorney

Exhibit "A"

Town Rezone Parcel

All that certain real property situates in the Town of Paradise, County of Butte, State of California described as follows:

Beginning at the Southeast Corner of Lot 11 as shown on that certain map entitled "Woodside Subdivision" which map was recorded in the office of the Recorder of the County of Butte, State of California on July 13, 1942, in Book 14 of Maps, at page(s) 25 and 26, said point also being on 666.18 foot radius curve, concave to the West, from which a line to the Radius bears North 63°22'26" West thence following Northerly along the arc of said curve and Easterly boundary of said Lot 11, through a central angle of 2°25'13", for a length of 28.14 feet to the TRUE POINT OF BEGINNING of the herein described parcel of land; thence North 24°12'21" East along said Lot 11 boundary, 26.14 feet; thence North 00°14'17" West along the East boundary of Lot 12 of said Woodside Subdivision and the Northerly prolongation thereof, a distance of 107.22 feet to a point on the Southerly Right of Way of Pearson Road; thence South 65°43'25" East along said Southerly Right of Way, a distance of 79.88 feet to the beginning of a tangent 540 foot radius curve, concave to the North; thence following Easterly along the arc of said curve, through a central angle of 5°04'32", for a length of 47.83 feet; thence South 19°12'03" West, 29.67 feet to the beginning of a non-tangent 75.01 foot radius curve, concave to the Northwest, from which a line to the radius bears North 67°14'02" West; thence following Southwesterly along the arc of said curve, through a central angle of 60°15'15", for a length of 78.88 feet; thence South 83°01'13" West, 58.13 feet to the point of beginning.

Containing 0.24 Acres, more or less

1-13-13

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TOWN OF PARADISE
Council Agenda Summary
Date: January 14, 2014

Agenda No. 3 (d)

ORIGINATED BY: Marc Mattox, Town Engineer

REVIEWED BY: Lauren Gill, Town Manager

SUBJECT: Adoption of Town Ordinance No. 536, Vehicular Speed Limits

COUNCIL ACTION REQUESTED:

1. Waive the second reading of Town Ordinance No. 536 and approve reading by title only; and,
2. Adopt Town Ordinance No. 536, "An Ordinance Amending Section 10.02.060 of the Paradise Municipal Code Regarding Vehicular Speed Limits".

Background:

The California Vehicle Code (CVC) provides a basic speed law that states that no person shall drive at a speed greater than which is reasonable and prudent having due regard for weather, visibility, traffic and the surface and width of the street, and in no event at a speed which endangers the safety of persons or property. The CVC also contains a prima facie speed law that specifies a definite speed limit for very specific conditions.

Section 22352, Prima Facie Speed Limits of the CVC details speed limits assigned to appropriate conditions. Twenty-five miles per hour (25 MPH) is the default speed limit on any highway other than a state highway, in any business or residential district unless a different speed is determined by local authority under procedures set forth in the CVC. This default prima facie speed limit is not required to be posted to be enforced.

Section 22357 grants local jurisdictions authority to increase the default speed limit, as shown below:

> *Whenever a local authority determines upon the basis of an engineering and traffic survey that a speed greater than 25 miles per hour would facilitate the orderly movement of vehicular traffic and would be reasonable and safe upon any street other than a state highway otherwise subject to a prima facie limit of 25 miles per hour, the local authority may by ordinance determine and declare a prima facie speed limit of 30, 35, 40, 45, 50, 55, or 60 miles per hour or a maximum speed limit of 65 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe.*

The Town of Paradise has the responsibility and duty of studying, recommending, constructing and maintaining traffic control measures for public roadways within the Town limits. The Town Council is required to legally establish speed limits defined by local ordinances in concurrence with the California Vehicle Code (CVC) and the California Manual of Uniform Traffic Control Devices (MUTCD). The method of establishing radar-enforceable speed limits is through the completion of engineering and traffic surveys for desired roadway segments.

The previous Engineering and Traffic Survey was approved by Town Council in January 2004. CVC provisions require Engineering and Traffic Surveys to be updated no less than every seven to ten years.

Analysis:

Using procedures set forth by the CVC and MUTCD, staff has prepared the 2014 Engineering and Traffic Survey which includes findings and recommendations for 46 different speed zones primarily along collectors, arterials and principal arterials in the Town of Paradise.

Survey procedures require detailed examination of each roadway segment, specifically studying the following:

1. Prevailing vehicle speeds (free-flow)
2. Collision history
3. Conditions not readily apparent to the driver
4. Pedestrian and bicyclist safety
5. Residential Districts
6. Narrow Road Widths

Following a detailed analysis of the above criteria, staff has recommended nine (9) total adjustments from currently posted and Council approved speed limits, as follows:

Segment No. 2, Bille Road between Skyway and Clark Road

- Current Speed Limit: 35 MPH
- Recommended Speed Limit: 30 MPH
- Justification: This segment qualifies as a CVC 627 Residential District. Other factors considered include presence of vertical curves, perpendicular crossing of the Memorial Trailway, lack of pedestrian and bicycle facilities, frequency of driveway encroachments, presence of observed pedestrians and bicyclists and an above average collision rate

Segment No. 4, Buschmann Road between Foster Road and Clark Road

- Current Speed Limit: 25 MPH
- Recommended Speed Limit: 30 MPH
- Justification: This segment qualifies as a CVC 22358.3 Narrow Roadway. Other factors considered include the presence of senior housing, medical facilities, community aquatic park and schools. In addition, pedestrians and bicyclists were observed during the survey.
- Special Note: The 2003 Survey required enforcement of the 25 MPH school zone at all times, whereas current regulations require the 25 MPH school zone speed limit only be enforced when children are present.

Segment No. 15, Neal Road between Skyway and Roe Road

- Current Speed Limit: 35 MPH
- Recommended Speed Limit: 30 MPH
- Justification: This segment qualifies as a CVC 22358.3 Narrow Roadway and a CVC 625 Residential District. Other factors considered include lack of pedestrian and bicycle facilities and frequency of driveway encroachments.

Segment No. 22, Pearson Road between Black Olive Drive and Clark Road

- Current Speed Limit: 25 MPH (Academy Drive to Clark Road)
- Recommended Speed Limit: 30 MPH
- Justification: Prevailing speeds indicate a speed limit of 30 MPH is appropriate for this segment
- Special Note: The 2003 Survey required enforcement of the 25 MPH school zone at all times, whereas current regulations require the 25 MPH school zone speed limit only be enforced when children are present.

Segment No. 24, Pearson Road between Butte View Terrace and Pentz Road

- Current Speed Limit: 25 MPH (Revised March 2013)
- Recommended Speed Limit: 35 MPH
- Justification: Prevailing speeds indicate a speed limit of 35 MPH is appropriate for this segment
- Special Note: This segment was reduced to 25 MPH to address conditions not readily apparent to drivers. Since this change was made effective, the segment has been micro-surfaced and the speed limit reduction is no longer necessary. The curve warning signs shall remain at 25 MPH. Warning signs are not considered regulatory.

Segment No. 32, Sawmill Road between Bille Road and Pearson Road

- Current Speed Limit: 35 MPH
- Recommended Speed Limit: 30 MPH
- Justification: This segment qualifies as a CVC 22358.3 Narrow Roadway and a CVC 625 Residential District. Other factors considered include lack of pedestrian and bicycle facilities and frequency of driveway encroachments.

Segment No. 43, Valley View Drive between Oliver Road and END

- Current Speed Limit: 35 MPH
- Recommended Speed Limit: 30 MPH
- Justification: This segment qualifies as a CVC 22358.3 Narrow Roadway and a CVC 625 Residential District. Other factors considered include horizontal and vertical curves, lack of pedestrian and bicycle facilities and frequency of driveway encroachments.

Segment No. 45, Wagstaff Road between Skyway and Clark Road

- Current Speed Limit: 35 MPH
- Recommended Speed Limit: 30 MPH
- Justification: This segment qualifies as a CVC 22358.3 Narrow Roadway and a CVC 625 Residential District. Other factors considered include vertical curves, frequency of driveway encroachments, and an above average collision history.

Segment No. 46, Wagstaff Road between Clark Road and Pentz Road

- Current Speed Limit: 35 MPH
- Recommended Speed Limit: 30 MPH
- Justification: This segment qualifies as a CVC 22358.3 Narrow Roadway and a CVC 625 Residential District. Other factors considered include vertical curves, lack of pedestrian and bicycle facilities and frequency of driveway encroachments.

In addition to the above adjustments, eleven segments have been removed from the survey. These eleven segments do not require an engineering and traffic survey to justify the enforcement of the default prima facie speed limit of 25 MPH in residential zones.

A list of all recommended speed limits in Town Limits is provided below:

ID	Primary Street	Start	End	Speed Limit
1	Bille Road	Cliff Drive	Skyway	30
2	Bille Road	Skyway	Clark Road	30
3	Bille Road	Clark Road	Pentz Road	30
4	Buschmann Road	Foster Road	Clark Road	30
5	Central Park Drive	Maxwell Drive	Clark Road	30
6	Clark Road	Skyway	Wagstaff Road	35
7	Clark Road	Wagstaff Road	Bille Road	35
8	Clark Road	Bille Road	Elliott Road	35
9	Clark Road	Elliott Road	Pearson Road	35
10	Elliott Road	Skyway	Clark Road	30
11	Elliott Road	Clark Roa	Sawmill Road	30

ID	Primary Street	Start	End	Speed Limit
12	Foster Road	Buschmann Road	Roe Road	30
13	Foster Road	Roe Road	Town Limits	30
14	Honey Run Road	Skyway	Honey View Terrace	25
15	Neal Road	Skyway	Roe Road	30
16	Neal Road	Roe Road	Town Limits	35
17	Nunneley Road	Academy Drive	Clark Road	35
18	Nunneley Road	Clark Road	Sawmill Road	30
19	Oliver Road	Skyway	Castle Drive	25
20	Oliver Road	Castle Drive	Wagstaff Road	30
21	Pearson Road	Skyway	Black Olive Drive	30
22	Pearson Road	Black Olive Drive	Clark Road	30
23	Pearson Road	Clark Road	Butte View Terrace	35
24	Pearson Road	Butte View Terrace	Pentz Road	35
25	Pentz Road	Skyway	Wagstaff Road	35
26	Pentz Road	Wagstaff Road	Bille Road	35
27	Pentz Road	Bille Road	Del Rio Way	35
28	Pentz Road	Del Rio Way	Pearson Road	35
29	Pentz Road	Pearson Road	Town Limits	35
30	Rocky Lane	Skyway	Wagstaff Road	30
31	Roe Road	Neal Road	Foster Road	30
32	Sawmill Road	Bille Road	Pearson Road	30
33	Skyway Eastbound	Town Limits	Neal Road	50
34	Skyway Westbound	Town Limits	Neal Road	50
35	Skyway	Neal Road	Pearson Road	35
36	Skyway	Pearson Road	Elliott Road	30
37	Skyway	Elliott Road	Bille Road	30
38	Skyway	Bille Road	Wagstaff Road	35
39	Skyway	Wagstaff Road	Rocky Lane	35
40	Skyway	Rocky Lane	Clark Road	35
41	Skyway	Clark Road	Pentz Road	35
42	Stearns Road	De Mille Road	County Club Drive	30
43	Valley View Drive	Oliver Road	End	30
44	Wagstaff Road	Oliver Road	Skyway	30
45	Wagstaff Road	Skyway	Clark Road	30
46	Wagstaff Road	Clark Road	Pentz Road	30

The complete 2014 Engineering & Traffic Survey is available for review at Town Hall.

On December 12, 2013, the Town Council introduced the above-noted Town ordinance for purposes of eventual adoption. The intent of the proposed ordinance is to provide Paradise Police Department the continued authority to utilize radar while performing speed enforcement in the Town of Paradise. The ordinance is presented using justification provided by the preparation of an Engineering & Traffic Survey in compliance with the California Vehicle Code and California Manual of Uniform Traffic Control Devices.

Staff recommends Town Council waive the second reading of this entire ordinance; read it by title only; and formally adopt Town Ordinance No. 536, attached to this report. Once adopted, the provisions of this ordinance will be effective thirty days thereafter.

Financial Impact:

Minor costs for publication of two ordinance summaries and codification are anticipated.

Alternatives:

Reject, modify or delay recommended action.

TOWN OF PARADISE
ORDINANCE NO. 536

AN ORDINANCE AMENDING SECTION 10.02.060 OF THE PARADISE MUNICIPAL CODE REGARDING VEHICULAR SPEED LIMITS

The Town Council of the Town of Paradise, State of California does **ordain as follows**:

SECTION 1: Section 10.02.060 of the Paradise Municipal Code is hereby amended to read as follows:

A. The town council establishes a prima facie speed limit of twenty-five miles per hour for all town maintained public roads not listed or otherwise set forth in this chapter.

B. In accordance with Section 22352 of the California Vehicle Code, the following established school zones shall have a prima facie speed limit of twenty-five miles per hour anytime children are present:

1. Buschmann Road, from Scottwood Road to Clark Road.
2. Pearson Road, from Academy Drive to Clark Road.
3. Recreation Drive, from Buschmann Road north five hundred thirty feet (to end of town maintained road).
4. Maxwell Drive, from Elliott Road to Central Park Drive.
5. Pentz Road, from Merrill Road to Dean Road.
6. Pentz Road, from Bille Road to Wagstaff Road.

C. The town council also establishes posted speed limits on certain highways as follows:

Segment ID	Primary Street	Start	End	Recommended Speed Limit
1	Bille Road	Cliff Drive	Skyway	30
2	Bille Road	Skyway	Clark Road	30
3	Bille Road	Clark Road	Pentz Road	30
4	Buschmann Road	Foster Road	Clark Road	30
5	Central Park Drive	Maxwell Drive	Clark Road	30
6	Clark Road	Skyway	Wagstaff Road	35
7	Clark Road	Wagstaff Road	Bille Road	35
8	Clark Road	Bille Road	Elliott Road	35
9	Clark Road	Elliott Road	Pearson Road	35
10	Elliott Road	Skyway	Clark Road	30
11	Elliott Road	Clark Road	Sawmill Road	30
12	Foster Road	Buschmann Road	Roe Road	30
13	Foster Road	Roe Road	Town Limits	30
14	Honey Run Road	Skyway	Honey View Terrace	25

15	Neal Road	Skyway	Roe Road	30
16	Neal Road	Roe Road	Town Limits	35
17	Nunneley Road	Academy Drive	Clark Road	35
18	Nunneley Road	Clark Road	Sawmill Road	30
19	Oliver Road	Skyway	Castle Drive	25
20	Oliver Road	Castle Drive	Wagstaff Road	30
21	Pearson Road	Skyway	Black Olive Drive	30
22	Pearson Road	Black Olive Drive	Clark Road	30
23	Pearson Road	Clark Road	Butte View Terrace	35
24	Pearson Road	Butte View Terrace	Pentz Road	35
25	Pentz Road	Skyway	Wagstaff Road	35
26	Pentz Road	Wagstaff Road	Bille Road	35
27	Pentz Road	Bille Road	Del Rio Way	35
28	Pentz Road	Del Rio Way	Pearson Road	35
29	Pentz Road	Pearson Road	Town Limits	35
30	Rocky Lane	Skyway	Wagstaff Road	30
31	Roe Road	Neal Road	Foster Road	30
32	Sawmill Road	Bille Road	Pearson Road	30
33	Skyway Eastbound	Town Limits	Neal Road	50
34	Skyway Westbound	Town Limits	Neal Road	50
35	Skyway	Neal Road	Pearson Road	35
36	Skyway	Pearson Road	Elliott Road	30
37	Skyway	Elliott Road	Bille Road	30
38	Skyway	Bille Road	Wagstaff Road	35
39	Skyway	Wagstaff Road	Rocky Lane	35
40	Skyway	Rocky Lane	Clark Road	35
41	Skyway	Clark Road	Pentz Road	35
42	Stearns Road	De Mille Road	County Club Drive	30
43	Valley View Drive	Oliver Road	End	30
44	Wagstaff Road	Oliver Road	Skyway	30
45	Wagstaff Road	Skyway	Clark Road	30
46	Wagstaff Road	Clark Road	Pentz Road	30

SECTION 2: This ordinance shall take effect thirty (30) days after the date of its passage. Before the expiration of fifteen (15) days after its passage, this ordinance shall be published with the names of the members of the Town Council voting for and against it in a newspaper of general circulation published in the Town of Paradise, California.

PASSED AND ADOPTED by the Town Council of the Town of Paradise, County of Butte, State of California, on this 14th day of January 2014, by the following vote:

AYES:

NOES:

ABSENT:

NOT VOTING:

_____
Scott Lotter, Mayor

ATTEST:

By: _____
Joanna Gutierrez, Town Clerk

APPROVED AS TO FORM:

By:_____
Dwight L. Moore, Town Attorney

TOWN OF PARADISE
Council Agenda Summary
Date: January 14, 2014

Agenda No. 3 (e)

ORIGINATED BY: Marc Mattox, Town Engineer

REVIEWED BY: Lauren Gill, Town Manager

SUBJECT: Prohibited Street Crossing Ordinance

COUNCIL ACTION REQUESTED:

1. Waive second reading of entire Town Ordinance No. 537 and approve reading by title only; and,
2. Adopt Town Ordinance No. 537, "An Ordinance Adding Chapter 10.38 to the Paradise Municipal Code relating to Pedestrians Using Crosswalks in Identified Zones ".

Background:

California Vehicle Code (CVC) Section 21955 prohibits pedestrians from crossing any street except at a marked crosswalk between adjacent intersections controlled by a traffic signal device or by police officers.

Currently the Paradise Police Department is only permitted to enforce CVC 21955 along Clark Road between Pearson Road and Nunneley Road. Private and public roads which intersect major streets are deemed “breaks” in the context of CVC 21955 and prohibited crossings cannot be enforced. For example, along Skyway between the signalized intersections of Elliott Road and Oliver Drive, Paradise Police cannot ticket a pedestrian crossing outside of a marked crosswalk because Memorial Way is considered an intersection with Skyway.

Paradise Police Department has noticed issues with pedestrians crossing streets outside marked crosswalks when the crosswalks or traffic signals are very short distances from the pedestrian. This is a safety hazard for pedestrians because motorists do not expect street crossings at these unmarked locations.

CVC Section 21961 allows local authorities to adopt ordinances prohibiting pedestrians from crossing roadways outside of crosswalks.

Analysis:

Staff is recommending Council adopt an ordinance prohibiting pedestrians from crossing the street along two additional roadway segments which have marked or controlled crosswalks within short distances from any point a pedestrian may be in the designated zone. The proposed prohibited crossing zones are described below:

1. Pearson Road between Mallan Lane and Clark Road – 0.40 Miles
    a. 2 signalized intersections at Recreation Drive and Clark Road
    b. 5 total marked crosswalks

2. Skyway between Black Olive Drive and Center Street – 1.00 Mile
    a. 3 signalized intersections at Pearson Road, Elliott Road and Oliver Road
    b. 15 total marked crosswalks

The key to the above zones is availability of marked crossing alternatives. Exhibits mapping the described prohibited crossing zones are attached to this report.

On December 12, 2013, the Town Council introduced the above-noted Town ordinance for purposes of eventual adoption. The objective of this ordinance is to increase pedestrian and motorist safety in the Town of Paradise by promoting predictable and safe street crossing behavior. Adopting this ordinance will enable Paradise Police Department to enforce proper use of marked crosswalks.

Staff recommends Town Council waive the second reading of this entire ordinance; read it by title only; and formally adopt Town Ordinance No. 537, attached to this report. Once adopted, the provisions of this ordinance will be effective thirty days thereafter.

Financial Impact:

None at this time.

Alternatives:

Reject, modify or delay recommended action.

TOWN OF PARADISE
ORDINANCE NO. 537

AN ORDINANCE ADDING CHAPTER 10.38 TO THE PARADISE MUNICIPAL CODE RELATING TO PEDESTRIANS USING CROSSWALKS

The Town Council of the Town of Paradise, State of California does **ordain as follows**:

SECTION 1: Chapter 10.38 is hereby added to the Paradise Municipal Code to read as follows:

CHAPTER 10.38
PEDESTRIANS

Sections:
10.38.010 Use of Crosswalks

10.38.010. Use of crosswalks. It shall be unlawful for a pedestrian to cross a street in any location other than a marked crosswalk within the following public street segments, identified below:

1. Pearson Road between Mallan Lane and Clark Road
2. Skyway between Black Olive Drive and Center Street

SECTION 2: This ordinance shall take effect thirty (30) days after the date of its passage. Before the expiration of fifteen (15) days after its passage, this ordinance shall be published with the names of the members of the Town Council voting for and against it in a newspaper of general circulation published in the Town of Paradise, California.

PASSED AND ADOPTED by the Town Council of the Town of Paradise, County of Butte, State of California, on this 14th day of January 2014, by the following vote:

AYES:

NOES:

ABSENT:

NOT VOTING:

_____
Scott Lotter, Mayor

ATTEST:

By: _____
Joanna Gutierrez, Town Clerk

APPROVED AS TO FORM:

By:_____
Dwight L. Moore, Town Attorney

TOWN OF PARADISE
Council Agenda Summary
Date: January 14, 2014

Agenda No. 3(f)

ORIGINATED BY: Dwight L. Moore, Town Attorney

REVIEWED BY: Lauren Gill, Town Manager

SUBJECT: Agreement between the Town of Paradise and Douglas R. Thorn, Attorney at Law

COUNCIL ACTION REQUESTED: Adopt Resolution No. 14-___ authorizing the Mayor to execute a legal services agreement with Douglas R. Thorn relating to public nuisance abatement lawsuits.

BACKGROUND: The California Supreme Court has ruled that a municipal corporation may retain the services of a private attorney under a contingent-fee type of agreement relating to public nuisance abatement actions if the agreement requires as follows:

a. The private counsel remains subject to the supervision and control of the government attorney;

b. The private counsel must serve in a subordinate role to the government attorney;

c. The defendant may contact the government attorney without having to confer with the private counsel;

d. The authority to settle the case must be under the control of the government attorney and that all final decisions must be within the sole power of the client and the government attorney;

e. The government attorney must retain a veto power over any decisions made by the private attorney;

f. The government attorney must be personally involved in overseeing the litigation; and

g. The government attorney must not have any financial interest in the outcome of the litigation.

DISCUSSION: In the recent past, Douglas Thorn, attorney at law, has represented the Town pursuant to a legal services agreement relating to public nuisance abatement actions under

which he was compensated solely by attorney fees from the defendant. In other words, the Town was not responsible for the payment of Mr. Thorn's fees, and Mr. Thorn did not receive any attorney's fees directly from the Town of Paradise for his services. In addition to the previous fee arrangement, the attached agreement provides for Mr. Thorn to be paid from funds generated by a receiver. The source of Mr. Thorn's fees would be from the receiver rather than the Town's General Fund. At no additional cost to the Town, the Town Attorney would supervise and control Mr. Thorn's legal services. As proposed, the only direct costs payable by the Town under the agreement would be limited to $1,000 for other costs such as a court reporter at a deposition, photocopying, and the cost to serve any lawsuit pleadings.

FINANCIAL IMPACT: Within the attached agreement, the Town's costs are limited to $1,000. In addition, the Town would be eligible to receive its costs from the violator or the receiver relating to the lawsuit.

Attachment

TOWN OF PARADISE
RESOLUTION NO. 14-__

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF PARADISE AUTHORIZING THE MAYOR TO EXECUTE AN AGREEMENT WITH DOUGLAS R. THORN, ATTORNEY AT LAW

WHEREAS, from time to time, persons violate the requirements of the Paradise Municipal Code, which may result in litigation by the Town to abate the violation; and

WHEREAS, the expense of such litigation can be substantially reduced if the Town's legal services are not payable by the Town; and

WHEREAS, Douglas R. Thorn, attorney at law, has offered to provide legal services to the Town relating to such litigation pursuant to a legal services agreement under which his attorney's fees would not be paid by the Town but by the defendant only if the Town prevails or from proceeds generated by a receivership.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF PARADISE as follows:

Section 1. Town Council does hereby authorize the Mayor to execute the attached legal services agreement between the Town of Paradise and Douglas R. Thorn, attorney at law.

PASSED AND ADOPTED by the Paradise Town Council of the Town of Paradise, County of Butte, State of California, on this 14th day of January, 2014, by the following vote:

AYES:

NOES:

ABSENT:

NOT VOTING:

_____
SCOTT LOTTER, Mayor

ATTEST:

_____
JOANNA GUTIERREZ, Town Clerk

APPROVED AS TO FORM:

_____
DWIGHT L. MOORE, Town Attorney

LEGAL SERVICES AGREEMENT

DOUGLAS R. THORN ("Attorney") and **TOWN OF PARADISE, CALIFORNIA** ("Client") hereby agree that Attorney will provide legal services to Client on the terms set forth below. Town Attorney Dwight L. Moore ("Town Attorney") will administer this Agreement for Client, and will serve as Attorney's primary contact with Client.

1. EFFECTIVE DATE. This Agreement will not take effect, and Attorney will have no obligation to provide legal services, until Client returns a signed copy of this Agreement.

2. SCOPE OF SERVICES. Subject to the terms of this Agreement, Client hires Attorney to assist Town Attorney in the following matters: Attorney will assist Town Attorney with code enforcement when Town Attorney asks Attorney for assistance, unless Attorney is prohibited from assisting by law. Code enforcement matters are matters involving the enforcement of building, construction, housing, zoning, and health and safety laws, including, but not limited to, public nuisances, appointment of a receiver, inspection warrants, injunctions, administrative citations, fines, and penalties.

3. CONTROL OF LITIGATION. Town Attorney shall supervise and direct Attorney. Attorney shall be subordinate to Town Attorney and shall not take any action on behalf of Client without prior direction and approval from Town Attorney. Town Attorney shall be the lead attorney of record in any litigation commenced in the name of Client, and Town Attorney shall supervise and control any litigation commenced in the name of Client. Attorney acknowledges and understands that Town Attorney shall be the only attorney with authority to settle or compromise claims and disputes on behalf of Client and make and direct all strategic litigation decisions on behalf of Client, even without the consent or over the objection of Attorney. In the event Attorney and Town Attorney are unable to agree, then Town Attorney's decision shall control and be final. Attorney understands and agrees that the defendant to any lawsuit by the Client may contact Town Attorney without having to confer with Attorney. Attorney will provide those legal services reasonably required to discharge the instructions of Town Attorney, and will keep Town Attorney informed about the status of discharging the directions and instruction received from Town Attorney. If a court action is filed, Attorney will represent Client as co-counsel with Town Attorney as the controlling attorney through trial and post-trial motions. **Town Attorney shall have the authority to veto the decisions of Attorney and shall have authority to settle any litigation without Attorney's consent**.

4. CLIENT'S GENERAL DUTIES. Client agrees to be truthful with Attorney, to cooperate with Attorney, to keep Attorney informed about the information and developments concerning the matters for which Attorney has been hired, and to abide by this Agreement.

5. LEGAL FEES AND BILLINGS. Attorney shall bill for all time spent on Client's matter at the following rates:

Partners---------- $435.00/hour
Paralegals---------- $110.00/hour

The foregoing rates are subject to change on 30 days' written notice to Client. The time charged shall include the time Attorney spends on telephone calls relating to Client's matter, including calls with Client, witnesses, opposing counsel or court personnel. The legal personnel assigned to Client's matter may confer among themselves about the matter, as required and appropriate. When they do confer, each person will charge for the time expended, as long as the work done is reasonably necessary and not duplicative. Likewise, if more than one of the legal personnel attends a meeting, court hearing or other proceeding, each will charge for the time spent. Attorney will charge for waiting time in court and elsewhere and for travel time, both local and out of town. Time is charged in minimum units of one-tenth (.10) of an hour, except the following services shall be billed in minimum increments as follows:

Telephone calls:	.20
Letters:	.20
Emails:	.20

The Attorney's fees billed to Client shall be due and payable only when collected by Client from property owner or receiver or other party as provided by law, but shall not become payable unless collected by Client. Client shall not be obligated to pay Attorney any amount that exceeds the amount collected by Client. Attorney shall prepare and prosecute any motions or applications for attorney fees necessary or required by law to enable Client to collect attorney fees. Client shall take reasonable steps to collect and enforce its right to collect attorney fees, including, but not limited to, placing liens on property authorized by law and monetizing liens through foreclosure or other legal means provided by law.

6. COSTS AND OTHER CHARGES.

There are various costs and expenses associated with performing legal services under this Agreement. Attorney understands that such costs and expenses do not include any attorney's fees under section 5. Client agrees to pay for all costs, disbursements and expenses. The costs and expenses commonly include: service of process charges, filing fees, court and deposition reporters' fees, transcript fees, jury fees, notary fees, deposition costs, long distance telephone charges, database access and search charges, messenger and other delivery fees, filing fees, motion fees, postage, photocopying and other reproduction costs, travel costs (including parking, mileage, transportation, meals and hotel costs), investigation expenses, consultants' fees, expert witness fees and expenses, professional, mediator fees and expenses, arbitrator and/or special master fees and expenses, and other similar items. In no event shall the above cost and other charges exceed $1,000.

7. BILLING STATEMENTS. Attorney will send Client periodic statements. Client may request a statement at intervals of no less than 30 days. If Client so requests, Attorney will provide one within 10 days. The statements shall include the amount, rate, basis of calculation or other method of determination of the fees and costs, which costs will be clearly identified by item and amount.

8. LIEN. Client hereby grants Attorney a lien on any and all claims or causes of action that are the subject of the representation under this Agreement. The lien will be for any sums owing to Attorney at the conclusion of services performed. The lien will attach to any recovery Client may obtain, whether by arbitration award, judgment, settlement or otherwise. The effect of such a lien is that Attorney may be able to compel payment of fees and costs from any such funds recovered on behalf of Client even if Attorney has been discharged before the end of the case. Because a lien may affect Client's property rights, Client may seek the advice of an independent lawyer of Client's choice before agreeing to such a lien. By initialing this paragraph, Client represents and agrees that Client has had a reasonable opportunity to consult such an independent lawyer and—whether or not Client has chosen to consult such an independent lawyer—Client agrees that Attorney will have a lien as specified above.

_____(Client Initial Here) _____(Attorney Initial Here)

9. DISCHARGE AND WITHDRAWAL. Client may discharge Attorney at any time. Attorney may withdraw with Client's consent or for good cause. Good cause includes Client's breach of this Agreement, refusal to cooperate or to follow Attorney's advice on a material matter or any fact or circumstance that would render Attorney's continuing representation unlawful or unethical. After services conclude, Attorney will, upon Client's request, deliver Client's file, and property in Attorney's possession unless subject to the lien provided above, whether or not Attorney has been paid for all services and expenses.

10. DISCLAIMER OF GUARANTEE AND ESTIMATES. Nothing in this Agreement and nothing in Attorney's statements to Client will be construed as a promise or guarantee about the outcome of the matter. Attorney makes no such promises or guarantees. Attorney's comments about the outcome of the matter are expressions of opinion only. Any estimate of fees given by Attorney shall not be a guarantee. Actual fees may vary from estimates given.

11. INDEMNIFICATION. Attorney agrees to defend, indemnify, and save harmless Client and its officers, officials, employees, and volunteers from and against all claims, demands and causes of action by third parties on account of personal injuries or death or on account of tangible property damages arising out of the work to be performed by Attorney hereunder and resulting from the negligent act or omissions of Attorney or his agents.

12. ENTIRE AGREEMENT. This Agreement contains the entire agreement of the parties. No other agreement, statement, or promise made on or before the effective date of this Agreement will be binding on the parties.

13. SEVERABILITY IN EVENT OF PARTIAL INVALIDITY. If any provision of this Agreement is held in whole or in part to be unenforceable for any reason, the remainder of that provision and of the entire Agreement will be severable and remain in effect.

14. MODIFICATION BY SUBSEQUENT AGREEMENT. This Agreement may be modified by subsequent agreement of the parties only by an instrument in writing signed by both of them**,** or an oral agreement only to the extent that the parties carry it out.

15. TERMINATION. This agreement shall terminate on January 14, 2015, unless it is extended by mutual consent of the parties.

THE PARTIES HAVE READ AND UNDERSTOOD THE FOREGOING TERMS AND AGREE TO THEM AS OF THE DATE ATTORNEY FIRST PROVIDED SERVICES. IF MORE THAN ONE CLIENT SIGNS BELOW, EACH AGREES TO BE LIABLE, JOINTLY AND SEVERALLY, FOR ALL OBLIGATIONS UNDER THIS AGREEMENT. CLIENT SHALL RECEIVE A FULLY EXECUTED DUPLICATE OF THIS AGREEMENT.

