### Before & After Videotapes & Special Events Data

Preliminary IIB Deliverable

C. Interim Report On Intersection Delay EECS - ITS LAB - FT95 - 012

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# MICHIGAN STATE UNIVERSITY

August 25, 1994

Mr. James Barbaresso Oakland County Road Commission 31001 Lahser Road Beverly Hills, MI 48025

RE: Phase II-A Deliverables

Dear Mr. Barbaresso:

Two of the deliverables under our sub-contract with the University of Michigan were videotapes of the before and after conditions at selected intersections, and data for the special event analysis. These data have been collected and are maintained in the project file for further analyses.

The attached listing of videotapes presents the status of the data. All the tapes have now been reduced and the data entered into computer files. Graphs of delay per approach have been constructed from these data. The table contains information on the corridor delay data as well as the intersection data.

The data collected for the purpose of conducting an analysis of SCATS for special events are also maintained in the project files. The attached table and graphs showing the iso-congestion lines were derived from these data. No other analysis has been conducted, because the data are for dissimilar events: Lions Football games on Sunday afternoons versus World Cup Soccer matches at various times and days. Therefore, we should not read too much into these results.

#### COLLEGE OF ENGINEERING

We look forward to continuing the evaluation of FAST-TRAC in Phase II-B of the project.

Department of Civil and Environmental Engineering

Very truly yours,

Michigan State University A349 Engineering Building East Lansing, MI 48624-1226

William C. Taylor, Ph.D., P.E. Professor

517/355-5107 Fax: 517/432-1827

cc: Steve Underwood

Attachments WCT/bar

**Table 1: Before Data (INTERSECTIONS)** 

Intersection	Date	Ti me	Video	Data	Graphi ng
Theersection	Date	Peri od			di apin ng
John R & Big	Monday	Morni ng	+	· · · · · · · · · · · · · · · · · · ·	Completed
Beaver	10 May 93	Morning	Compreced	Compreced	Compreced
Beaver	10 1,219 00	Afternoon	Completed Comple	Completed	Completed
		Eveni ng		Completed	Completed
	Wednesday	Morni ng		Completed	Completed
	12 May 93				
	J	Afternoon	Completed	Completed	Completed
		Eveni ng		Completed	Completed
	Thursday	Morni ng	•	Completed	Completed
	20 May 93	8	1	1	•
		Afternoon1	Completed	Completed	Completed
	Fri day	Morni ng	•	Completed	Completed
	21 May 93		_	_	_
Crooks &	Tuesday	Morni ng	Completed	Completed	Completed
South Blvd	11 May 93		_	•	•
	•	Afternoon	Completed	Completed	Completed
		Eveni ng	Completed	Completed	Completed
	Wednesday	Morni ng	Completed	Completed	Completed
	12 May 93		_	_	_
		Afternoon	Completed	Completed	Completed
		Eveni ng	Completed	Completed	Completed
	Wednesday	Morni ng	Completed	Completed	Completed
	19 May 93				
		Afternoon1	Completed	Completed	Completed
John R &	Thursday	Afternoon2	Completed	Completed	Completed
Mapl e	13 May 93				
		Eveni ng	Completed	Completed	Completed
	Fri day	Afternoon2	Completed	Completed	Completed
	14 May 93				
		Eveni ng	Completed	Completed	Completed
	Saturday	Afternoon	Completed	Completed	Completed
	15 May 93				
		Eveni ng	Completed	Completed	Completed
	Monday	Afternoon2	Completed	Completed	Completed
	17 May 93				
		Eveni ng	Completed	Completed	Completed

Interception	Doto	Ti mo	Vi deo	Doto	Cnaphing
Intersection	Date	Ti me		Data	Graphi ng
		Peri od	Reduction	Entry	
John R &	Wednesday	Afternoon2	Completed	Completed	Completed
Maple (cont)	26 May 93				
		Eveni ng	Completed	Completed	Completed
Rochester &	Tuesday	Afternoon2	Completed	Completed	Completed
South Blvd.	18 May 93		_	-	_
	•	Eveni ng	Completed	Completed	Completed
	Thursday	Morni ng	Completed	Completed	Completed
	27 May 93		_		_
	-	Afternoon	Completed	Completed	Completed
		Eveni ng	Completed	Completed	Completed
Maple &	Monday	Morni ng	Completed	Completed	Completed
Hei di	24 May 93		_	-	_
		Afternoon	Completed	Completed	Completed
		Eveni ng	Completed	Completed	Completed
	Tuesday	Afternoon2	Completed	Completed	Completed
	25 May 93		_	-	_
	-	Eveni ng	Completed	Completed	Completed
Rochester &	Wednesday	Eveni ng	Completed	Completed	Completed
Avon	06 July 94		•	_	•
	Thursday	Morni ng	Completed	Completed	Completed
	07 July 94		•	_	•
		Afternoon	Completed	Completed	Completed
Rochester &	Thursday	Eveni ng	Completed	Completed	Completed
Auburn	07 July 94			•	•
	Fri day	Morni ng	Completed	Completed	Completed
	08 July 94	8	1	1	
		Afternoon	Completed	Completed	Completed

