



**"Meeting the Future Needs of Transportation Flow"**

# **TRANSIT PROGRAM**

**Summary & Evaluation**  
Summer 2007

**Funded by a grant  
from the Michigan-Ohio University Transportation Center**



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## Class Content



### Day 1 (Monday, July 16)

Pre-test	
Movie Clip, 'The Italian Job'	
<b>Flow of Transportation</b>	<b>Dr. McAvoy, Transportation Engineer</b>
<b>Role of SEMCOG in Regional Transit</b> (Southeast Michigan Council of Government)	<b>Tiffany Draper, SEMCOG, Traffic Division</b>
Review of Day I Day I Evaluations	

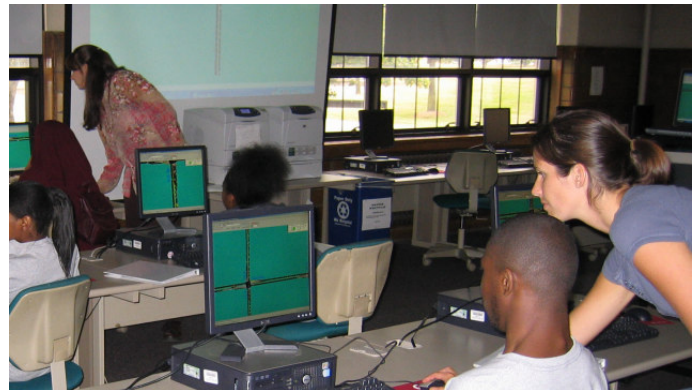




## "Meeting the Future Needs of Transportation Flow"

### Day 2 (Tuesday, July 17)

<b>Traffic Flow at Signalized Intersections</b>	<b>Prof. Dutta</b>
<b>How Concrete is Made</b>	<b>Prof. Lynch</b>
<b>Making Concrete</b>	<b>Prof. Lynch</b>
<b>Traffic Light System Simulation</b>	<b>Dr. McAvoy &amp; Laurel Vandeputte</b>
Review of Day II Day II Evaluations	







## "Meeting the Future Needs of Transportation Flow"

### Day 3 (Wednesday, July 18)

#### Field Trip to the Road Commission – Oakland County

<http://www.rcocweb.org/home/home.asp>

- Vehicle Infrastructure Integration
- Auto Traffic Control Problem
- Real Time Signals
- Auto Traffic Control Management

**Gary Piotrowicz;  
Dawn Bierlein;  
Danielle Deneau**

Review of Day III  
Day III Evaluations





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### Day 4 (Thursday, July 19)

<b>Social Justice in Transportation</b>	<b>Dr. Hoback</b>
<b>Vehicle Integrated Intelligence</b>	<b>Steven J. Cook, Structural Fabrication Engineer, Michigan Department of Transportation</b>
<b>Architecture of Urban Planning and Transportation</b>	<b>Christina Heximer; Virginia Stanard; Crystal Whitters; Brittany DesRocher</b>
<b>Review of Day IV Day IV Evaluations</b>	





## "Meeting the Future Needs of Transportation Flow"

### Day 5 (Friday, July 20)

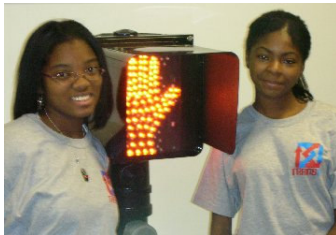
<b>Perspectives from a Traffic Engineer</b>	<b>Kimberly McDaniel, Spalding DeDecker</b>
<b>How to Make Concrete, Follow-up Activity</b>	<b>Prof. Lynch</b>
<b>Ford Motor Company Research - 'Intelligent Vehicles'</b>	<b>Joe Stinnett, Ford Motor Company</b>
Post Test Day V - Evaluation Review of Notebooks	
<b>The Future of Transportation</b>	<b>Dean Leo Hanifin, College of Engineering and Science</b>
Awards, Certificates and Recognition	





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## Field Trip Road Commission – Oakland County







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## Preparing and Testing Cement





