



Traffic Analysis

Scotia Rezone and Subdivision

Prepared for:

PALCO



Consulting Engineers & Geologists, Inc.

812 W. Wabash
Eureka, CA 95501-2138
707/441-8855

July 2005
005161.800

Mr. Donald Raffaelli, P.E.
3433 Trinity Street
Eureka, CA 95501
707-443-5485

Reference: 005161.800

July 26, 2005

Robert Wall, AICP
SHN Consulting Engineers & Geologists, Inc.
812 W. Wabash Ave.
Eureka, CA 95501-2138

Subject: Traffic Analysis, Scotia Rezone and Subdivision

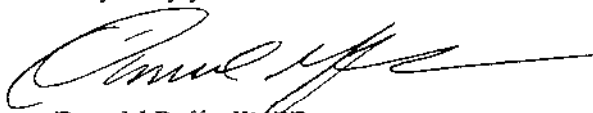
Dear Mr. Wall:

As requested, I have reviewed the above study prepared by SHN staff. It is my understanding that the rezone of the community of Scotia and the subdivision of the existing residential commercial and industrial apportions of Scotia (an unincorporated company town) will not change as a result of this action. The intended purpose is to conform to current county land use designation and to allow for future sales of the subdivided uses. Therefore, a more formal traffic impact study was not warranted or requested by the County.

The traffic analysis prepared by SHN staff accurately reflects current traffic conditions leading to and within Scotia. As detailed in the report, all segments of the system operate presently, at a Level Of Service (LOS) "A." As such, no traffic impact will be added as a result of the rezone and subdivision of the community, so long as no change occurs in the present land uses and no expansion of the current uses occur.

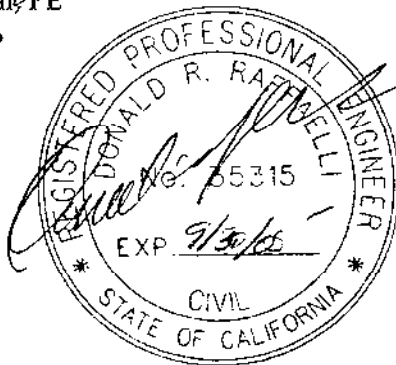
Therefore, based on the above stated qualifications, in my professional opinion, the traffic analysis prepared by SHN Consulting Engineers & Geologists, Inc. is sufficient to address the needs of the rezone/subdivision.

Very truly yours,



Donald Raffaelli, PE
CE 35315TR126

DR:lms



Reference: 005161.800

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QA/QC: RSW__

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Acronyms and Abbreviations

ADT	Average Daily Traffic
C-2/Q	Community Commercial (Humboldt County Code Zoning Classification)
LOS	Level of Service
MH/Q	Heavy Industrial (Humboldt County Code Zoning Classification)
mph	mile per hour
SH	State Highway
SHN	SHN Consulting Engineers & Geologists, Inc.
TIA	Traffic Impact Analysis
U	Unclassified (Humboldt County Code Zoning Classification)

Introduction

This traffic analysis was conducted by SHN Consulting Engineers & Geologists, Inc. (SHN) on behalf of PALCO. The purpose of this analysis is to assign traffic values to a proposed rezoning subdivision of the community of Scotia. Appendix A presents the Scotia Town Master Plan and defines the project area. Subdivision and rezone will only involve existing uses and structures. PALCO has requested a General Plan Amendment to reclassify land use designations and a zone change for the project area. The project area consists of approximately 106 acres of land, which includes most of PALCO's land currently zoned Unclassified (U) under the Humboldt County Code Zoning Regulations. Unclassified zoning not a part of the project area includes approximately 10 acres of roadways. The project area also does not include the previously rezoned industrial and downtown commercial areas, now zoned Heavy Industrial (MH/Q) and Community Commercial (C-2/Q).

The purpose of the proposed project is to change land use designations and zoning to match existing land uses, and to facilitate a tentative map for a major subdivision within the project area.

This traffic analysis assumes that no new uses or structures are proposed as a result of the subdivision and rezone. This study involves an analysis of the existing condition of one large parcel owned by PALCO with multiple uses and structures, and the effect the subdivision and rezone will have on traffic patterns and volumes.

Regional Setting

The unincorporated community of Scotia, located in the Eel River Valley in southern Humboldt County, is 22 statute miles South of Eureka, California. Scotia is offset from U.S. Highway 101 by roughly one mile and is linked to the incorporated City of Rio Dell of by the Eel River Bridge (State Highway [SH] 283).

Community

Scotia is a mix of commercial, residential, industrial, recreational and public facilities. Approximately two-thirds of the town is an industrial area that consists of Mill Complexes "A" and B, a large manufacturing plant, electricity and cogeneration plants, fuel and machinery buildings, the log pond, and log storage areas. A hardwood chip plant, log storage areas, and transfer station are located west of the manufacturing plant complex; these land uses are not included in the proposed rezone.