TOWN OF PARADISE

By: _____
Mayor Scott Lotter

DOUGLAS R. THORN

By:_____
Douglas R. Thorn, Attorney at Law

ATTEST:

By:_____
Joanna Gutierrez, CMC, Town Clerk

APPROVED AS TO FORM:

By:_____
Dwight L. Moore, Town Attorney

Town of Paradise
Council Agenda Summary **Agenda Item: 3(g)**
Date: January 14, 2014

Originated by: Gina S. Will, Finance Director/Town Treasurer

Reviewed by: Lauren Gill, Town Manager

Subject: Northern California Cities Self Insurance Fund (NCCSIF) Annual Report

Council Action Requested:

1. Receive and file the annual NCCSIF report, or

Alternatives:

Refer the matter back to staff for further development and consideration.

Background:

"The Northern California Cities Self Insurance Fund (NCCSIF) is an association of municipalities joined together in 1979 to protect Member resources by stabilizing risk costs in a reliable, economical and beneficial manner while providing members with broad coverage and quality services in risk management and claims management." There were eight founding members, and today the membership is twenty-two strong. Elk Grove is the newest member, joining the JPA in 2013.

Each member has a representative and an alternate that serves on the JPA Board. The Finance Director/Town Treasurer and the HR/Risk Manager are the Town's current representatives. Members take turns rotating through the executive committee. The Town of Paradise has just concluded its two year service on the Executive Committee.

The Town of Paradise joined the NCCSIF Liability Program in 1985 and the Workers Compensation program in 1987. Today, the Town participates in the following NCCSIF programs:

Liability Program

"The Liability Program provides coverage for losses Member Entities become legally obligated to pay as damages because of bodily injury, property damage, employment practices liability, personal injury and public officials' errors or omissions." Coverage is provided through three layers:

Banking Fund	$0 - $50,000
Shared Risk	$51,000 - $500,000
Excess Coverage	$501,000 - $40,000,000

Workers' Compensation

"California Workers' Compensation laws require every employer to provide benefits to employees for injury and/or illness arising out of, or in the course of, employment. Statutory benefits prescribed by law include:

- Medical Treatment
- Temporary Disability Payments
- Permanent Disability Compensation
- Rehabilitation
- Death Benefits"

Coverage is provided through three layers:

Banking Fund	$0 - $100,000
Shared Risk	$101,000 - $500,000
Excess Coverage	$501,000 – Statutory Limit (Workers' Comp) $501-000 - $5,000,000 (Employer's Liability)

Property Program

"This year NCCSIF renewed coverage through the Alliant Insurance Services' Public Entity Property Insurance Program. The program provides replacement cost coverage for all building and contents, subject to a $1 billion limit per occurrence and a $5,000 deductible per claim."

Physical Damage Program

This program designed especially for public agencies and rural cities, provides vehicle and mobile equipment protection. It replaces property on a like kind and quality basis. The Town covers vehicles still obligated under lease purchase agreements, fire engines and equipment and other large and expensive vehicles and equipment.

Crime Program

"The NCCSIF Crime Program provides for coverage of employee theft through the National Union Insurance Company, A.M. Best Rated A++ XV." It covers theft, forgery and computer fraud up to $1,000,000.

Employee Assistance Program

"An Employee Assistance Program (EAP) is a worksite-based program designed to assist City employees in identifying and resolving personal concerns, including, but not limited to, health, marital, family, financial, alcohol, drug, legal, emotional, stress, or other personal issues that may affect job performance."

Discussion:

NCCSIF is a well managed and fiscally conservative JPA. The last several years the JPA has released over $15 million in dividends to members to help ease the strain of the recession. The Town has received over $959,000 in dividends the last five years. Even with such release of dividends, the JPA has maintained a healthy cash reserve and equity.

The Liability Program rates per payroll are currently at historic lows. The program is currently rebuilding equity as the program experienced three sizable claims a couple years ago. The Board has voted to not approve any dividends from the program until equity is rebuilt.

The Workers' Compensation program is currently very healthy with healthy equity. The rates are competitive and are actually a little less than the State Fund. Further, unlike traditional insurance coverage, the Town has the opportunity to build equity, earn interest on its banking layers, and to receive dividends.

Fiscal Analysis:

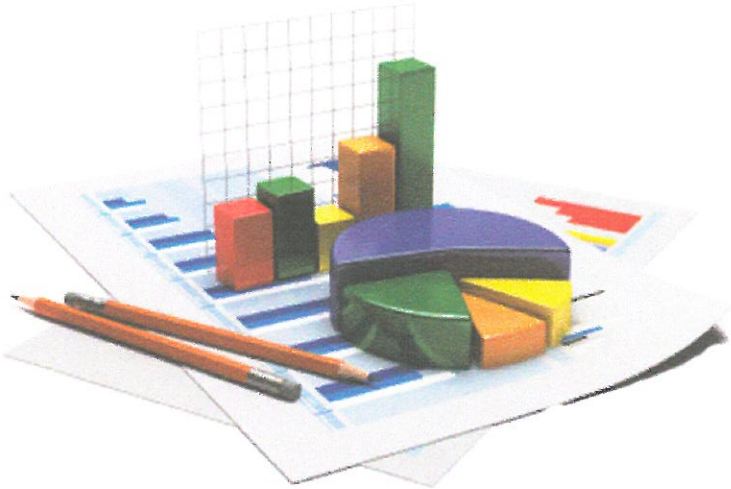
There is no fiscal impact to receiving this report.

NCCSIF

Northern California Cities Self Insurance Fund

A Joint Powers Authority

2013 Annual Report



NCCSIF Program Administrators

Alliant

Alliant Insurance Services, Inc.
1792 Tribute Road, Ste 450
Sacramento, California 95815
Main: (916) 643-2700 – Fax: (916) 643-2750
www.alliantinsurance.com
Corporate License No. 0C36861

NCCSIF 2013 Annual Report
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Letter to Our Members

Dear Members,

We are pleased to present you with the 2013 Annual Report. Through our long association with NCCSIF we have seen many changes take place, as outlined in the History of the JPA. While we have changed many Board Members over the years, we are always impressed by the quality of the new Board Members and the commitment they have to building and maintaining strong programs. New members bring new ideas, interests and energy to the JPA.

The strength of our assets has enabled NCCSIF to increase pricing stability, especially important in these trying financial circumstances. With a goal to reduce the impact of individual members' adverse loss development on premiums and not reduce the financial security the JPA enjoys, we reviewed the rating methodologies and the refund and assessment formulas. While no changes were enacted the review process is crucial to maintaining a healthy and well functioning joint powers authority. As a result of our continuing financial strength, NCCSIF has been able to return over $15 million in dividends to members over the past three years.

NCCSIF continues to work on increasing the Loss Control services and training programs available to Members. Loss Control services now represent an amount equal to 4.96% of the banking and pool layer funding.

NCCSIF operates in an environment that is partially dependent on the insurance market for about one third of the liability costs and about one fifth of the Workers' Compensation Program costs. The JPA has chosen to limit this impact by partnering with other public agencies participating in Excess Joint Powers Authorities. Participation in these excess pools has also increased the level of services available to the members. Our partnership with CJPRMA for liability coverage has resulted in eight years of dividends averaging in excess of $325,000 per year. These dividends are applied to the renewal costs for the Liability Program.

Our commitment is to continue to work for increased levels of claims cost containment to stabilize members' future costs.

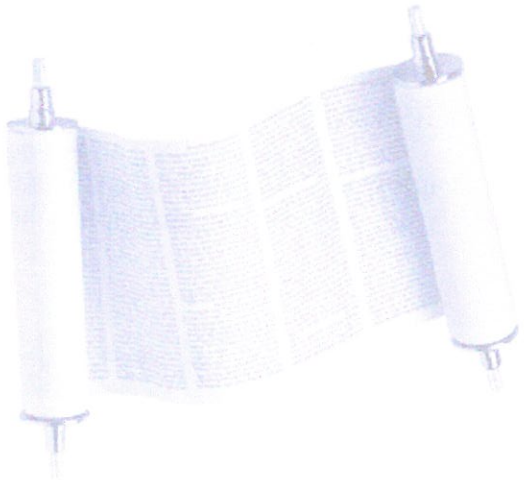
Sincerely,

Michael S. Simmons

Michael Simmons
NCCSIF Program Administrator
Alliant Insurance Services, Inc.

Mission Statement

The Northern California Cities Self Insurance Fund (NCCSIF) is an association of municipalities joined together in 1979 to protect Member resources by stabilizing risk costs in a reliable, economical and beneficial manner while providing members with broad coverage and quality services in risk management and claims management.



History of the JPA

The Northern California Cities Workers' Compensation Fund, a Joint Powers Authority, was first formed in early 1979. It is one of the first pooled municipal insurance programs in the State. The JPA's original purpose was to provide medium-sized Northern California cities a mechanism to self-fund a layer of workers' compensation insurance, as well as to obtain the advantages of group purchase excess insurance. In 1981, a number of the member cities desired to apply the same concepts of pooling to General Liability coverage, Automobile Liability, Errors and Omissions, and Employment Practices Liability. Since that time the group has grown to twenty-two cities that now pool coverage together to a limit of $500,000 for Workers' Compensation and $500,000 for General and Automobile Liability, Errors and Omissions and Employment Practices Liability.

Where originally the JPA relied upon excess coverage from the Commercial Insurance Marketplace, the excess coverage for both Workers' Compensation and Liability are now provided by excess Joint Powers Authorities. These are groups of Joint Powers Authorities and larger individual entities grouped together to pool coverages together and reduce the need for commercial coverage.

In 1987, the name of the Joint Powers Authority was changed to Northern California Cities Self Insurance Fund (NCCSIF).

NCCSIF also offers group purchase of Property, Crime and an Employee Assistance Program. As the cost to purchase these coverages on a group basis continues to be less than the cost to self-insure, these are not self-insurance programs.

In 2008 NCCSIF started providing Wellness services to Members. During 2009, NCCSIF enhanced its risk management services through partnerships with Target Safety and Risk Management Solutions to provide online loss prevention services to the membership. During 2010 the City of Ione joined NCCSIF.

In 2012 NCCSIF hired Bickmore as their Risk Control Services Vendor.

In 2013 the City of Elk Grove joined NCCSIF's Workers' Compensation program.

Northern California Cities Self Insurance Fund

NCCSIF Historical Timeline

1979	1980	1981	1982	1983	1984	1985
The Northern California Cities Workers' Compensation Fund, a Joint Powers Authority, was formed in early 1979. It is one of the oldest pooled municipal insurance programs in the State. The JPA's purpose is to provide small Northern California cities a mechanism to self-fund a layer of workers' compensation insurance, as well as to obtain the advantages of mass purchasing excess insurance. Members who joined the pool: Anderson, Corning, Folsom, Galt, Jackson, Placerville, Rio Vista and Willows	Additional members join the WC JPA: Gridley Rocklin	A number of the member cities desired to apply the same concepts of pooling to Automobile and General Liability coverage. LIABILITY Anderson Corning Folsom Galt Gridley Rocklin Willows WC Auburn	City of Nevada City joins the WC JPA	Additional members join the WC JPA: Dixon Red Bluff	City of Lincoln joins the WC JPA	A number of the member cities join the Liability JPA: Lincoln Oroville Paradise Rio Vista
1986	**1987**	**1988**	**1990**	**1991**	**1992**	**1993**
Additional members join the Liability JPA: Auburn Red Bluff	The name of the Joint Powers Authority was changed to Northern California Cities Self Insurance Fund (NCCSIF). NCCSIF offers group purchase of Property, Crime & EAP programs. These programs are not self-insurance. The following members joined the JPA: LIABILITY City of Jackson WC Town of Paradise	Additional members join the Liability JPA: Colusa Dixon	The City of Oroville joins the WC JPA	The City of Marysville joins the Liability JPA NCCSIF begins shared risk program for Liability and Workers' Compensation NCCSIF begins a Risk Management Committee Alliant - Marylin Kelley joins and becomes Program Administrator	The City of Yuba City joins the Liability JPA Additional members join the WC JPA: Colusa Marysville Yuba City	NCCSIF is awarded the CAJPA Accreditation with Excellence Achievement
1996	**2003**	**2007**	**2008**	**2009**	**2010**	**2013**
NCCSIF joins CJPRMA for Excess Liability Coverage	NCCSIF joins CPEIA for Excess Workers' Compensation Coverage	NCCSIF's Shared Risk Liability Layer changes from $500,000 to $1,000,000 and NCCSIF joins CSAC-EIA for Excess Workers' Compensation Coverage	NCCSIF Revises its Dividend Formula and Distributes $6M to Members Multiple risk management services are paid for by an administrative surplus: BackSafe for Fire and Public Works, Wellness Programs, Lexipol Daily Training Bulletin for PDs	NCCSIF is once again awarded the CAJPA Accreditation with Excellence Online risk management services are enhanced through partnerships with TargetSafety and Risk Control Online.	City of Ione joins Liability and Workers' Compensation JPA	City of Elk Grove joins Workers' Compensation JPA

Board of Directors

The Board of Directors of NCCSIF is composed of a representative appointed by the City Council of each member agency. An Alternate Member is also appointed to serve in the absence of the appointed representative. Only the Board Member – or in the Board Member's absence the Alternate Member – has voting authority.

Current Members are as follows:

Member	Board Director	Alternate	Member	Board Director	Alternate
City of Anderson*	Jeff Kiser	Vacant	City of Lincoln	John Lee	Sheila VanZandt
City of Auburn	Shari Conley	Joanna Belanger	City of Marysville	Matt Michaelis	Walter Muncheimer
City of Colusa	Toni Benson	Cathy Higgins	City of Nevada City	Catrina Olson	Vacant
City of Corning*	John Brewer	Tom Watson	City of Oroville	Liz Ehrenstrom	Vacant
City of Dixon	Steve Johnson	Kim Stalie	City of Placerville*	Dave Warren	John Driscoll
City of Elk Grove	Brad Koehn	Jonathan Hobbs	City of Red Bluff	Sandy Ryan	Cheryl Smith
City of Folsom*	Bruce Cline	Kristine Wilfong	City of Rio Vista*	Marni Rittburg	Vacant
City of Galt*	Paula Islas	Jason Behrmann	City of Rocklin	Russell Hildebrand	Michael Green
City of Gridley	Karin Helvey	Elisa Arteaga	City of Willows*	Tim Sailsbery	Steve Holsinger
City of Ione	Ed Pattison	Jane Wright	City of Yuba City	Steve Kroeger	Robin Bertagna
City of Jackson*	Michael Daly	Carla Soracco	Town of Paradise	Gina Will	Crystal Peters

**Founding Members*

Executive Committee

The Executive Committee is a standing committee of the Board that acts as a steering committee for overall operation of the Joint Powers Authority and has been delegated certain duties as enumerated in the Bylaws. The Committee is composed of seven-nine voting members and two nonvoting members of the Board selected in accordance with Section 4 of the Bylaws. The President of the Board serves as the Chair of the Committee, while the Vice President, immediate Past President and the Secretary are voting members of the Committee. Remaining voting seats are selected on a rotating geographical basis. Treasurer and CJPRMA Board Member are non-voting members of the Committee. The Program Administrator and the Claims Administrator also attend the meetings, but do not vote.

Members are as follows:

January 1, 2013		January 1, 2014	
City of Auburn	Andy Heath	City of Dixon	Steve Johnson
City of Gridley	Karin Helvey	City of Galt	Paula Islas, *CJPRMA Rep & Secretary*
City of Lincoln	John Lee	City of Lincoln	John Lee
City of Nevada City	Catrina Olson	City of Nevada City	Catrina Olson
City of Oroville	Liz Ehrenstrom, *President*	City of Oroville	Liz Ehrenstrom, *President*
Town of Paradise	Gina Will, *Secretary*	City of Rocklin	Russell Hildebrand, *Vice President*
City of Rocklin	Russell Hildebrand, *Vice President*	City of Rio Vista	Marni Rittburg

Non-Voting Members:

Treasurer	Tim Sailsbery, City of Willows
Program Administration Staff	Alliant Insurance Services, Inc.
Accounting Services Provider	James Marta, CPA
Third Party Claims Administration Staff	York Insurance Services Group, Inc.

Claims Committee

The Claims Committee reviews claims in the Shared Risk Layer, authorizes settlements and makes determinations on coverage. Authority is granted to the Executive Committee to act as or appoint members of the Claims Committee. All claims are reported to the Claims Administrator regardless of the claim values. The Claims Committee meets as necessary to review all open reported claims likely to involve the Authority's shared risk portion of the Liability and Workers' Compensation Programs. NCCSIF has retained the services of York Insurance Services Group, Inc. as Claims Administrator, which is responsible for performing or overseeing the performance of all necessary investigation of claims, assignment of legal defense firms, as well as overseeing legal defense. The Claims Administrator also provides reports containing the status of claims and the projected reserves to the Claims Committee.

Members have authority to settle claims in their Banking Layer up to $50,000 ($100,000 for Folsom) for Liability and $100,000 for Workers' Compensation. The Claims Committee has authority up to $250,000. The Board of Directors has authority to settle claims over $250,000 up to the SIR of $500,000 for Liability and $500,000 for Workers' Compensation. The Claims Committee is granted authority to deny claims and to refer claims to coverage counsel for opinions of coverage.

NCCSIF hires an independent claims auditor to perform an audit for the Liability Program every odd numbered year and an audit for the Workers' Compensation Program every even numbered year.

Claims Committee members are selected from the Executive Committee annually at the Spring meeting, except for the CJPRMA representative who is required.

Finance Committee

The NCCSIF Board of Directors has delegated financial investment authority to the Executive Committee and the Executive Committee has discharged the responsibilities and duties to the Finance Committee. The members of the Finance Committee members are appointed by the Executive Committee as follows:

> *The Treasurer and other Board members or Alternates are appointed by the Executive Committee. It is desired that one member of the committee shall be a finance or assistant finance director of an NCCSIF member.*

A Treasurer is annually elected by the Board of Directors and serves as the Chair of the Finance Committee.

Finance Committee Members:

City of Yuba City	Robin Bertagna
City of Yuba City	Steve Kroeger
City of Willows	Tim Sailsbery

Duties of the Finance Committee include:

1. Discuss strategies with the Investment Advisors in accordance with the Investment Policy and direct overall investment strategy.
2. Review cash management requirements on an annual basis and give direction to the accountant to make adjustments.
3. Review the independent auditor's proposed audit scope and approach.
4. Review the performance of the independent auditor.
5. Recommend the appointment to the Executive Committee of the independent auditor and review audit fees.
6. At the direction of the Board or the Executive Committee, review with counsel any legal matters that could have significant impact on the financial statements.
7. Review and make recommendations to the Board or the Executive Committee to maintain or change the Investment Policy in accordance with California Government Code.
8. Advise the Board and the Executive Committee on other financial matters.

Risk Management Committee

NCCSIF has had an active Risk Management Committee since 1991. The Committee is comprised of one member from each City and over the years the Committee has been enriched by the services of employees from Public Works, Finance, Human Resources, Police and Fire Departments as well as Assistant City Managers who have all worked to provide a broad range of safety services to the members. The Risk Management Committee has adopted the following Loss Control Policy Statement:

The Northern California Cities Self Insurance Fund, a Joint Powers Authority, is concerned for the welfare and safety of the JPA Members, Employees and the Public they serve.

The JPA acknowledges its obligation to encourage its members to provide the safest possible working conditions for employees and, as a government service organization, to provide a safe environment for the public that use their services and facilities.

It is the JPA's philosophy that the consideration of the worker safety, and the safety of the general public, bears as high a priority as the decision to commit funds or to complete a task. Our goal is to foster loss control programs to guard against all types of accidents and incidents wherever possible.

Recognizing the above goals, the Committee annually approves (and upon approval oversees expenditures of) a Risk Management Budget for submission to the Board of Directors. That budget represents almost 5%of the NCCSIF banking and pooled layer funding. These services include:

Contract Risk Management Services
Consulting by Bickmore including:

- Hotline Services – one of the most popular services provided
- Hazard & Safety Assessments
- Program/Policy Development
- On-site Training
- Safety Materials
- Webinars – WC and Liability Risk Management Topics
- Training Matrix

Safety Library
On-line Video Libraries are available through the Bickmore website, riskcontrol.brsrisk.com as well as the CSAC- EIA website, csac-eia.org.

Seminars and Training Sessions
Selection of topics determined annually by the Committee including:

- Bickmore: on-site sessions covering employment issues such as Harassment, Skills for Supervisors, and e-mail communications
- TargetSolutions and online training services on a variety of topics including OSHA Compliance and Employment Practices
- My Safety Officer and Risk Control Online: online programs to assist in the management and employment and safety training requirements for employees
- Wastewater Services Safety: updates wastewater safety policies at the City level on an as needed basis

Conference Attendance
Sponsorship of members for attendance at the Annual PARMA Risk Management Conference.

Website
Maintenance of the NCCSIF website, www.nccsif.org, including a "Risk Management" tab where members can access Risk Management information.

Additionally, the Committee has adopted and frequently reviews ten policies and procedures on various topics:

P & P NUMBER	SUBJECT	EFFECTIVE DATE	TYPE
RM-1	Compliance with Risk Management Standards	06/14/96	Mandatory
RM-2	Driving Standards	04/24/09	Mandatory
RM-3	Sidewalk Maintenance Liability Standards	01/11/08	Advisory
RM-4	Use of Public Facilities	01/11/08	Advisory
RM-5	Unlawful Harassment Policy	04/15/10	Mandatory*
RM-6	Approval of Coverage for Skateboard Parks	12/19/08	Mandatory
RM-7	Pool Operation	01/14/10	Advisory
RM-8	Development and Operation of Bicycle Parks	10/24/03	Mandatory
RM-9	Model Sewer Overflow and Backup Response	04/28/06	Advisory
RM-10	Risk Management Committee Composition & Duties	05/20/10	Mandatory

While every member **must** have a harassment policy in place that includes certain key issues, the sample policies included are advisory only. During the past year, due to changing needs of the Members the Risk Management Committee has been reviewing services from all risk management service providers. NCCSIF hired Bickmore as their Risk Control Services provider who is in the process of performing Hazard and Risk Assessments for each member

Police Risk Management Committee

The Police Risk Management Committee is a subcommittee of the Risk Management Committee. Public safety is the highest category of losses for liability and workers' compensation, both in frequency and severity of claims. Because police departments need direct input at developing or reviewing any additional procedures, it was agreed that the most effective way to tackle their risk control issues was to form a separate risk management committee for police departments.

Those members who have police departments are eligible to participate in the Police Risk Management Committee. One of the first issues tackled upon formation was to contract for services with Lexipol to develop and annually update police procedure manuals for all interested members. In addition, Lexipol now provides all interested police departments with their Lexipol's Daily Training Bulletin, which is an online service developed to keep officers apprised of their department's various policies and procedures on a daily basis. Risk management services through Lexipol continue to be a major activity of the Committee, as well as reviewing major claims for risk management practices and reviews of equipment that could be improved upon to reduce future losses.

The Police Risk Management Committee is working with Tom Kline from Bickmore to coordinate and organize training seminars by leading law enforcement professionals, designed to reduce the various risk exposures generated by the performance of regular Police duties in the current legal environment.

The Committee meets three to four times a year.

Liability Program

The Liability Program provides coverage for losses Member Entities become legally obligated to pay as damages because of bodily injury, property damage, employment practices liability, personal injury and public officials' errors or omissions. Coverage is included for the Member Entity and its commissions, agencies, districts, authorities, boards, or similar entities coming under the Member Entity's direction or control. There are nineteen (19) members in the liability program. Quality claims services and increasing attention on the part of the cities to loss control efforts, such as insurance requirements for contractors have led to these results. While normally a recession results in higher claims costs, this is not the case with the current recession for north central California.

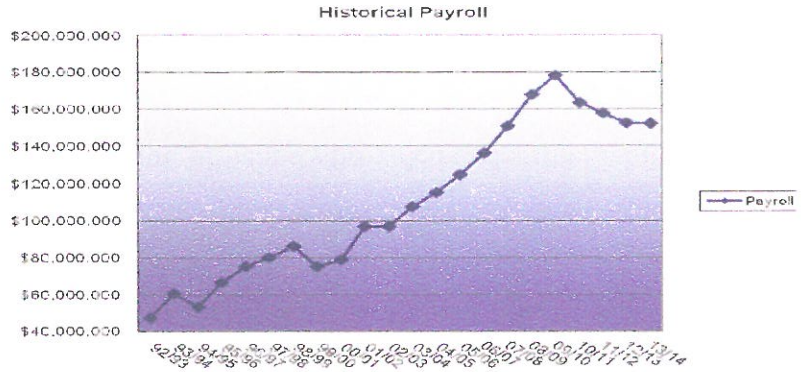
The total limit of liability provided under the Liability Program is $40,000,000 per occurrence. The program is divided into three separate coverage layers - Banking Fund, Shared Risk and Excess Coverage - as noted below:

Banking Fund	$0 - $50,000
	(Folsom is $0 - $100,000)
Shared Risk	Retained Limit - $500,000
Excess Coverage	$500,000 - $40,000,000

All three layers include self-insurance. The Banking Fund and the Shared Risk layers are funded through NCCSIF, while the Excess Coverage is funded through the California Joint Powers Risk Management Authority (CJPRMA). Since 1994 NCCSIF has participated in this Excess JPA (CJPRMA) which shares risk up to $5,000,000 with three other JPA's and 17 larger individual cities. CJPRMA purchases excess reinsurance for total limits of $40,000,000 inclusive of NCCSIF's retained limit of $500,000 per occurrence. As a result of sharing risk to $5,000,000 CJPRMA is largely removed from the impact of insurance market conditions. NCCSIF also received dividends from the CJPRMA program of $207,201 which were credited to the year's deposits and liability shared risk assessments.

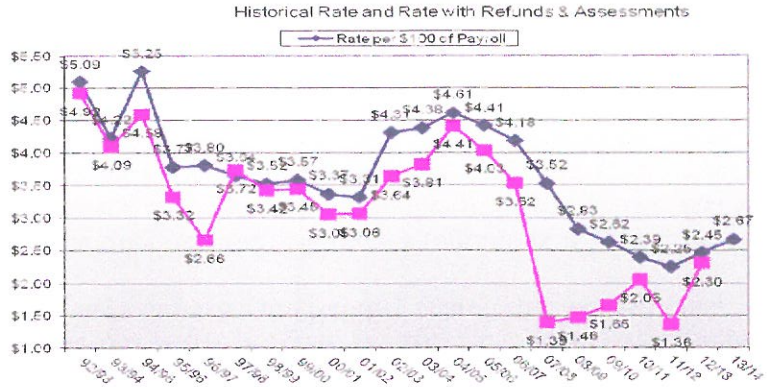
Total funding for the Liability Program is $3,738,214. This represents a 7% increase from the prior year. The Banking Fund returned $556,160? to Members in the form of dividends and assessed $86,396? this year. No dividends were returned to members this year.

This chart shows payroll growth which had been close to or in excess of 10% annually in the past, has now leveled out at about 15% below the height five years ago.

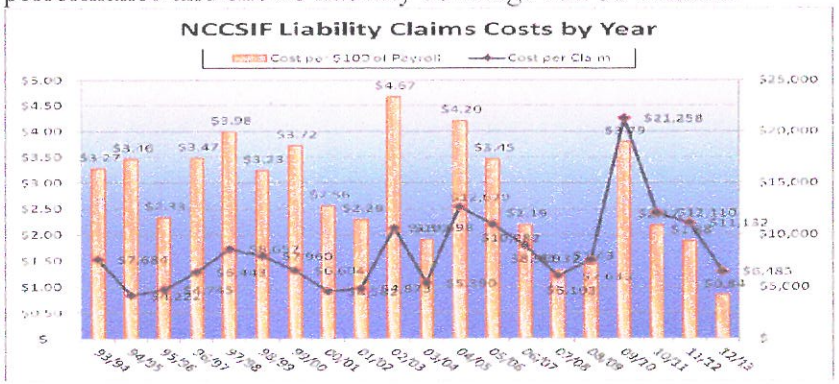


The Board of Directors annually reviews the Banking Fund's and Shared Risk's financial status to evaluate the appropriateness for declaring either a refund or an assessment.

The following chart shows the historical rates with and without the impact of refunds and assessments. As you can see, for the past few years, the program rates have reached historic lows. Due to the fact that NCCSIF doubled the size of the Shared Risk Layer from $500,000 to $1,000,000, the claims cost obligations for that layer have increased since 2007. Due to unfavorable claims development in 2011 and 2012, NCCSIF made the decision to lower the Shared Risk Layer from $1,000,000 back to $500,000. The increases in the rate are due to the increase in anticipated losses and also to decreases in payroll. The increase in the net rate is due to the Shared Risk Layer Assessment for the 12/13 fiscal year.



Our Liability claims administrator is York Insurance Services, who has been a long term partner with NCCSIF. The claims administrator is responsible for advising the merits of each claim and the appropriate action to be taken, as well as providing all necessary investigation of claims and overseeing the legal defense. The following chart shows historical claims performance and shows liability coverage can be volatile.



Workers' Compensation

California Workers' Compensation laws require every employer to provide benefits to employees for injury and/or illness arising out of, or in the course of, employment. Statutory benefits prescribed by law include:

- Medical Treatment
- Temporary Disability Payments
- Permanent Disability Compensation
- Rehabilitation
- Death Benefits

The total limit of liability provided under the Workers' Compensation Program is limited only by State Law also known as Statutory Limits for Workers' Compensation and $5,000,000 for Employers' Liability. 22 cities participate in the program. The program is divided into three separate coverage layers. Banking, Shared Risk (which are self funded) and Excess Coverage as noted below:

Banking Fund:	$0 - $100,000($50,000 for Ione)
Shared Risk:	Banking - $500,000
Excess Coverage:	$500,000 - Statutory / Workers' Compensation $500,000 - $5,000,000 / Employer's Liability

This program has seen a reduction in the number of claims from a high of 458 in 2002 to 313 in 2012. At the same time the per claim costs have gone from a high of $20,090 in 2000 to $12,811 in 2012. Part of this reduction is due to the fact that the cost of a claim is not fully known for 5-7 years after the occurrence, but this also reflects the legislative reforms passed in 2003 and the reduction in numbers of employees. In spite of these reductions there is still an increase in claims medical costs. The CPI index for Medical costs continues to outpace the CPI index as whole.

This means that medical costs will continue to have a major impact on total NCCSIF loss costs. They currently represent 49% of claims costs.

The total cost of the program for 2012-13 was $6,929,165, before dividends, a reduction of 2.6% over the prior year. Payrolls decreased by 3.02% reflecting stabilization of the impact of the recession.

The following chart on the next page shows the historical Workers' Compensation payrolls and reflects the addition of Elk Grove this fall:

Northern California Cities Self Insurance Fund

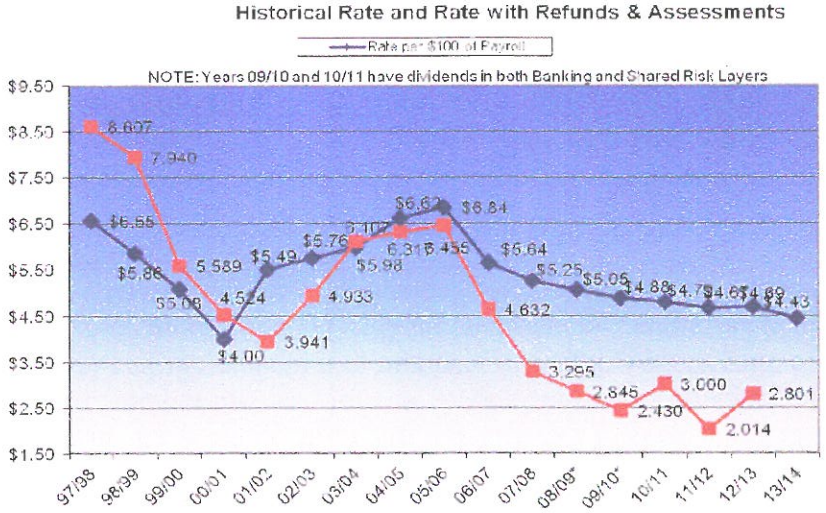
The Excess Coverage is provided through a joint powers authority, the CSAC Excess Insurance Authority (EIA). Since joining this group in 2003, the cost of Excess Insurance for NCCSIF has remained relatively stable with a rate of $.42 in 2003 to the current rate of $.35.