## "Meeting the Future Needs of Transportation Flow"

# Daily Evaluations

(1 Disagree ... 5 Agree)

	<b>Day 1</b>	
1	Today, I got a good overview of what this class is about	<b>4.5</b>
2	The Film clip from "The Italian Job" helped me understand the problem of monitoring traffic flow	<b>4.0</b>
3	Dr. McAvoy's presentation "Flow of Transportation" was helpful and informative	<b>4.4</b>
4	I now have a better understanding of the role of SEMCOG in our local traffic flow	<b>4.7</b>
5	My overall rating of this class today is very positive	<b>4.2</b>

	<b>Day 2</b>	
1	Today, I got a good overview of how Traffic Signals are controlled and help control traffic flow	<b>3.9</b>
2	I learned about 'Making Quality Concrete'	<b>4.6</b>
3	I now better understand and how quality concrete helps/hinders traffic flow	<b>4.1</b>
4	In the 'Traffic Light System Simulation' I learned about careers related to Traffic Flow	<b>4.0</b>
5	My overall rating of this class today is very positive	<b>4.0</b>

	<b>Day 3</b>	
1	Today, I got a good overview of the role of Oakland County Road Commission and how it affects our daily life	<b>4.5</b>
2	I got a chance to view the technology that helps traffic flow in our local community	<b>4.4</b>
3	I learned about 'Traffic Control' Problems and some solutions	<b>4.5</b>
4	I learned about careers related to 'Traffic Flow' and some of the college classes needed for these careers	<b>4.3</b>
5	My overall rating of this class today is very positive	<b>4.3</b>



## "Meeting the Future Needs of Transportation Flow"

	<b>Day 4</b>	
1	Today, I got a good understanding of how "Social Justice" is measured in Transportation	<b>4.2</b>
2	I learned about "Vehicle Integrated Intelligence"	<b>4.4</b>
3	I now better understand the process of improving Traffic Flow	<b>4.3</b>
4	The presentation on 'Architecture Development of a City' was very Interesting	<b>4.2</b>
5	My overall rating of this class today is very positive	<b>4.4</b>

	<b>Day 5</b>	
1	Today, we tested concrete and learned about quality and non-quality concrete	<b>4.7</b>
2	I learned about "How Quality Concrete helps Traffic Flow"	<b>4.5</b>
3	I learned about Innovations that are being added to New Automobiles	<b>4.6</b>
4	I learned about "The Future of Transportation"	<b>4.6</b>
5	My overall rating of this class today is very positive	<b>4.7</b>



## "Meeting the Future Needs of Transportation Flow"

# Pre / Post Test Summary

	(Disagree = 1 ... Agree = 5)	Pre-Test Mean		Post-Test Mean		Change
1	I understand and can explain how traffic is controlled in the Metro Detroit Community	2.6		4.3		+1.7
2	I can explain several components that make up the Michigan's Traffic Management System (TMS)	1.7		4.4		+2.7
3	I can list several steps in the Regional Transportation Plan (RTP) we need to make between now and 2030 to maintain our mobility	1.5		4.1		+2.6
4	I can define and name several characteristics of the "Flow of Transportation"	1.6		4.3		+2.7
5	I can identify and describe several social implications of reducing car congestion	1.8		4.6		+2.8
6	I understand SEMCOG's role in transportation flow in our area	1.7		4.4		+2.7
7	I can identify and describe the process of forming and testing cement for our roads	1.9		4.3		+2.4
8	I can define careers related to the 'Flow of Transportation'	2.2		3.5		+1.3
9	I see myself involved in a career related to the field of Transportation.	2.1		4.4		+2.3
10	I rate this program high, positive experience (Post test only)	X		X		4.4





## "Meeting the Future Needs of Transportation Flow"

In review of the Pre/Post test data, we can see several positive outcomes of this class. First, the students rated the class very 'High' (4.4), and indicated they had a positive experience. The students also showed a significant increase of interest in being involved in a career related to the field of transportation, see # 9. We also see in item # 5, the students could begin to understand the social implications of decisions related to transportation.

