

Training Program
Final Report

Prepared by

Robert L. Vecellio John R. McCarthy

Submitted to

Alabama Department of Transportation Montgomery, Alabama

Highway Research Center Harbert Engineering Center Auburn University, Alabama 36849-5337

December 1997

#### TRAINING COURSES

Date	Location	on.	Division	<u>Participants</u>
4-21-97	Montg	omery	6	30
4-22-97	Troy		7	44
4-30-97	Grove	Hill	8	43
5-1-97	Mobile	3	9	57
5-6-97	Tuscal	oosa	5	53
5-7-97	Birmin	gham	3	84
5-13-97	Tuscur	nbia	2	53
5-14-97	Gunter	sville	1	57
5-15-97	Alexan	der City	4	<u>68</u> 489
Employer				
Alabama DOT County City Other (Contractors, Consultant	cs)		(	411 63 1 <u>14</u> 489
Instructors:		Robert L. Vecellio Director, Alabama T <sup>2</sup> Auburn University	Center	
		John R. McCarthy Assistant Director, Ala Auburn University	abama T <sup>2</sup> Center	
ALDOT Project Coordinators:		W. Gerald Anderson State Traffic Engineer Alabama Department of	of Transportation	
		Billy Joe DeRamus Assistant Traffic Oper Alabama Department of		

#### Number of Participants

	<b>State</b>	<u>City</u>	<b>County</b>	<b>Contractor Consultant</b>
Montgomery	30			
Troy	31		13	
Grove Hill	41	r*	2	
Mobile	45		11	1
Tuscaloosa	48		5	
Birmingham	66		16	2
Tuscumbia	39	1	2	11
Guntersville	43		14	
Alexander City	68			
	411	1	63	11 3

TOTAL = 489

#### COURSE OUTLINE

TOPIC	Time (Min)
Introduction	15
ALDOT Policy & Procedure	
FHWA Guidelines	•
Overview of Traffic Control Elements	20
MUTCD General Provisions	25
Background	
Definitions	
Traffic Control Needs, Problems and Consequences	60
Fundamental MUTCD Principles	
Examples	
Consequences	
Traffic Control Plan Elements	20
Definitions of components	
Tapers	
Traffic Control Devices	75
Signs	
Portable changeable message signs	•
Arrow displays	•
High level warning devices	
Channelizing devices	
Markings	
Lighting devices	
Other devices	
ALDOT sign sheeting specifications	
Flagging	25
Requirements	
Practices	í
Workshop on Devices	25
Traffic Control Plans	30
Rural two lane highways	
Urban streets	
Intersections	
Multilane highways	
Freeways	
Workshop on Inspection and Accident Reporting	30
Installation, Maintenance & Removal	35
Methods	
Inspection	

### TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course Location 9 Courses	Date	1997
	Emphas	sis Needed
Course Topic	Less	More
ALDOT Policy & Procedure	65 (30%)	149 (70%)
Overview of Traffic Control Elements	82 (42%)	112 (58%)
MUTCD General Provisions	74 (37%)	124 (63%)
Traffic Control Needs, Problems & Consequences	59 (27%)	157 (73%)
TCP Elements	75 (39%)	117 (61%)
Traffic Control Devices	72 (37%)	123 (63%)
Flagging	105 (47%)	117 (53%)
Operations Workshop I - Devices	74 (39%)	117 (61%)
Traffic Control Plans	56 (27%)	150 (73%)
Operations Workshop II - Inspection and Accident Reporting	72 (37%)	123 (63%)
Installation, Maintenance & Removal	87 (45%)	108 (55%)
		Rating*
VISUAL AIDS		•
,		8.1
INSTRUCTION		8.3
OVERALL COURSE		8.3

Montgomery

April 21, 1997

**30 Participants** 

#### List of Participants Montgomery Work Zone Course April 21, 1997

Bowers, Vince Briggins, Christopher E. Carr, Karen Corbin, Brian L. Dale, Nathaniel Daniels, Jesse Driggers, Alice A. Estes, Norman Robert II Gray, William Keith Hall, Randal C. Hartley, Thomas Keith Henderson, Debra Hutto, Thomas J. Jr. Isham, Landon J. Johnson, Alton Carson Jones, Lee Jr. Knowles, Mike Kromtit, Lawrence B. Lewis, Michael J. Maness, Walter L. Moore, Robert Mothershed, Donald Price, Raymond Shepard, Donald Smith, Peter J. Tabb, Lloyd Tew, Wayne Vann, William E.

Willis, Efrem D. Wilson, Lynne D.

## TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course Location Montgomery	_Date_	April 21,	1997
		•	
		Emphasis	Needed
Course Topic		Less	More
ALDOT Policy & Procedure		5	9
Overview of Traffic Control Elements		4	7
MUTCD General Provisions		4	6
Traffic Control Needs, Problems & Consequences		2	8
TCP Elements		2	8
Traffic Control Devices		3	7
Flagging	,	3	8
Operations Workshop I - Devices		4	4
Traffic Control Plans		3	8
Operations Workshop II - Inspection and Accident Reporting		3	6
Installation, Maintenance & Removal		6	4
			Datina
VISUAL AIDS		-	Rating* 8.7
INSTRUCTION		-	8.8
OVERALL COURSE		-	8.8