In spring of 2012, NCCSIF returned $2,945,185 in dividends to its members and assessed only $157,388.

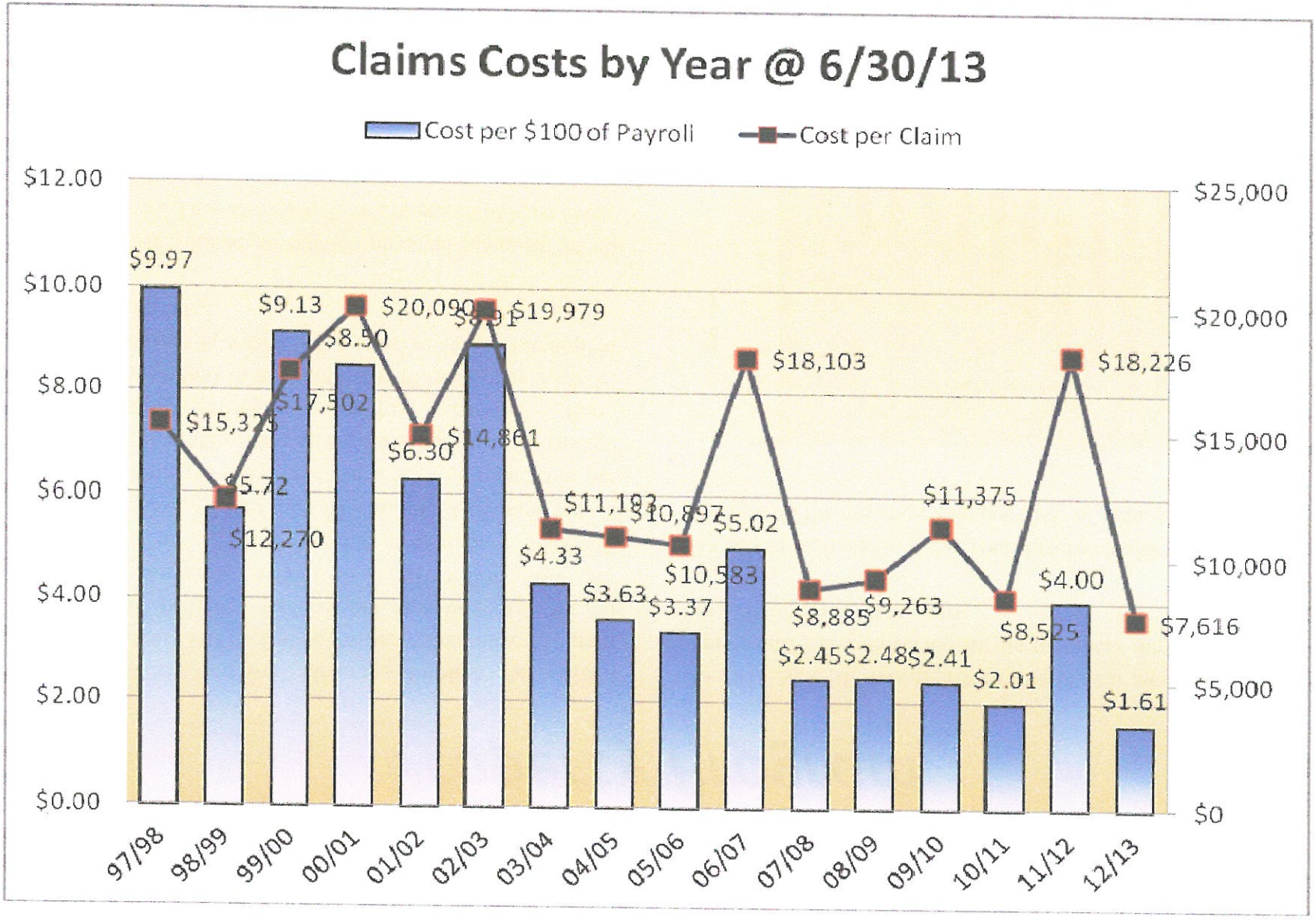
These excellent financial results are due to a combination of the legislative changes in 2003 and 2004. The development of NCCSIF cost containment strategies, such as encouraging return to work temporary placement for injured workers, increased loss control training for the members, and quality claims services from York.

Annually, the Board of Directors will review the Banking Fund's and Shared Risk's financial status to evaluate the appropriateness for declaring either a refund or an assessment.

The following chart shows the historical rates with and without the impact of refunds and assessments:



Claims administration services are provided by contract with York. The claims administrator is responsible for advising the member on the merits of each claim and the appropriate action to be taken, as well as providing for necessary investigation of claims and oversight of legal defense. The following chart on the next page shows Workers' Compensation costs by claim and payroll.


Claims Costs by Year @ 6/30/13
Cost per $100 of Payroll
Cost per Claim
$12.00
$10.00
$8.00
$6.00
$4.00
$2.00
$0.00
$25,000
$20,000
$15,000
$10,000
$5,000
$0
$9.97
$15,325
$5.72
$12,270
$9.13
$17,502
$8.50
$20,090
$6.30
$14,861
$8.91
$19,979
$4.33
$11,193
$3.63
$10,897
$3.37
$10,583
$5.02
$18,103
$2.45
$8,885
$2.48
$9,263
$2.41
$11,375
$2.01
$8,525
$4.00
$18,226
$1.61
$7,616
97/98
98/99
99/00
00/01
01/02
02/03
03/04
04/05
05/06
06/07
07/08
08/09
09/10
10/11
11/12
12/13

Property Program

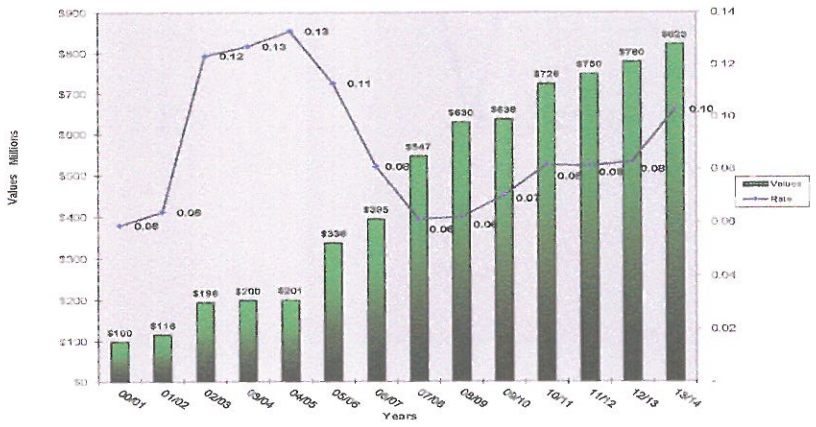
This year NCCSIF renewed coverage through the Alliant Insurance Services' Public Entity Property Insurance Program (PEPIP). PEPIP provides replacement cost coverage for all buildings and contents, subject to a $1 billion limit per occurrence and a $5,000 deductible per claim. NCCSIF members purchase Boiler & Machinery Coverage at a $100,000,000 limit per occurrence at a $2,500 deductible per claim. Selected members also insure for auto physical damage and flood coverage through the program excess of a flood deductible of $100,000 or $250,000 for Flood Zones A & V. The PEPIP program is very comprehensive in the breadth of the coverages provided.

In 2006, NCCSIF funded an outside physical appraisal of all member locations. This service will be continued at least every five-seven years. Keeping property values current is increasingly difficult as construction costs fluctuate annually due to the current financial crisis and also to worldwide competition for basic building materials.

NCCSIF increased the total values insured from $750 million in 2011 to $809 million in 2012 and to $823 million in 2013. Membership in PEPIP has grown to fifteen NCCSIF members.

In 2012 NCCSIF has approved funding for an outside property appraisal to be completed for its members during the 2012/13 and 2013/14 program years.

The chart below shows the Total Insured Values in the program along with the coverage rate per $100 of values.



Program participants are: Cities of Anderson, Auburn, Colusa, Dixon, Folsom, Galt, Gridley, Ione, Lincoln, Marysville, Red Bluff, Rocklin, Yuba City and Town of Paradise

Physical Damage Program

Selected Members are enrolled in the Western States Public Entity Physical Damage Program. The program was designed specifically for public agencies – including rural cities, sanitation districts, and wastewater districts – with a limited number of higher valued vehicles. The program was expanded to include other types of vehicle and mobile equipment.

It provides an All Risk Equipment Floater including earthquake and flood for scheduled equipment on file with the Company through Beazley Lloyd's Syndicate. Claims valuation is on a replacement cost valuation of property according to the cost of replacing it with property of a like kind and quality basis (not new for old).

Currently eleven of the twenty one NCCSIF Members are enrolled in this program. The deductible varies for each member as selected annually and covers all risks of direct physical loss or damage from any external cause, including general average and salvage charges, except perils excluded.

Crime Program

The NCCSIF Crime Program provides for coverage of employee theft through the National Union Insurance Company, A.M. Best Rated A++ XV.

Fifteen of the twenty-two NCCSIF members participate in the Crime program. The per-occurrence limit was increased to $1,000,000 in 2007. Coverage is subject to a $5,000 deductible. Some members have saved as much as 25-40% in premiums by taking advantage of the group rate savings.

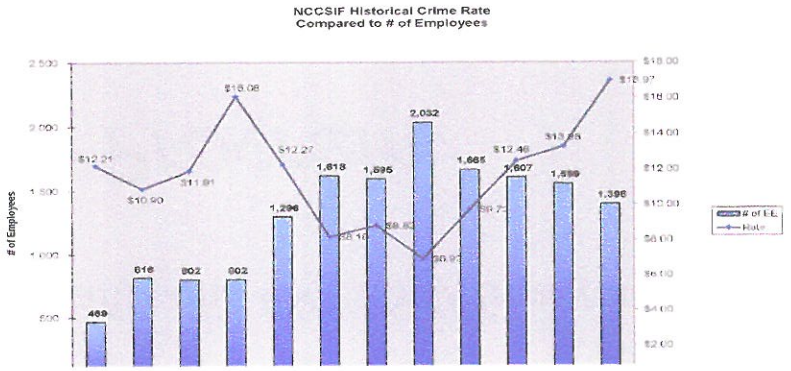
Program 15 participants are Cities of Anderson, Auburn, Corning, Colusa, Dixon, Galt, Gridley, Ione, Lincoln, Marysville, Oroville, Red Bluff, Rocklin, Yuba City and Town of Paradise.

Program Highlights:

- Includes volunteer workers other than fund solicitors as employees
- Includes specified directors and trustees on committees as employees
- Includes chairperson and members of committees as employees
- Deletes Treasurer/Tax Collector and Bonded Employees exclusions
- Includes specified non compensated officers as employees
- Specified City Officials Coverage Endorsement (for cities that are required by their city charter to individually bond certain employee or officer positions)

Insuring Agreements	Limits of Insurance
Employee Theft – Per Loss Coverage Including Faithful Performance of Duty	$1,000,000
Forgery or Alteration including Credit, Debit or Charge Card Forgery	$1,000,000
Computer Fraud	$1,000,000
Investigative Expenses	$50,000

Limits of Insurance are subject to a $5,000 Deductible



Employee Assistance Program

An Employee Assistance Program (EAP) is a worksite-based program designed to assist City employees in identifying and resolving personal concerns, including, but not limited to, health, marital, family, financial, alcohol, drug, legal, emotional, stress, or other personal issues that may affect job performance. The intent is to positively impact City productivity.

As part of the effort to control Workers' Compensation costs many NCCSIF members participate in group purchase of an Employee Assistance Program. Eighteen members currently participate in the Employee Assistance Program and a majority of those also participate in the Wellness program.

NCCSIF's current EAP carrier, ACI, has provided services for NCCSIF's participating cities since 2002. ACI Specialty Benefits offers EAP, Worklife and Wellness models. The program NCCSIF participates in features an unlimited EAP benefit package which includes consultation, training, CISD response, childcare, eldercare, legal and financial consultation. ACI's EAP always includes employees and ALL of their family members – whether or no they live in the home.

ACI has worked to keep utilization rates above 10%. This demonstrates the value to employees who are taking advantage of the services this program has to offer. In 2008 NCCSIF's Risk Management Committee approved free participation for all interested members in the AppleCore Wellness program through ACI as well.

ACI has guaranteed rates to NCCSIF members since 2005. Since then ACI has provided coverage with no increase, guaranteed through 2011. During the July1, 2012 renewal, the rate had been increased by 4%.

The program offers three different service levels:

- 3 visits per employee per year at a cost of $2.16 per employee per month, or
- 6 visits per employee per year at a cost of $2.34 per employee per month
- 6 visits + AppleCore per employee per year at a cost of $2.34 + $0.93 per employee per month

Financial Overview

The following report reflects on the financial condition of Northern California Cities Self Insurance Fund (NCCSIF) for the fiscal year ended June 30, 2013. It is provided in order to enhance the information in the financial audit, and should be reviewed in concert with that report.

Financial Highlights, fiscal years ended June 30, 2012 and 2011

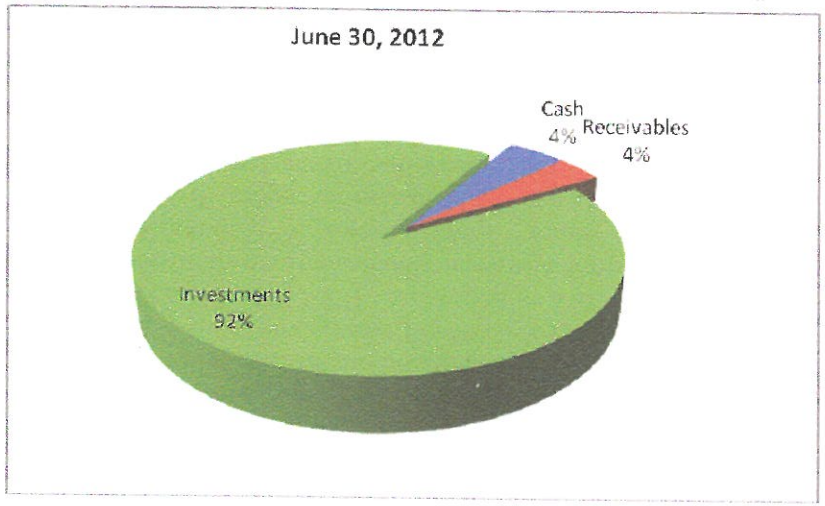
- The net loss for the fiscal year ended June 30, 2013 was $5,770,434. This loss is principally due to dividends to members of $4,236,073, a net increase in prior years claim liabilities of $2,063,327 and a net loss from investments of $70,118 due to unfavorable changes to fair market value. Without a return of equity to members the program would have shown net loss of $1,534,361.
- The net loss for the fiscal year ended June 30, 2012 was $4,786,706. Dividends to members of $4,417,281 were approved in the fiscal year 2012. Increases to prior years claims liabilities from the liability program totaled $3,619,779. Without the return of equity to members the program would have shown net loss $369,425
- Total operating revenues for fiscal year 2013 were $13,099,676, an increase of 6% or $734,081 as compared to fiscal year 2012. This increase is primarily due to the conscious decision of the board to increase funding for the liability and workers' compensation programs..
- Total operating revenues for fiscal year 2012 were $12,365,595 a decrease of 7% or $914,387 as compared to fiscal year 2011. This decrease is primarily due to the decision of the board to decrease premiums for the liability and workers' compensation programs in accordance with recommendation from the actuary.

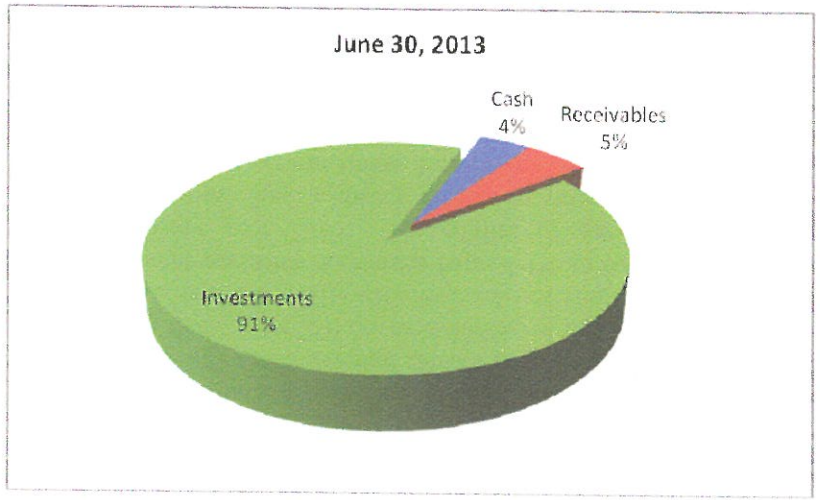
Northern California Cities Self Insurance Fund

Pool-Wide Financial Analysis

	June 30, 2013	Percent	June 30, 2013	Percent	June 30, 2012	Percent
Current Assets	$ 10,237,879	23%	$ 11,042,321	22%	$ 7,677,159	15%
Noncurrent Assets	34,380,597	78%	38,065,068	78%	42,765,401	85%
Total Assets	**44,618,476**	**100%**	**49,107,398**	**100%**	**50,442,560**	**100%**
Current Liabilities	1,763,450	4%	2,370,650	5%	2,666,256	5%
Claim Liabilities	35,461,518	79%	33,572,7976	68%	29,825,666	59%
Total Liabilities	**37,224,968**	**83%**	**35,943,447**	**73%**	**32,491,916**	**64%**
Net Assets	**7,393,508**	**17%**	**13,163,942**	**27%**	**17,950,648**	**36%**
Total Liabilities and Net Assets	**44,618,476**	**100%**	**49,107,389**	**100%**	**50,442,560**	**100%**

Total Assets by Type at June 30, 2012 and June 30, 2013



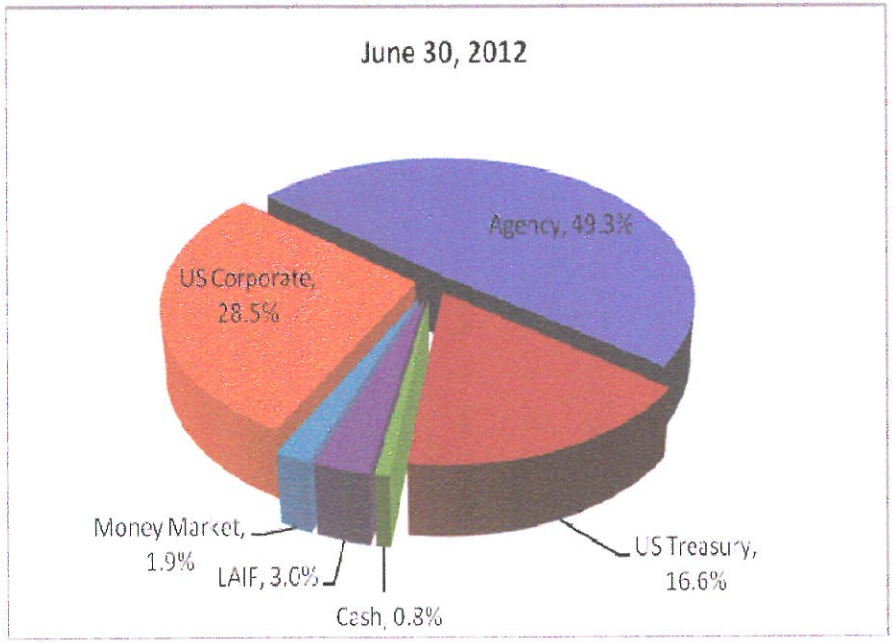


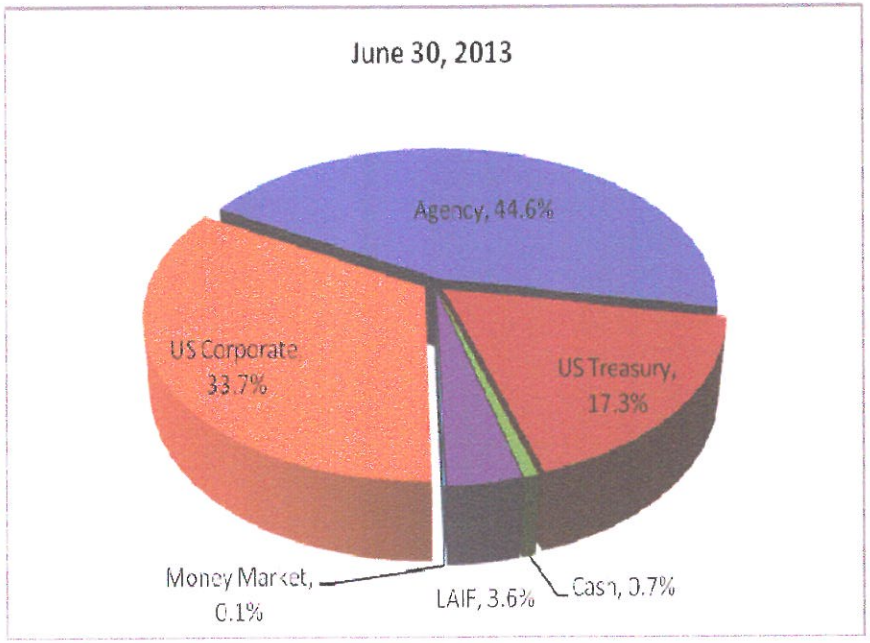
Northern California Cities Self Insurance Fund

Investment revenues are used to offset program costs wherever possible and reduce the required member contributions. The overall investments of the pool decreased in 2011-2012 from $46,501,544 to $45,088,684 and in 2012-2013 decreased to $40,508,952. NCCSIF invests those funds not immediately necessary for payment of claims in order to optimize the rate of return. Funds are invested in a manner that will protect principal, allow for cash flow needs and optimize returns, and are in conformity with all federal, state, and local statutes governing such investment of public funds. Those assets needed for current operations are maintained by the Local Agency Investment Fund (LAIF) in Sacramento, which is administered by the State Treasurer's Office.

The investment market performance has declined in the past two years. For example, the average rate of return for funds invested in LAIF during fiscal year 2012 was 0.358%, in 2013 the average rate of return was 0.298%. The effective rate of return for the overall JPA investment portfolio decreased from 4.1% in fiscal year 2012 to (0.2%) in fiscal year 2013. The ability of these funds to earn investment income has a direct effect on program rates, as this income is used to discount future liabilities. When investments fall short of projections, additional funding may be required to meet actuarial estimates.

Components of NCCSIF Portfolio at June 30, 2012 and June 30, 2013





NCCSIF Statements of Revenue, Expenses, and Changes in Net Assets

	2013	2012	Percent Change	2012	2011	Percent Change
Operating Revenues	$ 13,099,676	$ 12,365,595	6%	$ 12,365,595	$ 13,279,982	-7%
Provision for Claims	10,464,233	10,470,894	0%	10,470,894	7,160,389	46%
Dividends	4,236,073	4,417,281	-4%	4,417,281	6,452,113	-32%
Insurance Premiums	2,042,806	1,995,581	2%	1,995,581	1,970,875	1%
Administration	2,056,880	2,079,978	-1%	2,079,978	1,953,346	6%
Total Expenses	18,799,992	18,963,734	-1%	18,963,734	17,536,723	8%
Non-operating:						
Investment Income	(70,118)	1,811,433	-104%	1,811,433	1,280,054	42%
Net Income (Loss)	(5,770,434)	(4,786,706)	21%	(4,786,706)	(2,976,687)	61%
Beginning Net Assets	13,163,942	17,950,648	-27%	17,950,648	20,927,335	-14%
Ending Net Assets	$ 7,393,508	$ 13,163,942	-44%	$ 13,163,942	$ 17,950,648	-27%

Non-operating revenues decreased from $2,424,358 to $1,280,054 for 2010 and 2011, respectively. Non-operating revenues increased by 41% in fiscal year 2012 to $1,811,433. The slight increase was due to changes in the investment portfolio which resulted in slightly better returns. The fair value of investments experienced a net decrease from 2010 to 2011 – with a decrease in 2011 of $510K on the whole portfolio.

Operating expenses, including the provision for insured events, increased by $3.5 million in 2010-2011 to $17,536,723. This increase resulted from an adjustment of the actuary's ultimate loss estimates due to prior year's unfavorable loss development. Operating expenses increased 8% over the total 2011 figure to $18,963,734 in fiscal year 2012. This increase resulted from higher claims related expenses due to an increase in ultimate loss estimates for previous policy years as determined by the actuary.

Staff Members and Consultants

PROGRAM ADMINISTRATORS:

Alliant Insurance Services, Inc.
Michael Simmons, Vice Chair (Peer Review)
Marylin Kelley, Vice President
Joan Crossley, Account Manager - Lead
Johnny Yang, Assistant Account Representative

ACCOUNTING SERVICE PROVIDER:

James Marta & Company
Jim Marta, CPA, ARM
David Becker, CPA

THIRD PARTY CLAIMS ADMINISTRATION

York Insurance Services Group, Inc.

Vendor Relations	Marcus Beverly
Claims Manager - GL	Craig Wheaton
Claims Manager - WC	Ben Burg
Claims Supervisor	Debra Yokota
Claims Supervisor	Kelli Vitale-Carson

INVESTMENT CONSULTANTS:

Chandler Asset Management, Inc.
Kay Chandler, CFA, President and CEO
Martin Cassell, CFA, EVP and Chief Investment Officer
Ted Piorkowski, CFA, VP, Senior Portfolio Manager

INDEPENDENT FINANCIAL AUDITING SERVICES:

Crowe Horwath LLP
Matthew Nethaway, Financial Audit

RISK CONTROL AND ACTUARIAL SERVICES:

Bickmore
Henri Castro, Risk Control Provider
Tom Kline, Risk Control Provider
Jeff Johnston, Risk Control Provider
Mike Harrington, Director, Property & Casualty Actuarial Services

NCCSIF

Northern California Cities Self Insurance Fund
A Joint Powers Authority

The Northern California Cities Self Insurance Fund (NCCSIF) is an association of municipalities joined together in 1979 to protect Member resources by stabilizing risk costs in a reliable, economical and beneficial manner while providing members with broad coverage and quality services in risk management and claims management.

Town of Paradise
Council Agenda Summary **Agenda Item: 3(h)**
Date: January 14, 2014

Originated by: Gina S. Will, Finance Director/Town Treasurer

Reviewed by: Lauren Gill, Town Manager

Subject: Animal Shelter Donation

Council Action Requested:

1. Accept and acknowledge animal shelter donation of $600.00 from Paradise Community House.

Background:

Currently the annual $12.00 per parcel (Measure N) assessment coupled with special service fees is insufficient to cover all the salary, benefits and expenditures of running the animal shelter and providing animal control services to the community. The Animal Control Fund, even at reduced staffing levels, is currently depending on community donations to supplement the revenues and balance the fund annually.

Discussion:

Loretta Griffin of Paradise Community House, 4929 Foster Road, Paradise, is aware of this financial situation, and so the organization issued two donation checks, the first in November for $300.00 and another in December for $300.00 to be used to support the animal shelter.

Fiscal Analysis:

The $600.00 will be applied to fund 7811 Animal Control Misc. Donation Fund and will be transferred to fund 2070 the Animal Control Fund as needed to cover animal shelter expenditures.

TOWN OF PARADISE
COUNCIL AGENDA SUMMARY
DATE: January 10, 2014

ORIGINATED BY: Paul T. Derr, Public Works Manager **AGENDA ITEM:** 3 (i)

REVIEWED BY: Lauren Gill, Town Manager

SUBJECT: Donation of $382.00 to Tree Replacement Fund from Jeff Rolls Logging.

COUNCIL ACTION REQUESTED: Accept a donation of $382.00 from Jeff Rolls Logging to the Tree Replacement fund (7623.00.0000.5203) for dead tree replacement within the Town's rights-of-way.

BACKGROUND: Many times over the last several years, Jeff Rolls has hauled way dead and downed trees after storms, many times in adverse weather conditions. He has the capability of picking up and self-loading large trees which provides much assistance and relief to the public works staff. Mr. Rolls provides this service at no cost to the Town—saving the Town thousands of dollars.

Recent examples of his service to the Town include the removal of a large-diameter, dead, Ponderosa Pine tree near the Skyway/Clark intersection, and a large Ponderosa Pine on the Paradise Memorial Trailway. With this effort, he saved the Town approximately 20 staff hours, for an estimated savings of $1,000. The estimated cost to remove the trees was $5,000. After working with PG&E tree crews and Mr. Rolls, the cost for the removals ended up being less than $500. The value of the timber removed and hauled away was $382.00, which he would like to donate to the Town.

Although Mr. Rolls may not be able to provide this type of assistance in the future because his equipment does not meet the new state regulations regarding vehicle air quality, Mr. Rolls would like to donate the value of the timber that was removed and hauled away ($382.00.) He would like the funds to be placed in the Tree Replacement fund to offset the cost of dead tree replacement.

According to Town Resolution #96-17, whenever a donation is received for a specific purpose, the donation shall be offered directly to the Town Council for acceptance.

FINANCIAL IMPACT: The donation of $382.00 will help offset future costs of tree replacement for the Town of Paradise.

Town of Paradise
Council Agenda Summary **Agenda Item: 5(a)**
Date: January 14, 2014

Originated by: Colette Curtis, Administrative Analyst

Reviewed by: Lauren Gill, Town Manager

Subject: **Public Hearing for the Community Development Block Grant Program (CDBG) 2014-2015 Action Plan**

Council Action Requested:

Conduct the first of two public hearings on the Town's Community Development Block Grant Funding for the 2014-2015 program year to solicit input and public comments

Background:

As a HUD established entitlement community, the Town of Paradise receives annual Community Development Block Grant (CDBG) funding from the Department of Housing and Urban Development (HUD). HUD determines the amount of each entitlement grant by a statutory dual formula which uses several objective measures of community needs, including the extent of poverty, population, housing overcrowding, age of housing and population growth lag, in relationship to other metropolitan areas. The Town has not yet received official notification of its funding allocation for the 2014-2015 program year, but we will use last year's funding as starting point to making our Annual Plan. Last year we were allocated $159,159, but it has not been determined whether we will receive the same amount this year. The Town typically receives notification from HUD regarding our award amount in late January/early February.

As a condition of funding, the Town must establish an Annual Plan, or budget, outlining how the community will use its CDBG funds. The first step in the process is to hold a public hearing announcing the award of funds and to inform the community that the Annual Plan process is beginning. Members of the public have several opportunities throughout the process to offer input/comments.

Annual Action Plan and Public Meetings:

Over the next several weeks, staff will prepare a Draft Annual Action Plan. The Plan will be available for public viewing and comment prior to its adoption by Council and prior to submission to the U.S. Department of Housing and Urban Development. The dates of the comment period and public hearings are as follows:

- **Public Hearing No. 2**: Tuesday, February 11, 2014 at 6:00 p.m., or as soon thereafter as possible, in the Town Hall Council Chambers at 5555 Skyway, Paradise, California. This public hearing is to solicit suggestions and/or comments from the public regarding the 2013-2014 CDBG funding priorities and

outlines general information about the CDBG program. The public is encouraged to submit written comments on any aspect of the CDBG funding to Lauren Gill, 5555 Skyway, and Paradise, CA 95969.

- **The Draft Annual Plan** will be available to the public on February 11, 2014. The plan will be available on the Town's website (www.townofparadise.com); at the Butte County Public Library on Clark Road in Paradise, at the Paradise Senior Center; at the Family Resource Center and at the Paradise Chamber of Commerce. The public comment period is from February 11th through March 11th, 2014. Written comments should be addressed to Lauren Gill, 5555 Skyway, Paradise, CA 95969.

- **Town Council on the final Annual Plan**: Tuesday, April 8, 2014, at 6:00 p.m., or as soon thereafter as possible, in the Town Hall Council Chambers at 5555 Skyway, Paradise, California. The Council will consider adopting the final 2013-2014 Annual Plan and receive additional public comment at this time.

Public Services Funding Process:

As part of the Community Development Block Grant (CDBG) Annual Plan process, the Town Council may elect, but is not required, to allocate up to 15% of its Program Year funding for public services agencies. The agencies must be legal, non-profit organizations that provide services to low- and moderate-income residents.

Last year, the Town Council directed staff to establish a sub-committee consisting of two council representatives and two staff members to hold preliminary interviews with interested subrecipients. The purpose of the subcommittee was to meet with the subrecipients and make a formal recommendation to the Council for final approval.