**Table 2: After Data (INTERSECTIONS)** 

Intersection	Date	Time Period	Vi deo Reducti on	Data	Graphi ng	
		Periou		Entry		
Maple &	Tuesday		Completed	Completed	Completed	
Hei di	09 Nov 93					
			Completed	Completed	Completed	
John R &	Wednesday	Eveni ng	Completed	Completed	Completed	
Mapl e	01 June 94		_	_	_	
	Thursday	Morni ng	Completed	Completed	Completed	
	02 June 94	J	-	_	_	
		Afternoon	Completed	Completed	Completed	
		Eveni ng	Completed	Completed	Completed	
	Fri day	Morni ng	Completed	Completed	Completed	
	03 June 94	Afternoon	Completed	Completed	Completed	

**Table 1: Before Data (CORRIDOR)** 

Intersection	Date	Ti me	Vi deo	Data	Graphi ng
The Section	Date	Peri od	Reduction	Entry	di apin ng
ND Talan D	Mondon				Countated
NB John R	Monday	Morni ng	Completed	Completed	Completed
	17 May 93	4.0:	0 1 1	0 1 1	0 1 1
	_	Afternoon	Completed	Completed	Completed
	Tuesday	Morni ng	Completed	Completed	Completed
	18 May 93				
		Afternoon	Completed	Completed	Completed
	Wednesday	Afternoon	Completed	Completed	Completed
	19 May 93			_	_
		Eveni ng	Completed	Completed	Completed
	Thursday	Afternoon	Completed	Completed	Completed
	20 May 93		_	•	•
		Eveni ng	Completed	Completed	Completed
	Fri day	Afternoon	Completed	Completed	Completed
	21 May 93		1		•
	•	Eveni ng	Completed	Completed	Completed
SB John R	Monday	Morni ng	Completed	Completed	Completed
	17 May 93			_	-
	•	Afternoon	Completed	Completed	Completed
	Tuesday	Morni ng	Completed	Completed	Completed
	18 May 93		•	_	•
	3	Afternoon	Completed	Completed	Completed
	Wednesday	Afternoon	Completed	Completed	Completed
	19 May 93		1	1	1
	J	Eveni ng	Completed	Completed	Completed
	Thursday	Afternoon	Completed	Completed	Completed
	20 May 93		7-7-2-5-5-4	11-11-000	77-77-0004
		Eveni ng	Completed	Completed	Completed
	Fri day	Afternoon	Completed	Completed	Completed
	21 May 93		Jonipreced	Jonapheecu	
	~1 May 55	Eveni ng	Completed	Completed	Completed
L		Evening	Compt eted	compi eted	compreted

Intersection	Date	Ti me	Vi deo	Data	Graphi ng
Theersection	bacc	Peri od	Reduction	Entry	di apini ng
NP Coolidge	Tuesday		Completed	Completed	Completed
NB Coolidge	Tuesday 18 May 93	Morni ng	Compreted	Compreted	Compreted
	Wednesday	Afternoon	Completed	Completed	Completed
	19 May 93		osapi sesa	Jon Proces	Ton-Proces
		Eveni ng	Completed	Completed	Completed
	Fri day	Afternoon	Completed	Completed	Completed
	21 May 93		•	•	•
		Eveni ng	Completed	Completed	Completed
	Tuesday	Morni ng	Completed	Completed	Completed
	25 May 93				
		Afternoon	Completed	Completed	Completed
	Wednesday	Morni ng	Completed	Completed	Completed
	26 May 93		_	_	_
		Afternoon	Completed	Completed	Completed
SB Cool i dge	Tuesday	Morni ng	Completed	Completed	Completed
	18 May 93				_
	Wednesday	Afternoon	Completed	Completed	Completed
	19 May 93				_
	-	Eveni ng	Completed	Completed	Completed
	Fri day	Afternoon	Completed	Completed	Completed
	21 May 93				-
		Eveni ng	Completed	Completed	Completed
	Tuesday	Morni ng	Completed	Completed	Completed
	25 May 93		_	_	_
		Afternoon	Completed	Completed	Completed
	Wednesday	Morni ng	Completed	Completed	Completed
	26 May 93		_	_	
		Afternoon	Completed	Completed	Completed

