

## APPENDIX B - THE TWIN CITIES INCIDENT DATABASE

This appendix presents definitions of the training data used in the development of incident detection algorithms using the I-880 database. The training data are addressed individually below for two methods of labeling employed.

All times represent the time that the head of queue was detected by the queue identification algorithm described in Section 9.

### B. 1 Remote Labeling

There were 37 incidents identified remotely. The times and locations of the detected head of queue conditions corresponding to incident traffic are listed in Table B- 1.

**Table B-1. Remotely Labeled Incidents**

Date	Zone	Time
10/1/96	Z284	9:06
10/1/96	Z355	6:43
10/1/96	Z478	7:54
10/1/96	Z229	15:20
10/1/96	Z432	15:36
10/1/96	Z386	15:49
10/1/96	Z460	8:20
10/1/96	Z5	12:50
10/2/96	Z712	10:24
10/2/96	Z442	7:48
10/2/96	Z80	16:35
10/2/96	Z62	16:59
10/2/96	Z384	17:29
10/2/96	Z58	18:15
10/3/96	Z42	13:27
10/3/96	Z593	13:47
10/3/96	Z560	15:42
10/3/96	Z630	16:17
10/4/96	Z322	14:27
10/4/96	Z355	15:22
10/4/96	Z223	15:24
10/4/96	Z770	17:15
10/4/96	Z598	16:50
10/28/96	Z560	15:47
10/28/96	Z66	16:01
10/29/96	Z695	8:58
10/29/96	Z768	12:20
10/30/96	Z68	15:58
10/30/96	Z79	16:29
10/30/96	Z66	16:56
10/30/96	Z622	15:53
10/30/96	Z286	13:23

<b>Date</b>	<b>Zone</b>	<b>Time</b>
1 0/3 1/96	Z546	6:51
10/3 1/96	Z559	7:47
10/3 1/96	Z229	7:25
10/3 1/96	Z414	8:04
1 1/1/96	Z132	7:27

## **B .2 On-site Labeling**

The times and locations of the detected head of queue conditions corresponding to incident traffic are listed in Table B-2.

**Table B-2. On-site Labeled Incidents**

<b>Date</b>	<b>Zone</b>	<b>Time</b>
4/21/97	Z516	16:34
4/21/97	Z481	16:41
4/21/97	Z229	17:09
4/22/97	Z438	8:05
4/22/97	Z453	8:09
4/22/97	Z252	8:31
4/22/97	Z259	8:36
4/22/97	Z284	13:51
4/22/97	Z42	14:06
4/22/97	Z185	14:52
4/22/97	Z69	15:21
4/22/97	Z14	16:50
4/22/97	Z287	17:48
4/23/97	Z398	8:21
4/23/97	Z566	16:35
4/24/97	Z110	8:02
4/24/97	Z559	8:06
4/24/97	Z622	15:48
4/24/97	Z480	16:32
4/24/97	Z670	17:16
4/25/97	Z417	11:41
5/12/97	Z46	7:11
5/12/97	Z567	7:27
5/12/97	Z386	7:31
5/12/97	Z8	16:53
5/13/97	Z185	7:13
5/13/97	Z696	7:21
5/13/97	Z11	7:26
5/13/97	Z138	7:27

5/13/97	Z584	7:50
5/13/97	Z233	15:35
5/13/97	Z492	15:41
5/13/97	Z232	15:44
5/13/97	Z11	15:58
5/13/97	Z514	16:17
5/13/97	Z159	17:00
5/14/97	Z624	15:03
5/14/97	Z667	15:24
5/14/97	Z2	15:48
5/14/97	Z670	16:02
5/14/97	Z338	16:21
5/14/97	Z553	17:01
5/15/97	Z472	8:00
5/15/97	Z63	15:36
5/16/97	Z76	8:06

The times and locations of the detected head of queue conditions corresponding to incident-free traffic are listed in Table B-3.

**Table B-3. Detected Head of Queue Conditions Corresponding to Incident-Free Traffic**

Date	Zone	Time
4/22/97	Z706	6:37
4/22/97	Z194	6:35
4/22/97	Z322	6:38
4/22/97	Z337	7:41
4/22/97	Z388	8:00
4/22/97	Z515	7:55
4/22/97	Z617	7:54
4/22/97	Z641	8:21
4/22/97	Z11	14 53
4/22/97	Z194	15:18
4/22/97	Z290	15:42
4/22/97	Z314	15:40
4/22/97	Z78	15:51
4/22/97	Z230	15:48
4/22/97	Z629	16:40
4/22/97	Z410	17:20
4/23/97	Z641	6:56
4/23/97	Z334	7:05
4/23/97	Z292	7:11
4/23/97	Z337	7:11
4/23/97	Z271	7:16
4/23/97	Z483	7:39
4/23/97	Z410	7:42