#### SUMMARY COURSE COMMENTS

#### Montgomery April 21, 1997

#### Did you benefit from attending this course? Explain how.

- Yes I learned about tapering and the required minimum sizes of different devices.
- Yes- By learning correct methods of installing traffic control plans and inspecting these plans and related signs with them.
- Yes I learned some things that I didn't know.
- Yes I benefitted from this course.
- Yes The course was beneficial to me and I will know more about what to look for when I'm inspecting the TCP.
- Yes I learned more than what I ever thought there was to traffic control.
- Yes I learned about traffic control safety and about Part VI, Standard and Guides for Traffic Control.
- Yes Updated on changes in traffic control.
- Yes More understanding.
- Yes By learning more about procedures.
- Yes I did benefit from attending this course I am now aware of the regulations which dictate proper implementation of traffic control devices.
- Yes I got exposed more to the MUTCD.
- Yes Yes it reminded me of how important it is to have the TCP up and working as it is supposed to be.
- Yes (7)

#### Other Comments

Condense course down a little.

All ALDOT maintenance employees should be able to attend classes on flagging and traffic control.

Might could condense some.

Refer to book, keep us on same page, very good presentation.

Troy

**April 22, 1997** 

**44 Participants** 

#### List of Participants Troy Work Zone Course April 22, 1997

Aughtman, Lester C., Jr. Barker, Awbrey Beck, Steven B. Beyer, Walter R. IV Brewer, Derek Bush, Jon J. Byrd, James M. Carroll, Walter W. Catrett, Lew Wayne Champion, Chris Chappell, Raymond L. Cronin, Charles Douglas, William D. Dunaway, William J. Dykes, Ronald L. Ellis, Marvin Folmar, Charles K. Franklin, Charlotte A. Fuller, Bill Hagler, James R. Hancock, Susan A. Holloway, Coley M. Jr. Lambert, Gary L. Lawson, Sherry L. Lee, Joyce A. Leverette, Kyle M. Massey, Cliff K. Meredith, Jonathon M. Mount, Edward Lavon Oliver, Howard S.

Phillips, Sam
Powell, Roy F.
Roberts, Richard H.
Shelley, Daniel F.
Shirley, Kevin R.
Sneed, Homer L. Jr.
Tillery, James A.
Walker, Jimmy O.
Warren, William
Whaley, Joseph M.
White, Paul W.
Williamson, Charlie
Yelverton, Lee A.
Yohn, Kenneth E.

## TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course			
Location Troy	_ Date_	April 2	2, 1997
		Emphas	is Needed
Course Topic		Less	More
ALDOT Policy & Procedure		4	7
Overview of Traffic Control Elements		6	. 3
MUTCD General Provisions		4	5
Traffic Control Needs, Problems & Consequences		5	4
TCP Elements		5	4
Traffic Control Devices		9	4
Flagging		9	2
Operations Workshop I - Devices		5	5
Traffic Control Plans		6	5
Operations Workshop II - Inspection and Accident Reporting		5	6
Installation, Maintenance & Removal		9	4
VISUAL AIDS			Rating*
INSTRUCTION			8.8
OVERALL COURSE			8.5

#### SUMMARY COURSE COMMENTS

## **Troy April 22, 1997**

#### Did you benefit from attending this course? Explain How.

- Yes This course helped me to understand the need for the traffic control devices.
- Yes I was shown some mistakes that I have seen made in traffic control and how to correct these mistakes.
- Yes It is always good to review work zone traffic control.
- Yes Very beneficial, good review of requirements.
- Yes Learned when and where to place certain signs. Learned what the "G", "W" and "R" mean. Learned the sizes (dimensions) of signs. Learned about setting up work zones, and where to park machinery.
- Yes Learned standards and guidelines for traffic control and how to do inspection.
- Yes- The materials and information were helpful.
- Yes Some new ways to sign properly.
- Yes As well as specifics I'm aware of now and wasn't before; the realities of the importance of traffic control, however minute' it may seem, was brought to light.
- Yes It qualified me for traffic control inspections.
- Yes Improved on general knowledge of traffic control.
- Yes I became more aware of traffic control procedures.
- Yes Learned a lot.
- Yes I realized we have a lot of work to do to get the county up to these standards for traffic control and safety.
- Yes Several areas regarding flaggers were clarified; sign changes were emphasized which I had not previously heard of.

Yes - I enjoyed this class. I had learned quite a bit about the signs and when used.

Yes - Learned we are not suppose to be using orange flags for flagging.

Yes - Interesting, well paced and best of all learned a lot.

Yes (8)

#### **Other Comments**

Good emphasis on important points. Possibly offer another course with emphasis on "two-lane rural TCP's" to attract more county workers, and to "seal in" this course for those of us who attended.

I was absolutely too cold.

Some of the visual aids were old and out of date. On flagging procedure we were told the flagger was to stay out of the roadway. Many time workers and instruments must be placed in the roadway and the flagger should be too..

The general public needs to be warned or schooled on the course to protect them and also the worker.

The information was presented entirely too in depth.

The explanations and definitions of each type of sign and device were too long and uncalled for. This class could be completed within the morning half.