Intersection	Date	Ti me	Vi deo	Data	Graphi ng
Theer seceron	Ducc	Peri od	Reduction	Entry	ar apin ng
EB Wattles	Thursday	Morni ng	Completed	Completed	Completed
22 maceres	13 May 93		Сопртосоц		Сопрассои
		Afternoon	Completed	Completed	Completed
	Fri day	Morni ng	Completed	Completed	Completed
	14 May 93		_	_	-
		Afternoon	Completed	Completed	Completed
	Monday	Morni ng	Completed	Completed	Completed
	17 May 93				
		Afternoon	Completed	Completed	Completed
	Tuesday	Morni ng	Completed	Completed	Completed
	25 May 93				
		Afternoon	Completed	Completed	Completed
	Wednesday	Morni ng	Completed	Completed	Completed
	26 May 93				
		Afternoon	Completed	Completed	Completed
WB Wattles	Thursday	Morni ng	Completed	Completed	Completed
	13 May 93	_		_	_
		Afternoon	Completed	Completed	Completed
	Fri day	Morni ng	Completed	Completed	Completed
	14 May 93				
		Afternoon	Completed	Completed	Completed
	Monday	Morni ng	Completed	Completed	Completed
	17 May 93				
		Afternoon	Completed	Completed	Completed
	Tuesday	Morni ng	Completed	Completed	Completed
	25 May 93				
		Afternoon	Completed	Completed	Completed
	Wednesday	Morni ng	Completed	Completed	Completed
	26 May 93				
		Afternoon	Completed	Completed	Completed

Intersection	Date	Ti me	Vi deo	Data	Graphi ng
		Peri od	Reduction	Entry	
EB Maple	Monday	Afternoon	Completed	Completed	Completed
-	17 May 93		_	_	_
		Eveni ng	Completed	Completed	Completed
WB Maple	Thursday	Morni ng	Completed	Completed	Completed
-	13 May 93		_	_	_
		Afternoon	Completed	Completed	Completed
	Fri day	Morni ng	Completed	Completed	Completed
	14 May 93		_	_	_
		Afternoon	Completed	Completed	Completed

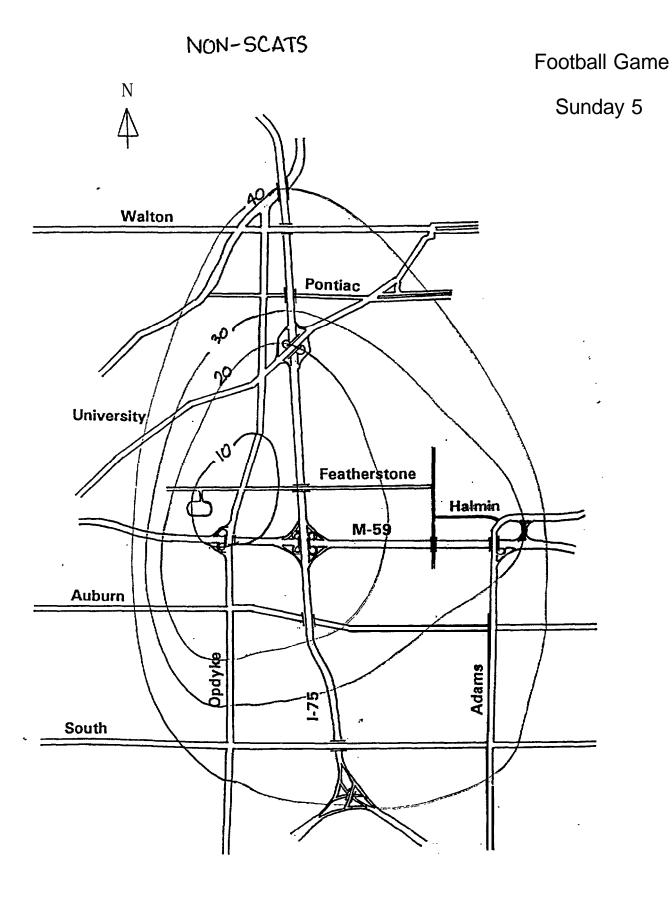
Intersection	Date	Ti me Peri od	Vi deo Reducti on	Data Entry	Graphi ng
NB Rochester	Wednesday 06 July 94	Eveni ng	Completed	Completed	Completed
	Thursday 07 July 94	Morni ng	Completed	Completed	Completed
		Eveni ng	Completed	Completed	Completed
	Fri day 08 July 94	Morni ng	Completed	Completed	Completed
SB Rochester	Wednesday 06 July 94	Eveni ng	Completed	Completed	Completed
	Thursday 07 July 94	Morni ng	Completed	Completed	Completed
	The state of the s	Eveni ng	Completed	Completed	Completed
	Fri day 08 July 94	Morni ng	Completed	Completed	Completed