Date	Zone	Time
4/23/97	Z566	7:53
4/23/97	Z194	15:31
4/23/97	Z228	15:31
4/23/97	Z190	15:32
4/23/97	Z290	15:43
4/23/97	Z78	16:15
4/23/97	Z127	16:22
4/23/97	Z514	16:25
4/23/97	Z410	16:30
4/23/97	Z386	16:39
4/23/97	Z664	16:49
4/24/97	Z701	7:25
4/24/97	Z410	7:26
4/24/97	Z244	7:27
4/24/97	Z584	7:44
4/24/97	Z259	7:51
4/24/97	Z337	7:53
4/24/97	Z271	7:54
4/24/97	Z322	15:26
4/24/97	Z230	15:50
4/24/97	Z386	15:55
4/24/97	Z382	16:03
4/24/97	Z442	16:09
4/24/97	Z591	16:39
4/24/97	Z567	16:42
4/24/97	Z657	16:46
4/24/97	Z626	16:47
4/24/97	Z513	16:51
4/24/97	Z338	16:58
4/24/97	Z724	17:19
4/24/97	Z184	17:25
4/24/97	Z719	17:26
4/25/97	Z286	7:00
4/25/97	Z188	7:06
4/25/97	Z231	7:10
4/25/97	Z410	7:09
4/25/97	Z639	7:11
4/25/97	Z322	7:18
4/25/97	Z325	7:16
4/25/97	Z194	7:20
4/25/97	Z337	7:32
4/25/97	Z417	7:39
4/25/97	Z702	7:41
4/25/97	Z518	7:46
4/25/97	Z244	8:00
5/12/97	Z286	6:46

<b>Date</b>	<b>Zone</b>	<b>Time</b>
5/12/97	Z183	6:48
5/12/97	Z193	7:11
5/12/97	Z322	7:19
5/12/97	Z578	7:20
5/12/97	Z398	7:27
5/12/97	Z337	7:37
5/12/97	Z127	7:39
5/12/97	Z190	7:42
5/12/97	Z626	15:29
5/12/97	Z69	15:42
5/12/97	Z230	
5/12/97	Z515	16:25
5/12/97	Z314	16:42
5/12/97	Z190	16:45
5/12/97	Z622	16:52
5/12/97	Z197	16:53
5/13/97	Z701	6:42
5/13/97	Z284	6:47
5/13/97	Z531	7:05
5/13/97	Z322	7:13
5/13/97	Z189	7:27
5/13/97	Z412	7:28
5/13/97	Z193	7:28
5/13/97	Z127	7:30
5/13/97	Z483	7:53
5/13/97	Z388	7:54
5/13/97	Z725	15:18
5/13/97	Z185	15:25
5/13/97	Z194	15:26
5/13/97	Z322	15:45
5/13/97	Z189	15:46
5/13/97	Z622	16:25
5/13/97	Z726	16:27
5/13/97	Z337	16:32
5/13/97	Z314	16:41
5/13/97	Z273	16:41
5/13/97	Z410	16:46
5/13/97	Z29	16:48
5/13/97	Z468	16:50
5/13/97	Z387	16:51
5/13/97	Z437	16:52
5/13/97	Z394	16:54
5/13/97	Z591	17:08
5/13/97	Z181	17:13
5/13/97	Z334	17:15
5/13/97	Z655	17:15

<b>Date</b>	<b>Zone</b>	<b>Time</b>
5/13/97	Z594	17:21
5/13/97	Z664	17:34
5/14/97	Z639	6:56
5/14/97	Z127	6:56
5/14/97	Z186	7:02
5/14/97	Z616	7:09
5/14/97	Z194	7:17
5/14/97	Z77	7:20
5/14/97	Z410	7:34
5/14/97	Z189	7:36
5/14/97	Z578	7:44
5/14/97	Z388	7:48
5/14/97	Z337	7:49
5/14/97	Z701	7:53
5/14/97	Z194	15:28
5/14/97	Z230	15:32
5/14/97	Z657	15:58
5/14/97	Z592	16:41
5/14/97	Z110	16:49
5/14/97	Z468	16:50
5/14/97	Z176	16:53
5/14/97	Z515	17:16
5/15/97	Z11	7:24
5/15/97	Z701	7:38
5/15/97	Z616	7:38
5/15/97	Z386	7:44
5/15/97	Z19	7:47
5/16/97	Z19	7:28
5/16/97	Z189	7:29
5/16/97	Z616	7:36
5/16/97	Z701	7:42
5/16/97	Z10	7:46
5/16/97	Z410	7:47