There are approximately 58 acres of residential uses in Scotia, located on three main residential areas. The smallest residential area is approximately six acres in size, and is located in the northern corner of the project area, adjacent to the Highway 101 Scotia off-ramp. The largest residential area is approximately 38 acres, located in an area east of the commercial and industrial zone and extending to Highway 101. The third residential area, approximately 13 acres in size, is located west of the log pond and adjacent to the Eel River. Non-

residential land uses, commonly located in residential areas, are also found in Scotia's main residential area. These non-residential uses include the following: elementary school, fire station, two churches, the former hospital building (currently used as office space), and recreation center (*PlanWest 2005, Project Description*).

The new residential uses include the Scotia Inn.

The existing unincorporated community of Scotia is characterized by one main street. Main Street is classified by the County of Humboldt as a "Collector." Collector streets provide linkages between local streets and arterial streets. Collector streets provide access to individual properties and act as thoroughfares for local streets. Collector streets support light to moderate traffic volumes. Main Street is accessed by way of Northbound U.S. Highway 101 and SH 283.

All other roads in the unincorporated community of Scotia are classified as "Local Roads." Local roads provide direct access to adjacent properties and are not intended to serve through traffic. Local roads provide access to collector streets and carry low traffic volumes.

Scotia does not have official bike routes, trails, or paths. Many of the streets are unnamed. The County maintains the following streets in the community of Scotia: B Street, Bridge Street, Church Street, Eddy Street, Mill Street, North Court, Williams Street, 1st Street, 2nd Street, 3rd Street, 4th Street, 5th Street, and 6th Street.

The streets appear to be in good condition, and residential streets have sidewalks on one side only. There are approximately four marked crosswalks centered around the marketplace.

Public Transportation

A small population and low ridership limit public transit within Scotia. At present, there is one bus stop at Hoby's Market in Scotia. Regional bus service from Monday to Friday has seven scheduled stops going north: four in the morning and three after noon. Those times are 6:29 a.m., 7:23 a.m., 8:29 a.m., 10:29 a.m., 2:29 p.m., 4:32 p.m., and 6:48 p.m. There are six scheduled stops proceeding south from Hoby's Market. Two are in the morning and four are after noon. Those times are 8:08 a.m., 10:15 a.m., 1:58 p.m., 4:16 p.m., 6:31 p.m., and 7:34 p.m.. According to the census population count, 0% commute to work by bus, 14.4% commute to work by carpool, 62.4% commute to work by automobile, and 3.2% work from home (2000 U.S. Census). The proposed subdivision and rezone is not expected to affect public transit.

Traffic Analysis

To accomplish this traffic analysis, the following tasks were performed:

1. conducted a.m./p.m. peak hour intersection analysis on June 28, 29, 30, 2005;
2. acquired, from County and Caltrans, information on past traffic volumes;
3. reviewed Humboldt County General Plan §§4200 and 4300 et. seq.;
4. reviewed PALCO “administrative” project description submitted to SHN on July 11, 2005; and
5. acquired PALCO’s shift change schedule (See Appendix B).

The elements of this Traffic Impact Analysis (TIA) will consist of:

Level of Service (LOS) as it now exists (See Appendices C and D)

Trips generated by project (current estimate)

Summary of elements

Conclusions

Recommendations

Level of Service

LOS is an indication of how smoothly traffic flows on a street or highway. An LOS “A” is indicative of free flow with little or no delay for vehicles entering from a side street (ramp) and no delay for vehicles traveling on the main street. An LOS E is constant stop and go and extensive delay for vehicles entering the main stream. LOS F is generally considered to be gridlock. Table 1 explains the progression of delay, in seconds, for unsignalized intersections.

Table 1 Progression of Delay For Unsignalized Intersections		
LOS ¹	General Operating Condition	Average Control Delay Per Vehicle/Second (seconds)
A	Free Flow	Up to 10.0
B	Reasonably Free Flow	10.1 to 15.0
C	Stable Flow	15.1 to 25.0
D	Approaching Unstable Flow	25.1 to 35.0
E	Unstable Flow	35.1 to 50.0
F	Force or Breakdown Flow	Greater 50.0
1. LOS: Level of Service (Source: Transportation Research Board, <i>2000 Highway Capacity Manual</i>)		

Because, at present, the Average Daily Traffic (ADT) on any given Scotia street is very low, the delay southbound U.S. Highway 101 off ramp movements are not restricted for left hand turns; therefore, the off ramp has an LOS of “A.” The same LOS of “A” also applies to the northbound U.S. 101 ramp. The north-south connection between Rio Dell and Scotia, State Highway 283, experiences an unrestricted flow. Observations of peak hour ramp movements were also made at

the southbound, U.S. 101 on-ramp, and lunchtime peak hour movements were made at Bridge Street and Main Street. All intersections experience minimal dwell times that are categorized as having an LOS of “A.” Delay times were not counted because the traffic flow was observably steady and without a backup.