With the reduction CDBG funding, the subcommittee will be asked to consider whether to recommend a change in funding levels to the agencies for this program year. Local public agencies that are considering applying for these funds should be aware that their funding may be reduced and/or eliminated this program year. If the Council wishes to pursue public service agency input at this time, the following schedule will be required in order to meet the HUD Annual Plan submission deadline.

Date	Action
Jan. 6	Subrecipient Applications Released
Feb. 6	Subrecipient Applications Due
Feb. 11	Town Council meeting - 2nd Public Hearing
Feb. 11	30-day public comment period begins (Annual Plan is posted on website & avail. @ Town Hall, Senior Center, Paradise Library, Chamber and Family Resource Center)
Feb. 12	Subrecipient Applications to Committee
TBD	Committee Interviews with Subrecipients
TBD	Committee Recommendations are finalized
Mar. 11	30-day public comment period concludes

April 9	Town Council Meeting - Consent Agenda to adopt the annual plan, approve subreciepient allocations and review any comments received during the public hearing process.
May 15	Deadline to submit 2014-15 Annual Plan to HUD

Discussion:

Although the Town has some discretion on how the funds are used, there are many restrictions, conditions, and objectives that must be met. Community Development Block Grant funds can be used for activities that further community and economic development; provide improved community facilities and services; and provide affordable housing opportunities to low and disadvantaged residents. Each activity except planning and administrative activities, must meet one of the CDBG program's three broad National Objectives:

1. Benefit low and moderate income persons,
2. Aid in the prevention or elimination of slums or blight, or
3. Meet community development needs having a particular urgency.

The types of activities that meet the national objective will encompass the following basic qualifiers:

Area benefit activities: An activity can be area-wide meaning that the benefits are available to all the residents of a particular area where at least 51 percent of the residents are low and moderate income persons. The service area must be primarily residential, and the activity must meet the identified needs of low-and-moderate income persons.

Limited clientele activities: An activity can be "limited clientele," which means that the activity benefits a certain, limited clientele that is at least 51 percent low income. An example of this would be our housing programs. We have to document and verify income to ensure that each client is eligible.

Housing activities: An activity carried out for the purpose of providing or improving permanent residential structures, which upon completion, will be principally occupied by low and moderate income households.

Job creation or retention activities: An activity designed to create or retain permanent jobs where at least 51% of that, computed on a full-time equivalent (FTE) basis, involves the employment of low and moderate income persons. Potentially eligible activities include: construction of a business incubator designed to offer space and assistance to new firms to help them become viable small businesses; loans to pay for expansion.

Slum Blight Removal. Activities under this category must meet ALL of the following criteria: (1) The area delineated by the grantee must meet a definition of a slum, blighted, deteriorated or deteriorating area under state or local law; (2) there must be a substantial number of deteriorated buildings through the area; and (3) the activity must address one or more conditions that contributed to the deteriorate ion of the area.

Boundaries, designations, inspections and detailed rehabilitation records must be kept.

In addition to the above qualifiers, there is a list of basic eligible activities and ineligible activities that can be carried out using CDBG funds. (Government Code Section 570.201.)

Basic Eligible Activities include: Acquisition/disposition of real property; public facilities acquisition, construction and rehabilitation; public services funding; payment of costs in support of activities eligible for funding under the HOME program; housing assistance for low/mod income families; and micro-enterprise assistance.

Conclusion:
Submission of the 2014-2015 Annual Plan meets the objectives outlined in the Town's 5-year Consolidated Plan.

Fiscal Impact Analysis:

The impact of this agenda item and subsequent actions related to the CDBG Program is positive. It will result in the award of approximately $159,000 in federal funds as we estimate the Town may receive approximately the same amount of funding as last year.

TOWN OF PARADISE
Council Agenda Summary
Date: January 14, 2014

Agenda No. 7(a)

ORIGINATED BY: Marc Mattox, Town Engineer

REVIEWED BY: Lauren Gill, Town Manager

SUBJECT: Downtown Paradise Safety Project Transportation & Safety Study

COUNCIL ACTION REQUESTED:

1. Acknowledge Transportation & Safety Study prepared by Traffic Works for the Downtown Paradise Safety Project along Skyway between Vista Way and Elliott Road; and
2. Authorize staff to proceed with final design and public outreach plan.

Purpose:

The objective of the Downtown Paradise Safety Project is to address existing challenges along Skyway between Vista Way and Elliott Road. In the previous 10 years, over 90 injury collisions have occurred in these limits, including 3 fatalities. The absolute priority for the subject project is safety. The Downtown Paradise Safety Project presents an opportunity for a public investment in the community by creating a safer commercial corridor which addresses high speeds, difficult crosswalks, limited parking, common collision hazards, and an aging roadway. These objectives may be achieved by accepting a reduction in lanes and small delays in travel time during the peak commute periods.

Background:

In 2009, Town Council adopted the Skyway Corridor Study prepared by W-Trans. This plan was based on extensive traffic analysis, public workshops, and stakeholder meetings and called for a reduction of through travel lanes in the downtown corridor and enhancements to pedestrian facilities.

On April 23, 2012, Caltrans announced Cycle 5 Call-for-Projects for the Highway Safety Improvement Program (HSIP). The purpose of this program is to achieve a significant reduction in traffic collisions and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

On October 19, 2012, Caltrans approved the Downtown Paradise Safety Project for Federal funding. This project was selected based upon the calculated high Benefit-Cost Ratio using actual collision data between 2006 and 2010 and implementation of safety countermeasures. The project includes pedestrian and motorist safety enhancements along Skyway between Vista Way and Elliott Road. Specific countermeasures to be implemented in the project include the addition pedestrian bulb-outs, flashing beacons, signal coordination, and a reduction of through vehicle lanes.

On April 9, 2013, Town Council approved Program Supplement Agreement No. 011-N for Project HSIPL-5425 (024) to assure receipt of $155,800.00 in Federal funds for the project's preliminary engineering project phase.

On September 10, 2013, Town Council approved staff's recommendation to award a preliminary engineering services contract to Traffic Works of Chico, CA in the lump sum amount of $84,900. The first phase of their task list included:

- Professional topographic field survey of Skyway between Vista Way and Oliver Road,
- Traffic data collection, volume projection, traffic modeling, and signal inventory, and
- Provide report on findings and recommendations which meet project objectives.

Analysis:

Traffic Works has successfully completed the Preliminary Project Report / Traffic Operations Study which examines existing conditions and a proposed project alternative which meets grant funding requirements. The Report, attached as Exhibit A to this report, demonstrates the safety benefits and operational impacts of implementing the awarded grant proposal along Skyway between Pearson Road and Elliott Road. A summary of report findings is provided in the following sections:

1. *Existing Conditions*

Heavy traffic volumes coupled with a lack of turn lanes, multiple driveways, and numerous pedestrian crossings create a variety of operational and safety issues along the Skyway corridor. The heavy traffic volumes through the downtown have forced the Skyway to function as a highway rather than a downtown arterial.

Four lane roadways often generate excessive speeds. Motorists using four-lane roadways, note that there are spare lanes in their direction and hence tend to drive faster than they should. Vehicles often change lanes to move out of slow moving lanes when the leading vehicle(s) slow down to make right or left-turning movements. Abrupt lane change behavior and vehicles stopping in the "fast lane" can lead to serious rear-end crashes. Without a left turn lane, left turning vehicles stop in the travel lane until they find a safe gap in the opposing traffic, causing backups on Skyway.

Non-motorized travel, such as walking and biking, are important elements of the transportation system and the provision, extent, and quality of non-motorized facilities affect mode choice. High speed and high volume four-lane roadways also erode the ability for transit, walking and bicycling to succeed. Pedestrians have difficulty finding gaps across four lanes. On roadways with two or more lanes of vehicles traveling in the same direction, if one vehicle stops for a pedestrian/bicycle and another vehicle overtakes it on either side, the pedestrian/bicycle may not be visible and can be hit (this condition is commonly referred to as dual threat). In this situation, the pedestrian may be blocked from the view of other approaching motorists by a stopped vehicle, thereby increasing a vehicle-pedestrian crash risk. Skyway has six un-controlled pedestrian crossings between Pearson Road and Elliott Road which prove difficult for pedestrians to use due to high speeds, limited visibility and poor yield rates.

Collision data was obtained from 2002-2011 to help identify high-crash locations and to understand how the crashes occur. Skyway, as an undivided four lane highway between Pearson Road and Elliott Road, has observed the highest concentration of injury collisions in the Town of Paradise over a 10-year period (2002-2011). During this time, 92 injury collisions had been recorded to the Transportation Injury Management System (TIMS) along Skyway between Vista Way and Elliott Road.

In the downtown corridor, overarching trends in the collision data show a high volume of rear-end collision types. In addition, 48% of the collisions had unsafe speed as a primary collision

factor. This is a direct indication that a two-way left turn lane and traffic calming would provide safety benefits in this segment. In addition, 10 of 92 collisions (about 11%) involved a bicyclist or pedestrian, the group most susceptible to severe injuries. Road diets can help reduce the number of collisions involving pedestrians or bicyclists by creating fewer lanes of traffic to cross and by reducing vehicle speeds.

2. *Proposed Project*

The Highway Safety Improvement Program grant process requires countermeasures be proposed to address actual collision data. For the Town's application, three specific improvements were proposed, as described below:

Countermeasure 1 – Road Diet

A road diet, or road conversion, is the process of reconfiguring the available right-of-way on a given road from two lanes in each direction (4-lane layout) to one lane in each direction with a center two-way left-turn lane (3-lane layout). Road diets can offer potential benefits to both vehicles and pedestrians. Road diets typically reduce vehicle speeds and vehicle interactions during lane changes, which potentially reduces the number and severity of vehicle-to-vehicle crashes. The well documented benefits of implementing a road conversion include: a reduction in overall collisions (average 30%), improved access to adjacent destinations, speed reduction and increased pedestrian safety. Typical thresholds for implementation of road diets with zero impacts to level of service or motorist conflicts range between 20,000-23,000 vehicles per day. The current volume within the downtown corridor is 20,000. As the existing road volume is near the upper limit of implementation, a detailed analysis in addition to the Skyway Corridor Study has been performed and is further described in this summary and in the attached report.

Countermeasure 2 – Improve Signal Timing (Phasing and Coordination)

Coordinating traffic signals within a defined corridor provides more efficient operation at the signalized intersections in addition to the road which connects them. The ultimate objective of this countermeasure is the reduction of collision types associated with isolated signal devices. Coordinating the traffic signals has been shown to reduce associated accident types by 15%. In addition, signal coordination can improve corridor level of service, reduce queue lengths, and decrease travel delays.

The proposed project includes the coordination of the existing traffic signals at Skyway/Elliott Road, Skyway/Pearson Road and potentially at Skyway/Oliver Road. Coordinating these signals is a key factor in managing high traffic volumes within the road diet limits. Without signal coordination, implementation of Countermeasure 1 might not be feasible.

Countermeasure 3 – Install Crossing with Enhanced Safety Features / Curb Extensions

Providing safe pedestrian crossings within any corridor is a critical priority. This countermeasure includes the implementation of a combination of curb extensions, refuge islands, and/or pedestrian activated flashing beacons. Providing bulb-outs and pedestrian activated crossing devices is proven to improve pedestrian safety and reduce pedestrian related accidents by 35%. Integrating pedestrian facilities within the roadway design is important to provide a safe and usable facility for all travel modes. Without proper consideration, pedestrians are discouraged from using walking as a mode of transportation or visiting commercial destinations.

The proposed project includes the installation of two types of crosswalk treatments at various locations along Skyway between Vista Way and Elliott Road.

The first of these is the installation of either rectangular rapid flashing beacons (RRFB) or a pedestrian hybrid signal with a center refuge island at 5555 Skyway (near Jewell Road). This crosswalk has historically presented challenges to pedestrian safety, as it has two lanes in each direction which pedestrians must navigate when crossing. The installation of a center refuge island will allow pedestrians to clear each direction of traffic individually with an opportunity to seek a protected rest area in the middle of the roadway. In addition, a pedestrian activated system will better catch the attention of drivers and improve motorist yield rates.

The second crosswalk type will be implemented at 4 to 5 locations within the downtown section of Skyway, between Pearson Road and Elliott Road. These crosswalks will include the installation of both curb extensions and rapid rectangular flashing beacons. Curb extensions decrease the physical distance which pedestrians are expected to cross. In addition, they significantly improve visibility between motorists and pedestrians. Finally, curb extensions facilitate increased parallel parking in the downtown corridor, as clearance/buffer zones between crosswalks and permitted parking are no longer necessary. The benefit of this measure with flashing beacons is again, the clear communication of pedestrians to motorists of their intent to cross the street.

Outside the proposed countermeasures used for grant award, the project will also include an asphalt overlay between Pearson Road and Elliott Road, intersection configuration adjustments, ADA curb return/ramp upgrades, spot sidewalk repairs, and crosswalk street lighting as funding allows.

3. *Operational Impacts*

As previously noted, a detailed analysis of the expected traffic impacts is required. Implementing a reduction of through lanes will impact the speed through the corridor and impact delays to and from Skyway and nearby side streets. To evaluate the project impacts, Traffic Works performed a Level of Service Analysis and Micro-Simulation, described below:

A. Level of Service – The analysis showed all study intersections will operate with acceptable levels of service during both the AM and the PM peak hours. Outside of peak hours, the Skyway can be expected to operate more quickly and efficiently with a better LOS condition and lower delays than during peak hours.

B. Micro-Simulation – The estimated average and maximum queue lengths are generally acceptable with the exception of the northbound queues at Skyway/Pearson during the PM peak hour, which are estimated to be nearly 500 ft and 800 ft respectively. Despite the long queues during PM peak hour, the simulation showed that the queues would generally be cleared in one signal cycle due to the proposed optimized and coordinated signal timings (Countermeasure 2).

4. *Report Conclusion*

Through the recent HSIP grant award, the Town of Paradise has immediate funding available to implement the proposed roadway conversion and realize the benefits desired by so many communities, including:

- Safer, enhanced pedestrian crossings with bulb-outs for better visibility of pedestrians

- Reduced travel speeds
- A center-turn lane for safer and more efficient turning maneuvers
- Safer and more efficient on-street parking buffered from the travel lanes
- Investment and design features that support business revitalization

In order to realize these significant benefits, the Town and its residents will need to accept a decrease in roadway capacity on Skyway between Pearson Road and Elliott Road. The roadway conversion will result in increased delay and longer vehicle queue lengths on Skyway (particularly at Elliott Road during the AM peak period and at Pearson Road during the PM peak period) and increased delay on the side-street approaches to Skyway during the peak traffic flows. The studied intersections are all shown to operate at acceptable levels of service after the proposed roadway conversion. Our detailed traffic operations analysis and simulations indicate that, although the vehicular queue lengths will notably increase during peak traffic flows, the implementation of optimized signal phasing and coordination patterns will provide reasonable management of existing traffic volumes. Traffic Works recommends that the road diet is feasible, will provide the intended and important safety benefits, and that the current traffic flows are manageable with the planned traffic signal timing/coordination and lane configuration improvements.

Recommendation:

Staff recommends Council acknowledge the report prepared by Traffic Works and authorize staff to proceed with final design and public outreach. Understanding that a decision to transform the downtown corridor requires significant consideration, staff proposes to present a final design in May for approval. In the meantime, staff will undertake a comprehensive outreach effort which will aim to reach the general Town of Paradise public and various project stakeholders. Finally, a running item on future Council agendas will be added for February, March and April to facilitate public input on the forthcoming decision.

Financial Impact:

The total Highway Safety Improvement Program grant provides $900,000 towards the proposed $1,025,000 project. Funding for preliminary engineering totals $155,800 in federal-aid, with a 10% match on all participating expenditures. Matching funds are included in the Town's approved 2013-2016 Capital Improvement Program budget utilizing Local Transportation funds (Transit Fund 5900).

There are no new financial impacts at this time.

Alternatives:

Modify recommendation or provide other direction to staff.

Attachments:

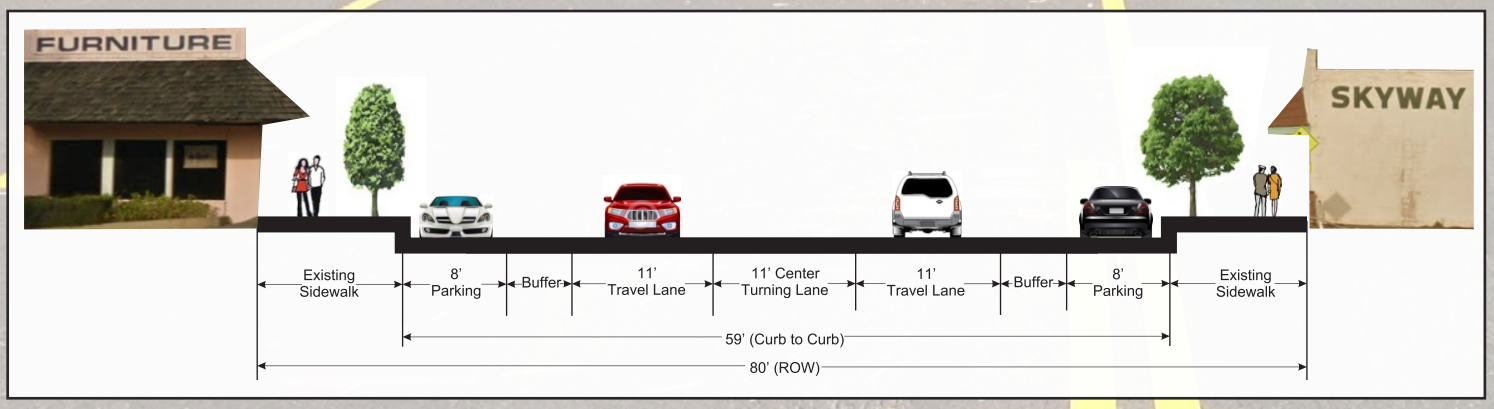
1. Exhibit A – Traffic Works Transportation & Safety Study

TRANSPORTATION & SAFETY STUDY
Downtown Paradise Safety Project

Town of Paradise, California

Prepared for:

December, 2013



Prepared by:

TRAFFIC WORKS LLC

2240 St. George Lane, Suite 1 • Chico • CA • 95926 • 530.897.0199

TRANSPORTATION & SAFETY STUDY

DOWNTOWN PARADISE SAFETY PROJECT

December 16, 2013

Prepared for:

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EXECUTIVE SUMMARY

Background

Skyway is a principal arterial roadway which interconnects Chico, Paradise, Magalia and the upper ridge area of Butte County. Through development and growth, the purpose and use of Skyway within the Paradise Town limits has changed. Currently its connectivity to employment destinations for upper ridge residents has caused the Skyway downtown district between Pearson Road and Elliott Road to evolve from a quaint commercial destination to a major thoroughfare which functions as a four-lane undivided highway.

The current conditions on Skyway have prompted a complete re-evaluation of the road's configuration to determine if opportunities exist to both accommodate the traffic volume and present a viable downtown business corridor. As a result, the Town partnered with Butte County Association of Governments (BCAG) to complete the *Skyway Corridor Study, 2009*. The study thoroughly examined alternatives, sought public input, and ultimately recommended a reduction in travel lanes between Pearson Road and Elliott Road. The benefit of the lane reduction is the opportunity to enhance both pedestrian and motorist safety in addition to providing improved access to local businesses.

In October 2012, the Town of Paradise applied for and received a Highway Safety Improvement Program (HSIP) Grant to design and build a project which implements the recommendations of the *Skyway Corridor Study*. This funding source utilizes actual collision data and proposed improvement costs to formulate a benefit-cost ratio for the selection of project features. In total, the grant provides a $900,000 contribution to the estimated $1,025,000 project cost. Town Council approved the Downtown Paradise Safety Project grant agreement on April 9, 2013 and authorized staff to begin the preliminary engineering phase.

Purpose

This update aims to further evaluate the proposed alternative which reduces travel lanes on Skyway between Pearson Road and Elliott Road. Ultimately, it is critical to gain full understanding of associated impacts of the project to allow for an informed decision making process regarding the project benefits which may be achieved. Additionally, this study identifies what specific intersection configurations and signal system modifications would be necessary to support the proposed lane reduction.

Proposed Project

The HSIP grant was awarded based on three proposed countermeasures (CM) to address ongoing safety issues within the downtown area, as listed below:

CM1 – Road Diet (R15)
CM2 – Signal Coordination (S3)
CM3 – Enhanced Pedestrian Crosswalks (NS18)

Countermeasure 1 will re-configure Skyway between Pearson Road and Elliott Road from a four-lane cross-section to a three-lane cross-section, including one lane per direction and a center two-way left-

turn lane. The anticipated benefits of this modification include slower speeds, improved access to parking and commercial destinations, reduction of common collision types, and allowance for the construction of safer pedestrian facilities.

Countermeasure 2 will coordinate the signals in the downtown segment to facilitate efficient movement of traffic on Skyway during peak hours. The anticipated benefits of signal coordination include reduction in overall stops and travel delays and efficient traffic movement on the Skyway by allowing for large groups of vehicles to efficiently flow through a series of traffic signals without stopping.

Countermeasure 3 will install pedestrian crossings with enhanced safety features and curb-extensions.

Existing Conditions with Road Diet

A Level of Service (LOS) analysis was performed at critical intersections in the downtown corridor to study potential impacts of the proposed project. The analysis showed all study intersections will operate with acceptable levels of service during both the AM and the PM peak hours. Outside of peak hours, the Skyway can be expected to operate more quickly and efficiently with a better LOS condition and lower delays than during peak hours.

In addition to the LOS analysis, a micro-simulation was also performed to estimate the queue lengths at Skyway/Pearson Road and Skyway/Elliott Road. The estimated average and maximum queue lengths are generally acceptable with the exception of the northbound queues at Skyway/Pearson during the PM peak hour, which are estimated to be nearly 500 ft and 800 ft respectively. Despite the long queues during PM peak hour, the simulation showed that the queues would generally be cleared in one signal cycle due to the proposed optimized and coordinated signal timings (Countermeasure 2).

Future Conditions

Based on Butte County Association of Governments' (BCAG) travel demand model, the projected traffic volumes are expected to increase between 3% and 13% by the year 2020. Recognizing the difficulty of projecting traffic growth, a conservative 10% growth rate was used to analyze the future horizon year traffic conditions. The analysis showed that in the future, delays would increase, however all study intersections would operate at or above the Town of Paradise General Plan LOS "D" threshold, with the exception of the unsignalized intersection of Skyway/Black Olive Drive. If Skyway/Black Olive Drive remains unsignalized, motorists will experience heavier delays turning to or from Skyway. With a 10% growth in vehicle volumes, queue lengths are also expected to increase compared to 2013 conditions. However, future planned improvement projects could mitigate the effects of potential traffic growth. Projects including signalization of the Skyway/Black Olive Road intersection, intersection control improvements at Black Olive Road/Foster Road intersection, and possibly the long-term extension of Buschmann Road to Skyway, could relieve capacity pressure along Skyway between Pearson Road and Elliott Road.

Final Recommendation

Within the last 10 years an ever growing number of communities have implemented road conversions within their downtown districts to calm traffic, reclaim the pedestrian environment, revitalize businesses, and reduce the occurrence of both vehicular and pedestrian crashes that impact the lives of their family and friends. Through the recent Skyway HSIP grant award, the Town of Paradise has immediate funding available to implement the proposed roadway conversion and realize the benefits desired by so many communities, including:

- Safer, enhanced pedestrian crossings with bulb-outs for better visibility of pedestrians
- Reduced travel speeds
- A center-turn lane for safer and more efficient turning maneuvers
- Safer and more efficient on-street parking buffered from the travel lanes
- Investment and design features that support business revitalization

In order to realize these significant benefits, the Town and it's residents will need to accept a decrease in roadway capacity on Skyway between Pearson Road and Elliott Road. The roadway conversion will result in increased delay and longer vehicle queue lengths on Skyway (particularly at Elliott Road during the AM peak period and at Pearson Road during the PM peak period) and increased delay on the side-street approaches to Skyway during the peak traffic flows. The studied intersections are all shown to operate at acceptable levels of service after the proposed roadway conversion. Our detailed traffic operations analysis and simulations indicate that, although the vehicular queue lengths will notably increase during peak traffic flows, the implementation of optimized signal phasing and coordination patterns will provide reasonable management of existing traffic volumes. We recommend that the road diet is feasible, will provide the intended and important safety benefits, and that the current traffic flows are manageable with the planned traffic signal timing/coordination and lane configuration improvements.

INTRODUCTION

Skyway is one of two principal arterials serving the Town of Paradise. The westerly extent of Skyway connects the southern boundary of the City of Chico to the Town of Paradise, Magalia and upper ridge area of Butte County. The 16 miles between Magalia and Chico along Skyway have highly contrasting road configurations, terrain, and adjacent land uses. Through Paradise, Skyway enters as a four lane divided highway and becomes undivided south of Neal Road. The four-lane undivided configuration continues from Neal Road to Bille Road where the lanes are reduced to one in each direction. This configuration continues to the upper Town limits, ultimately connecting to Magalia. The Average Daily Traffic (ADT) on Skyway within the Town Limits has grown in the previous decades to roughly 25,000 between Neal Road and Pearson Road and 20,500 between Pearson Road and Elliott Road. Skyway between Wagstaff Road and the Town Limits carries an ADT of 10,000, evidence of the commuter traffic influence along this corridor. Examining potential destinations and the lack of alternate routes to Chico, it can be assumed approximately 50% of traffic through downtown Paradise is actually for daily commuting purposes with those trips originating outside the Town Limits.

The increased volumes along Skyway and its evolved use as a commuting “highway” to and from the City of Chico has created a list of changes which have negatively impacted the Town of Paradise central business district between Pearson Road and Elliott Road. In 2009, this evolution prompted the Town to work with the Butte County Association of Governments to study Skyway with the perspective of moving traffic volumes and meeting livable community objectives.

The Skyway Corridor Study was completed by W-Trans, a transportation engineering consultant. The report included extensive public input and evaluated use alternatives for Skyway within the Town Limits. The final preferred alternative for Skyway between Pearson Road and Elliott Road included one lane per direction with a center two way left turn lane.

In 2012, the California Department of Transportation issued a “call for projects” under the Highway Safety Improvement Program (HSIP). This federal-aid grant opportunity funds projects at 90% reimbursement, up to $900,000 for projects which can quantify injury reducing benefits compared to actual project costs. HSIP grant applications require submission of actual collision data which can be attributed to proposed countermeasures (CMs) with defined cost ratios.

The Town of Paradise submitted a grant application under the HSIP call for projects for the Downtown Paradise Safety Project. This application was aimed at securing funding to implement recommendations made in the Skyway Corridor Study. By proposing the implementation of a reduction in travel lanes, installation of a two-way left turn lane, signal coordination, and improved pedestrian crosswalks, the Town of Paradise was awarded the maximum grant amount of $900,000 federal aid towards the $1,025,000 total project cost.

The Town of Paradise Town Council formally authorized staff to execute the preliminary engineering funding agreement on April 9, 2013. Town staff then hired Traffic Works to perform an additional analysis of the proposed countermeasures for existing and future traffic volumes.

The purpose of this report is to provide a professional recommendation based on the current information available, information collected, potential project benefits, and most importantly, ultimate project feasibility and what specific measures would be necessary for project success.

EXISTING CONDITIONS

Problem Statement

Heavy traffic volumes coupled with a lack of turn lanes, multiple driveways, and numerous pedestrian crossings create a variety of operational and safety issues along the Skyway corridor. The heavy traffic volumes through the downtown have forced the Skyway to function as a highway rather than a "main street". Some of the field pictures showing current conditions on Skyway are shown in **Figure 1**.

Figure 1. Images Showing Skyway Functioning as a Highway

Four lane roadways often generate excessive speeds. Motorists using four-lane roadways, note that there are spare lanes in their direction and hence tend to drive faster than they should. Vehicles often change lanes to move out of slow moving lanes when the leading vehicle(s) slow down to make right or left-

turning movements. Abrupt lane change behavior and vehicles stopping in the "fast lane" can lead to serious rear-end crashes. Without a left turn lane, left turning vehicles stop in the travel lane until they find a safe gap in the opposing traffic, causing backups on Skyway.

Non-motorized travel, such as walking and biking, are important elements of the transportation system and the provision, extent, and quality of non-motorized facilities affect mode choice. High speed and high volume four-lane roadways also erode the ability for transit, walking and bicycling to succeed. Pedestrians have difficulty finding gaps across four lanes and many bicyclists find four-lane roads too narrow to ride comfortably. On roadways with two or more lanes of vehicles traveling in the same direction, if one vehicle stops for a pedestrian/bicycle and another vehicle overtakes it on either side, the pedestrian/bicycle may not be visible and can be hit (this condition is commonly referred to as dual threat). In this situation, the pedestrian may be blocked from the view of other approaching motorists by a stopped vehicle, thereby increasing a vehicle-pedestrian crash risk. Skyway has six un-controlled mid-block pedestrian crossings between Pearson Road and Elliott Road. Each of these are on a 4-lane cross-section which is potentially more dangerous for pedestrians. Mid-block locations tend to experience higher travel speeds, further contributing to pedestrian-vehicle collision risk.

Study Area Roadway Configuration

The project study area includes 2.3 miles of the Skyway corridor from Neal Road (south end) to Bille Road (north end). According to California Road System Maps, Skyway is classified as a Principal Arterial. The Skyway corridor within the study area consists of three character zones that are each different and distinct from each other.

Neal Road to Pearson Road: Skyway along this section has a five-lane cross-section with two travel lanes in each direction and a two-way left turn lane in between. The speed limit changes from 50 mph to 35 mph. The land use in this section is mostly commercial with some office buildings. There is no on-street parking.

Pearson Road to Elliott Road: This segment through the downtown is an un-divided four lane roadway with on-street parking and sidewalks on both sides of Skyway. The sidewalks vary from 5 to 8 feet wide. Six mid-block pedestrian crossings are located between Pearson Road and Elliott Road. The land use in this section is predominantly commercial. The speed limit on Skyway is 35 mph in this section.

Elliott Road to Bille Road: The cross-section of Skyway between Elliott Road and Bille Road transitions between a five-lane roadway with two-way left turn lane and a four-lane undivided roadway. The land use in this section mainly consists of commercial buildings. There is no on-street parking and the speed limit on this segment is 30 mph.

TRAFFIC WORKS LLC

NO SCALE

LEGEND

- Project Area

(X) - Study Intersection

FIGURE 2

Transportation & Safety Study

Vicinity Map

The major study intersections included in the traffic analysis are:

- Skyway and Neal Road - Four legged signalized intersection.
- Skyway and Black Olive Drive – Four legged un-signalized (TWSC) intersection with STOP signs on Black Olive Drive and free movement on Skyway.
- Skyway and Pearson Road – Three legged signalized intersection.
- Skyway and Elliott Road – Four legged signalized intersection.
- Skyway and Oliver Road – Four legged signalized intersection.
- Skyway and Maxwell Road – Three legged signalized intersection.
- Skyway and Bille Road – Four legged signalized intersection.

The study area and the study intersections are shown in **Figure 2**.

