

~~DEB~~

Martini

Grand

From: BUREAU OF TRAFFIC ENGINEERING
420 S.W. Main St.-Portland, Or. 97204

DATE 1/17/80

To: Dick Speer

 FOR YOUR ATTENTION & REPLY
 FOR YOUR INFORMATION

 PLEASE INVESTIGATE & REPORT
 PLEASE ANSWER OR ARRANGE

Note: Will you make arrangements to get information on traffic conditions on Grand Avenue south of the Morrison Bridge so that we have the delays, operating speeds, etc. both a.m. and p.m. peaks and off peaks so that when the Morrison Street Bridge widening and 2-lane turn goes in, we can go back and measure and see what the difference has been.

DEB:jjp

*all "BEFORE" data
has been compiled
May 1979*

OK

Grand

HERSHISER, MITCHELL, MOWERY & DAVIS

ATTORNEYS AT LAW

1600 WILLAMETTE CENTER

121 S.W. SALMON STREET

PORTLAND, OREGON 97204

TELEPHONE (503) 221-0460

DONALD E. HERSHISER
WM. H. MITCHELL
BRUCE L. MOWERY
CHRIS P. DAVIS
WM. KELLY OLSON
E. PENNOCK GHEEN
MICHAEL A. LEHNER
BRUCE M. WHITE
S. JANE PATTERSON
REX A. MALOTT

October 2, 1980

Vision

Traffic Engineer
City of Portland
317 SW Alder Room 301
Portland, OR 97204

Re: Traffic Signal Sequence

Dear Sir:

Will you please provide us with a certified copy of the traffic signal sequence northbound on SE Grand from Oregon to Multnomah Streets on June 2, 1978 at 8:00 p.m.

Enclosed find our check for \$7.50 for this service.

Very truly yours,

HERSHISER, MITCHELL, MOWERY & DAVIS

Christine Vernier

Christine B. Vernier
Legal Assistant to
Wm. H. Mitchell

CBV:ksc
Enclosure

RECEIVED
OCT 7 1980
BUREAU OF
TRAFFIC ENGINEERING

Hershiser, Mitchell, Mowery & Davis
Attorneys At Law
1600 Willamette Center
121 S.W. Salmon
Portland, OR 97204

October 9, 1980

To Whom it May Concern:

Regarding the operation of the traffic control signals at the following intersections on June 2, 1978 at 8:00 P.M., our records show the following:

At the intersection of N.E. Grand & N.E. Oregon:

For vehicles southbound on N.E. Grand Avenues:

Green-----	28.2 Seconds
Yellow-----	3.0 Seconds
Red-----	28.8 Seconds

For vehicles eastbound on N.E. Oregon Street:

Green-----	23.4 Seconds
Yellow-----	3.0 Seconds
Red-----	33.6 Seconds

There is a period of 1.2 seconds of Red for all vehicles immediately following each Yellow indication.

The period for one complete change is 60.0 seconds.

The northbound Green at Oregon on Grand begins ~~30.0~~ 18.0 seconds after the northbound Green at Hoyt for a progressive speed of 19 m.p.h. for the approximate 500' distance.'

The eastbound Green at Grand for Oregon begins 8.4 seconds after the eastbound Green at Union for a progressive speed of 21 m.p.h. over the approximate 260' distance.

1A

At the intersection of N.E. Grand Ave. & N.E. Holladay St.:

For vehicles northbound on N.E. Grand:

Green-----	28.8	Seconds
Yellow-----	33.0	Seconds
Red-----	28.2	Seconds

For vehicles westbound on N.E. Holladay:

Green-----	22.8	Seconds
Yellow-----	3.0	Seconds
Red-----	34.2	Seconds

There is a period of 1.2 seconds of Red for all vehicles immediately following each yellow indication.

The cycle period for one complete change is 60.0 seconds.

At the intersection of N.E. Grand and Multnomah:

For vehicles northbound on N.E. Grand:

Green-----	30.0	Seconds
Yellow-----	3.0	Seconds
Red-----	27.0	Seconds

For vehicles east and westbound on N.E. Multnomah:

Green-----	21.6	Seconds
Yellow-----	3.0	Seconds
Red-----	35.4	Seconds

There is a period of 1.2 seconds of red for all vehicles immediately following each yellow indication.

The cycle period for one complete change is 60.0 seconds.

The green indication for eastbound vehicles on N.E. Multnomah at N.E. Grand begins 19.8 seconds after the beginning of the green indication for eastbound vehicles on N.E. Multnomah at N.E. Union. The distance from Union to Grand is approximately 280 feet.