Existing Traffic Counts

The 2003 traffic volume report from Caltrans (Appendix E) shows that Post Mile R51.84 (Junction Route 283 Northwest) has a peak hour traffic volume of 1,200. The report shows a peak month ADT of 12,500. The annual peak is 9,400. For comparison, 1973 data from Caltrans shows Post Mile 51.90 North Scotia Road to have a peak hour traffic count of 1,050. The ADT for the peak month was 11,800. The ADT for the annual count was 8,200. The Humboldt County Department of Public Works ADT report 1973 (Appendix F), counts 1,192 vehicles from the location of 50 feet from the intersection of Williams and Bridge Streets.

SHN Traffic Counts

Based on the shift change schedule for the Scotia mill, a two-hour “Peak Hour” observation time was used for all study intersections. Appendix C presents traffic count data and Appendix D presents a Peak Hour Turning Movement Summary. Appendix G present photographs of the pertinent streets and intersections. As noted above in the “Level of Service” section above, the intersections chosen, include the following:

- northern ingress/egress point (Junction 283 and U.S. 101)
- commercial center of Bridge and Main Streets
- southern ingress/egress point (Southbound, U.S. 101 onramp)

The 6:00-8:00 a.m. “Peak Hour” Movement at Junction 283 off Highway 101, Scotia tallied total count of 405 vehicles. Five pedestrians were utilizing the sidewalk at that time.

Table 2 a.m. Peak Hour Movements at Junction 283 off Highway 101, Scotia, June 28, 2005				
Hour	Eastbound (to 101 North)	Westbound (to Northcourt Residential)	Southbound (to Scotia/Main Street)	Northbound (to Rio Dell)
06:00 – 06:15	7	2	32	4
06:16 – 06:30	10	0	21	6
06:31 – 06:45	12	0	22	3
06:46 – 07:00	9	0	38	3
07:01 – 07:15	17	1	29	10
07:16 – 07:30	14	0	47	10
07:31 – 07:45	24	0	16	12
07:46 – 08:00	18	1	27	10
Totals	111	4	232	58

The 2:30-4:30 p.m. Peak hour Movement at Junction 283 tallied a total count of 818 vehicles.

Table 3 p.m. Peak Hour Movements at Junction 283 off Highway 101, Scotia, June 28, 2005				
Hour	Eastbound (to 101 North)	Westbound (to Northcourt Residential)	Southbound (to Scotia/Main Street)	Northbound (to Rio Dell)
14:30 – 14:45	32	2	33	40
14:46 – 15:00	19	2	33	25
15:01 – 15:15	36	1	32	25
15:16 – 15:30	25	3	35	29
15:31 – 15:45	47	1	42	38
15:46 – 16:00	18	4	43	34
16:01 – 16:15	35	4	45	36
16:16 – 16:30	25	4	40	30
Totals	237	21	303	257

The 11:00 a.m. – 1:00 p.m. lunch “Peak Hour” Movement at Bridge and Main Streets tallied 503 vehicles. Approximately 98% of the vehicles using the road during the two-hour interval were logging trucks and PALCO company vehicles.

Table 4 a.m. and p.m. Lunch Peak Hour Movements at Bridge and Main Streets, Scotia, June 29, 2005			
Hour	Westbound (to Bridge Street/Residential Area)	Southbound Main Street	Northbound Main Street
11:00 – 11:15	13	15	26
11:16 – 11:30	10	16	24
11:31 – 11:45	15	19	39
11:46 – 12:00	12	23	27
12:01 – 12:15	13	18	42
12:16 – 12:30	20	31	26
12:31 – 12:45	14	19	25
12:46 – 13:00	13	21	22
Totals	110	162	231

The 6:00-8:00 a.m. “Peak Hour” Movement at the South Freeway onramp at Highway 101 tallied 166 vehicles. The 2:30-4:30 p.m. “Peak Hour” Movement at the South Freeway onramp at Highway 101 tallied 236 vehicles. An approximate even split of logging trucks and passenger vehicles used the road during the 2:30 – 3:30 p.m. traffic count. During the traffic count hour of 3:30 – 4:30 p.m., approximately 75% of the vehicles using the road were passenger vehicles.

Table 5 a.m. Peak Hour Movements at South Freeway Onramp Highway 101, Scotia, June 30, 2005				
Hour	Eastbound (to Highway 101)	Westbound (no link)	Southbound (to log deck)	Northbound (to Scotia)
06:00 – 06:15	7	0	9	8
06:16 – 06:30	6	0	5	8
06:31 – 06:45	9	0	7	8
06:46 – 07:00	5	0	3	6
07:01 – 07:15	7	0	9	6
07:16 – 07:30	11	0	9	7
07:31 – 07:45	8	0	6	3
07:46 – 08:00	13	0	3	3
Totals	66	0	51	49