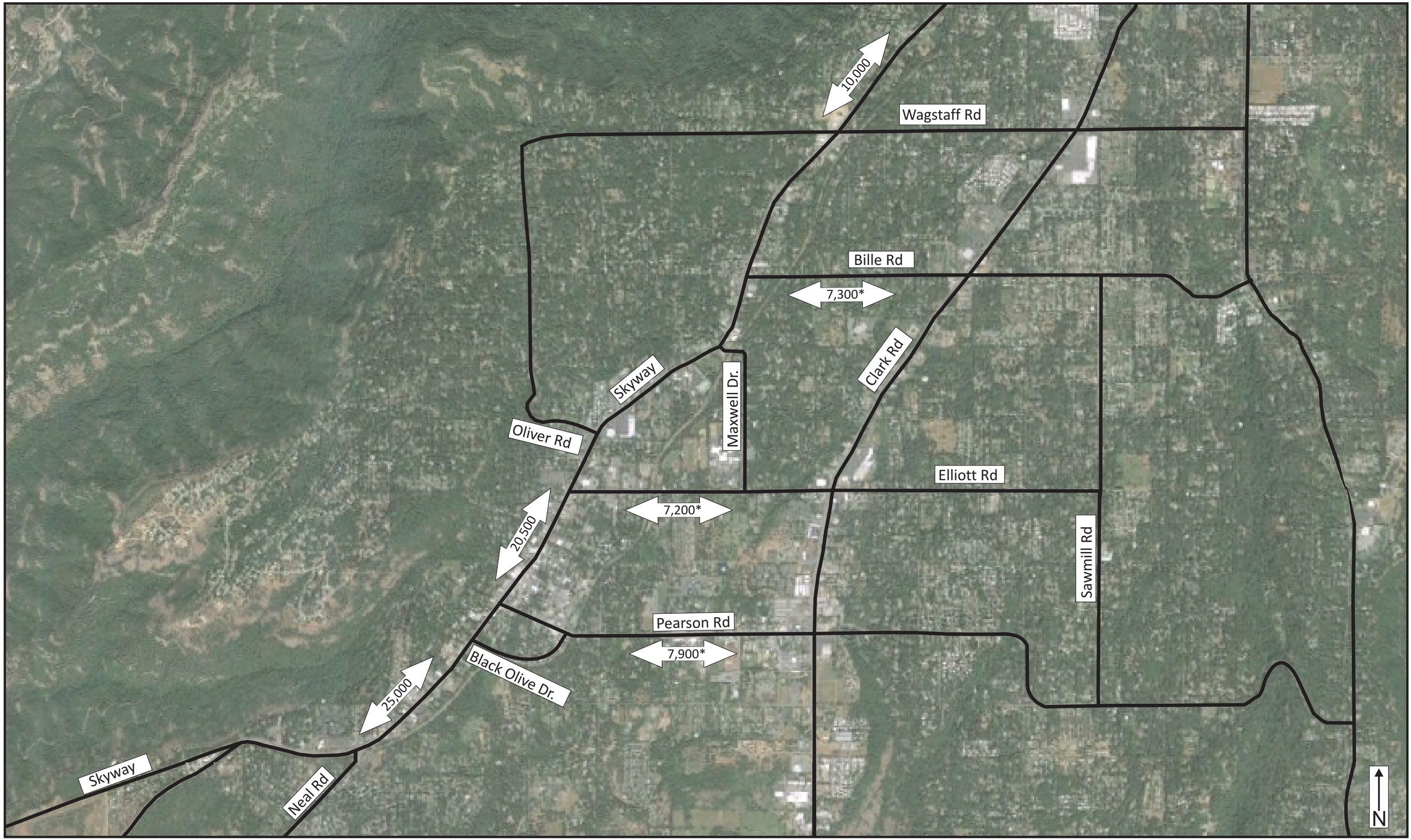
Non-motorized Facilities

The Skyway corridor and the side streets in the study area generally accommodate non-motorized travel modes. Sidewalks exist through most of the study area along the Skyway corridor. The width of sidewalks varies between 5 feet and 8 feet through the downtown area. Six uncontrolled pedestrian crosswalks across Skyway are available in the downtown area. The locations of uncontrolled crossings are shown in **Figure 3**. There are no dedicated bike lanes within the Skyway corridor.

Vehicular Volumes

The ADT on Skyway between Pearson Road and Elliott Road is approximately 20,500 vehicles per day and the ADT on Skyway south of Pearson Road is approximately 25,000 vehicles per day. Directional peaking occurs on Skyway. During the AM peak hour, the proportion of traffic traveling southbound is higher than the percentage of traffic travelling northbound. The southbound volumes on Skyway during the AM peak hour range from 900 to 1,000 vehicles per hour through downtown. The peaking occurs in the reverse direction during the PM peak hour. Southbound volumes on Skyway during the AM peak hour range from 1,000 to 1,100 vehicles per hour through downtown. The existing ADTs and turning movement volumes are shown in **Figure 4** and **Figure 5**, respectively.

Figure 3. Uncontrolled Pedestrian Crossings



TRAFFIC WORKS LLC

NO SCALE

LEGEND

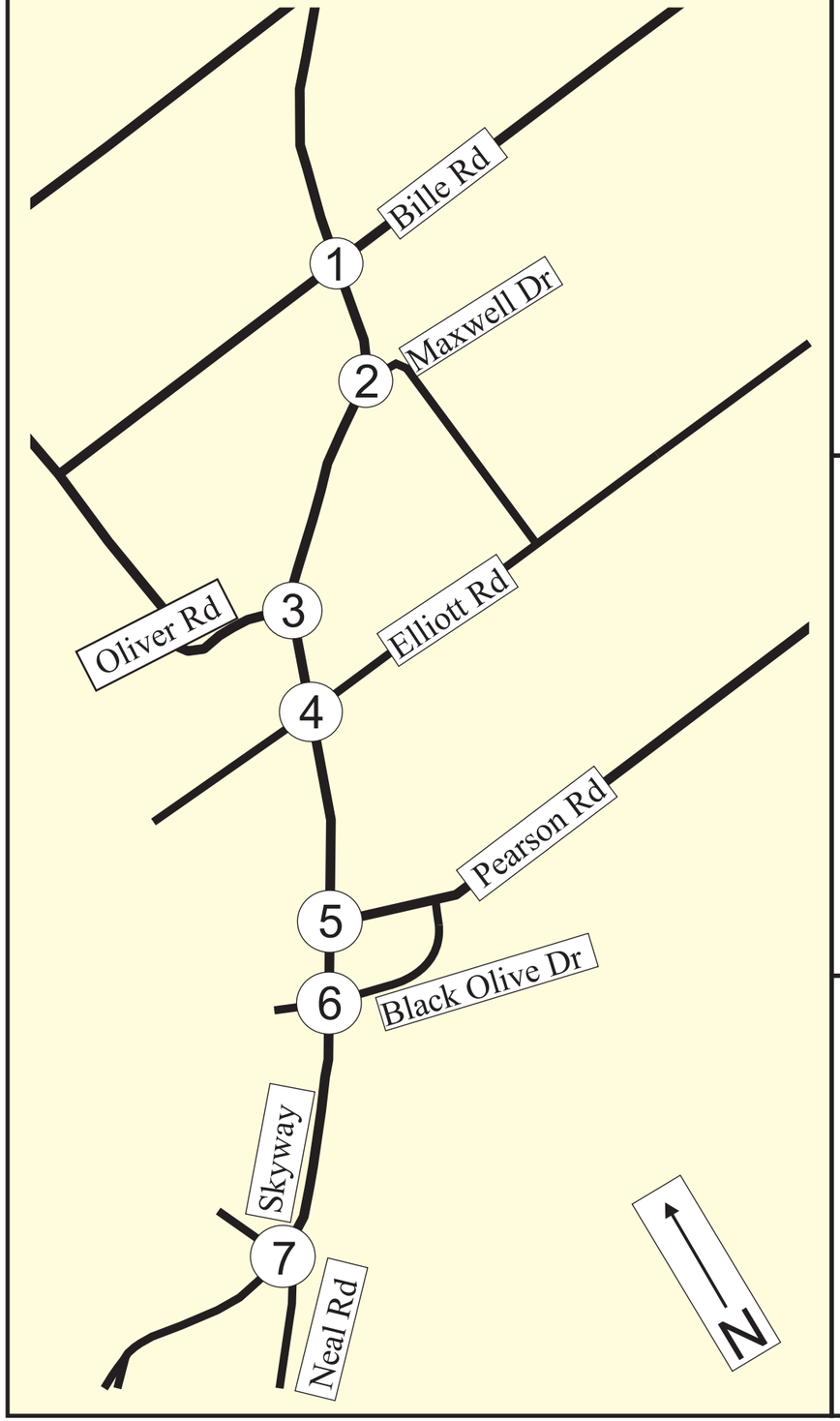
XX,XXX - ADT Volume

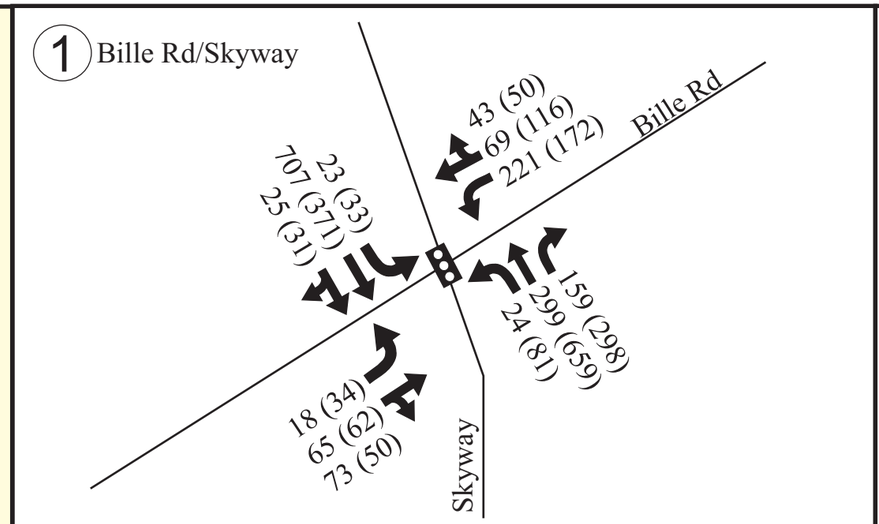
* - Based on Peak Hour x 10

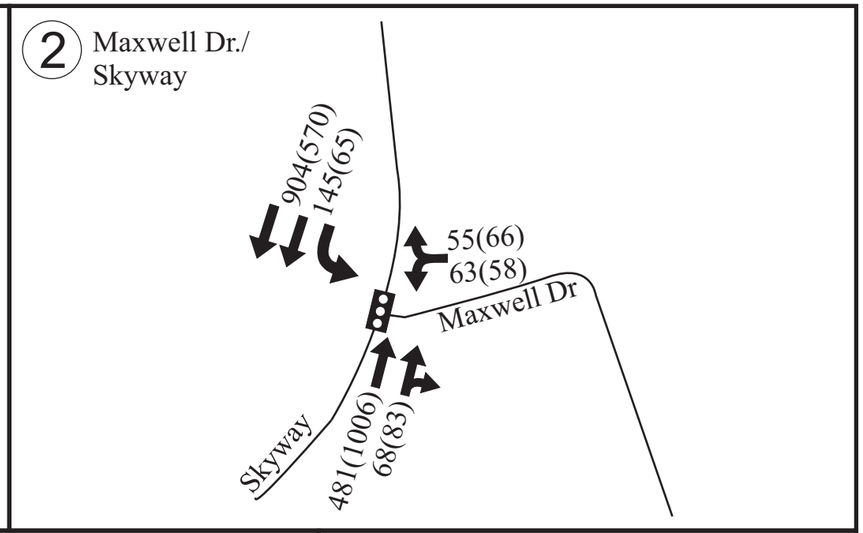
FIGURE 4

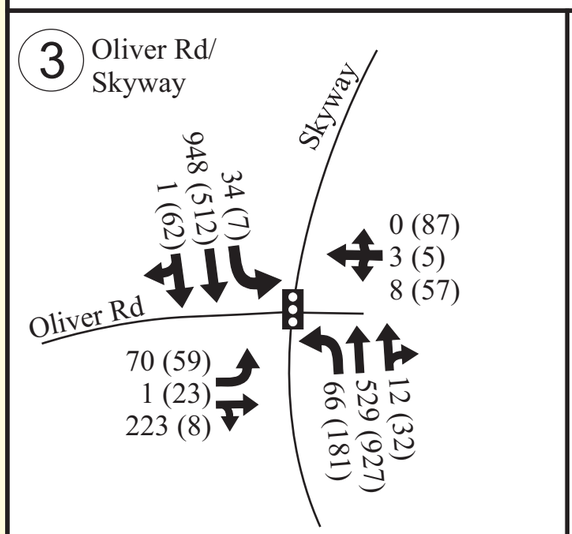
Transportation & Safety Study

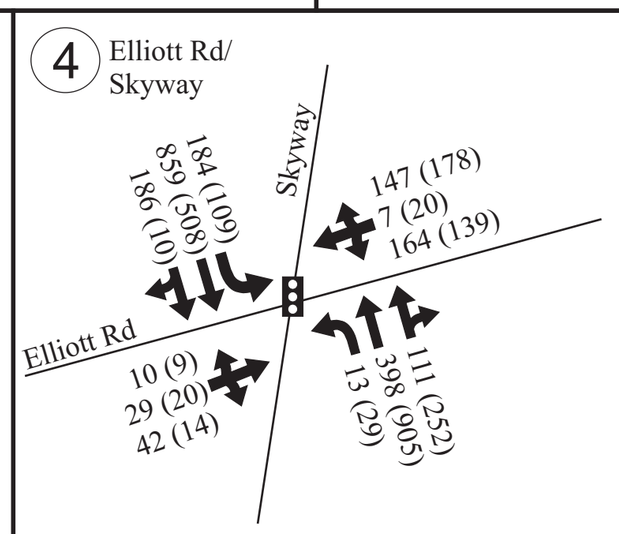
Existing Daily Traffic Volumes

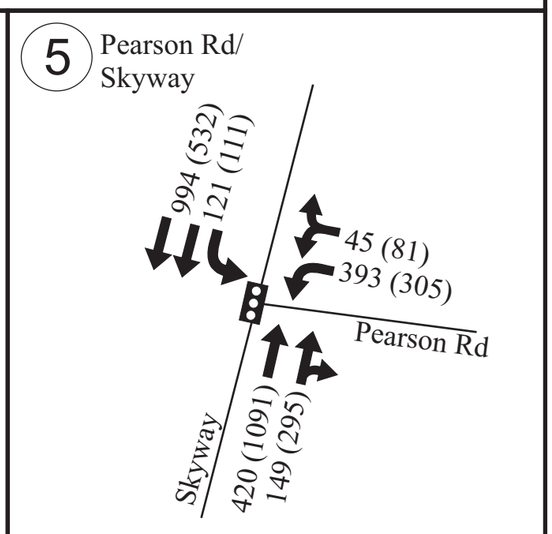


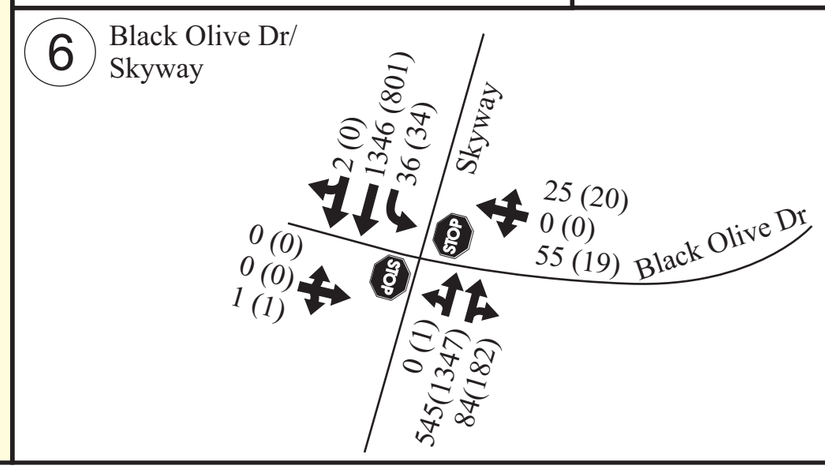


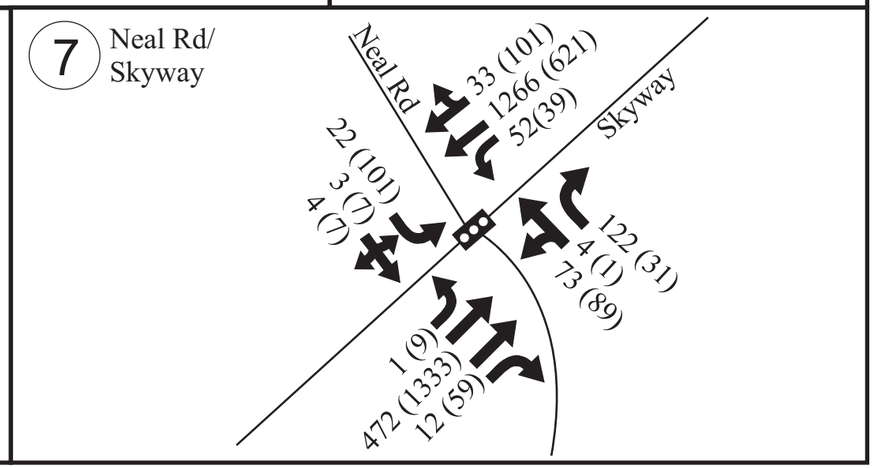












TRAFFIC WORKS LLC

NO SCALE

LEGEND

xx(xx) - AM(PM) Volumes

- Study Intersections

- Stop Sign

- Traffic Signal

- Lane Configurations

98

FIGURE 5

Transportation & Safety Study

Existing Turning Movement Volumes

Speed Survey Data

Speed data at locations along Skyway was obtained from the speed surveys conducted by the Town of Paradise in September 2013. Speed survey data was collected for two segments – Neal Road to Pearson Road (south of downtown) and Pearson Road to Elliott Road (downtown Paradise). Speed data is summarized below by the posted speed limit, average observed speed, and the observed 85th percentile speed.

Table 1. 2013 Speed Data Summary

Segment		Posted Speed Limit (mph)	Average Observed Speed (mph)	85th %tile Observed Speed (mph)	% of vehicles above Speed Limit
From	To				
Neal Rd	Pearson Rd	35	34.9	38.1	36.40%
Pearson Rd	Elliott Rd	30	29.7	33.2	35.80%

Table 1 summarizes the speed survey data along Skyway. Generally, vehicles on Skyway are traveling at speeds slightly higher than the speed limit. The speed limit on Skyway between Neal Road and Pearson Road is 35 mph. In this segment, 37% of motorists are travelling at a speed greater than the speed limit. The observed 85th percentile speed is 38.1 mph which is higher than the speed limit. The speed limit on Skyway between Pearson Road and Elliott Road (downtown) is 30 mph. In this segment, 36% of motorists are travelling at a speed greater than the speed limit. The observed 85th percentile speed is 33.2 mph which is again higher than the speed limit.

Speeding traffic will make it more difficult and less safe for pedestrians to cross Skyway. High speeds also increase the potential for rear-end collisions and vehicles trying to turn in to/out of driveways will find fewer gaps in the opposing traffic.

Crash History and Trends

Collision data was obtained from 2002-2011 to help identify high-crash locations and to understand how the crashes occur. Skyway, as an undivided four lane highway between Pearson Road and Elliott Road, has observed the highest concentration of injury collisions in the Town of Paradise over a 10-year period (2002-2011). During this time, 90 injury collisions have been recorded to the Transportation Injury Management System (TIMS), a statewide injury collision analysis tool. A majority of the crashes were rear-end collisions accounting for 55% of overall crashes, followed by broadside crashes (24%). Summary information of the collisions trends is provided in the following **Figures 6, 7 and 8**. During this time period there were two fatalities within the study area and a third occurred in May 2013.

Figure 6. Injury Collision Severity (2002-2011)

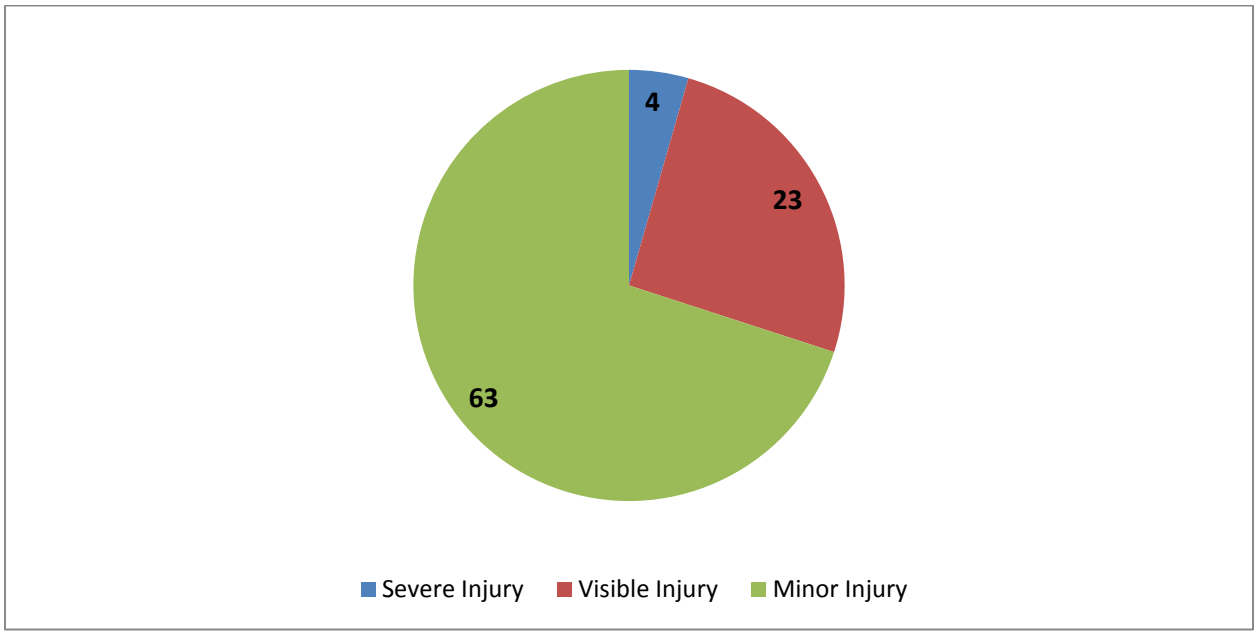


Figure 7. Collision Type (2002-2011)

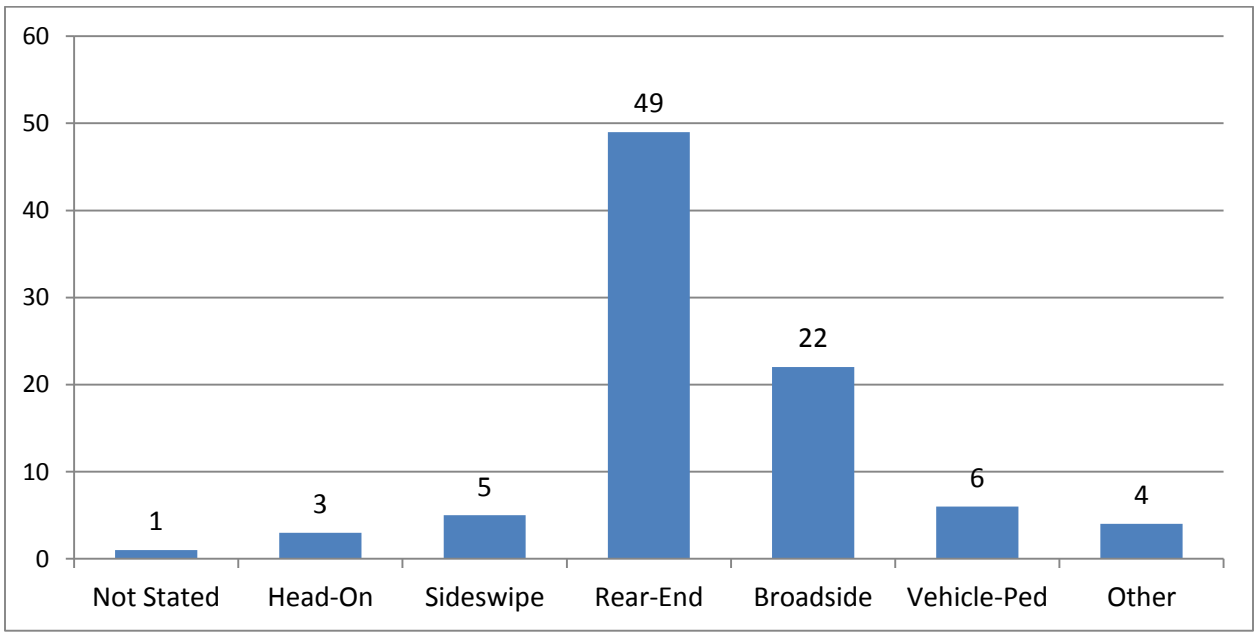


Figure 8. Motor Vehicle Collisions Involved With Other Roadway Elements/Users (2002-2011)

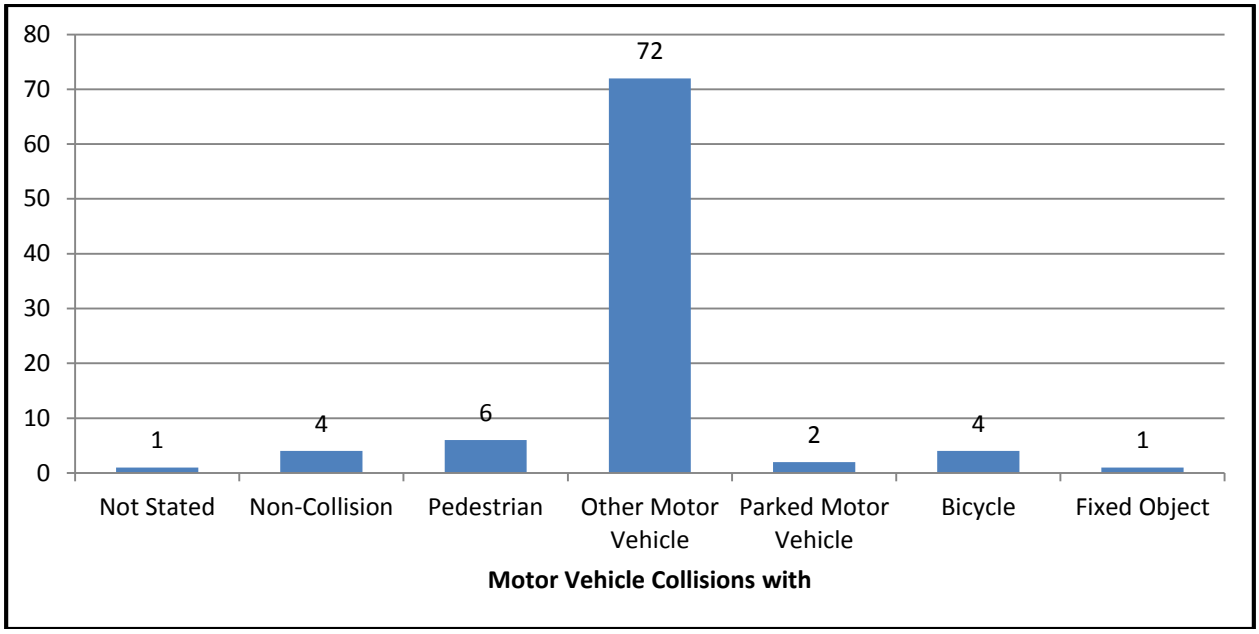


Table 2. Primary Collision Factors

Primary Collision Factor	Total	Percentage
Not Stated	4	4.40%
Unknown	2	2.20%
DUI Alcohol or Drug	7	7.80%
Unsafe Speed	43	47.80%
Wrong Side of Road	5	5.60%
Unsafe Lane Change	1	1.10%
Improper Turning	1	1.10%
Automobile Right-of-Way	16	17.80%
Pedestrian Right-of-Way	5	5.60%
Pedestrian Violation	2	2.20%
Traffic Signals and Signs	3	3.30%
Unsafe Starting or Backing	1	1.10%

Overarching trends in the collision data show a high volume of rear-end collision types. As shown in **Table 2**, 48% of the collisions, unsafe speed was reported as a primary collision factor. This is a direct indication that a two-way left turn lane and traffic calming would provide safety benefits in this segment. In addition, 10 of 93 collisions (about 11%) involved a bicyclist or pedestrian, the group most susceptible to severe injuries. Road diets can help reduce the number of collisions involving pedestrians or bicyclists by creating fewer lanes of traffic to cross (removing the dual threat) and by reducing vehicle speeds.

PROPOSED PROJECT

Countermeasures

Understanding the current conditions along Skyway, specifically in the downtown corridor, the Town of Paradise is seeking a solution which transforms Skyway between Pearson Road and Elliott Road into a safer, more pedestrian friendly, business-oriented destination. Moving forward the recommendations of the 2009 Skyway Corridor Study, the Town of Paradise secured a Highway Safety Improvement Program (HSIP) grant which provides funding for three primary countermeasures within the project area.

Countermeasure 1 – Road Diet

A road diet, or road conversion, is the process of reconfiguring the available right-of-way on a given road from two lanes in each direction (4-lane layout) to one lane in each direction with a center two-way left-turn lane (3-lane layout). Road diets can offer potential benefits to both vehicles and pedestrians. Road diets typically reduce vehicle speeds and vehicle interactions during lane changes, which potentially reduces the number and severity of vehicle-to-vehicle crashes.

The well documented benefits of implementing a road conversion include:

Collision Reductions – A road conversion is an effective strategy to reduce collision types associated with two-lanes in each direction and the absence of left turning lanes. These collision types include head-on, left-turn, rear-end, and sideswipe same-direction collisions. The proposed road diet (CRF "R15") is anticipated to reduce certain types of crashes by 30%. A crash reduction factor (CRF) is the percentage crash reduction that might be expected after implementing a given countermeasure at a specific site. The factors have been developed through extensive research and established methodologies outlined by the Federal Highway Administration. In 2006, the Highway Safety Information System issued a study entitled "Evaluation of Lane Reduction 'Road Diet' Measures and Their Effects on Crashes and Injuries." This report on the performance of road diets in California and Washington, found crash rates to be six percent lower on streets with road diets compared to similar streets without treatments.

Access Improvements – Providing a dedicated center two-way left-turn lane allows motorists to safely access adjacent commercial establishments or connecting roadways without stopping in the "fast lane" to make a left-turn.

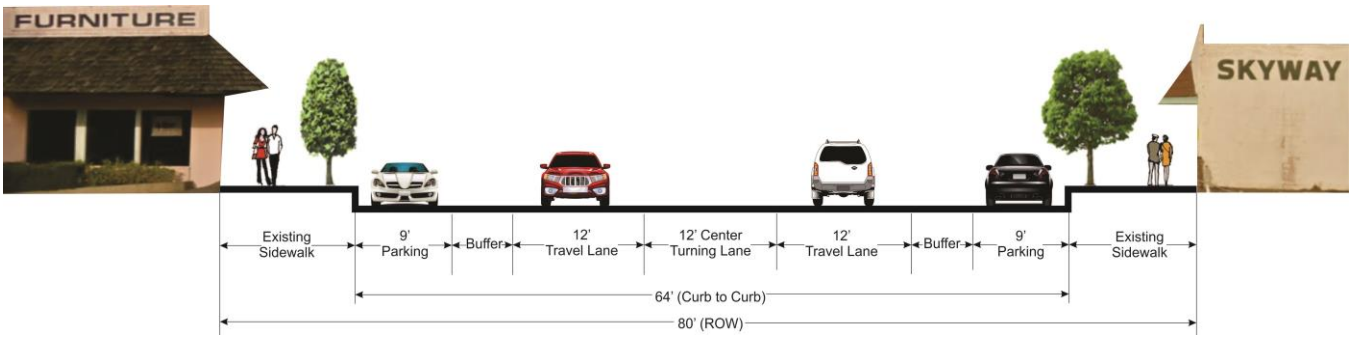
Speed Reduction / Traffic Calming – Four lane undivided highways converted using a road diet typically experience a reduction in overall travel speeds. Providing one travel lane per direction restricts opportunities for motorists to make abrupt passing movements and calms overall driver behavior. Reducing travel speeds in areas with high pedestrian concentrations is a critical element to improve overall safety and collision severities will typically decrease as a result.

Pedestrian Enhancements – Effective use of the available road width can allow for construction of pedestrian facilities which increase visibility and safety for crossing movements. This safety benefit is further discussed in Countermeasure 2.

Limitations of road conversions are based upon the volume of traffic using the corridor. According to a study conducted by the Federal Highway Administration (Publication Number: FHWA-HRT-04-082), Road Diets would work under most average daily traffic (ADT) conditions tested. Road diets have minimal effects on vehicle capacity, because left-turning vehicles are moved into a common two-way left-turn lane. However, for road diets with ADTs above approximately 20,000 vehicles, there is a greater likelihood that traffic congestion will increase to the point of diverting traffic to alternate routes.

The proposed project includes the implementation of a road diet along Skyway between Pearson Road and Elliott Road. The ADT on this section current exceeds 20,000 vehicles per day, which prompts a detailed analysis of potential consequences such as Level of Service degradation, vehicular capacity reduction, and longer queue lengths. These measurement tools and anticipated effects are discussed in detail later in this report. A typical cross-section of Skyway with a road diet in downtown area is illustrated in **Figure 9**.