**Table 2: After Data (CORRIDOR)** 

Intersection	Date	Ti me	Vi deo	Data	Graphi ng
		Peri od	Reduction	Entry	
NB John R	Wednesday	Eveni ng	Completed	Completed	Completed
	01 June 94		-	_	_
	Thursday	Morni ng	Completed	Completed	Completed
	02 June 94	J	_	_	-
		Eveni ng	Completed	Completed	Completed
	Fri day	Morni ng	Completed	Completed	Completed
	03 June 94		-	_	_
SB John R	Wednesday	Eveni ng	Completed	Completed	Completed
	01 June 94		_	_	_
	Thursday	Morni ng	Completed	Completed	Completed
	02 June 94		_	_	_
		Eveni ng	Completed	Completed	Completed
	Fri day	Morni ng	Completed	Completed	Completed
	03 June 94		_	_	_

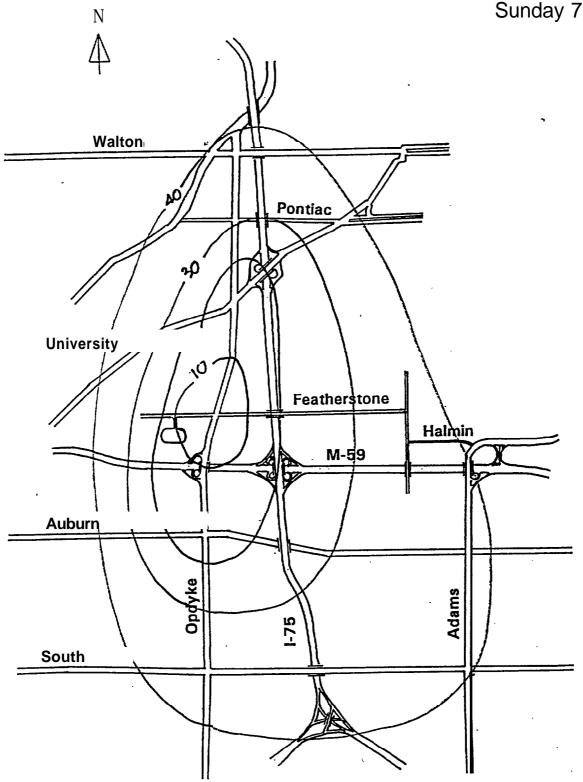
## COMPARISON ON CONGESTION DURATION SCATS and NON-SCATS

INTERSECTION		NGTH OF ( N-SCATS		SEST SCA		(Min)
	1	2	1	2	3	4
NORTH OF THE SILVER DOM	E					
Opdyke and University	40	38	69	47	48	41
Opdyke and Walton	6	n/a	43	3	38	46
SOUTH OF THE SILVER DOME	E					
Opdyke and Auburn	18	n/a	37	66	45	39
Opdyke and South	72	59	n/a	n/a	51	30
Adams and Auburn	5	n/a	70	51	9	7
Adams and South	n/a	5	40	16	11	28