**Grove Hill** 

**April 30, 1997** 

43 Participants

#### List of Participants Grove Hill Work Zone Course April 30, 1997

Baker, Cecil D. Bryant, Alan E. Calhoun, Nicky L. Cannon, James R. Champagne, Lisa S. Cole, Patricia C. Cregar, Michael D. Doggett, Rodney Ehteridge, Danny J. Ezell, John Dennis Gafford, David T. Geeslin, John W. Gibson, Stephen G. Graves, William A. Halbrook, J. G., Jr. Harwell, Frank L. Hayes, Larry N. Holt, Jerry L. Johnson, David M. Kennel, Nick Knight, Edwin D. Kynard, Lorinzol McCain, John Val Mckay, Curtis M. Metzger, Wesley R. Mitchell, Kenneth S. Noble, Sam M. Parker, Russel D. Powell, Jeffery H.

Powers, Perry A.
Pritchett, Adrian D.
Rainer, Orland N.
Raybon, Darin W.
Scott, Marion Lance
Stuckey, Shannon E.
Walker, Thomas E. II
Washington, James E.
Whatley, George E., Jr.
Williamson, Billy Ray
Wilson, Daryl D.
Wright, Elbert D.
Wright, Herman I.

## TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course			
Location Grove Hill	Date_	April	30 1997
	Emphasis Need		is Needed
Course Topic		Less	More
ALDOT Policy & Procedure		6	11
Overview of Traffic Control Elements	•	5	11
Overview of Traine Control Elements		J	11
MUTCD General Provisions		5	9
Traffic Control Needs, Problems & Consequences		3	15
, <u>-</u>		_	
TCP Elements		4	11
Traffic Control Devices		7	8
Flagging		7	10
Operations Workshop I - Devices		5	10
Traffic Control Plans		5	13
Operations Workshop II - Inspection and Accident Reporting		8	7
Installation, Maintenance & Removal		7	9
			Rating*
VISUAL AIDS			8.1
INSTRUCTION			8.4
OVERALL COURSE			8.3

\*Rating: Excellent = 10, Poor = 1

#### SUMMARY COURSE COMMENTS

#### Grove Hill April 30, 1997

#### Did you benefit from attending this course? Explain how.

- Yes I learned more about roadway construction, maintenance, and utility operations. I also learned that there were more signs than I had ever seen. And I also learned how to flag correctly.
- Yes I did benefit from attending the course. I learned about safety in the work zone and when, where and how to place signs.
- Yes I really did enjoy and benefit from this class because I learned more about traffic signs and different other activities.
- Yes The course helped me understand the execution of traffic control devices.
- No A lot of information to be learned in such a short time.
- Yes I believe so because I now know about all the traffic control procedures.
- Yes Because we all need to know how to inspect TCP's for our safety and public safety.
- Yes Updated on traffic control.
- Yes Learned something I did not know before attending class.
- Yes A good review of what we have used in past years.
- Yes Will help in preparing TCP's.
- Yes Very good course.
- Yes Good review.
- Yes Several things that I did not know were cleared up.
- Yes A refresher course.

- Yes I have been made aware of information on how to locate and use the information in the MUTCD.
- Yes Learned how to implement traffic control plans in different phases of construction and it refreshed my memory of a previous course.
- No I have already done the work, made no difference.
- Yes Course was a good refresher on procedures. First course attended since transition from AMUTCD to Federal Manual.
- Yes Became familiar with the inspection procedures for traffic control devices.
- Yes I now have a better understanding of the TCP on the projects I work on.
- Yes Mainly from receiving manuals to refer to out on the project; also, the discussion cleared up some misconceptions on allowable traffic control and devices.
- Yes I learned about the new ways of setting up traffic schemes. I would like to see this course taught to contractors that are working on ALDOT projects.

Yes (3)

#### **Other Comments**

Good job by instructors.

Root for Alabama instead of Auburn.

Course needed for maintenance people, but not as detailed as this.

Not enough breaks!

Did a job well for the amount of time used.

Trying to cover too much material in a short period of time.

Too long.

Mobile

May 1, 1997

**57 Participants** 

#### List of Participants Mobile Work Zone Course May 1, 1997

Alms, Fred W., Jr. Amberger, Nick Brown, James Bryars, Benjamin Chatmon, Terry Lee Clark, Robert E. Coleman, Denny K. Cook, Johnnie L. Cotton, Rodney Criswell, Gerald W. Curry, Wayne Fore, James W. III Gilchrist, Stanley C. Gipson, Rhonda M. Goodman, Thomas W., Jr. Gradick, William Henry III Graves, Daniel R. Gulledge, David C. Hall, Jerry D. Hardegree, Jeffrey L. Harris, Rodrick Hawkshead, Marty Hayles, Richard Ray Hires, Kenneth Hoover, Victor Jenks, John W. Johnson, Leroy Jones, Myron L. Kossow, Glenn D. Martin, Calvin McIntosh, James Medley, Gary M. Melton, Donald R. Mitchell, Clyde F. Nunnally, Joey D.

Orrell, Jerry L. Phillips, Jeff Scott Phillips, William Powell, Robert H. Powers, Dennis L. Rogers, Lasharon Schlude, Michael F. Scott, Adrian Sellers, Michael R. Sharp, Michael W. Sheppard, Scott M. Singleton, T. Antroy Staimpel, Walter Stewart, Wayne L. Stockman, Joseph L. Terry, Lonnie Anthony Washington, Maurice Watson, Michal E. Wearren, Wendell Whitworth, T. Layne, Jr. Williams, James H. Wright, Frank, Sr.

# TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course Location Mobile	_Date	May 1,	1997
Course Topic		Emphas Less	is Needed More
ALDOT Policy & Procedure		6	16
Overview of Traffic Control Elements		8	7
MUTCD General Provisions		6	12
Traffic Control Needs, Problems & Consequences		7	12
TCP Elements		8	10
Traffic Control Devices		5	13
Flagging		11	9
Operations Workshop I - Devices		8	11
Traffic Control Plans		5	16
Operations Workshop II - Inspection and Accident Reporting		7	13
Installation, Maintenance & Removal		9	9
VISUAL AIDS			Rating*
INSTRUCTION			8.5
OVERALL COURSE			8.6

## SUMMARY COURSE COMMENTS

#### Mobile May 1, 1997

#### Did you benefit from attending this course? Explain how.

- Yes This course was my first training on traffic control devices.
- Yes I learned more about signing more projects other than the ones we normally do.
- Yes Learned a lot about traffic control.
- Yes Because of the fact that I had never had this class before, therefore, some methods that were being used on projects that I thought was correct ends up that it was not.
- Yes Because all of the lawsuits that are being filed against ALDOT are due to mistakes in TCP.
- Yes Because it had been eleven years since this course had been given.
- Yes I learned more about control of traffic than I know. This course helped me with all phases of traffic control. I also learned about the standards and procedures of traffic control.
- Yes I learned things that I did not know.
- Yes A better understanding of TCP operations.
- Yes I did.
- Yes A lot I did not know.
- Yes A good course.
- Yes Did some things that I had done before.
- Yes How to sign roads.
- Yes It improved my information.
- Yes Became more aware of the importance of proper diverting of traffic.

- Yes They did not just drone on, laying down the law but they explained the reasons for the law, so to speak. They gave us clear and concise explanations and useful handout material.
- Yes More understanding of how to access a traffic control problem.
- Yes Minimum specifications for signs, spacing of signs, TCP, and when signs are used or not used.
- Yes This information and schooling will help me very much in my everyday safety job performance, thanks.
- Yes I learned a lot by being in this class.
- Yes I did in the work zone traffic.
- Yes Learned about traffic control since this was my first exposure to traffic control planning.
- Yes Because I am still learning about traffic control in work zones.
- Yes Because things have changed from the way I was taught.
- Yes I did in the work zone traffic.
- Yes I thought the course was well taught, we learned a lot.
- Yes I learned more about how to set up work areas, what devices to use and how to use them.
- Yes This course was very educational, we need more courses like this so that the state employee can be updated on this material. I think it is a very good course.

Yes (4)

#### **Other Comments**

Could have read the books myself.

Good presentation, course time for topics was adequate.

The information if used correctly can save lives and money.

The main thing is to stress the importance of our legal standpoints and let us know what we are responsible for. Give us a clearer picture of what is expected of us as inspectors. I was pleased with your course and found it very informative.

This would be a good class for contractor personnel.

Tuscaloosa

May 6, 1997

**53 Participants** 

#### List of Participants Tuscaloosa Work Zone Course May 6, 1997

Abrams, John

Arnold, Glenn

Branch, Willie III

Brown, Geneva M.

Cantrell, Alvis L.

Clemmons, E. Nell

Clifton, Virgil M.

Coley, William A.

Crocker, Darren F.

Crocker, George W.

Dunn, Celena

Edwards, Kenneth R.

Edwards, Roddy D.

Ferguson, Elaine R.

George, William C.

Gohde, G. Richard

Groom, Jerry Paul

Guyton, Daryl D.

Hall, Earnest

Haney, Daniel R.

Hardin, Richard

Hardy, Horace H., Jr.

Jackson, Ronald D.

Jacobs, Milton R.

Jones, Robert L.

Kemp, David A.

Kemp, Richard

Knox, Grady William

Limerick, Roger

Little, Bobby L.

Lowery, Jimmy R.

McGuire, Jack H.

McPherson, Norman W.

McPherson, Robert S.

Mitchell, Lonnie

Moses, Samuel Lynn

O'Neal, Gordon K.

Osburn, Wayne J.

Pearson, Marty

Philon, Harold LaDel

Plenty, Sandra D.

Rhodes, Dennis S.

Rice, Alvah D.

Sellers, Earnest L.

Singley, Larry L.

Sluder, Clayton D.

Smith, Danny

Sommerville, Alphonsia, Jr.

Stokes, Emanuel

Sutton, Terry L.

Taylor, Tim

Tilley, Derek

Yerby, Donna J.

## TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course		
Location Tuscaloosa D	ate <u>May 6</u>	<u>5, 199</u> 7
	Empha	sis Needed
Course Topic	Less	More
ALDOT Policy & Procedure	2	29
Overview of Traffic Control Elements	5	24
Overview of frame control Elements	3	24
MUTCD General Provisions	7	23
Traffic Control Needs, Problems & Consequences	4	24
•	·	
TCP Elements	4	21
Traffic Control Devices	7	19
		00
Flagging	6	23
Operations Workshop I - Devices	4	24
Traffic Control Plans	4	25
Operations Workshop II - Inspection and Accident Reporting	6	<b>20</b> /
Installation, Maintenance & Removal	5	21
YHOLLAY A TOO		Rating*
VISUAL AIDS		8.2
INSTRUCTION		8.3
OVERALL COURSE		8.2