Table 6 p.m. Peak Hour Movements at South Freeway onramp Highway 101, Scotia, June 30, 2005				
Hour	Eastbound	Westbound	Southbound	Northbound
14:30 – 14:45	16	0	9	8
14:46 – 15:00	6	0	6	4
15:01 – 15:15	19	0	8	13
15:16 – 15:30	21	0	5	5
15:31 – 15:45	14	0	1	7
15:46 – 16:00	15	0	14	6
16:01 – 16:15	10	0	9	8
16:16 – 16:30	8	0	13	11
Totals	109	0	65	62

Table 7 Observed Traffic Count Totals by Site and Time	
Site/Time	Total
Junction 283 a.m.	405
Junction 283 p.m.	818
Bridge and Main Streets, a.m.–p.m.	503
South Freeway onramp a.m.	166
South Freeway onramp p.m.	236

Table 8 Total a.m. and p.m. Peak Hour Traffic Movements		
Location	Time	Total
Junction 283	7:00 - 8:00 am	236
Junction 283	15:00 - 16:00 p.m.	413
Bridge and Main Streets	11:30 a.m. - 12:30 p.m.	285
South Freeway Onramp	7:00 - 8:00 a.m.	85
South Freeway Onramp	15:00 - 16:00 p.m.	128

Based on observations at a.m. and p.m. peak hours, the average control delay of less than 10 seconds correlates with LOS “A” (see Table 1). The peak hour traffic count data (Appendices C and D) was extrapolated from the total of the fifteen-minute interval tallies. The data shows that for each studied intersection, a reasonable free flow of interrupted traffic with minimal dwell times and an absence of queues. The project will cause no change in existing LOS.

The *Institute of Transportation of Engineers Trip Generation Manual* was not applicable to this study, as the intersection analysis studied an aggregate number of trips generated by all users within the community of Scotia. This particular subdivision and zone change is not categorized as a “Significant Trip Generator.” The only possible expected effect of rezone and subdivision would be a slight increase in queues at both a.m. and p.m. peak hours at Junction 283, caused by residents commuting and working outside the community. Thus, the project will not generate a significant number of new trips.

Evacuation Routes for PALCO

Volunteers constitute the Fire Department for Scotia. The Scotia Volunteers are all employees of PALCO. The PALCO Fire Chief is responsible for emergency response throughout PALCO’s operations. Each PALCO operation has a site-specific emergency action plan.

Conclusion

The proposed rezone and subdivision of the town of Scotia (See Appendix A) will not have an adverse affect on traffic flow. The current traffic count data and the traffic count data from Caltrans and the Humboldt County Public Works Department attest to the fact that there has been no significant change in traffic flow from 1973 to present. If the subdivision were to incorporate a new population of people who were employed outside the town limits of Scotia, an observable increase in traffic may occur during a.m. and p.m. peak hours at Junction 283 intersection to Highway 101. However, this slight increase would not significantly affect traffic flows in the area.

Recommendations

As a result of the subdivision, it will be necessary to develop a management entity to maintain roads not currently defined within the confines of the county system. These management entities include a community services district, homeowners association, or full incorporation of the roads into the county maintenance system.

References Cited

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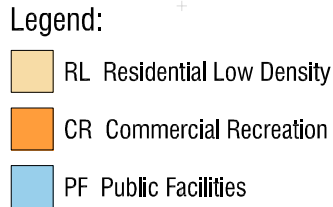
Institute of Transportation of Engineers. (1991). *Trip Generation, 5th Edition*. Washington DC: ITE.

PlanWest Partners. (July 11, 2005). "The Town of Scotia California Proposed Rezone and Subdivision, Administrative Draft Project Description for the Initial Study."
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Appendix A

**Scotia Town Master Plan—Land Use Plan and
Subdivision Plan**



PALCO
WORKING FOR THE FUTURE

PALCO Shift Schedule

Book	Operations	Work Days	Shift Times
5	Gymnasium	M-F	5:00am - 8:30 pm
12	Road Crew	M-F	6:00am - 4:30 pm
12	Logging/Contract Administrators	M-F	6:00am - 4:30 pm
16	Scalers-Carlotta/Yager	M-F	7:00am - 3:30 pm
20	Fortuna Sawmill-1 st Shift	T-F	5:00am - 3:30 pm
39	Plant Store	M-F	6:30am - 4:00 pm
43	Power Plant	M-Su	Various Shifts
43	P.P. Maintenance	M-F	7:30am - 4:30 pm
46	Kilns	M-F	6:00am - 2:30 pm
48	Shipping	M-F	6:00am - 2:30 pm
50	Factory Finishing	M-F	6:00am - 2:30 pm
57	SVA Planner 1 st Shift	M-Th	5:00am - 3:30 pm
58	SVA Planner 2 nd Shift	M-Th	5:00am - 3:30 pm
59	Maintenance	M-F	5:00am - 3:00 pm
60	Filers	M-F	Variable Shifts
62	Construction Millwrights	M-F	7:00am - 3:30 pm
63	Construction Carpenters	M-F	7:00am - 3:30 pm
64	Scotia Small Log 1 st Shift	M-F	7:00am - 5:30 pm
65	Scotia Small Log 2 nd Shift	M-F	6:00 pm - 4:30 am
66	Power Shift	F-M	5:00 pm - 3:30 am
67	Scotia Large Log 1 st Shift	M-F	
68	Scotia Large Log 2 nd Shift	M-F	
69	Scotia Large Log 3 rd Shift	M-F	
72	Fleet Shop 1 st Shift	M-F	5:00am - 3:30 pm
72	Fleet Shop 2 nd Shift	M-F	3:30 pm - 2:00 am
73	Support Services	M-F	7:00 m - 3:30 pm
75	Fire Protection	M-F	7:00am - 5:00 pm
81	Painters (Town)	M-F	7:00am - 3:30 pm
84	Town Maintenance & Laborers	M-F	7:00am - 3:30 pm
88	Machine Shop 1 st Shift	M-F	6:30am - 3:30 pm
88	Machine Shop 2 nd Shift	M-F	3:30 pm - 12:00am
89	Electricians	M-F	6:30am - 3:30 pm