Figure 9. Cross-section of Skyway with Road Diet between Pearson and Elliott



Countermeasure 2 – Improve Signal Timing (phasing and coordination)

Coordinating traffic signals within a defined corridor provides more efficient operation at the signalized intersections in addition to the road which connects them. The ultimate objective of this countermeasure is the reduction of collision types associated with isolated signal devices. Coordinating the traffic signals has been shown to reduce associated accident types by 15% (Crash Reduction Factor "S3"). In addition, signal coordination can improve corridor level of service, reduce queue lengths, and decrease travel delays.

The proposed project includes the coordination of the existing traffic signals at Skyway/Elliott Road, Skyway/Pearson Road and potentially at Skyway/Oliver Road. Coordinating these signals is a key factor in managing high traffic volumes within the road diet limits. Without signal coordination, implementation of Countermeasure 1 might not be feasible.

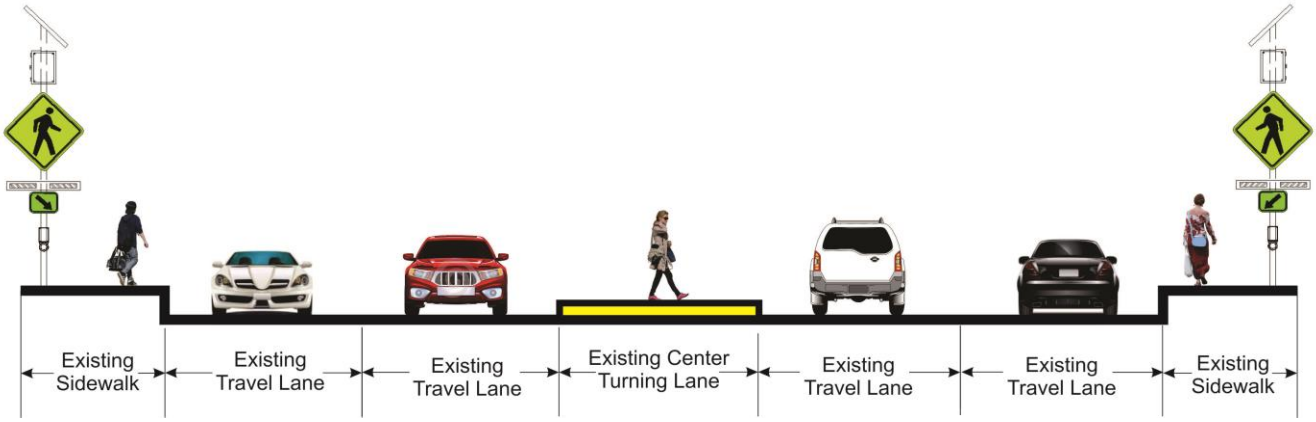
Countermeasure 3 – Install Pedestrian Crossing with Enhanced Safety Features / Curb Extensions

Providing safe pedestrian crossings within any corridor is a critical priority. This countermeasure includes the implementation of a combination of curb extensions, refuge islands, and/or pedestrian activated flashing beacons. Providing bulb-outs and pedestrian activated crossing devices is proven to improve pedestrian safety and reduce pedestrian related accidents by 35% (crash reduction factor "NS18"). Integrating pedestrian facilities within the roadway design is important to provide a safe and usable facility for all travel modes. Without proper consideration, pedestrians are discouraged from using walking as a mode of transportation or visiting commercial destinations.

The proposed project includes the installation of two types of crosswalk treatments at various locations along Skyway between Vista Way and Elliott Road.

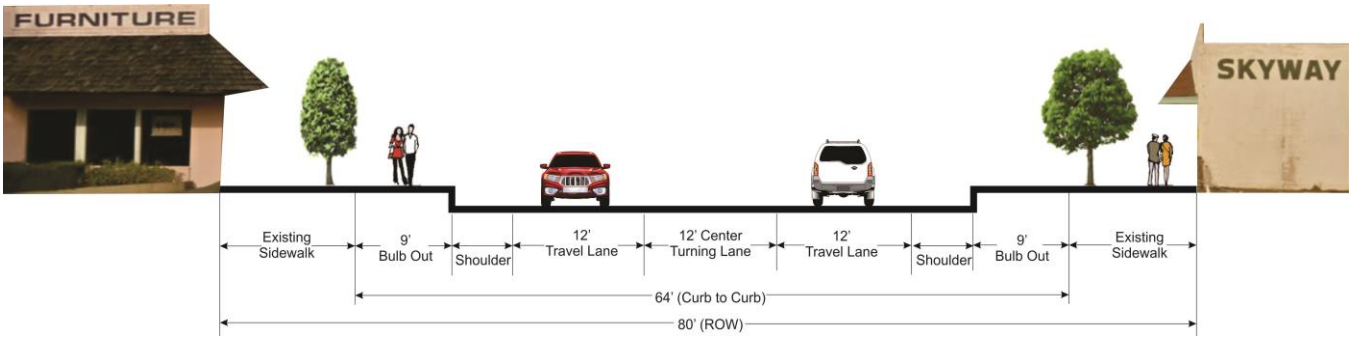
The first of these is the installation of either rectangular rapid flashing beacons (RRFB) or a pedestrian hybrid signal with a center refuge island at 5555 Skyway (near Jewell Road). This crosswalk has historically presented challenges to pedestrian safety, as it has two lanes in each direction which pedestrians must navigate when crossing. The installation of a center refuge island will allow pedestrians to clear each direction of traffic individually with an opportunity to seek a protected rest area in the middle of the roadway. In addition, a pedestrian activated system will better catch the attention of drivers and improve motorist yield rates. The cross-section of Skyway with this type of crosswalk is shown in **Figure 10**.

Figure 10. Cross-section of Skyway with Rapid Flashing Beacons and Center Refuge Island



The second crosswalk type will be implemented at 4 to 5 locations within the downtown section of Skyway, between Pearson Road and Elliott Road. These crosswalks will include the installation of both curb extensions and rapid rectangular flashing beacons. Curb extensions decrease the physical distance which pedestrians are expected to cross. In addition, they significantly improve visibility between motorists and pedestrians. Finally, curb extensions facilitate increased parallel parking in the downtown corridor, as clearance/buffer zones between crosswalks and permitted parking are no longer necessary. The benefit of this measure with flashing beacons is again, the clear communication of pedestrians to motorists of their intent to cross the street. The cross-section of Skyway with bulb-outs, or curb extensions, is shown in **Figure 11**.

Figure 11. Cross-section of Skyway with Curb Extensions



Outside the proposed countermeasures used for grant award, the project will also include an asphalt overlay between Pearson Road and Elliott Road, intersection configuration adjustments, ADA curb return/ramp upgrades, spot sidewalk repairs, and crosswalk street lighting as funding allows.

Nexus Summary

A road diet on the downtown section of Skyway would remedy most of the wide range of issues identified in the problem statement. It should be noted that all proposed changes to Skyway would occur within the existing right-of-way. Based on the "Skyway Corridor Study" report produced by W-Trans in February 2009 and discussions with Town of Paradise staff, it was agreed that a three-lane section through downtown Paradise would serve all of the project goals and that this configuration should be studied to identify the benefits and any potential impacts. The portion of Skyway between Pearson Road and Elliott Road would be reconfigured as a three-lane section with one travel lane in each direction and a two-way left turn lane. The traffic signals at Pearson Road, Elliott Road and Oliver Road would be retimed to provide optimized and coordinated traffic movement through the downtown area. The potential traffic impacts and benefits of implementing the road diet are discussed in detail in the following sections.

METHODOLOGY

Data Collection

Appropriate and accurate traffic data collection is crucial for making well informed decisions and for providing quantitative evidence. In order to analyze the existing operating conditions and to estimate the potential traffic impacts of road diet, Traffic Works collected and gathered data from various sources. The different types of data that were collected and gathered for this project are as follows:

- Weekday 24-hour traffic volume counts
- Turning movement counts
- Speed Survey Data
- Crash Data
- BCAG Travel Demand Model projections

- Historic counts along Skyway
- Miscellaneous data from field observations such as roadway geometrics, lane widths, lengths of turn lanes, crosswalk lengths etc.,

Level of Service

Level of service (LOS) is an estimate of the quality and performance of the transportation system operations. The industry standard for evaluating traffic conditions is based on the Transportation Research Board's (TRB) methodology outlined in the Highway Capacity Manual (HCM), Special Report 209 (TRB 2000). Using this methodology, traffic conditions are assessed with respect to the average intersection delay (seconds/vehicle). The letter "A" is used to describe the least amount of congestion and best operations, and the letter "F" indicates the highest amount of congestion and worst operations. The 2000 HCM level of service criteria for signalized and un-signalized intersections are shown in **Table 3**.

Table 3. Level of Service Criteria for Signalized and Un-signalized Intersections

LOS Rating	Brief Description	Average Delay for Signalized Intersections (seconds/vehicle)	Average Delay for TWSC Intersections (seconds/vehicle)
A	Free flow conditions.	0-10	0-10
B	Stable conditions with some affect from other vehicles.	>10-20	>10-15
C	Stable conditions with significant affect from other vehicles.	>20-35	>15-25
D	High density traffic conditions still with stable flow.	>35-55	>25-35
E	At or near capacity flows.	>55-80	>35-50
F	Over capacity conditions.	> 80	> 50

Source: HCM 2000, modified from Exhibits 16-2 and 17-2; TWSC: two-way stop control.

LOS ratings for TWSC and three-legged stop-control intersections are based on the worst movement average delay; LOS is not defined for the overall intersection.

Level of Service Policy

The Town of Paradise strives to maintain Level of Service "D" or better for all intersections (signalized and un-signalized). LOS "D" was therefore used as the criteria and threshold for determining significant impacts.

Queue Lengths

Queue length is defined as the total length of vehicles stopped in a lane behind the stop line and is reported in feet. The evaluation of traffic signals focuses on the estimation of delays and queue lengths that result from various signal control strategies at individual intersections, as well as on progression, or the sequence of arrivals at consecutive intersections. Traffic queues are the principle performance measure used in determining and evaluating of adequacy of turn lane lengths. Unlike level of service standards, the "acceptability" of queue lengths is not defined by industry standards. The performance measure is mainly relative to the context of the project and community. For this study, the queue lengths

were estimated to report the impacts of a road diet and to determine the turn lane lengths. SimTraffic simulation software was used to estimate the maximum and average queue lengths.

The maximum queue is the maximum back of queue observed for the entire analysis interval (1 hour for this study). This is a simple maximum, without any averaging. The maximum queue is calculated independently for each lane. The queue reported is the maximum queue for an individual lane, not the sum of all lane queues. SimTraffic records the maximum back of queue observed for every two minute period. The average queue is the average of all the two minute maximum queues. Vehicles can stop when queued and when waiting for a lane change. The SimTraffic software attempts to determine whether the stopping is due to queuing or lane changes and reports the queue lengths appropriately.

PRE-PROJECT ANALYSIS

Non-motorized Facilities

As detailed in prior sections, there are a variety of safety concerns, particularly regarding pedestrian crossings, on Skyway within the downtown segment. All things considered, the most significant issue is the "dual threat" condition associated with crossing multiple lanes in each direction of travel. This condition could only be corrected with a road diet and would not be addressed if the proposed project was not implemented.

Without the project, no improvement would be realized for the bicycle travel mode.

Traffic Volumes (current and future)

Turning movement counts were collected at all the study intersections on a regular weekday, from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. This data was used to identify the heaviest morning and evening traffic conditions. At each of the study intersections, the one-hour period with the heaviest traffic volumes (referred to as the peak hour) was calculated from the morning and evening data. Pedestrian crossing volumes and heavy vehicle data were also collected. Peak hour counts show that the Skyway experiences directional peaking with the vast majority of traffic travelling southbound during the morning peak and northbound during evening peak. In addition to turning movement counts, 24-hour volume counts were also collected at various locations along the corridor. The existing weekday average daily traffic (ADT) on Skyway in the Paradise downtown area is 20,500 vehicles/day. The existing ADT and peak hour traffic volumes are shown in **Figure 4** and **Figure 5** respectively.

Traffic volumes in the study area could increase in the future depending on population growth and development. According to the traffic count data provided by BCAG, the Annual Average Daily traffic (AADT) values have been declining in the study area consistently since the year 2000. Historic counts also show that the peak hour traffic on Skyway north of Elliott Road has been going down since 2006. However, the BCAG travel demand forecasting model also shows that for the study area, the traffic volumes along Skyway corridor are expected to increase approximately by 3% to 13% between 2010 and 2020. The historic and projected traffic volumes along the Skyway corridor obtained from BCAG model are presented in **Table 4**.

Table 4. Historic and Projected Volumes from BCAG

Location	Year	AADT		AM Peak		PM Peak	
Skyway north of Elliott	2020*	21230	I	1560	S	1640	D
	2009/10	20558	D	1558	D	1689	D
	2006	22255	D	1937	S	1774	I
	2003	24236	I	1956		1551	
	2000	23572		NA		NA	
Skyway south of Pearson	2020*	28350	I	2170	I	2690	I
	2009/10	24905		1901		2173	

* Obtained from BCAG demand model traffic projections

I – Increase compared to previous historic count

D – Decrease compared to previous historic count

S – No change compared to previous historic count

The data from BCAG clearly shows that the traffic volumes north of Elliott Road are either decreasing in the future or remaining constant. The 2020 AM peak volumes are forecasted to remain the same as 2010 volumes and the 2020 PM peak volumes are forecasted to decrease slightly. However, the travel demand model also shows that the traffic volumes increase on Skyway south of Pearson Road. Through discussion with Town of Paradise staff, a conservative growth rate of 10% was used to estimate the future AM and PM peak hour volumes. A 10% growth in traffic would reasonably account for any future growth and development that would occur in the vicinity of Town of Paradise. The directional distribution of traffic volumes along Skyway was assumed to remain consistent with the existing conditions. The percentage of heavy vehicles was also assumed to be constant.

Traffic Operations Analysis

The intersections were analyzed using the HCM modules for signalized and un-signalized intersections in Trafficware's software program, Synchro 8.0 (Build 804). Level of service calculations were performed using the existing condition intersection configurations and traffic volumes collected. The Level of Service and delay results are presented in **Table 5** and the calculation sheets are provided in **Appendix A**, attached.

As shown in **Table 5**, all the existing study intersections currently operate at acceptable levels of service (LOS "D" or better) during both the AM and PM peak hours.

Without a road diet, the future traffic growth would have minimal impact on Skyway from strictly a traffic operations perspective. The delays and congestion on Skyway are would increase slightly with increased traffic volumes. The increased traffic volume would make it increasing harder for drivers to make left-turn movements in to/out of driveways to find a safe gap in the opposing traffic. Pedestrians would also find it increasing more difficult find safe gaps in traffic at mid-block crossings.

Table 5. 2013 Existing AM and PM Peak Hour LOS Summary

Intersection	Control		AM Peak	PM Peak
Skyway and Neal Rd	Signalized	**LOS**	B	B
		Delay (sec/veh)	14.3	15.8
Skyway and Black Olive Dr	TWSC[1]	**LOS**	C	D
		Delay (sec/veh)	16.9	33.5
Skyway and Pearson Rd	Signalized	**LOS**	B	B
		Delay (sec/veh)	12.3	17.2
Skyway and Elliott Rd	Signalized	**LOS**	C	C
		Delay (sec/veh)	20.1	21.3
Skyway and Oliver Rd	Signalized	**LOS**	B	B
		Delay (sec/veh)	11.3	11.6
Skyway and Maxwell Rd	Signalized	**LOS**	A	A
		Delay (sec/veh)	8.7	8.5
Skyway and Bille Rd	Signalized	**LOS**	C	C
		Delay (sec/veh)	24.2	27.7

1 At TWSC intersections, LOS is based on average delay experienced by the critical movement at the intersection, typically a left-turn from stop-controlled street.

PROPOSED PROJECT ANALYSIS

Non-motorized Facilities

The proposed project features, by design, would improve pedestrian safety by 1) removing the "dual threat" at all unsignalized crosswalks in the downtown segment (Pearson to Elliott), 2) making pedestrians more visible and prominent in the corridor by installing curb extensions and pedestrian activated crossing devices, and 3) by reducing vehicular speeds and creating a pedestrian environment.

Bicycle travel would also be improved between Pearson Road and Elliott Road through the additional space created adjacent to the on-street parking. Today, cyclists must take a travel lane, and force traffic to pass them, which is difficult particularly in the uphill (northbound) direction. In the 3-lane cross-section, the proposed buffer area between the travel lane and parking area would provide a space for cyclists to ride without feeling pressured by vehicles following closely behind them.

Traffic Operations Analysis

A Level of Service analysis was performed at all the study intersections assuming a three-lane configuration between Pearson Road and Elliott Road. The existing traffic volumes were used for this analysis (in other words, no traffic diversion is assumed). We did, however, optimize and coordinate the traffic signals between Pearson Road and Oliver Road. Signal Coordination refers to the timing of the signals so that a platoon of cars traveling on a street arrives at a succession of green lights and proceeds through multiple intersections without stopping. Coordinated systems are controlled from a master controller and are set up so lights "cascade" in sequence and vehicles can proceed through a continuous series of green lights. Two-way streets are often arranged to correspond with rush hours to favor the

heavier volume direction. A well-coordinated signal system can enhance traffic flow, reduce delay and minimize pollution. Other benefits of signal coordination include reduced collisions, reduced unnecessary stopping and starting of traffic, improved journey time, and reduced driver frustration or road rage.

The signal timings within the downtown were coordinated to allow efficient traffic progression in the southbound direction during AM peak hour and in the northbound direction during PM peak hour. The Level of Service and delay results for this scenario are presented in **Table 6** and the detailed output sheets are provided in **Appendix A**. As shown in the results table, even with the road diet, all the study intersections operate at acceptable level of service conditions during both the AM and PM peak hours. The LOS rating remains the same, with the road diet, at all the study intersections except for the intersection of Skyway and Pearson Road. The LOS at Skyway and Pearson Road worsens from B to C but still operates well within acceptable ranges. The intersections of Skyway/Pearson and Skyway/Elliott experience minor increase in delay due to the road diet.

In addition to coordinated signal timings, other minor improvements that can be incorporated to improve the efficiency of traffic movements are:

- Removing the east-west crosswalk on the south leg at the Skyway/Pearson Road intersection. This crosswalk, when used, ties up the intersection because no vehicle movements are permitted. Pedestrians crossing Skyway at this location can use the crosswalk on the north leg.
- Changing the outside northbound lane at Skyway/Pearson Road to a right only lane with a free-right or an overlap phase. Since the lane reduction occurs immediately north of Pearson Road, the outside lane can be converted into an exclusive right-turn lane. The proposed configuration at this intersection is shown in **Figure 12**.
- Changing the westbound right from Elliott Road to Skyway to a free-right movement. The proposed configuration at this intersection is also shown in **Figure 12**.

As the traffic volumes on Skyway are over 20,000 vehicles per day, Traffic-Works performed a detailed micro-simulation analysis in addition to the LOS analysis. SimTraffic software was used to estimate queue lengths at the critical intersections of Skyway/Pearson and Skyway/Elliott. The simulation was run for 60 minutes with a 15 minute seeding time. Seeding is completed in order to fill the network with vehicles, so that there will be vehicles in the network when simulation begins. The seeding time is usually set to be at least the amount of time (in minutes) required by a vehicle to travel from one end of the corridor to the other end. An average of five different 60-minute simulation runs was used to report queue lengths on Skyway. Averaging multiple simulation runs accounts for the daily variation in traffic.

Table 7 summarizes the expected average and maximum queue lengths on Skyway at the two critical intersections in downtown Paradise.

Table 6. 2013 LOS Comparison (With and Without Road Diet)

Intersection	Control		AM Peak		PM Peak	
			Existing	W/ Road Diet	Existing	W/ Road Diet
Skyway and Neal Rd	Signalized	**LOS**	B	B	B	B
		Delay	14.3	13.8	15.8	15.3
Skyway and Black Olive Dr	TWSC[1]	**LOS**	C	C	D	D
		Delay	16.9	20.4	33.5	33.6
Skyway and Pearson Rd	Signalized	**LOS**	B	B	**B**	**C**
		Delay	12.3	16	17.2	28.6
Skyway and Elliott Rd	Signalized	**LOS**	C	C	C	C
		Delay	20.1	21.5	21.3	26.6
Skyway and Oliver Rd	Signalized	**LOS**	B	B	B	B
		Delay	11.3	12.9	11.6	12.7
Skyway and Maxwell Rd	Signalized	**LOS**	A	A	A	A
		Delay	8.7	9.3	8.5	8.5
Skyway and Bille Rd	Signalized	**LOS**	C	C	C	C
		Delay	24.2	29.4	27.7	24.6

1 At TWSC intersections, LOS is based on average delay experienced by the critical movement at the intersection, typically a left-turn from stop-controlled street.

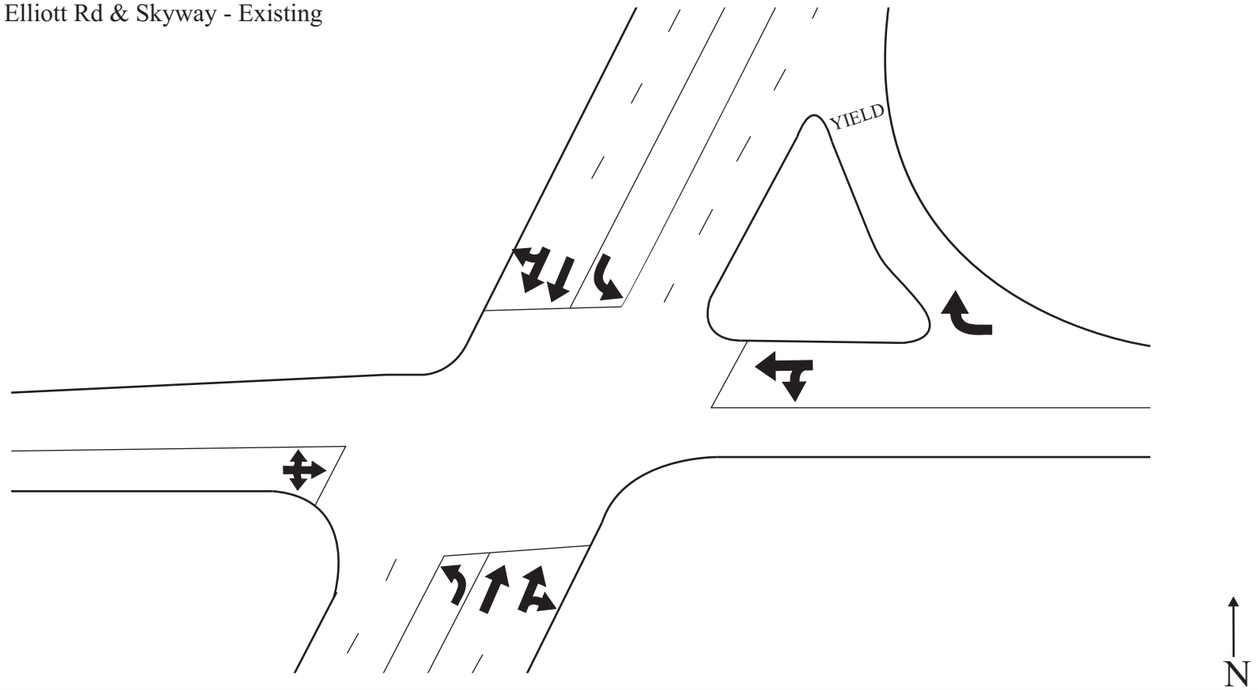
Delay is measured in seconds/vehicle.

Skyway and Pearson Road is the only intersection where the LOS grade changes (from LOS B to LOS C) due to a road diet.

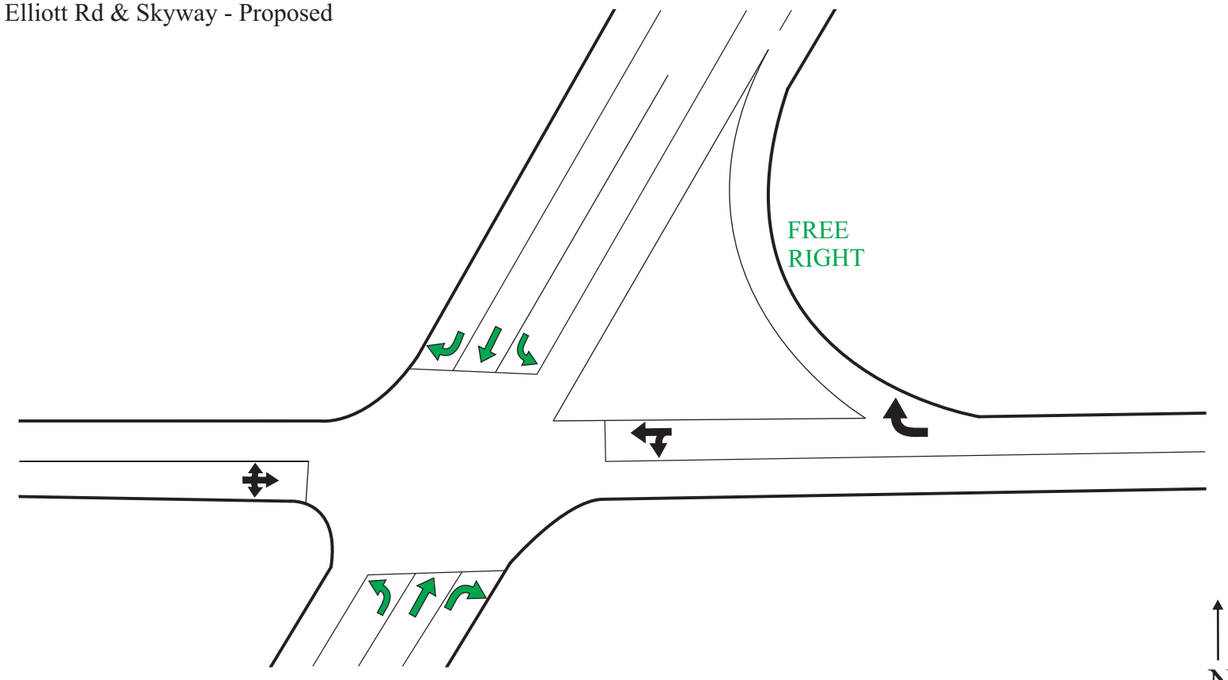
Table 7. Queue Lengths on Skyway for Existing 2013 with Road Diet

Intersection		AM Peak W/ Road Diet		PM Peak W/ Road Diet	
		NBT	SBT	NBT	SBT
Skyway and Pearson Rd	**Max Queue (ft)**	257	381	**792**	254
	Avg Queue (ft)	127	158	**460**	105
Skyway and Elliott Rd	**Max Queue (ft)**	148	325	274	269
	Avg Queue (ft)	46	108	123	97

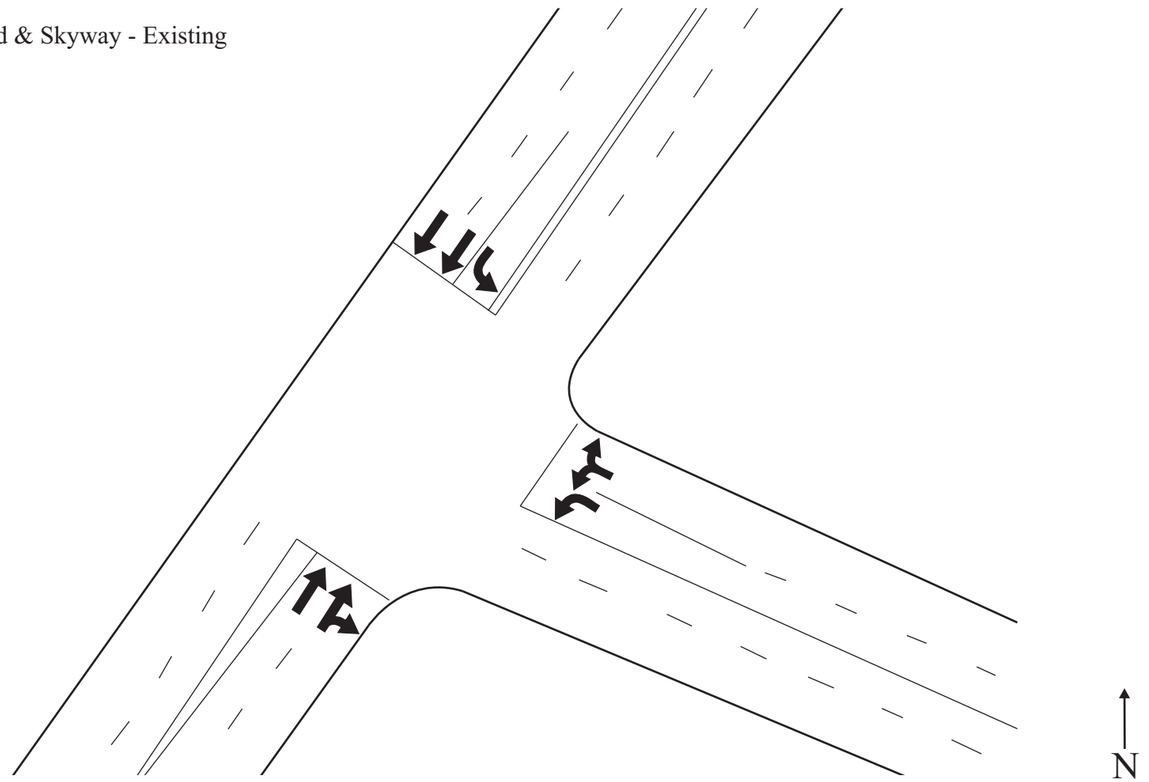
Elliott Rd & Skyway - Existing



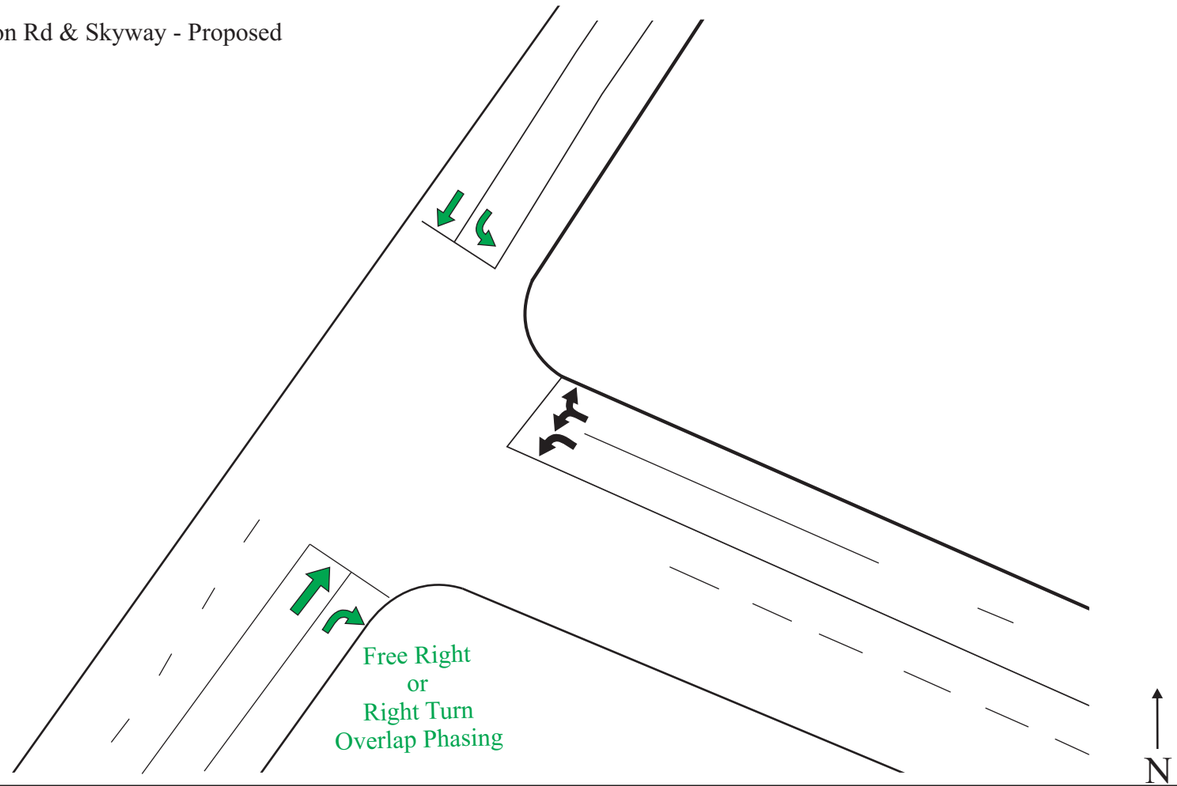
Elliott Rd & Skyway - Proposed



Pearson Rd & Skyway - Existing



Pearson Rd & Skyway - Proposed



TRAFFIC WORKS LLC

NO SCALE

LEGEND

- Proposed Lane Configuration
- Existing Lane Configuration

FIGURE 12

Transportation & Safety Study

Existing & Proposed Intersection Configurations

The results show that Skyway will experience long queues if the road diet is implemented. During the AM peak, the maximum queue occurs in the southbound direction, which is the heavy traffic movement during morning time period. The pattern reverses in the evening peak with maximum queues occurring in the northbound direction. The maximum queues during the AM peak are in the range of 300 ft to 400 ft. The maximum queue during the PM peak is nearly 800 ft which occurs on northbound Skyway at Skyway/Pearson. This queue almost spills back to the intersection of Skyway/Black Olive. However, it should be noted that the maximum queues shown in **Table 5** do not last for the entire peak hour but only for the peak 15 minute period or less (a few cycles). Realistically, through most of the peak hour, the queue lengths will be in the range of the average queues reported. All the average queue lengths are within normal ranges with the exception of the northbound queue at Skyway/Pearson during the PM peak hour. Despite the long queues during PM peak hour, the simulation showed that the queues would be cleared every cycle due to the optimized and coordinated signal timings.