#### SUMMARY COURSE COMMENTS

#### Tuscaloosa May 6, 1997

#### Did you benefit from attending this course? Explain how.

- Yes I feel better informed and qualified traffic as a control inspector. I should have had this class nineteen years ago. It is well presented. The course should be taken very seriously.
- Yes I learned the difference between drums and barrels and how to figure the distance between construction signs in work zones.
- Yes Lots of information given.
- Yes This course helped me to update my traffic control skills, which by working in construction is really needed.
- No Information given did not pertain to my job.
- Yes Learned a lot.
- Yes I learned proper traffic control.
- No Very little benefit, the course was rushed through.
- Yes Project inspection and administration.
- Yes Speed limit for barricades, types and flag color.
- Yes I know what to look for when inspecting TCP.
- No Very little benefit, most of this was common sense.
- Yes There was a lot of helpful information covered in this class.
- Yes Too much information too fast.
- Yes This is a very serious part of road work.
- Yes A very good test, it was excellent, very good instructors.
- Yes (3)
- No (2)

#### **Other Comments:**

Good job.

The course should have been two days or more to get all the much needed information across.

This class should be extended to two or three days. Too much material was covered in this class.

Keep the good work up.

Birmingham

May 7, 1997

**84 Participants** 

#### List of Participants Birmingham Work Zone Course May 7, 1997

Barnett, Keith Michael Beersdorf, James H. Bobo, John Robert Bolton, James R. Boozer, Ken Boswell, Clarence Brown, Rhenae C Brundidge, Theodore Butler, Nathan Butsch, Rodney W. Bynum, Joe C. Cashion, Linda Clark, Mae E. Deavers, Debbie Dennis, Tommy Dudley, Sammy Estes, James David Evans, Mark C. Gillam, Dwayne A Goodwin, Charles M. Graham, Carl C. Gray, Jerry M. Hand, David J. Hill, Cynthia L. Holladay, Scott Hooks, Renya M. Hulsey, Donald W. Jr. Ingle, Paula S. Iwuoha, Victor Johnson, Clarence E. Jones, Glen E. Jones, Willie Jr. Kelley, Harold Wayne Key, Philip D. Kidd, Willie Joe Kilpatrick, James E. Kirby, Molli S. Lamberth, Sylvia W. Long, Lonnie

Magouirk, Edward E.

Mann, Benny Darvan

Maner, Jamie Lee

May, Debra T. McCandless, Elizabeth L. McGlawn, Adrian McKee, Gregory C. McKinney, Christopher D. Meadows, David Meriwether, W.L. Moore, La Nese Moore, Linda H. Montgomery, Jonathan Musulman, Carlo A. Newby, Lafarrow Nunnally, Brian Payne, Delene Pennington, James N. Perryman, Larry Raines, Jeremy M. Richards, Michael T Richardson, William Alvin Rigsby, Jamie L. Robertson, Herschel Robinson, Aaron Roe, Randal K. Sanders, Lewis Jr. Spears, Sylvester J. Stephens, J. Wayne Jr. Stephens, Marc M. Strain, Billy J. Taylor, Russell L. Thomas, James E. Thomas, Sonya F. Topping, Richard K. Wadkins, Kelly S. Wallace, Louie P. III Wallace, Timothy Wayne Watkins, Jon D. Widner, Philip Wilson, John D. Wood, Wesley Woods, Sue H. Wrenn, Lloyd E. Yeager, Bill

## TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course Location Birmingham	_ DateMay	7, 1997
Course Topic	Emphas Less	is Needed More
ALDOT Policy & Procedure	15	23
Overview of Traffic Control Elements	15	23
MUTCD General Provisions	15	24
Traffic Control Needs, Problems & Consequences	8	36
TCP Elements	15	24
Traffic Control Devices	10	29
Flagging	20	23
Operations Workshop I - Devices	16	25
Traffic Control Plans	7	31
Operations Workshop II - Inspection and Accident Reporting	11	28
Installation, Maintenance & Removal	19	18
VISUAL AIDS		Rating*
INSTRUCTION		8.4
OVERALL COURSE		8.1

\*Rating: Excellent = 10, Poor = 1

#### SUMMARY COURSE COMMENTS

## Birmingham May 7, 1997

#### Did you benefit from attending this course? Explain how.

- Yes This course helped me to see what I can do and things I cannot do. This course has given me a good overview on traffic control devices, policy and procedure.
- Yes This was a good class.
- Yes I liked the course.
- Yes Because it enabled me to review the right traffic control devices and showed the correct way to set up the devices. It is a good refresher course. Knowing that you cannot use damaged devices and learning better public relations, the do's and the don'ts.
- Yes I learned a great deal from this course. I thought that it was very well taught and had very good handouts and video material.
- Yes I learned a good bit.
- Yes It refreshed my mind on proper traffic control procedures. I had taken the course several years ago. But it is entirely too long.
- Yes I learned more about traffic control situations so that I can now limit mistakes made on my job pertaining to traffic control plans.
- Yes Instructors did very well presenting some very dry material and making it as interesting as possible.
- Yes I learned some things. It reminded me of some things I had forgotten. Good handouts. Wish they could have a design portion and an operations portion so that people could attend the portion they have most interest in or would be most beneficial. I personally benefitted from both aspects: design and operations.
- Yes Instruction of placement and removal of lane closure.
- Yes But only marginally, more time is needed.. A couple of days of material is presented quickly in a narrow time frame. Some or many sections of the MUTCD manual were omitted. Less time on cones please. Certainly, safety of ourself, contractor, crews and motorists is worth more time spent on this course. For example, one day per week for six or eight weeks. No more "tomatoes against the wall approach".