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File Name : Scotia Junction 283 AM
Site Code : 00000001
Start Date : 06/28/2005
Page No : 1

Groups Printed- Unshifted

Start Time	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
06:00	2	11	2	0		0	0	21	0		5	4	0	0		0	0	0	0		45
06:15	0	4	2	0		3	0	15	0		6	3	0	0		2	2	0	0		37
06:30	0	5	1	0		1	0	17	0		9	2	0	0		0	2	0	0		37
06:45	0	10	1	0		0	0	27	0		8	3	0	0		1	0	0	0		50
Total	2	30	6	0		4	0	80	0		28	12	0	0		3	4	0	0		169
07:00	0	5	7	0		2	0	24	0		10	8	1	0		0	0	0	0		57
07:15	0	9	4	0		2	0	37	0		10	8	0	0		1	0	0	0		71
07:30	0	1	9	0		4	0	15	0		15	8	0	0		0	0	0	0		52
07:45	0	11	4	0		3	1	16	0		12	7	0	0		0	2	0	0		56
Total	0	26	24	0		11	1	92	0		47	31	1	0		1	2	0	0		236
Grand Total	2	56	30	0		15	1	172	0		75	43	1	0		4	6	0	0		405
Approch %	2.3	63.6	34.1	0.0		8.0	0.5	91.5	0.0		63.0	36.1	0.8	0.0		40.0	60.0	0.0	0.0		
Total %	0.5	13.8	7.4	0.0		3.7	0.2	42.5	0.0		18.5	10.6	0.2	0.0		1.0	1.5	0.0	0.0		

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File Name : Scotia Junction 283 PM
Site Code : 00000002
Start Date : 06/28/2005
Page No : 1

Groups Printed- Unshifted

Start Time	From North					From East					From South					From West					InL Total
	Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
14:30	0	19	3	0		10	0	13	0		29	30	2	0		1	0	0	0		107
14:45	1	17	4	0		8	0	15	0		14	15	1	0		1	1	2	0		79
Total	1	36	7	0		18	0	28	0		43	45	3	0		2	1	2	0		186
15:00	1	19	8	0		4	0	12	0		27	21	0	0		1	1	0	0		94
15:15	0	12	2	0		7	3	22	0		22	21	0	0		1	1	1	0		92
15:30	0	25	5	0		6	0	16	1		39	32	1	1		1	3	0	0		130
15:45	0	23	4	0		8	2	18	0		13	25	2	0		2	1	1	0		99
Total	1	79	19	0		25	5	68	1		101	99	3	1		5	6	2	0		415
16:00	0	17	4	0		4	3	26	0		31	30	1	0		2	0	2	0		120
16:15	0	22	4	0		7	0	16	0		19	22	4	0		2	2	1	0		99
Grand Total	2	154	34	0		54	8	138	1		194	196	11	1		11	9	7	0		820
Apprch %	1.1	81.1	17.9	0.0		26.9	4.0	68.7	0.5		48.3	48.8	2.7	0.2		40.7	33.3	25.9	0.0		
Total %	0.2	18.8	4.1	0.0		6.6	1.0	16.8	0.1		23.7	23.9	1.3	0.1		1.3	1.1	0.9	0.0		

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File Name : Scotia Bridge and Main St.
Site Code : 00000003
Start Date : 06/29/2005
Page No : 1