The queue lengths could be further reduced by increasing the cycle length and thereby increasing the green time given to the heavy movements. Although the queue lengths could be shortened with longer cycle lengths, it should be noted that increasing the cycle length can also increase the overall intersection delay. In this scenario, since all the intersections are operating better than the threshold of LOS D, the cycle lengths could likely be increased without going over the LOS threshold and without worsening the overall intersection operation.

It is also important to provide sufficient storage for turn lanes and side streets when implementing coordinated signal timings, especially since the majority of green time is given to the coordinated movement (southbound in the AM and northbound in the PM). Spilling of turn lane queues into the through movements can cause unnecessary congestion and can often throw off signal coordination. SimTraffic simulations were also reviewed to estimate the turning movement queues and determine the turn pocket lengths at the intersections of Skyway/Pearson and Skyway/Elliott. **Table 8** shows the recommended turn pocket lengths.

Table 8. Recommended Turn Pocket Lengths

Intersection	Turn Pocket	AM Queue (ft)	PM Queue (ft)	Recommended Pocket Length (ft)[1]
Skyway/Elliott	Northbound Right	63	162	200
	Northbound Left	55	96	150
	Southbound Right	35	8	100
Skyway/Pearson	Southbound Left	288	214	300

1 The pocket lengths recommended in the above table are higher than existing queue lengths due to future traffic increase considerations.

As discussed in previous sections, traffic volumes in the overall study area could potentially grow by 10% by the year 2020. The evaluation of future conditions showed that delay at all the study intersections increases noticeably, but all the intersections with the exception of Skyway and Black Olive Drive (which is side street STOP controlled), operate at acceptable level of service conditions. With the increased delay, the queue lengths would also increase in the downtown area.

Some of the Skyway traffic originating from/destined to the north-east portion Paradise (and to some extent the upper ridge area) may move to other roadways over time due to the road diet. According to FHWA research, for road diets with ADTs above approximately 20,000 vehicles, there is a likelihood of traffic diverting to alternative routes due to increased traffic congestion. Changing travel patterns could further reduce the queue lengths and improve level of service conditions on Skyway through the downtown area. However, it should be noted that these changes in travel patterns and driver behaviors would occur over time (not immediately) as the drivers experience heavier delays and longer queues. In addition to the change in travel patterns, a variety of future planned improvement projects would accommodate the traffic growth and improve traffic operations on Skyway.

The primary intent of this project is to improve safety along Skyway in downtown Paradise. A number of other long-term improvements would provide improved operations in the overall study area and could be selected for construction later in the design phase or as separate projects. Planned improvements that could reasonably be assumed to be constructed in the future, that could alleviate the congestion in downtown include:

- signalization of the Skyway/Black Olive intersection,
- intersection control changes at Black Olive/Foster intersection and
- construction of alternative routes such as a potential Buschmann Road extension west to Skyway.

CONCLUSIONS

Within the last 10 years an ever growing number of communities have implemented road conversions within their downtown districts to calm traffic, reclaim the pedestrian environment, revitalize businesses, and reduce the occurrence of both vehicular and pedestrian crashes that impact the lives of their family and friends. Implementing a road diet on Skyway by reconfiguring it from a four-lane cross-section to a three-lane cross-section with a center turn lane will achieve the project goals including:

- Safer, enhanced pedestrian crossings with bulb-outs for better visibility of pedestrians
- Reduced travel speeds
- A center-turn lane for safer and more efficient turning maneuvers
- Safer and more efficient on-street parking buffered from the travel lanes
- Investment and design features that support business revitalization

In order to realize these significant benefits, the Town and it's residents will need to accept a decrease in roadway capacity on Skyway between Pearson Road and Elliott Road. The roadway conversion will result

in increased delay and longer vehicle queue lengths on Skyway and increased delay on the side-street approaches to Skyway during the peak traffic flows.

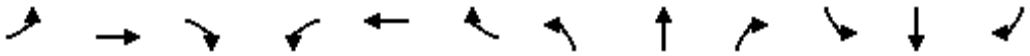
The Level of Service analysis shows that the study intersections will continue to operate at acceptable Levels of Service and meet the LOS "D" or better threshold after implementation of a road diet. The micro-simulation model indicated that the worst queues would occur during the PM peak hour in the northbound direction at the Skyway/Pearson Road intersection. All the other queues are within generally accepted ranges. The queue lengths can be mitigated, for the most part, by adjusting the signal timings to clear queues on Skyway. This can be achieved by increasing the cycle lengths and providing more green time to the heavy movement on Skyway.

We recommend that the road diet is feasible, will provide the intended and important safety benefits, and that the current traffic flows are manageable with the planned traffic signal timing/coordination and lane configuration improvements.

APPENDIX A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	3	4	73	4	122	1	472	12	52	1266	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.95			1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.98			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1715	1678			1779	1563	1805	3406	1487	1770	3526	
Flt Permitted	0.95	0.98			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1715	1678			1779	1563	1805	3406	1487	1770	3526	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	25	3	5	83	5	139	1	536	14	59	1439	38
RTOR Reduction (vph)	0	5	0	0	0	120	0	0	7	0	1	0
Lane Group Flow (vph)	17	11	0	0	88	19	1	536	7	59	1476	0
Confl. Peds. (#/hr)						2			3			
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	0%	6%	6%	2%	2%	2%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	2.4	2.4			8.4	8.4	0.7	30.1	30.1	4.4	33.8	
Effective Green, g (s)	2.4	2.4			8.4	8.4	0.7	30.1	30.1	4.4	33.8	
Actuated g/C Ratio	0.04	0.04			0.14	0.14	0.01	0.49	0.49	0.07	0.55	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	67	65			243	214	20	1672	730	127	1944	
v/s Ratio Prot	c0.01	0.01			c0.05		0.00	0.16		c0.03	c0.42	
v/s Ratio Perm						0.01			0.00			
v/c Ratio	0.25	0.17			0.36	0.09	0.05	0.32	0.01	0.46	0.76	
Uniform Delay, d1	28.6	28.5			24.0	23.1	30.0	9.4	8.0	27.3	10.6	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.0	1.3			0.9	0.2	1.0	0.5	0.0	2.7	2.8	
Delay (s)	30.6	29.8			24.9	23.3	31.0	9.9	8.0	30.0	13.5	
Level of Service	C	C			C	C	C	A	A	C	B	
Approach Delay (s)		30.2			23.9			9.9			14.1	
Approach LOS		C			C			A			B	

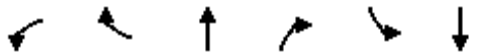
Intersection Summary			
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	61.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	1	55	0	25	0	545	84	36	1346	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	1	61	0	28	0	606	93	40	1496	2
Pedestrians		1			1						2	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			0						0	
Right turn flare (veh)												
Median type								TWLTL			None	
Median storage veh)								2				
Upstream signal (ft)											902	
pX, platoon unblocked	0.84	0.84	0.84	0.84	0.84		0.84					
vC, conflicting volume	1910	2278	750	1482	2232	352	1499			700		
vC1, stage 1 conf vol	1578	1578		653	653							
vC2, stage 2 conf vol	333	700		829	1579							
vCu, unblocked vol	1700	2138	315	1189	2084	352	1209			700		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	82	100	96	100			96		
cM capacity (veh/h)	133	167	575	330	171	648	480			899		

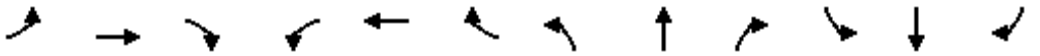
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	1	89	303	396	40	997	501
Volume Left	0	61	0	0	40	0	0
Volume Right	1	28	0	93	0	0	2
cSH	575	390	480	1700	899	1700	1700
Volume to Capacity	0.00	0.23	0.00	0.23	0.04	0.59	0.29
Queue Length 95th (ft)	0	22	0	0	3	0	0
Control Delay (s)	11.3	16.9	0.0	0.0	9.2	0.0	0.0
Lane LOS	B	C			A		
Approach Delay (s)	11.3	16.9	0.0		0.2		
Approach LOS	B	C					

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	55.3%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	393	45	420	149	121	994
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frpb, ped/bikes	1.00		0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.98		0.96		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	3365		3314		1787	3574
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	3365		3314		1787	3574
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	437	50	467	166	134	1104
RTOR Reduction (vph)	16	0	44	0	0	0
Lane Group Flow (vph)	471	0	589	0	134	1104
Confl. Peds. (#/hr)	3	1		3		
Heavy Vehicles (%)	3%	3%	4%	4%	1%	1%
Turn Type	NA		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	12.8		25.1		6.0	35.1
Effective Green, g (s)	12.8		25.1		6.0	35.1
Actuated g/C Ratio	0.23		0.45		0.11	0.63
Clearance Time (s)	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	770		1488		191	2244
v/s Ratio Prot	c0.14		0.18		c0.07	c0.31
v/s Ratio Perm						
v/c Ratio	0.61		0.40		0.70	0.49
Uniform Delay, d1	19.3		10.3		24.1	5.6
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.4		0.8		11.1	0.8
Delay (s)	20.8		11.1		35.1	6.4
Level of Service	C		B		D	A
Approach Delay (s)	20.8		11.1			9.5
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	55.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

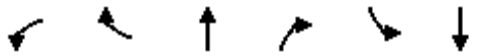


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	29	42	164	7	147	13	398	111	184	859	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.93			0.94		1.00	0.97		1.00	0.97	
Flt Protected		0.99			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1745			1692		1770	3407		1770	3445	
Flt Permitted		0.96			0.82		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1681			1416		1770	3407		1770	3445	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	31	45	174	7	156	14	423	118	196	914	198
RTOR Reduction (vph)	0	33	0	0	40	0	0	24	0	0	16	0
Lane Group Flow (vph)	0	54	0	0	297	0	14	517	0	196	1096	0
Confl. Peds. (#/hr)			1			1			1			
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		20.5			20.5		0.7	31.5		13.0	43.8	
Effective Green, g (s)		20.5			20.5		0.7	31.5		13.0	43.8	
Actuated g/C Ratio		0.27			0.27		0.01	0.41		0.17	0.57	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		447			376		16	1393		298	1959	
v/s Ratio Prot							0.01	0.15		c0.11	c0.32	
v/s Ratio Perm		0.03			c0.21							
v/c Ratio		0.12			0.79		0.88	0.37		0.66	0.56	
Uniform Delay, d1		21.4			26.3		38.1	15.9		29.9	10.5	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			10.8		161.3	0.8		5.2	1.2	
Delay (s)		21.5			37.1		199.4	16.6		35.1	11.7	
Level of Service		C			D		F	B		D	B	
Approach Delay (s)		21.5			37.1			21.2			15.2	
Approach LOS		C			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	77.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	1	223	8	3	0	66	529	12	34	948	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85			1.00		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1600			1813		1770	3526		1770	3539	
Flt Permitted	0.75	1.00			0.70		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1410	1600			1308		1770	3526		1770	3539	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	75	1	240	9	3	0	71	569	13	37	1019	1
RTOR Reduction (vph)	0	166	0	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	75	75	0	0	12	0	71	581	0	37	1020	0
Confl. Peds. (#/hr)									1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	8.7	8.7			8.7		4.6	34.3		2.2	31.9	
Effective Green, g (s)	8.7	8.7			8.7		4.6	34.3		2.2	31.9	
Actuated g/C Ratio	0.15	0.15			0.15		0.08	0.60		0.04	0.56	
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	214	243			198		142	2114		68	1973	
v/s Ratio Prot		0.05					c0.04	0.16		0.02	c0.29	
v/s Ratio Perm	c0.05				0.01							
v/c Ratio	0.35	0.31			0.06		0.50	0.27		0.54	0.52	
Uniform Delay, d1	21.7	21.6			20.8		25.2	5.5		27.0	7.9	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	0.7			0.1		2.8	0.3		8.6	1.0	
Delay (s)	22.7	22.3			20.9		28.0	5.8		35.6	8.8	
Level of Service	C	C			C		C	A		D	A	
Approach Delay (s)		22.4			20.9			8.2			9.8	
Approach LOS		C			C			A			A	

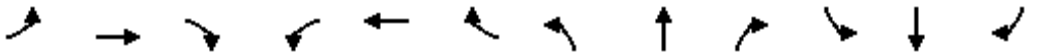
Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	57.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	63	55	481	68	145	904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		0.98		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1718		3474		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1718		3474		1770	3539
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	72	62	547	77	165	1027
RTOR Reduction (vph)	54	0	12	0	0	0
Lane Group Flow (vph)	80	0	612	0	165	1027
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	NA		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	6.4		24.8		6.1	34.9
Effective Green, g (s)	6.4		24.8		6.1	34.9
Actuated g/C Ratio	0.13		0.50		0.12	0.71
Clearance Time (s)	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	223		1747		219	2505
v/s Ratio Prot	c0.05		0.18		c0.09	c0.29
v/s Ratio Perm						
v/c Ratio	0.36		0.35		0.75	0.41
Uniform Delay, d1	19.6		7.4		20.9	3.0
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.0		0.6		13.6	0.5
Delay (s)	20.6		7.9		34.5	3.5
Level of Service	C		A		C	A
Approach Delay (s)	20.6		7.9			7.8
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	49.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

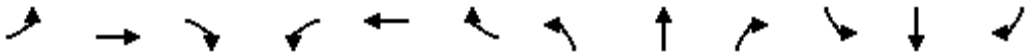
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	65	73	221	69	43	24	299	159	23	707	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.92		1.00	0.94		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1732		1787	1773		1770	1863	1583	1770	3521	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1732		1787	1773		1770	1863	1583	1770	3521	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	19	70	78	238	74	46	26	322	171	25	760	27
RTOR Reduction (vph)	0	58	0	0	29	0	0	0	108	0	3	0
Lane Group Flow (vph)	19	90	0	238	91	0	26	322	63	25	784	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	0.7	11.7		12.8	23.8		1.4	24.3	24.3	1.4	24.3	
Effective Green, g (s)	0.7	11.7		12.8	23.8		1.4	24.3	24.3	1.4	24.3	
Actuated g/C Ratio	0.01	0.18		0.19	0.36		0.02	0.37	0.37	0.02	0.37	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	306		345	637		37	683	581	37	1292	
v/s Ratio Prot	0.01	c0.05		c0.13	0.05		c0.01	0.17		0.01	c0.22	
v/s Ratio Perm									0.04			
v/c Ratio	1.06	0.30		0.69	0.14		0.70	0.47	0.11	0.68	0.61	
Uniform Delay, d1	32.8	23.7		24.9	14.3		32.2	16.0	13.8	32.2	17.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	230.8	0.5		5.7	0.1		46.2	2.3	0.4	39.3	2.1	
Delay (s)	263.6	24.2		30.5	14.4		78.4	18.4	14.2	71.5	19.2	
Level of Service	F	C		C	B		E	B	B	E	B	
Approach Delay (s)		51.4			25.1			20.0			20.8	
Approach LOS		D			C			B			C	

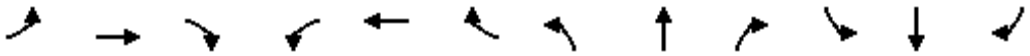
Intersection Summary			
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	7	7	89	1	31	9	1333	59	39	621	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98			1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	0.96			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1715	1708			1793	1579	1787	3574	1565	1770	3465	
Flt Permitted	0.95	0.96			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1715	1708			1793	1579	1787	3574	1565	1770	3465	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	106	7	7	94	1	33	9	1403	62	41	654	106
RTOR Reduction (vph)	0	5	0	0	0	29	0	0	30	0	8	0
Lane Group Flow (vph)	60	55	0	0	95	4	9	1403	32	41	752	0
Confl. Peds. (#/hr)						1			1			
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	6.2	6.2			7.1	7.1	0.7	32.9	32.9	2.2	34.4	
Effective Green, g (s)	6.2	6.2			7.1	7.1	0.7	32.9	32.9	2.2	34.4	
Actuated g/C Ratio	0.10	0.10			0.11	0.11	0.01	0.51	0.51	0.03	0.53	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	165	164			197	174	19	1825	799	60	1850	
v/s Ratio Prot	c0.03	0.03			c0.05		0.01	c0.39		c0.02	0.22	
v/s Ratio Perm						0.00			0.02			
v/c Ratio	0.36	0.33			0.48	0.02	0.47	0.77	0.04	0.68	0.41	
Uniform Delay, d1	27.3	27.2			26.9	25.6	31.7	12.7	7.9	30.8	8.9	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	1.2			1.9	0.0	17.5	3.2	0.1	27.6	0.7	
Delay (s)	28.6	28.4			28.8	25.6	49.1	15.9	8.0	58.3	9.6	
Level of Service	C	C			C	C	D	B	A	E	A	
Approach Delay (s)		28.5			28.0			15.7			12.1	
Approach LOS		C			C			B			B	

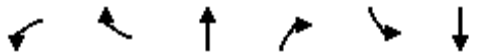
Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	64.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	1	19	0	20	1	1347	182	34	801	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1	21	0	22	1	1464	198	37	871	0
Pedestrians					1						2	
Lane Width (ft)					12.0						12.0	
Walking Speed (ft/s)					4.0						4.0	
Percent Blockage					0						0	
Right turn flare (veh)												
Median type								TWLTL			None	
Median storage veh)								2				
Upstream signal (ft)											902	
pX, platoon unblocked	1.00	1.00	1.00	1.00	1.00		1.00					
vC, conflicting volume	1703	2610	435	2077	2511	834	871			1663		
vC1, stage 1 conf vol	945	945		1566	1566							
vC2, stage 2 conf vol	758	1665		510	945							
vCu, unblocked vol	1698	2608	427	2073	2509	834	864			1663		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	82	100	93	100			90		
cM capacity (veh/h)	199	108	580	113	148	315	779			387		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	1	42	733	930	37	580	290
Volume Left	0	21	1	0	37	0	0
Volume Right	1	22	0	198	0	0	0
cSH	580	168	779	1700	387	1700	1700
Volume to Capacity	0.00	0.25	0.00	0.55	0.10	0.34	0.17
Queue Length 95th (ft)	0	24	0	0	8	0	0
Control Delay (s)	11.2	33.5	0.0	0.0	15.3	0.0	0.0
Lane LOS	B	D	A		C		
Approach Delay (s)	11.2	33.5	0.0		0.6		
Approach LOS	B	D					

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	59.6%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	305	81	1091	295	111	532
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	0.97		0.95		1.00	0.95
Frpb, ped/bikes	1.00		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.97		0.97		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	3352		3443		1787	3574
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	3352		3443		1787	3574
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	328	87	1173	317	119	572
RTOR Reduction (vph)	45	0	29	0	0	0
Lane Group Flow (vph)	370	0	1461	0	119	572
Confl. Peds. (#/hr)	2	1		3		
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1%
Turn Type	NA		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	11.0		26.1		5.0	35.1
Effective Green, g (s)	11.0		26.1		5.0	35.1
Actuated g/C Ratio	0.20		0.48		0.09	0.65
Clearance Time (s)	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	681		1661		165	2318
v/s Ratio Prot	c0.11		c0.42		c0.07	0.16
v/s Ratio Perm						
v/c Ratio	0.54		0.88		0.72	0.25
Uniform Delay, d1	19.3		12.6		23.9	4.0
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.9		7.0		14.4	0.3
Delay (s)	20.2		19.6		38.3	4.2
Level of Service	C		B		D	A
Approach Delay (s)	20.2		19.6			10.1
Approach LOS	C		B			B

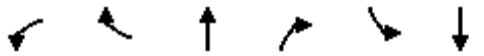
Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	54.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	20	14	139	20	178	29	905	252	109	508	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.93		1.00	0.97		1.00	1.00	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1788			1717		1805	3476		1787	3563	
Flt Permitted		0.93			0.84		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1689			1479		1805	3476		1787	3563	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	10	22	16	156	22	200	33	1017	283	122	571	11
RTOR Reduction (vph)	0	12	0	0	75	0	0	30	0	0	2	0
Lane Group Flow (vph)	0	36	0	0	303	0	33	1270	0	122	580	0
Confl. Peds. (#/hr)			1			1			1			1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)		16.0			16.0		1.4	24.8		5.1	28.5	
Effective Green, g (s)		16.0			16.0		1.4	24.8		5.1	28.5	
Actuated g/C Ratio		0.28			0.28		0.02	0.43		0.09	0.49	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		466			408		43	1488		157	1753	
v/s Ratio Prot							0.02	c0.37		c0.07	c0.16	
v/s Ratio Perm		0.02			c0.20							
v/c Ratio		0.08			0.74		0.77	0.85		0.78	0.33	
Uniform Delay, d1		15.5			19.1		28.1	14.9		25.8	8.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			7.1		56.1	6.4		21.1	0.5	
Delay (s)		15.6			26.2		84.2	21.3		46.9	9.4	
Level of Service		B			C		F	C		D	A	
Approach Delay (s)		15.6			26.2			22.9			15.9	
Approach LOS		B			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	23	8	57	5	87	181	927	32	7	512	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96			0.92		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1804			1717		1787	3556		1787	3508	
Flt Permitted	0.60	1.00			0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1133	1804			1506		1787	3556		1787	3508	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	24	8	60	5	92	191	976	34	7	539	65
RTOR Reduction (vph)	0	7	0	0	79	0	0	1	0	0	7	0
Lane Group Flow (vph)	62	25	0	0	78	0	191	1009	0	7	597	0
Confl. Peds. (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	8.3	8.3			8.3		9.0	38.6		0.8	30.4	
Effective Green, g (s)	8.3	8.3			8.3		9.0	38.6		0.8	30.4	
Actuated g/C Ratio	0.14	0.14			0.14		0.15	0.65		0.01	0.51	
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	157	250			209		269	2299		23	1786	
v/s Ratio Prot		0.01					c0.11	c0.28		0.00	0.17	
v/s Ratio Perm	c0.05				0.05							
v/c Ratio	0.39	0.10			0.37		0.71	0.44		0.30	0.33	
Uniform Delay, d1	23.4	22.4			23.3		24.1	5.2		29.2	8.7	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.2			1.1		8.5	0.6		7.4	0.5	
Delay (s)	25.0	22.6			24.5		32.6	5.8		36.5	9.2	
Level of Service	C	C			C		C	A		D	A	
Approach Delay (s)		24.2			24.5			10.1			9.5	
Approach LOS		C			C			B			A	

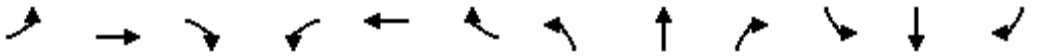
Intersection Summary			
HCM 2000 Control Delay	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	59.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	58	66	1006	83	65	570
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.93		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1706		3499		1770	3539
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1706		3499		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	64	73	1118	92	72	633
RTOR Reduction (vph)	64	0	6	0	0	0
Lane Group Flow (vph)	73	0	1204	0	72	633
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	NA		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	6.6		30.4		3.2	37.6
Effective Green, g (s)	6.6		30.4		3.2	37.6
Actuated g/C Ratio	0.13		0.58		0.06	0.72
Clearance Time (s)	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	215		2037		108	2549
v/s Ratio Prot	c0.04		c0.34		c0.04	0.18
v/s Ratio Perm						
v/c Ratio	0.34		0.59		0.67	0.25
Uniform Delay, d1	20.8		6.9		24.0	2.5
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.9		1.3		14.5	0.2
Delay (s)	21.8		8.2		38.4	2.7
Level of Service	C		A		D	A
Approach Delay (s)	21.8		8.2			6.4
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	52.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



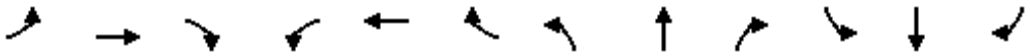
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	62	50	172	116	50	81	659	298	33	371	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.93		1.00	0.95		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1755		1787	1797		1770	1863	1583	1770	3498	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1755		1787	1797		1770	1863	1583	1770	3498	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	67	54	187	126	54	88	716	324	36	403	34
RTOR Reduction (vph)	0	44	0	0	22	0	0	0	150	0	5	0
Lane Group Flow (vph)	37	77	0	187	158	0	88	716	174	36	432	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	2.1	9.1		7.2	14.2		6.7	33.5	33.5	1.4	28.2	
Effective Green, g (s)	2.1	9.1		7.2	14.2		6.7	33.5	33.5	1.4	28.2	
Actuated g/C Ratio	0.03	0.14		0.11	0.21		0.10	0.50	0.50	0.02	0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	55	237		191	379		176	928	789	36	1467	
v/s Ratio Prot	0.02	0.04		c0.10	c0.09		c0.05	c0.38		0.02	0.12	
v/s Ratio Perm									0.11			
v/c Ratio	0.67	0.32		0.98	0.42		0.50	0.77	0.22	1.00	0.29	
Uniform Delay, d1	32.2	26.3		29.9	22.9		28.7	13.7	9.5	32.9	12.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	27.8	0.8		58.3	0.7		2.2	6.2	0.6	150.0	0.5	
Delay (s)	60.0	27.1		88.3	23.7		30.9	19.9	10.1	182.9	13.4	
Level of Service	E	C		F	C		C	B	B	F	B	
Approach Delay (s)		34.8			56.6			18.0			26.3	
Approach LOS		C			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	67.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	3	4	73	4	122	1	472	12	52	1266	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	0.99	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.95			1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.98			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1715	1678			1779	1562	1805	3406	1485	1770	3526	
Flt Permitted	0.95	0.98			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1715	1678			1779	1562	1805	3406	1485	1770	3526	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	25	3	5	83	5	139	1	536	14	59	1439	38
RTOR Reduction (vph)	0	5	0	0	0	123	0	0	6	0	1	0
Lane Group Flow (vph)	17	11	0	0	88	16	1	536	8	59	1476	0
Confl. Peds. (#/hr)						2			3			
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	0%	6%	6%	2%	2%	2%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	3.9	3.9			9.4	9.4	0.7	48.0	48.0	6.3	53.6	
Effective Green, g (s)	3.9	3.9			9.4	9.4	0.7	48.0	48.0	6.3	53.6	
Actuated g/C Ratio	0.05	0.05			0.11	0.11	0.01	0.57	0.57	0.08	0.64	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	80	78			200	175	15	1955	852	133	2260	
v/s Ratio Prot	c0.01	0.01			c0.05		0.00	c0.16		0.03	c0.42	
v/s Ratio Perm						0.01			0.01			
v/c Ratio	0.21	0.14			0.44	0.09	0.07	0.27	0.01	0.44	0.65	
Uniform Delay, d1	38.4	38.2			34.6	33.3	41.1	9.0	7.6	37.0	9.3	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.3	0.9			1.5	0.2	1.9	0.3	0.0	2.4	1.5	
Delay (s)	39.7	39.1			36.2	33.5	43.0	9.3	7.6	39.3	10.7	
Level of Service	D	D			D	C	D	A	A	D	B	
Approach Delay (s)		39.4			34.5			9.4			11.8	
Approach LOS		D			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	83.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	1	55	0	25	0	545	84	36	1346	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	1	61	0	28	0	606	93	40	1496	2
Pedestrians		1			1						2	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			0						0	
Right turn flare (veh)												
Median type								TWLTL			None	
Median storage veh)								2				
Upstream signal (ft)											902	
pX, platoon unblocked												
vC, conflicting volume	1910	2278	750	1482	2232	352	1499			700		
vC1, stage 1 conf vol	1578	1578		653	653							
vC2, stage 2 conf vol	333	700		829	1579							
vCu, unblocked vol	1910	2278	750	1482	2232	352	1499			700		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	77	100	96	100			96		
cM capacity (veh/h)	108	150	358	262	152	648	443			899		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	1	89	303	396	40	997	501
Volume Left	0	61	0	0	40	0	0
Volume Right	1	28	0	93	0	0	2
cSH	358	322	443	1700	899	1700	1700
Volume to Capacity	0.00	0.28	0.00	0.23	0.04	0.59	0.29
Queue Length 95th (ft)	0	28	0	0	3	0	0
Control Delay (s)	15.1	20.4	0.0	0.0	9.2	0.0	0.0
Lane LOS	C	C			A		
Approach Delay (s)	15.1	20.4	0.0		0.2		
Approach LOS	C	C					

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	55.3%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	393	45	420	149	121	994
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.99	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	3364		1827	1533	1787	1881
Flt Permitted	0.96		1.00	1.00	0.95	1.00
Satd. Flow (perm)	3364		1827	1533	1787	1881
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	437	50	467	166	134	1104
RTOR Reduction (vph)	11	0	0	0	0	0
Lane Group Flow (vph)	476	0	467	166	134	1104
Confl. Peds. (#/hr)	3	1		3		
Heavy Vehicles (%)	3%	3%	4%	4%	1%	1%
Turn Type	NA		NA	Free	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases				Free		
Actuated Green, G (s)	17.9		47.1	90.0	13.0	64.1
Effective Green, g (s)	17.9		47.1	90.0	13.0	64.1
Actuated g/C Ratio	0.20		0.52	1.00	0.14	0.71
Clearance Time (s)	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	669		956	1533	258	1339
v/s Ratio Prot	c0.14		0.26		0.07	c0.59
v/s Ratio Perm				0.11		
v/c Ratio	0.71		0.49	0.11	0.52	0.82
Uniform Delay, d1	33.6		13.7	0.0	35.6	9.0
Progression Factor	1.00		1.00	1.00	0.79	0.35
Incremental Delay, d2	3.6		1.8	0.1	1.3	4.4
Delay (s)	37.2		15.5	0.1	29.3	7.5
Level of Service	D		B	A	C	A
Approach Delay (s)	37.2		11.5			9.9
Approach LOS	D		B			A