- Yes Knowledge about signs and flagging.
- Yes I did because it's been a while since I've had contact with out on the road work. Things have changed since I was last out on the road. The class was explained in detail. I really got a lot out of this class, and it also helped me as a motorist. I really don't think it would hurt for the general public to attend these classes. Maybe they would learn from it to help prevent so many wrecks.
- Yes Very beneficial information given, to protect the public, workers and inspectors.
- Yes Only slightly. No longer involved with traffic control.
- Yes I did, it made me aware of the manual on uniform traffic devices and the proper usage.
- Yes I learned how to protect myself as well as the public.
- Yes I thought the class was informative and gave me a better idea of how to perform traffic control better.
- Yes Helped me make better plans for the public safety and the crew I work with.
- Yes It was a good chance to use the manual in practice situations. It will help to know what to look for and where to look.
- Yes Some information I had seen but understood better from the course.
- Yes A good update.
- Yes It covered a lot I did not know.
- Yes I have had this course before, some new changes that were covered were helpful.
- Yes Some benefit...
- Yes The course provided a basic knowledge of reporting and maintaining TCP during construction.
- Yes The handouts were very helpful and informative.
- Yes Better understanding of traffic control devices.
- Yes I have not attended this class before and I work in design. Information helpful as I work on different types of plans.
- Yes I am more learned in traffic control devices and much more aware of situations that can occur. And that there is no flagman but flagger signs.

- Yes Somewhat, however one day could not possibly be enough time to teach any course. I did on the other hand learn a different dimension on signs, the function of the devices to maintain accident free traffic control.
- Yes Class was very informative. Some parts were long and boring, particularly the part where we went over every type of warning sign.
- Yes I did not realize there was so much to traffic control.
- Yes I learned a lot of things about traffic control.
- Yes I know more.
- Yes More about traffic control and the usage of traffic control equipment.
- Yes I learned the importance of good traffic control procedures in a construction zone and what is expected of me in my position as a traffic control person.
- Yes I learned how traffic control devices should be properly set up and the way they should be. I'm not sure I know how to read the plans to find out how it should be and I know where to go to the MUTCD to find out whatever I don't know.

Yes (4)

#### **Other Comments:**

Course too long.

Need more training and understanding of how important traffic control is concerning lawsuits.

Needed more breaks during class, people became tired and restless. Needed more time to present class material.

Please update your slides and let this class out earlier.

Class should be stretched to two or three days. It is too much information to be accurately taken in an eight hour period, thereby rushing the class and not giving certain areas sufficient coverage.

Thank you for teaching us this course.

Need updated slides, although some of the clothes have come back in style.

An excellent day.

If it wasn't for the amount of information needing to be taught in such a short amount of time, more breaks would have been helpful.

Please give more seminars on this course for three to five days to instill more information; and for the personnel to grasp the information. One day isn't enough.

Too much too fast.

Need to update slides with actual footage on VMS.

Class should be shortened.

Too long.

First slide presentation on flagging was out of date and unrealistic.

# TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Tuscumbia

May 13, 1997

**53 Participants** 

#### List of Participants Tuscumbia Work Zone Course May 13, 1997

Barnes, Rodney

Beal, Fred

Bedsole, Jonathan

Bridgman, Glenn

Brown, Fred

Cooper, Jerry W.

Dale, Mark F.

Dotson, Titus M.

Elliot, Arthur

Farris, William M.

Fleming, Jeffrey Dean

Ford, Julian

Garner, Hiram P.

Geise, Patsy

Gilbreath, Mike

Goode, Jamie

Green, Kenneth R.

Hand, David M.

Hand, Michael

Hankins, Alton

Harris, Benard

Henley, Billy

Higgins, Cynthia

Jackson, Tony O.

Johnson, Kevin

Kennedy, Sammy M.

Langham, Joseph G.

Laster, Anthony J.

Liles, Larry C.

McDaniel, Madelina R.

McGuire, Odell

Moebes, Gilbert

Mosley, Zachery D.

Oliver, Larry

Posey, Phillip R.

Posey, Rickey

Pride, Ne'Oshune

Pruitt, Bobby Alvin

Pugh, Jeffrey Lee

Reding, Brenda

Ricks, Gary L.

Risner, Tony

South, Jacky L.

Taylor, Lance Allan

Thompson, Spencer Jr.

Tittle, Ray

Traffanstedt, Clay V.

White, Brandon Lee

White, Charles W.