Signals
Oct. 9, 1980
Page 2

The green indication for northbound vehicles on N.E. Grand at N.E. Multnomah begins 16.2 seconds after the beginning of the green indication for northbound vehicles on N.E. Grand at N.E. Holladay. The distance from Holladay to Multnomah is approximately 540 feet.

There was no trouble reported at any of these installations on the above date.

I, Dean L. Franklin, Traffic Engineer, certify and affirm that I am a keeper of the public records regarding the foregoing information, and that the foregoing information is a true and correct copy of such records.

Dean L. Franklin

DLF:mc

Subscribed and sworn to before me this 9th day of October, 1975.

Notary Public for Oregon
My commission expires

APPROVED:

James K. Wilson, Sr. Traffic Engr.
City of Portland

Grand

June 10, 1980

MEMORANDUM

TO: Steve Thomsen, Streets and Structural Engineering
FROM: James K. Wilson, *JKW* Bureau of Traffic Engineering

This memo is to notify you that on March 20, 1980 the signal installation at S.E. Grand and Morrison was inspected and it was found to be completed as per the specifications.

If you have any question, please contact Dean L. Franklin at 317 S.W. Alder, Room 301, 248-4199.

JKW/DLF/as

cc: Dick Schmidt, Bureau of Maintenance
Keith Castleberry, Bureau of Maintenance
Tice Electric Company

Grand

February 21, 1980

Ron Failmezger
Regional Traffic Engineer
9200 S.E. McLoughlin Blvd.
Milwaukie, Oregon 97222



Dear Mr. Failmezger:

From time to time we receive complaints about the signing of the transition from the 45 MPH speed to 30 MPH when northbound on the Grand Ave. viaduct (US99E).

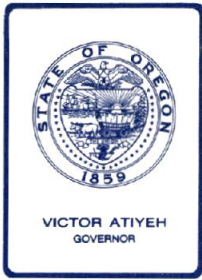
The 30 MPH speed zone begins 500 feet south of Stephens Street (vicinity of Lincoln Street). The police are checking them as they come off the viaduct at Harrison Street. We have received several requests that signs be installed advising the motorist that there is a reduced speed ahead. They are of the opinion this is a speed trap and feel additional warning signs are warranted.

We feel there is some merit to their request and suggest that consideration be given to installing "REDUCED SPEED AHEAD" signs on both sides of the viaduct, 250 feet in advance of the present "SPEED 30" signs.

Sincerely,

R.C. Speer
Assistant City Engineer

RCS:WES:jc



Department of Transportation
METROPOLITAN BRANCH

5821 N.E. GLISAN, PORTLAND, OREGON 97213

Telephone 238-8226

April 23, 1980

In Reply Refer to
File No.

TRA

Don Bergstrom
City of Portland Traffic Engineer
420 S.W. Main Street Annex
Portland, OR 97204

Subject: Traffic Investigation
High Accident Location
S.E. Grand Avenue in vicinity of Hawthorne Bridge

Enclosed is a copy of a traffic investigation report of a high accident location within the City of Portland. The high number of angle-type accidents at the intersections of S.E. Clay, S.E. Hawthorne Street and S.E. Madison Street with Grand Avenue, could be minimized with improvements to the signals.

The recommended improvement consists of installing 12-inch red lenses and signal backboards on fifteen signal heads at the above mentioned intersections. Also, it is recommended that a two-second all-red clearance interval be provided at these intersections. The estimated cost of this improvement is \$6,500.

If you concur with the recommended improvements, it is suggested that a possible shared-cost arrangement could be made to proceed with the improvements.

D. R. Adams
Project Development Manager

OSH0 (2)

DRA:PE
Enclosure

RECEIVED

MAY 1 1980

**BUREAU OF
TRAFFIC ENGINEERING**

OREGON DEPARTMENT OF TRANSPORTATION

Metropolitan Branch

Report of Traffic Conditions

Ore 99E - Hwy. No. 1E - M.P. 0.60N to M.P. 0.80N

Recommendation:

As a result of investigation of the section of S.E. Grand Avenue in the vicinity of the Hawthorne Bridge, the following recommendations are made:

1. With the exception of signal heads facing westbound S.E. Clay Street traffic, 12" red signal lenses and standard backboards be installed at these intersections with S.E. Grand Avenue:

- a. S.E. Clay Street
- b. S.E. Hawthorne Street
- c. S.E. Madison Street

This recommendation involves 15 signal heads.

2. Two second all red clearance periods be included in the signal timing at these intersections with S.E. Grand Avenue:

- a. S.E. Clay Street
- b. S.E. Hawthorne Street
- c. S.E. Madison Street

Historical Background

This investigation and report was initiated by the Oregon Department of Transportation as part of a continuing program to investigate the more hazardous sections of state highways within the region.