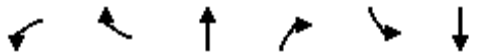
Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	29	42	164	7	147	13	398	111	184	859	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.93			0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.97		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1737			1692		1770	1863	1548	1770	1863	1583
Flt Permitted		0.96			0.80		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1672			1394		1770	1863	1548	1770	1863	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	31	45	174	7	156	14	423	118	196	914	198
RTOR Reduction (vph)	0	33	0	0	39	0	0	0	65	0	0	80
Lane Group Flow (vph)	0	54	0	0	298	0	14	423	53	196	914	118
Confl. Peds. (#/hr)			1			1			1			
Heavy Vehicles (%)	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8					2			6
Actuated Green, G (s)		23.6			23.6		0.8	40.7	40.7	13.7	53.6	53.6
Effective Green, g (s)		23.6			23.6		0.8	40.7	40.7	13.7	53.6	53.6
Actuated g/C Ratio		0.26			0.26		0.01	0.45	0.45	0.15	0.60	0.60
Clearance Time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		438			365		15	842	700	269	1109	942
v/s Ratio Prot							0.01	c0.23		0.11	c0.49	
v/s Ratio Perm		0.03			c0.21				0.03			0.07
v/c Ratio		0.12			0.82		0.93	0.50	0.08	0.73	0.82	0.13
Uniform Delay, d1		25.3			31.2		44.6	17.5	14.0	36.4	14.5	8.0
Progression Factor		1.00			1.00		0.69	0.42	0.13	0.85	0.77	0.38
Incremental Delay, d2		0.1			13.1		186.9	1.9	0.2	9.0	6.6	0.3
Delay (s)		25.4			44.3		217.6	9.3	2.1	39.8	17.8	3.3
Level of Service		C			D		F	A	A	D	B	A
Approach Delay (s)		25.4			44.3			13.0			18.9	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	1	223	8	3	0	66	529	12	34	948	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85			1.00		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1600			1813		1770	3526		1770	3539	
Flt Permitted	0.75	1.00			0.49		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1410	1600			929		1770	3526		1770	3539	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	75	1	240	9	3	0	71	569	13	37	1019	1
RTOR Reduction (vph)	0	172	0	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	75	69	0	0	12	0	71	581	0	37	1020	0
Confl. Peds. (#/hr)									1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	10.8	10.8			10.8		5.6	63.6		3.6	61.6	
Effective Green, g (s)	10.8	10.8			10.8		5.6	63.6		3.6	61.6	
Actuated g/C Ratio	0.12	0.12			0.12		0.06	0.71		0.04	0.68	
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	169	192			111		110	2491		70	2422	
v/s Ratio Prot		0.04					c0.04	0.16		0.02	c0.29	
v/s Ratio Perm	c0.05				0.01							
v/c Ratio	0.44	0.36			0.11		0.65	0.23		0.53	0.42	
Uniform Delay, d1	36.8	36.4			35.3		41.2	4.6		42.4	6.3	
Progression Factor	1.00	1.00			1.00		1.11	0.37		1.00	1.00	
Incremental Delay, d2	1.9	1.1			0.4		11.0	0.2		7.0	0.5	
Delay (s)	38.7	37.5			35.7		56.7	1.9		49.4	6.8	
Level of Service	D	D			D		E	A		D	A	
Approach Delay (s)		37.8			35.7			7.9			8.3	
Approach LOS		D			D			A			A	

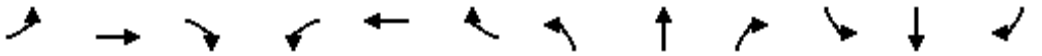
Intersection Summary			
HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	63	55	481	68	145	904
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		0.98		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1718		3474		1770	3539
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1718		3474		1770	3539
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	72	62	547	77	165	1027
RTOR Reduction (vph)	54	0	11	0	0	0
Lane Group Flow (vph)	80	0	613	0	165	1027
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	NA		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	6.7		26.9		6.0	36.9
Effective Green, g (s)	6.7		26.9		6.0	36.9
Actuated g/C Ratio	0.13		0.52		0.12	0.72
Clearance Time (s)	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	223		1811		205	2530
v/s Ratio Prot	c0.05		0.18		c0.09	c0.29
v/s Ratio Perm						
v/c Ratio	0.36		0.34		0.80	0.41
Uniform Delay, d1	20.5		7.2		22.2	3.0
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	1.0		0.5		20.1	0.5
Delay (s)	21.5		7.7		42.3	3.4
Level of Service	C		A		D	A
Approach Delay (s)	21.5		7.7			8.8
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	51.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



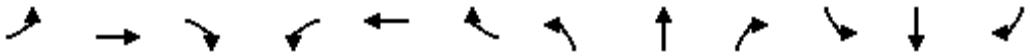
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	65	73	221	69	33	24	299	159	23	707	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.92		1.00	0.95		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1732		1787	1791		1770	1863	1583	1770	3521	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1732		1787	1791		1770	1863	1583	1770	3521	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	19	70	78	238	74	35	26	322	171	25	760	27
RTOR Reduction (vph)	0	66	0	0	25	0	0	0	96	0	2	0
Lane Group Flow (vph)	19	82	0	238	84	0	26	322	75	25	785	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	0.7	9.0		8.2	16.5		2.1	26.6	26.6	0.7	25.2	
Effective Green, g (s)	0.7	9.0		8.2	16.5		2.1	26.6	26.6	0.7	25.2	
Actuated g/C Ratio	0.01	0.15		0.14	0.27		0.03	0.44	0.44	0.01	0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	20	257		242	488		61	819	695	20	1466	
v/s Ratio Prot	0.01	c0.05		c0.13	0.05		c0.01	0.17		0.01	c0.22	
v/s Ratio Perm									0.05			
v/c Ratio	0.95	0.32		0.98	0.17		0.43	0.39	0.11	1.25	0.54	
Uniform Delay, d1	29.9	23.0		26.1	16.8		28.6	11.5	10.0	29.9	13.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	175.6	0.7		52.9	0.2		4.7	1.4	0.3	288.2	1.4	
Delay (s)	205.5	23.7		78.9	17.0		33.3	12.9	10.3	318.1	14.7	
Level of Service	F	C		E	B		C	B	B	F	B	
Approach Delay (s)		44.4			59.5			13.1			24.0	
Approach LOS		D			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	29.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	60.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	7	7	89	1	31	9	1333	59	39	621	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95			1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98			1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	0.96			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1715	1708			1793	1579	1787	3574	1564	1770	3465	
Flt Permitted	0.95	0.96			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1715	1708			1793	1579	1787	3574	1564	1770	3465	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	106	7	7	94	1	33	9	1403	62	41	654	106
RTOR Reduction (vph)	0	5	0	0	0	30	0	0	28	0	7	0
Lane Group Flow (vph)	60	55	0	0	95	3	9	1403	34	41	753	0
Confl. Peds. (#/hr)						1			1			
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	6.6	6.6			7.7	7.7	0.7	41.4	41.4	3.7	44.4	
Effective Green, g (s)	6.6	6.6			7.7	7.7	0.7	41.4	41.4	3.7	44.4	
Actuated g/C Ratio	0.09	0.09			0.10	0.10	0.01	0.55	0.55	0.05	0.59	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	150	149			183	161	16	1962	858	86	2040	
v/s Ratio Prot	c0.03	0.03			c0.05		0.01	c0.39		c0.02	0.22	
v/s Ratio Perm						0.00			0.02			
v/c Ratio	0.40	0.37			0.52	0.02	0.56	0.72	0.04	0.48	0.37	
Uniform Delay, d1	32.5	32.4			32.1	30.5	37.2	12.6	7.8	34.9	8.1	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.6			2.5	0.1	38.3	2.3	0.1	4.1	0.5	
Delay (s)	34.3	34.0			34.6	30.5	75.5	14.9	7.9	39.0	8.7	
Level of Service	C	C			C	C	E	B	A	D	A	
Approach Delay (s)		34.1			33.5			15.0			10.2	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	75.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	1	19	0	20	1	1347	182	34	801	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1	21	0	22	1	1464	198	37	871	0
Pedestrians					1						2	
Lane Width (ft)					12.0						12.0	
Walking Speed (ft/s)					4.0						4.0	
Percent Blockage					0						0	
Right turn flare (veh)												
Median type								TWLTL			None	
Median storage veh)								2				
Upstream signal (ft)											902	
pX, platoon unblocked												
vC, conflicting volume	1703	2610	435	2077	2511	834	871			1663		
vC1, stage 1 conf vol	945	945		1566	1566							
vC2, stage 2 conf vol	758	1665		510	945							
vCu, unblocked vol	1703	2610	435	2077	2511	834	871			1663		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	82	100	93	100			90		
cM capacity (veh/h)	199	108	574	113	147	315	776			387		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	1	42	733	930	37	580	290
Volume Left	0	21	1	0	37	0	0
Volume Right	1	22	0	198	0	0	0
cSH	574	168	776	1700	387	1700	1700
Volume to Capacity	0.00	0.25	0.00	0.55	0.10	0.34	0.17
Queue Length 95th (ft)	0	24	0	0	8	0	0
Control Delay (s)	11.3	33.6	0.0	0.0	15.3	0.0	0.0
Lane LOS	B	D	A		C		
Approach Delay (s)	11.3	33.6	0.0		0.6		
Approach LOS	B	D					

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	59.6%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	305	81	1091	295	111	532
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.97		1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00		1.00	0.99	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	0.85	1.00	1.00
Flt Protected	0.96		1.00	1.00	0.95	1.00
Satd. Flow (prot)	3351		1881	1578	1787	1881
Flt Permitted	0.96		1.00	1.00	0.95	1.00
Satd. Flow (perm)	3351		1881	1578	1787	1881
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	328	87	1173	317	119	572
RTOR Reduction (vph)	27	0	0	0	0	0
Lane Group Flow (vph)	388	0	1173	317	119	572
Confl. Peds. (#/hr)	2	1		3		
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1%
Turn Type	NA		NA	Free	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases				Free		
Actuated Green, G (s)	17.4		68.6	105.0	7.0	79.6
Effective Green, g (s)	17.4		68.6	105.0	7.0	79.6
Actuated g/C Ratio	0.17		0.65	1.00	0.07	0.76
Clearance Time (s)	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	555		1228	1578	119	1425
v/s Ratio Prot	c0.12		c0.62		c0.07	0.30
v/s Ratio Perm				0.20		
v/c Ratio	0.70		0.96	0.20	1.00	0.40
Uniform Delay, d1	41.3		16.8	0.0	49.0	4.4
Progression Factor	1.00		1.00	1.00	0.82	0.61
Incremental Delay, d2	3.8		17.0	0.3	75.7	0.7
Delay (s)	45.2		33.8	0.3	115.8	3.4
Level of Service	D		C	A	F	A
Approach Delay (s)	45.2		26.6			22.8
Approach LOS	D		C			C

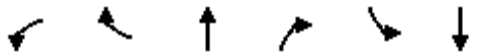
Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	20	14	139	20	178	29	905	252	109	508	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.95			0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.98		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1783			1717		1805	1900	1579	1787	1881	1563
Flt Permitted		0.93			0.86		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1667			1501		1805	1900	1579	1787	1881	1563
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	10	22	16	156	22	200	33	1017	283	122	571	11
RTOR Reduction (vph)	0	12	0	0	41	0	0	0	82	0	0	5
Lane Group Flow (vph)	0	36	0	0	337	0	33	1017	201	122	571	6
Confl. Peds. (#/hr)			1			1			1			1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8					2			6
Actuated Green, G (s)		27.1			27.1		3.9	57.3	57.3	8.6	62.0	62.0
Effective Green, g (s)		27.1			27.1		3.9	57.3	57.3	8.6	62.0	62.0
Actuated g/C Ratio		0.26			0.26		0.04	0.55	0.55	0.08	0.59	0.59
Clearance Time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		430			387		67	1036	861	146	1110	922
v/s Ratio Prot							0.02	c0.54		c0.07	0.30	
v/s Ratio Perm		0.02			c0.22				0.13			0.00
v/c Ratio		0.08			0.87		0.49	0.98	0.23	0.84	0.51	0.01
Uniform Delay, d1		29.5			37.3		49.6	23.3	12.4	47.5	12.6	8.8
Progression Factor		1.00			1.00		1.20	0.44	0.07	0.81	0.68	1.00
Incremental Delay, d2		0.1			18.8		2.6	15.2	0.3	31.4	1.7	0.0
Delay (s)		29.6			56.1		62.2	25.5	1.2	70.0	10.3	8.9
Level of Service		C			E		E	C	A	E	B	A
Approach Delay (s)		29.6			56.1			21.3			20.6	
Approach LOS		C			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	23	8	57	5	87	181	927	32	7	512	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96			0.92		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1803			1717		1787	3556		1787	3507	
Flt Permitted	0.45	1.00			0.86		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	843	1803			1506		1787	3556		1787	3507	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	62	24	8	60	5	92	191	976	34	7	539	65
RTOR Reduction (vph)	0	7	0	0	72	0	0	1	0	0	5	0
Lane Group Flow (vph)	62	25	0	0	85	0	191	1009	0	7	599	0
Confl. Peds. (#/hr)			4									3
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	11.3	11.3			11.3		24.2	80.3		1.4	57.5	
Effective Green, g (s)	11.3	11.3			11.3		24.2	80.3		1.4	57.5	
Actuated g/C Ratio	0.11	0.11			0.11		0.23	0.76		0.01	0.55	
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	90	194			162		411	2719		23	1920	
v/s Ratio Prot		0.01					c0.11	c0.28		0.00	c0.17	
v/s Ratio Perm	c0.07				0.06							
v/c Ratio	0.69	0.13			0.52		0.46	0.37		0.30	0.31	
Uniform Delay, d1	45.2	42.4			44.3		34.8	4.1		51.3	13.0	
Progression Factor	1.00	1.00			1.00		0.61	0.14		1.00	1.00	
Incremental Delay, d2	19.7	0.3			3.0		0.3	0.1		7.4	0.4	
Delay (s)	64.9	42.7			47.3		21.7	0.7		58.7	13.4	
Level of Service	E	D			D		C	A		E	B	
Approach Delay (s)		57.3			47.3			4.1			13.9	
Approach LOS		E			D			A			B	

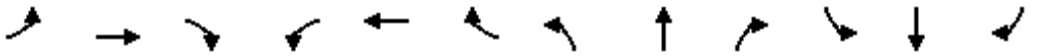
Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	58	66	1006	83	65	570
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.93		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1706		3499		1770	3539
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1706		3499		1770	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	64	73	1118	92	72	633
RTOR Reduction (vph)	64	0	6	0	0	0
Lane Group Flow (vph)	73	0	1204	0	72	633
Heavy Vehicles (%)	1%	1%	2%	2%	2%	2%
Turn Type	NA		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	6.6		30.4		3.2	37.6
Effective Green, g (s)	6.6		30.4		3.2	37.6
Actuated g/C Ratio	0.13		0.58		0.06	0.72
Clearance Time (s)	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	215		2037		108	2549
v/s Ratio Prot	c0.04		c0.34		c0.04	0.18
v/s Ratio Perm						
v/c Ratio	0.34		0.59		0.67	0.25
Uniform Delay, d1	20.8		6.9		24.0	2.5
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	0.9		1.3		14.5	0.2
Delay (s)	21.8		8.2		38.4	2.7
Level of Service	C		A		D	A
Approach Delay (s)	21.8		8.2			6.4
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	52.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	62	50	172	116	50	81	659	298	33	371	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.93		1.00	0.95		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1755		1787	1797		1770	1863	1583	1770	3498	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1755		1787	1797		1770	1863	1583	1770	3498	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	67	54	187	126	54	88	716	324	36	403	34
RTOR Reduction (vph)	0	41	0	0	20	0	0	0	147	0	5	0
Lane Group Flow (vph)	37	80	0	187	160	0	88	716	177	36	432	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	2.2	8.7		9.2	15.7		7.8	34.8	34.8	2.2	29.2	
Effective Green, g (s)	2.2	8.7		9.2	15.7		7.8	34.8	34.8	2.2	29.2	
Actuated g/C Ratio	0.03	0.12		0.13	0.22		0.11	0.49	0.49	0.03	0.41	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	55	215		231	397		194	914	776	54	1440	
v/s Ratio Prot	0.02	0.05		c0.10	c0.09		c0.05	c0.38		0.02	0.12	
v/s Ratio Perm									0.11			
v/c Ratio	0.67	0.37		0.81	0.40		0.45	0.78	0.23	0.67	0.30	
Uniform Delay, d1	34.0	28.6		30.0	23.6		29.6	14.9	10.3	34.0	14.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	27.8	1.1		18.5	0.7		1.7	6.7	0.7	26.9	0.5	
Delay (s)	61.8	29.7		48.5	24.3		31.2	21.6	11.0	60.9	14.5	
Level of Service	E	C		D	C		C	C	B	E	B	
Approach Delay (s)		37.2			36.6			19.3			18.1	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	70.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

TOWN OF PARADISE
Council Agenda Summary
Date: January 14, 2014

AGENDA NO. 7(b)

ORIGINATED BY: Joanna Gutierrez, Town Clerk
REVIEWED BY: Lauren Gill, Town Manager

SUBJECT: Review of Council appointed Citizen Advisory Committees/Commissions

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COUNCIL ACTION REQUESTED: (1) Review and discuss the purpose of current Council appointed citizen advisory committees and commissions; and, (2) Consider direction to staff.

BACKGROUND: At the December 10, 2013 meeting, the Town Council directed staff to bring back information that would allow the Town Council to analyze the Council appointed Citizen Advisory Committees/Commissions in order that the Council might determine if there is opportunity to streamline process and lessen impacts to the staff due to staff shortages, and to the budget, however slight.

DISCUSSION: There currently exists seven Town Council appointed citizen advisory committees as outlined in the attached chart. One committee was formed pursuant to State mandate and the remaining six formed to serve at the will of the Town Council.

Two of the committees meet on a regular basis:

- Planning Commission (established by Paradise Municipal Code)
- Fire Safe Council (established by minute order)

Four committees meet as needed:

- Access Appeals Board (established by Paradise Municipal Code)
- Building/Fire Code Appeals Board (State mandated - required by CA Uniform Administrative Code)
- Development Impact Fee Adjustments Board (established by Paradise Municipal Code)
- Tree Advisory Committee (established by Paradise Municipal Code)

One committee is inactive, but not formally disbanded:

- Paradise Economic Development Commission (established by Council resolution)

RECOMMENDATION: Determine if there is opportunity to streamline the process and lessen impact to staff or to the budget, and consider direction to staff to implement desired changes, if any.

FISCAL IMPACT: Potential costs savings in staff labor if any committee activity is suspended; potential codification costs if legislation relating to the Paradise Municipal Code is necessary.

CITIZEN COMMITTEE ANALYSIS

COMMITTEE	PURPOSE	MANDATED BY STATE		STAFF IMPACT		BUDGET IMPACT		ESTABLISHED BY
		YES	NO	YES	NO	YES	NO	
Access Board of Appeals	Provides appeal process of Building Official Decisions		X	X		X		• CA Uniform Admin Code • PMC Chapter 15 • Res. No. 03-05
Building/Fire Code Appeals Board	Provides appeal process of Building Official/Fire Marshal Decisions	X				X		• CA Uniform Admin Code • PMC Chapter 15 • Minute Order/Building Official Recommended
Development Impact Fee Adjustments Board	Provides appeal process for adjustment, reduction or waiver of development impact fees		X	X		X		• PMC Section 3.40.070
Fire Safe Council	Support Fire Department Fire Prevention Efforts		X		X		X	• Minute Order-Nov. 2001
Paradise Economic Development Commission	Relating to Economic Development of the Town INACTIVE – Oct. 2004		X		X		X	• Res No. 81-42
Planning Commission	Advisory agency for land use matters including General Plan implementation, State Subdivision Map Act, CEQA compliance & duties assigned by PMC in Titles 8, 12, 16 & 17		X	X		X		• PMC Section 2.21.040
Tree Advisory Committee	Advisory Body for management of tree resources as delegated by Town Council or requested by staff, Planning Commission or Town Council		X	X		X		• PMC Section 8.12.030

TOWN OF PARADISE
Council Agenda Summary
Date: January 14, 2014

AGENDA NO. 7(c)

ORIGINATED BY:
REVIEWED BY: Lauren Gill, Town Manager

SUBJECT: Consider Options for upcoming Town Council Vacancy

COUNCIL ACTION REQUESTED: In accordance with California Government Code Section 36512, consider options to fill the upcoming vacancy caused by the pending resignation of Councilmember Tim Titus, and provide direction to staff.

DISCUSSION: Due to the resignation submitted by Councilmember Titus, the Council is being called to decide how to fill the remainder of his term, which expires in November of this year. Pursuant to California Government Code Section 36512, whenever there is a vacancy on the Council, the Council has 60 days to fill the vacancy by appointment or call a special election to fill the vacancy. If the Council does not appoint a citizen to fill the vacancy and does not hold a special election, the position will remain vacant until the regular election in November.

A vacancy occurs immediately if a member of the Council moves his or her place of residence outside the Town limits. Mr. Titus has estimated that date to be sometime in March.

In making the appointment for the vacant seat, the Council has the following options:

1. Appoint a resident to fill the remaining term of the vacant position (November, 2014.) In order to qualify, the resident must be a United States citizen at least 18 years of age and be a registered voter of the Town of Paradise. The appointment may be made by choosing a member of a current committee/commission who is already familiar with the Brown Act and the Political Reform Act relating to financial disclosures, conflicts of interest, ethics training, etc for elected and appointed public officials. These laws are regulated by the California Fair Political Practices Commission.

   The Council may also decide to appoint through a public application process. The process involves advertising the vacancy, inviting applications, interviewing applicants, making the appointment at a Town Council meeting.

2. The Council may call for a special election to fill the vacancy. This is a very expensive and time consuming process, and is not a prudent or feasible option being the term expires in November 2014. This vacancy, whether filled or vacant, will be on the next general election ballot in November.

3. The Council may decide not to act and the position will be vacant until the next regular election in November.

FISCAL IMPACT: Depending upon which option the Council chooses, the time and expense may be very minimal.

Town of Paradise
Council Agenda Summary **Agenda Item: 8(a)**
Date: January 14, 2014

Originated by: Joanna Gutierrez, Town Clerk

Reviewed by: Lauren Gill, Town Manager

Subject: **Council representation on local and County Committees and Commissions.**

Council Action Requested: Appoint Council representatives and alternates to represent the Town of Paradise on various local and regional committees and commissions.

Alternatives: Consider other actions relating to committee/commission representation.

Background: The Town Council, on an annual basis, appoints Council Members to represent the Town of Paradise on local and regional committees and commissions.

Discussion: Three committees require Mayor representation: the Butte County City Selection Committee, the Butte County Disaster Council and Town's Finance & Investment Committee. If the Mayor is unable to attend a City Selection Committee meeting, a letter of authorization from the Mayor is required for an alternate to attend on the Mayor's behalf. The alternate must be a seated Council Member.

The Butte County Air Quality Management District (BCAQMD) and Butte County Associations of Governments (BCAG) boards meet on the same day and in the same location. It is recommended that the same Council Member serve on the BCAQMD and BCAG. The Joint Powers Agreement for the Butte County Air Quality Management District (BCAQMD) states that city appointments are for a four-year term, unless the term of office for the representative expires.

At the November 10, 2009, Regular Meeting, Council concurred that the Council Member appointed to serve as alternate to the Butte County Association of Governments (BCAG) would automatically serve as the alternate to the Butte County Air Quality Management District (BCAQMD).

Following is a list and description of the committees and commissions, meeting dates and times, and locations.

Butte County Committees/Commissions

1. Butte County Air Quality Management District Governing Board
   - Meets 4th Thursday after Butte County Association of Governments
   - Comprised of five Butte County Supervisors plus **one elected representative** from each of the County's five cities;

   The Butte County Air Quality Management District board establishes policies

& approves new rules to protect people & environment from the effects of air pollution.

2. Butte County Association of Governments

- Meets 4th Thursday of each month at 9:00 a.m. in the Chico City Council Chambers
- Comprised of five Butte County Supervisors plus **one elected representative** from each of the County's five cities

The Butte County Association of Governments board is responsible for development of federal and state transportation plans and programs that secure transportation funding for the region's highways, transit, streets/roads, and, pedestrian and other transportation system improvements.

3. Butte County City Selection Committee

- Meets twice a year upon notification; **Mayor must be representative.**

The City Selection Committee is comprised of the Mayors from the five incorporated cities and selects two city representatives to serve on the Local Area Formation Commission (*LAFCo).

*Butte County Local Area Formation Commission (LAFCO)

- 1st Thursday at 9:00 am in Oroville; Appointments to LAFCo made by City Selection Committee.

LAFCo is a State mandated local agency composed of seven regular Commissioners: two members from the Butte County Board of Supervisors (selected by the entire Board); two members from the city councils (selected by the mayors of all five incorporated cities); two members who represent special districts (selected by a majority vote of independent special districts); and one public member (selected by the other six LAFCo members).

The LAFCO board oversees boundary changes to cities and special districts, the formation of new agencies including incorporation of new cities, and consolidation of existing agencies.

4. Butte County Disaster Council

- Meets at least once a year in Oroville; **Mayor must be representative.**

The purpose of the Disaster Council is to provide for the preparation and execution of plans for the protection of persons, the environment, and property within the County of Butte in the event of an emergency.

5. Butte County General Plan Planning Process – **Two representatives**;

- Formed to monitor Butte County 2010 General Plan Planning Process.

The Butte County General Plan 2030 was adopted October 26, 2010 and which became effective November 30, 2010. The Butte County Department

of Development Services maintains an information website relating to the Butte County General Plan 2030 process at www.buttegeneralplan.net.

6. Butte County Integrated Waste Management Local Task Force

- **One representative and one alternate;** meets as needed in Oroville.

The Local Task Force is a mandated committee formed by the Board of Supervisors; develops goals, policies & procedures which are consistent with guidelines & regulations adopted by the CA Integrated Waste Management Act relating to coordinated & cost effective regional waste management issues/solutions.

7. Butte County Water Advisory Committee – **One representative.**

- Meets quarterly or as needed in Oroville.

The Water Advisory Committee assists & advises the Water Commission & Board of Supervisors in establishment & maintenance of Basin Management Objectives to be used to establish criteria for groundwater elevations, groundwater quality & land subsidence.

- City/County Ad Hoc Committee – Meets upon notification

Two Council representatives.

The City/County Ad Hoc Committee was formed to discuss issues/topics of common concern associated with the Paradise Ridge Area: comprised of two members of the Town Council; two members of the Board of Supervisors and various staff.

8. Lake Oroville Supplemental Benefits Fund (JPA Terminated) –

- Meets 1st Wednesday of every quarter at 5:30 pm in the City of Oroville Council Chambers. **One representative; one citizen alternate.**

The City of Oroville is designated as the Fund Administrator for funds received from DWR & State Water contractors for the purpose of recreational and economic development to mitigate the Federal Energy Regulatory Commission (FERC) 2100 license for the Oroville facility (the dam, hydro plant, Forebay, and After bay). The committee is composed of five voting members (three Oroville Council Members, two Feather River Recreation & Park District Members) and three advisory members of publicly elected officials. The Town of Paradise is an interested party and the representative receives agendas and staff reports from the SBF/RDA Coordinator Bob Marciniak. The next meeting is scheduled for January 13, 2013 at 5:30 pm.

9. 3CORE (formerly known as the Tri County Economic Development Corporation)

- Meets the 4th Wednesday of every other month at 10:00 a.m. at the 3Core office at 3120 Cohasset. **One Council representative** serves on the Comprehensive Economic Development Strategy (CEDS) Advisory Board for a two-year term.

3CORE is a private, non-profit corporation that works as the economic development planning & coordinating agency for the Tri-County region composed of Butte, Glenn & Tehama counties & the nine member cities located therein and advises and recommends actions to the Board of Directors

Local Committees

1. Paradise Community Village – (formerly known as the Paradise Youth Sports and Family Center) **One Council representative;**
    - Meets the 2nd Monday of each month at 4pm in the Paradise Town Council Chambers.

    Paradise Community Village (PCV) is a local non-profit corporation formed to oversee the development of the Paradise Community Village project, a mixed use development consisting of affordable and single family housing, parks/recreation, open space & community facilities. Board is comprised of the following members: Town of Paradise (one Council and one staff representative); Youth for Change; Paradise Youth Soccer Club; and, the Community Housing Improvement Program (CHIP).

2. Paradise Irrigation District (PID) Liaison – **Two Council representatives.**
    - Meets in Paradise upon notification to discuss issues of common concern.

    PID is an Independent Special District governed by a five-member elected board of directors; Formed in 1916 under the laws of the State Water Code to deliver water to municipal residential and commercial customers.

3. Paradise Recreation & Park District (PRPD) Liaison – **Two Council Representatives.**
    - Meets in Paradise upon notification to discuss issues of common concern.

    PRPD is an Independent Special District governed by a five-member elected board of directors; Formed in 1948 to provide recreation and park services within the district.

4. Paradise Solid Waste Committee – Meets in Paradise upon notification; **Two Council representatives.**

    The Paradise Solid Waste Committee discusses solid waste, recyclable materials, and yard waste programs with staff and representative from NRWS, the company franchised by the Town to provide of solid waste collection and disposal services which includes recycling, source reduction, household hazardous waste and vegetative waste disposal services; two council representatives, Town staff.

5. Project Vision/Youth Council - **One Council representative.**
    - Meets the 2nd Monday at PUSD District Office 5:30 – 6:30 p.m.

    Project Vision is an "asset based", non-profit organization formed to support young people and youth programs on the Ridge.

6. Onsite Ad Hoc Committee – **Two Council representatives**

    The Onsite Ad Hoc Committee meets as needed to keep Council representatives informed of issues & long term effects of proposed changes to the Manual for Onsite Treatment of Wastewater (Onsite Manual); Formed by Minute Order on September 3, 2008. Onsite Manual may be viewed at the Town's website at the following address:
    http://www.townofparadise.com/index.php/departments/development-services/onsite

7. Finance & Investment Committee – Members include **Mayor, Vice Mayor, Town Manager, Assistant Town Manager, Finance Director/Town Treasurer.**

    The Finance & Investment Commission is established by Paradise Municipal Code Section 2.16.030 for the purpose of providing oversight of the town's financial, public financing & investment activities.

8. Oversight Board to the Successor Agency to the Paradise Redevelopment Agency
    Meets quarterly on the third Thursday at 3pm. **Two members from the Town of Paradise; the Mayor is the appointing authority**
    - One member is to be selected from the largest employee group from the former redevelopment agency. The Town had allocated percentages of management staff to the redevelopment agency.

    The purpose of the seven-member Oversight Board is to oversee and approve the activities of the Successor Agency of the Paradise Redevelopment Agency relating to assets of the former RDA. The Town Council was designated as the Successor Agency after the Paradise Redevelopment Agency was eliminated by State law.

Attached is a list of the 2013 representation, along with a blank chart for the 2014 assignments.

Conclusion: It is timely that Council consider appointments to local and County Committees/ and Commissions.

Fiscal Impact Analysis: None.

2013 REPRESENTATION

BUTTE COUNTY COMMITTEES/COMMISSIONS

	BUTTE COUNTY	Mayor	Vice Mayor	CM	CM	CM
1	Air Quality Management District	Titus – R				Rawlings-A
2	Association of Governments	Titus – R				Rawlings-A
3	City Selection Committee (Mayor)	Titus				
4	~~Emergency~~ Disaster Services Council (Mayor)	Titus				
	Local Area Formation Commission (LAFCo) (Lotter through 5/2015 – Appointed by City Selection Committee)		Lotter-R 5/2015			
5	Waste Mgt Local Task Force		Lotter-R		Culleton-A	
6	Water Advisory Committee (4-year term)					Rawlings
7	City/County Ad Hoc Committee		Lotter			Rawlings
8	Lake Oroville Supplemental Benefits Funds- Alternate: Citizen Sam Dresser					Rawlings
9	3CORE (formerly Tri County Economic Dev Corp) (Two year term as of 1/1/2013)			Bolin		

LOCAL COMMITTEES/COMMISSIONS

	PARADISE	Mayor	Vice Mayor	CM	CM	CM
1	Paradise Community Village		Lotter			
2	Paradise Irrigation District Liaison			Bolin		Rawlings
3	Paradise Rec. & Park District Liaison			Bolin	Culleton	
4	Solid Waste Committee (formerly Rate Review)		Lotter		Culleton	
5	Youth Council (Project Vision)				Culleton	
6	Onsite Ad Hoc Committee		Lotter	Bolin		
7	Investment Committee (Mayor & Council Member)	Titus	Lotter			
8	Oversight Board to Successor Agency (Mayor Appointment)					Culleton

2014 REPRESENTATION

BUTTE COUNTY COMMITTEES/COMMISSIONS

	BUTTE COUNTY	Mayor	Vice Mayor	CM	CM	CM
1	Air Quality Management District					
2	Association of Governments					
3	City Selection Committee (Mayor)	Lotter				
4	Disaster Services Council (Mayor)	Lotter				
	Local Area Formation Commission (LAFCo) (Lotter through 5/2015 – Appointed by City Selection Committee)	Lotter				
5	Waste Mgt Local Task Force					
6	Water Advisory Committee (4-year term)					
7	City/County Ad Hoc Committee					
8	Lake Oroville Supplemental Benefits Funds- Alternate: Citizen Sam Dresser					
9	3CORE (formerly Tri County Economic Dev Corp) (Two year term as of 1/1/2013)					

LOCAL COMMITTEES/COMMISSIONS

	PARADISE	Mayor	Vice Mayor	CM	CM	CM
1	Paradise Community Village					
2	Paradise Irrigation District Liaison					
3	Paradise Rec. & Park District Liaison					
4	Solid Waste Committee (formerly Rate Review)					
5	Youth Council (Project Vision)					
6	Onsite Ad Hoc Committee					
7	Investment Committee (Mayor & Council Member)	Lotter	Bolin			
8	Oversight Board to Successor Agency (Mayor Appointment)					