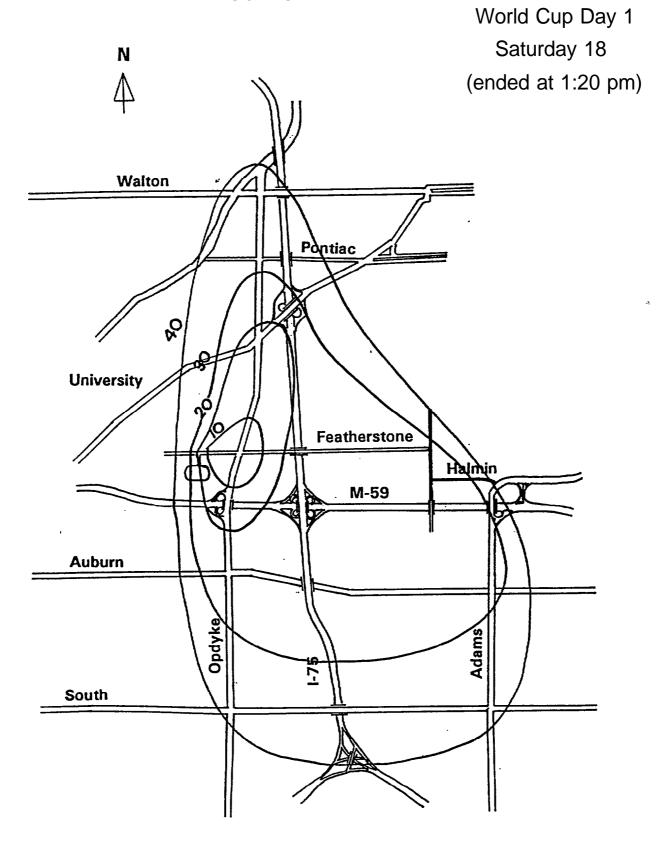


**NON - SCATS** 

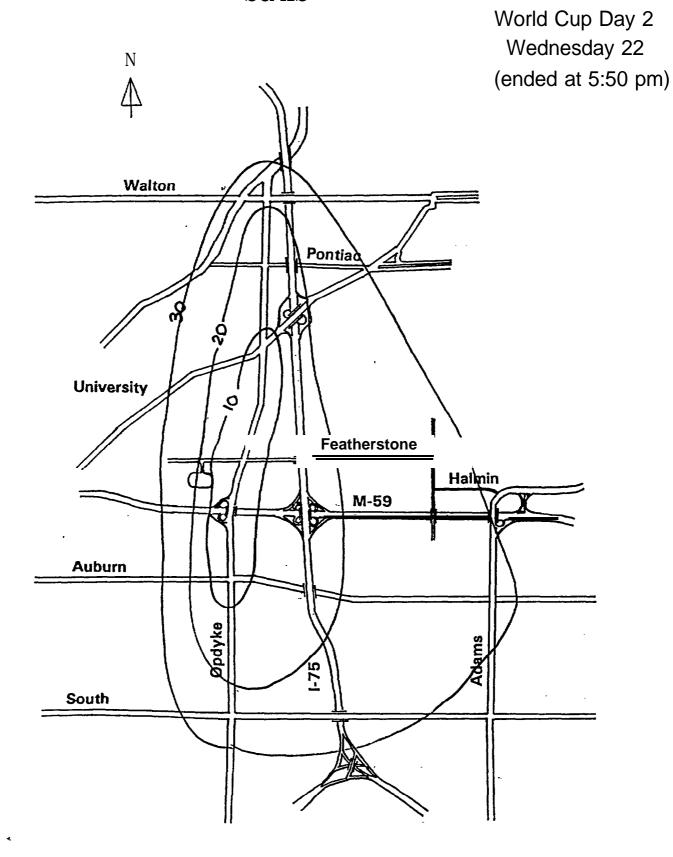
Football Game Sunday 7



**SCATS** 

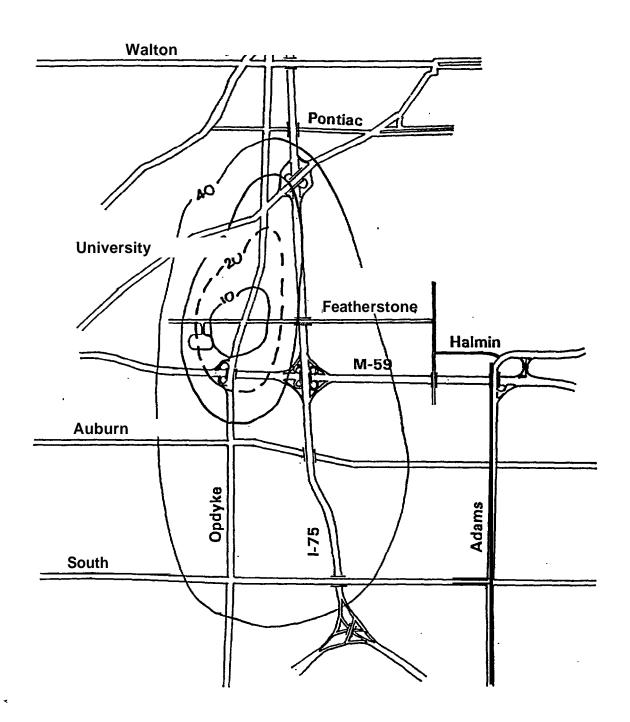


#### **SCATS**



Ν

World Cup Day 3 Friday 24 (ended at 9:20 pm)



World Cup Day 4 Tuesday 28 N (ended at 5:50 pm) Walton Pontiac University Featherstone Halmin M-59 **Auburn** Opdyke Adams 1-75 South