Groups Printed- Unshifted

Start Time Factor	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		
11:00	7	13	0	0	0	0	0	0	0	0	0	12	6	0	0	2	0	14	0	0	54
11:15	5	14	0	0	0	0	0	0	0	0	0	16	3	0	0	2	0	8	1	0	49
11:30	11	17	0	0	0	0	0	0	0	0	0	26	4	0	0	2	0	13	0	0	73
11:45	10	20	0	0	0	0	0	0	0	0	0	16	2	0	0	3	0	11	0	0	62
Total	33	64	0	0	0	0	0	0	0	0	0	70	15	0	0	9	0	46	1	0	238
12:00	10	14	0	0	0	0	0	0	0	0	0	23	3	0	0	4	0	19	0	0	73
12:15	14	26	0	0	0	0	0	0	0	0	0	12	6	0	0	5	0	14	0	0	77
12:30	9	15	0	0	0	0	0	0	0	0	0	18	5	0	0	4	0	7	0	0	58
12:45	9	17	0	0	0	0	1	1	0	0	6	8	3	0	0	3	0	8	0	0	56
Total	42	72	0	0	0	0	1	1	0	0	6	61	17	0	0	16	0	48	0	0	264
Grand Total	75	136	0	0	0	0	1	1	0	0	6	131	32	0	0	25	0	94	1	0	502
Apprch %	35.5	64.5	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	3.6	77.5	18.9	0.0	0.0	20.8	0.0	78.3	0.8	0.0	
Total %	14.9	27.1	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	1.2	26.1	6.4	0.0	0.0	5.0	0.0	18.7	0.2	0.0	

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File Name : Scotia South Freeway Exit AM
Site Code : 00000004
Start Date : 06/30/2005
Page No : 1

Groups Printed- Unshifted

Start Time	From North			From East			From South			From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:15	0	3	5	5	0	6	2	3	0	0	0	0	24
06:30	0	0	2	6	0	5	4	2	0	0	0	0	19
06:45	0	2	5	6	0	5	4	2	0	0	0	0	24
Total	0	5	12	17	0	16	10	7	0	0	0	0	67
07:00	0	0	4	6	0	3	1	0	0	0	0	0	14
07:15	0	2	5	4	0	7	2	2	0	0	0	0	22
07:30	0	1	8	6	0	8	3	1	0	0	0	0	27
07:45	0	1	5	2	0	5	3	1	0	0	0	0	17
Total	0	4	22	18	0	23	9	4	0	0	0	0	80
08:00	0	0	5	2	0	3	8	1	0	0	0	0	19
Grand Total	0	9	39	37	0	42	27	12	0	0	0	0	166
Apprch %	0.0	18.8	81.3	46.8	0.0	53.2	69.2	30.8	0.0	0.0	0.0	0.0	
Total %	0.0	5.4	23.5	22.3	0.0	25.3	16.3	7.2	0.0	0.0	0.0	0.0	

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File Name : Scotia South Freeway Exit PM
Site Code : 00000005
Start Date : 06/30/2005
Page No : 1

Groups Printed- Unshifted

Start Time Factor	From North					From East					From South					From West					Int. Total
	Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		Right	Thru	Left	Peds		
14:30	0	0	9	0		3	0	9	0		7	5	0	0		0	0	0	0		33
14:45	0	0	1	0		4	0	6	0		5	2	0	0		0	0	0	0		18
Total	0	0	10	0		7	0	15	0		12	7	0	0		0	0	0	0		51
15:00	0	0	11	0		11	0	8	0		8	2	0	0		0	0	0	0		40
15:15	0	3	11	0		5	0	2	0		10	0	0	0		0	0	0	0		31
15:30	0	1	6	0		5	0	0	0		8	2	0	0		0	0	0	0		22
15:45	0	4	6	0		6	0	10	0		9	0	0	0		0	0	0	0		35
Total	0	8	34	0		27	0	20	0		35	4	0	0		0	0	0	0		128
16:00	0	3	4	0		5	0	6	0		6	3	0	1		0	0	0	0		28
16:15	0	3	8	0		5	0	10	0		7	6	0	0		0	0	0	0		39
Grand Total	0	14	56	0		44	0	51	0		60	20	0	1		0	0	0	0		246
Approch %	0.0	20.0	80.0	0.0		46.3	0.0	53.7	0.0		74.1	24.7	0.0	1.2		0.0	0.0	0.0	0.0		0.0
Total %	0.0	5.7	22.8	0.0		17.9	0.0	20.7	0.0		24.4	8.1	0.0	0.4		0.0	0.0	0.0	0.0		0.0

Table D-1 Peak Hour Turning Movement Summary at Junction 283												
Peak Hour	Main Street						Junction 283					
	Northbound			Southbound			Eastbound			Westbound		
	LT ¹	TH ²	RT ³	LT	TH	RT	LT	TH	RT	LT	TH	RT
6:00 to 8:00 a.m.	0	13	15	172	56	6	30	6	75	1	1	2
2:30 to 4:30 p.m.	7	196	54	138	154	11	34	9	194	11	8	2
1. LT: Left 2. TH: Through 3. RT: Right												

Table D-2 Peak Hour Turning Movement Summary at Bridge Street and Main Street												
Peak Hour	Main Street						Bridge Street					
	Northbound			Southbound			Eastbound			Westbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
11:00 a.m. to 1:00 p.m.	94	131	0	1	136	25	0	0	0	32	1	75
1. LT: Left 2. TH: Through 3. RT: Right												