Winsted, Barry

Woodruff, Reda Metcalf

Walker, Jonah

White, Gay

#### **COURSE EVALUATION**

## TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course Location Tuscumbia	_ Date	May 1	3, 1997
Common Transis	Emphasis Needed		
Course Topic		Less	More
ALDOT Policy & Procedure		14	19
Overview of Traffic Control Elements		15	13
MUTCD General Provisions		11	17
Traffic Control Needs, Problems & Consequences		12	21
TCP Elements		17	10
Traffic Control Devices		13	14
Flagging		16	13
Operations Workshop I - Devices		14	14
Traffic Control Plans		17	12
Operations Workshop II - Inspection and Accident Reporting		14	15
Installation, Maintenance & Removal		13	16
VISUAL AIDS			Rating* 7.8
INSTRUCTION			7.5
OVERALL COURSE			8.0

# SUMMARY COURSE COMMENTS

#### Tuscumbia May 13, 1997

#### Did you benefit from attending this course? Explain how.

- Yes I learned there was a lot more detailed criteria than the average employee recognizes.
- Yes It was very informative. Enjoyed all the information, important material and explanation of traffic control devices.
- Yes The first traffic control class I have attended.
- Yes I did. Before taking this class I didn't have a proper understanding of roadway signs.
- Yes I did, it was very helpful.
- Yes Just knowing what to do now in setting up control on the projects.
- Yes I understand traffic control better.
- Yes I learned things I was unaware of previously.
- Yes It was not a bad course.
- Yes Became more familiar with traffic control items, installation, maintenance and removal.
- Yes It was a good overview. Probably would help to get into groups and work on traffic control plans.
- Yes What signs were done away with.
- Yes I learned about new sign codes.
- Yes I learned of discontinued signs.
- Yes Since I work on a lot of resurfacing projects, it is important to know what traffic devices to use and where to use them.
- Yes I benefitted because it showed how to set up traffic control work areas.
- Yes It was a good course.

- Yes I learned much about traffic control through construction areas which is a very important subject.
- Yes Whenever you can increase your knowledge of your job and improve your awareness of it to help you perform your job better is beneficial.

Yes (3)

#### **Other Comments**

It should not take three years to obtain information this important.

Good class.

The instructors acted in a very unprofessional manner by returning from lunch forty minutes late. It was very inconsiderate to make about fifty people waste that time away from their jobs. The situation was made worse when one of the instructors offered an apology and ended it with a smart remark about "teaching your own class." The class seemed hurried. Should be spread over two days to allow for in-depth study.

# TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Guntersville

May 14, 1997

**57 Participants** 

#### **COURSE EVALUATION**

# TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course Location Guntersville	Date_	May 14	, 1997
			,
Course Topic		Emphasi Less	is Needed More
ALDOT Policy & Procedure		6	13
Overview of Traffic Control Elements		11	7
MUTCD General Provisions		11	9
Traffic Control Needs, Problems & Consequences		9	15
TCP Elements		9	10
Traffic Control Devices		10	8
Flagging		10	. 7
Operations Workshop I - Devices		7	8
Traffic Control Plans		4	15
Operations Workshop II - Inspection and Accident Reporting		8	9
Installation, Maintenance & Removal		10	. 5
·			D. C *
VISUAL AIDS			Rating* 8.2
INSTRUCTION			8.4
OVERALL COURSE			8.5

#### List of Participants Guntersville Work Zone Course May 14, 1997

Barrentine, Mark L.

Bates, Doug

Beasley, Don

Boman, David M.

Butler, William Sean

Conley, Tiffani A.

Dahlke, Dan

Davis, Steve

Ellis, Ronnie N.

Fagan, Barry

Fagan, Tracey Lynn

Fuller, Angelia L.

Garth, William L. Jr.

Graves, Casey D.

Hand, David L.

Hosch, Michael J.

Jasper, Johnny Thomas

Jelks, Christopher A.

Johnson, Angel

King, Linda M.

Kirkland, James S.

Knop, Michael

Lowery, Christine Y.

Lucas, Daniel

Matthews, Stephanie

McAbee, Jimmy Jason

McBride, Portia

McDonald, Mark H.

Miller, Billy C.

Mitchell, James

Mitchell, Sylvia

Moore, Dwight

Myrick, LeVon

Nix, Mark A.

Placek, Alan

Phillips, T.E.

Roberson, Douglas (Scott)

Sanders, Richard

Shepard, S. Mark

Shryock, Ronald L.

Skaggs, Greg

Snider, John E.

Spencer, Darnell

Steele, Leon

Stewart, Kelvin A.

Taheri, Bejan A.

Terry, James

Terry, Mark A.

Terry, Reginald B.

Thompson, James Ronnie

Thompson, Michael G.

Trimble, John C.

Warren, Ronnie

Wheeler, Eddie R.

Wilhelm, Russell

Williams, Melissa P.

Wunch, Thomas L.

#### SUMMARY COURSE COMMENTS

#### Guntersville May 14, 1997

#### Did you benefit from attending this course? Explain how.

- Yes I design traffic control plans; some policy and procedures I did not know. Course was very informative.
- Yes I was introduced to new terms and ideas for setting up traffic control plans.
- Yes It gave me a better insight to the proper procedures involved in traffic control plans and inspection.
- Yes Good refresher.
- Yes Some of the minor points were brought up in the class.
- Yes Good overview of knowledge needed to inspect traffic control devices.
- Yes As a designer, this information is very beneficial to me.
- Yes Learned how to inspect traffic controls on a project and fill out the forms.
- Yes I learned a lot about traffic control that I did not know. Really helpful because safety comes first.
- Yes It made me eligible for traffic control inspection and gave me a better understanding of traffic control inspection.
- Yes In this class I learned about the different types of TCP. I did not know a lot of these types of plans. Also I learned about some new signs that I haven't seen before.
- Yes It was a very good course and was beneficial to me.
- Yes I benefitted from attending the course by being updated on changes in the traffic control manual.
- Yes As an inspector with ALDOT it is necessary to understand traffic control. I have learned a lot and with this material I now have the knowledge.