Investigation

The section studied includes a four-block urban portion of S.E. Grand Avenue in the vicinity of the Hawthorne Bridge ramps. S.E. Grand Avenue is a one-way, northbound street with four moving lanes of traffic. Parking is permitted on the east side of the street north of S.E. Clay Street. The three intersections in this section are all signalized. There are no other signalized intersections on S.E. Grand Avenue within the immediate vicinity. The 1978 average daily traffic was 26,700 vehicles. Photographs showing typical conditions are included elsewhere in this report.

During the period from January 1, 1977 to December 31, 1978, there were 67 accidents reported in the section studied. Intersectional accidents accounted for 62 of these and of this total, 29 were angle type collisions. The second most common accident was the rear-end collision which totaled 16. By intersection, the 29 angle collisions were distributed as follows:

S.E. Clay Street	-	6
S.E. Hawthorne Street	-	11
S.E. Madison Street	-	12
S.E. Main Street	-	0

Analysis of the attached collision diagram shows that the striking vehicle was traveling on S.E. Grand Avenue in 17 cases and on side streets in 12 instances.

The preponderance of angle type accidents and the relative high number of rear-enders indicates that the basic hazard at the three intersections in question involves motorists disregarding the red signal indications. The recommendations included herein are aimed at minimizing this condition.

Assuming complete new signal heads will be necessary to accomodate 12" red lenses and new backboards, it is estimated that it will cost \$6,500 for materials and labor to implement these improvements.

The 15 existing signal heads would have some salvage value, perhaps \$1,500, thus the net cost would be in the vicinity of \$5000. If approved, it is suggested that the cost be shared in some fashion with the City of Portland i.e., State provides materials and claim salvaged material. The City provide the labor cost by installing the equipment.

DLP:po

ODOT

4/15/80

TYPICAL VIEWS

S.E. Grand Avenue - Portland

1. Looking north on S.E. Grand Ave. from 150 feet south of S.E. Clay St.
2. Looking north on S.E. Grand Ave. from 150 feet south of S.E. Hawthorne St.
3. Looking north on S.E. Grand Ave. from 150 feet south of S.E. Madison St.
4. Looking east on S.E. Clay St. from 100 feet west of S.E. Grand Ave.
5. Looking east on S.E. Hawthorne St. from 100 feet west of S.E. Grand Ave.
6. Looking north on S.E. Hawthorne St. from 50 feet west of S.E. Grand Ave.
7. Looking west on S.E. Madison St. from 100 feet east of S.E. Grand Ave.

OREGON STATE HIGHWAY DIVISION
TRAFFIC ENGINEERING SECTION
ACCIDENT ANALYSIS
COLLISION DIAGRAM

City of Portland County Multnomah
Intersection of Pacific Hwy E and _____
Highway Number 1E (ore 99E) MP 0.60N to 0.80N
Period Covered 1-1-77 12-31-78
Compiled by SC Drawn by _____ Date 11-13-79

LEGEND

- Person Killed
- ←---- Pedestrian Killed
- Person Injured
- ◁---- Pedestrian Injured
- ←---- Property Damage Only
- ←+← Collision - Rear-end
- +←+ Collision - Head-on
- ↔ Collision - Sideswipe

- ◁---- Path of Pedestrian
- ← Path of Vehicle
- ←---- Path of Animal
- ←+ Vehicle Moving
- Vehicle Stopped
- ←+ Vehicle Backing
- Properly Parked
- ◁ Improperly Parked
- ↺ Vehicle Overturned
- ↺ Vehicle Skidded

Day 57
Night 10
Total 67

* STOPPED prior to 417

Collision Type	1977				1978															
	Fatal	Non-fatal	Prop	Total	Fatal	Non-fatal	Prop	Total	Fatal	Non-fatal	Prop	Total	Fatal	Non-fatal	Prop	Total	Fatal	Non-fatal	Prop	Total
Angle		4	6	10		10	9	19										14	15	29
Head-on																				
Rear-end		1	6	7		3	6	9										4	12	16
Sideswipe			4	4		1		1										1	4	5
Turning Movement		1	4	5		2	8	10										3	12	15
Parking																				
Non-collision																				
Fixed Object																				
Pedestrian						1		1										1		1
Backing																				
Misc.			1	1															1	1
TOTAL		6	21	27		17	23	40										23	44	67

Portland, Multnomah
Pacific Hwy E
1 E (ORE 99E) MP 0.60 to 0.80
1-1-77, 12-31-78