Table D-3 Peak Hour Turning Movement Summary at South Freeway onramp												
Peak Hour	Main Street						South Freeway onramp, Highway 101					
	Northbound			Southbound			Eastbound			Westbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
6:00 to 8:00 a.m.	0	12	37	42	9	0	39	0	27	0	0	0
2:30 to 4:30 p.m.	0	20	44	51	14	0	56	0	60	0	0	0
1. LT: Left 2. TH: Through 3. RT: Right												

Rte 101, Hum Co

1973 TRAFFIC VOLUMES

Rte 101, Hum Co

Mile-post	Description	Peak Hour	ADT Pk. Mo.	Annual
0.06	Temporary Jct. Rte. 271 South			
1.61	Richardson Grove Interchange	640	7,400	4,000

TO: BARBARA KRYSTAL

DEPT: _____

CO: SHNFAX: 44 18377
 FROM: LARRY LARK
 CALTRANS TRAFFIC COUNTS
 DATE: 6-27-77

R14.31	Dean Creek Interchange			
R16.84	Milepost equation	780	8,800	4,800
R16.90				
R17.91	Jct. Rte. 254 Northeast			
		730	7,900	4,100
R22.44	French Road Interchange			
		700	7,500	3,900
25.01	Salmon Creek Road Interchange			
		720	7,700	4,000
27.94	Jct. Rte. 254, Myers Flat Interchange			
		750	8,000	4,150
33.22	Wooti, Newton Road Interchange			
35.11	Jct. Rte. 254 South			
		770	8,200	4,250
35.70	South Fork Road Interchange			
		770	8,300	4,300
R39.67	Bedcroft Interchange			
		710	8,200	4,450
R43.22	Berkdull Road Interchange			
		840	8,500	4,650
R45.90	Jordan Road Interchange			
R48.87	End Freeway	880	8,900	4,850
R49.04	Shively Road			
		800	8,200	5,000
		800	7,200	5,000
51.09	South Scotia Road			
51.86	Milepost equation	730	6,700	4,700
51.88				
51.90	North Scotia Road			
		1,050	11,800	6,200
52.63	Rio Dell, Cedar Street			
		1,150	12,700	6,900
53.74	Rio Dell, Bellview Road			

Mile-post	Description	Peak Hour	ADT Pk. Mo.	Annual
53.74	Rio Dell, Bellview Road	1,000	11,200	7,800
		1,000	11,800	7,800
57.89	Alton, Jct. Rte. 36 East			
		1,050	12,100	8,500
58.10	Drake Hill Road			
		1,050	12,100	8,500
59.11	Begin Freeway			
		1,050	11,700	8,200
59.50	Kenmar Road Interchange			
		950	10,600	7,400
50.45	12th Street Interchange			
		880	9,800	6,800
61.53	Fortuna Overhead (Main Street)			
		1,600	17,900	12,400
62.25	Palmer Boulevard Interchange			
		1,500	16,900	11,700
63.10	Finch Creek Road Interchange			
		1,250	14,000	9,700
64.29	Jct. Rte. 1, Singley Road Interchange			
		1,050	15,200	11,800
65.96	Tuleta Drive Interchange			
		1,400	15,700	10,900
68.21	Hookton Road Interchange			
		1,450	16,000	11,100
70.61	Fields Landing Overhead			
		1,800	19,800	13,700
72.03	Orchard Street Interchange			
		1,800	21,300	14,800
72.86	King Salmon Avenue Interchange			
		1,800	22,200	15,400
73.72	Spruce Point Interchange			
		1,950	21,100	18,100
74.63	End Freeway			
		2,150	23,000	19,700
74.78	Elk River Road			
		2,150	23,100	19,800
75.91	Eureka, McCullen Avenue			
		2,250	23,600	20,200
		2,250	23,600	20,200
76.33	Eureka, Harris Street			
		1,900	20,100	17,200
76.85	Eureka, Henderson Street			
		2,150	23,600	19,400
		2,200	23,100	19,600
77.30	Eureka, Walsh Avenue			

RTE 101, Hum Co

2003 TRAFFIC VOLUMES

RTE 101, Hum Co

Mile- post	Description	Peak Hour	ADT	
			Pk. Mo.	Annual
T0.08	Temporary Jct. Rte. 271 South			
T0.27 =0.31	Milepost Equation	850	7,600	5,300
1.61	Richardson Grove	900	7,100	5,200
R2.92 =R5.11	Milepost Equation			
R5.61	Begin Freeway	900	7,100	5,200
R8.60	Lake Benbow	930	7,800	6,000
R11.13	Garberville, Sprawel Creek Road	680	5,800	4,500
R11.50	Redwood Drive	820	7,100	5,500
R14.31	Dean Creek			
R16.84 =R16.92	Milepost Equation	1,100	9,700	7,500
R17.91	Jct. Rte. 254 Northeast	930	8,400	6,500
R22.44	French Road	820	7,600	5,900
25.01	Salmon Creek Road	830	7,800	6,100
27.94	Jct. Rte. 254; Myers Flat	840	8,000	6,300
33.22	Woot, Newton Road	540	7,200	6,000
35.11	Jct. Rte. 254 South	750	7,400	5,700
35.70	South Fork Road	820	8,100	6,200
R39.67	Redcrest	870	8,700	6,500
R43.32	Barkdell Road			
R45.90	Jct. Rte. 254 Southwest Jordan Road	900	9,000	6,700
		980	10,000	7,300
R48.28 =R48.69	Milepost Equation			
R48.87	End Freeway			
R49.18	Shively Road	1,050	10,700	7,800

Mile- post	Description	Peak Hour	ADT	
			Pk. Mo.	Annual
R49.18	Shively Road	1,050	10,500	7,600
		780	9,600	7,600
R50.59	South Scotia Road	1,050	10,800	7,800
R50.78	Begin Freeway			
51.70 =R51.49	Milepost Equation			
R51.84	Jct. Rte. 283 Northwest, North Scotia Road	1,050	10,700	7,700
		1,200	12,500	9,400
R52.60	Rio Dell, Davis Street	1,200	12,300	9,800
R53.38	Rio Dell, Scenic Way	1,500	17,000	13,600
R53.71	End Freeway			
57.69	Alton, Jct. Rte. 36 East	1,250	15,200	13,600
		2,000	22,300	17,800
58.69	Drake Hill Road	2,000	22,300	17,700
59.11	Begin Freeway			
59.50	Fortuna, Kenmar Road	1,750	19,700	15,700
		1,350	14,200	12,000
60.49	12th Street	1,450	15,300	12,900
61.53	Fortuna Overhead (Main Street)	2,300	25,000	21,000
62.23	Palmer Boulevard	2,250	24,400	20,600
63.10	Finch Creek Road	2,200	23,800	20,300
64.29	Jct. Rte. 211, Singley Road	2,100	22,500	20,300
65.95	Loleta Drive	2,150	21,600	20,000
68.21	Huckton Road	2,200	21,600	20,000
70.61	Fields Landing	2,650	25,000	23,500
72.03	Orchard Street			

**Humboldt County Department of Public Works 1973
Average Daily Traffic Count Data**

COUNTY MAINTAINED ROADS IN SCOTIA

Road Name	Road No.	From	To	Total Miles	Count	Location	Date
Main Street	C4F010	State Hwy 101	State Hwy 283	1.59	1203	S.W. of Bridge St.	1970
B Street	4F015	Main St.	Main St.	0.51	NONE		
Bridge Street	4F065	Main St.	End	0.22	1055	ON BRIDGE	1970
Church Street	4F060	Main St.	End	0.29	143	W. OF FRIEDMAN	1969
Eddy Street	4F050	Church St.	End	0.08	NONE		
Mill Street	4F055	Main St.	End	0.12	NONE		
North Court	4F013/4F014	State Hwy 283	End	0.15	NONE		
Williams Street	4F070	Bridge St.	End	0.50	1192	S. OF FRIEDMAN X BRIDGE	1973
1st Street	4F045	Main St.	Church St.	0.13	NONE		
2nd Street	4F040	Main St.	B St.	0.07			
3rd Street	4F035	Main St.	B St.	0.09			
4th Street	4F030	Main St.	B St.	0.08			
5th Street	4F025	Main St.	B St.	0.06			
6th Street	4F020	Main St.	B St.	0.04			

Post-It® Fax Note		7671	Date	6/17/01	# of Pages	4
To	Barbara Crystal		From	Chris A. Hartman		
Co./Dept.	SHW		Co.	Humboldt DPW		
Phone #			Phone #			
Fax #			Fax #			

Scotia Streetscapes



View of Church Street from Eddy Street. Church Street is a County maintained road with street parking and sidewalks on both sides of the street. Church Street serves nonresidential buildings as well as residential homes. The preschool and Church are visible in top left of picture.



Intersection of Main Street and Bridge Street. Location of midday traffic count June 29, 2005. Both Streets are County maintained. Bridge Street begins and Main and maintains sidewalks for only one block. Main Street only host crosswalks in this vicinity.



View of B Street from Main. B Street is county maintained and has a continuous sidewalk on one side. It begins off of Main Street but then turns and runs parallel to Main Street. As seen some street parking is available. B Street was observed to be the main residential street.



B Street, south of 6th Street. South of 6th Street the sidewalk on B Street inclines above street level with a railing.



2nd Street from Main Street.
Residential county
maintained street with
narrow sidewalks on both
sides of the road.



**Unnamed Street from Main
Street.** Gravel alley off of
Main Street across from fire
department. Provides garage
access with a paved portion
of road at top, approaching B
Street.



Mill Street west of Eddy Street. West of Eddy Street Mill Street narrows and hosts a sidewalk only on once side. Mill Street is a county maintained street.