- Yes I learned about traffic control.
- Yes It made me more aware of traffic devices and flagger responsibility, along with help on the C-25 form and traffic accident report.
- Yes I learned more about traffic control and how devices are used.
- Yes Because I was certified in traffic safety.
- Yes I have become better aware of correct placement and inspection of traffic control devices.
- Yes This is the second class I have taken on traffic control. Being an assistant county engineer this is information that is very important to have when paving or building a bridge using federal money.
- Yes Learning about traffic measures and to prevent and help avoid accidents and confusion.
- Yes I have a better understanding of the importance of a well maintained traffic control plan, in order to maintain safety for the public and also for the workers.

Yes (7)

#### **Other comments:**

Instructors were very informed on the subject.

Good class but give more breaks so students can pay better attention.

The A.M. classes seemed slow. The P.M. classes seemed rushed.

The course was too long.

Need more courses.

This course is much too long, too many personal comments by the instructors.

Too much material to cover in one day.

Projects need to be able to enforce contractor's use of quality signs.

Need to get material for proper installation of traffic signals - positioning, height requirements, testing, etc.

It is unnecessary to read/review every warning sign. Teach how to use manual instead. Reading is not DOT problem, but not using available manuals seems to be the problem. John reading all handouts to group made the class unnecessarily long.

Some slides had information the instructor wanted us to see, but due to poor visibility, not enough shown on the slide, it was too hard to pick out pertinent points. On some points you should have a series of several slides to get a view of the work area. Could not understand John McCarthy when he was speaking. Slow down. Speak more clearly and get rid of the attitude. Spends too much time on closed lane speed limit signs.

Flagging slides need to be a film for a better understanding.

Slides were dark and hard to see.

# TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

**Alexander City** 

May 15, 1997

**68 Participants** 

#### List of Participants Alexander City Work Zone Course May 15, 1997

Abner, Eugene

Anseman, Janice Michelle

Babbs, Torris J.

Barker, Alan D.

Beck, R. Vance

Blair, Terry L.

Blankenship, Joseph C.

Camp, Robert Fred Jr.

Castleberry, Wayne

Chapman, Jacoby D.

Clark, Natalie C.

Cook, David T.

Cush, Ken

Davis, Keith M.

Dean, Christopher

Driggers, Joe M.

Faulk, Henry C.

Foster, James Edward

Frames, Kevin

Frames, Willie G.

Fuller, Sharron R.

Garrett, Kenneth D.

Gault, Leon

Haynes, John S.

Hightower, Earl

Howard, Daryl

Johnson, Baxter

Jones, Terry W.

Kelley, Kendall E.

Kite, Larry W. Jr.

Lauderdale, Sebron Jr.

Lee, Joseph Q.

Lindsey, Henry Clay Jr.

Mallory, Lenox Mikecal

Mathis, James W.

McCoy, Diane

McKenzie, Anthony

McLeod, James H.

Moore, Cathy

Morris, Huey L.

Newman, Willie L.

Payne, Keith M.

Perry, Michael A.

Pettus, William Clyde

Ponder, Donald

Porter, Rebekah M.

Powe, Susan

Powe, Winston J.

Pritchett, Jimmy P.

Queen, Ivey G.

Ramsav, Lawrence R.

Robbins, Shannon W.

Robertson, Michael

Shaw, Robert E.

Smith, Daniel R.

Smith, Larry W.

Smith, Stanley

Spencer, Alan Cornell

Strong, Kenneth B.

Thomas, Phillip

Thrash, Johnny W.

Voss, Robert E.

Walker, Kevin

Walls, Jerry W.

Whetstone, Ezra Jr.

Whittington, L.W.

Williams, Tisha D.

Wilson, Fred Jr.

#### **COURSE EVALUATION**

## TRAFFIC CONTROL THROUGH CONSTRUCTION WORK ZONES

Instructors: Bob Vecellio and John McCarthy

Course Location Alexander City	Date	May 15 1997	
		1124	
Course Topic		Emphas Less	is Needed More
ALDOT Policy & Procedure		7	22
Overview of Traffic Control Elements		13	17
MUTCD General Provisions		11	19
Traffic Control Needs, Problems & Consequences		9	22
TCP Elements		11	19
Traffic Control Devices		8	21.
Flagging		23	22
Operations Workshop I - Devices		11	16
Traffic Control Plans		5	25
Operations Workshop II - Inspection and Accident Reporting		10	19
Installation, Maintenance & Removal		9	22
VISUAL AIDS			Rating* 7.9
INSTRUCTION			7.9
OVERALL COURSE			8.0

# SUMMARY COURSE COMMENTS

#### Alexander City May 15, 1997

#### Did you benefit from attending this course? Explain how.

- Yes I benefitted from this course because I do most all accident reports from contractors and write letters for the inspector to the project engineer.
- Yes It gave me information that I did not have.
- Yes In the understanding of numbers, locations, meaning of signs and the importance of traffic control including the responsibility.
- Yes I did. It was very informative and I have gotten a lot of understanding of why I need to take the necessary precautions in planning our job's traffic control. Also got the needed information of when I need to do my checks, what to look for and how often. I appreciate the time and dedication you took in the preparation of the class. The guidance and information you provided will be very essential in my further documentation of traffic control procedures. Thanks Bob and John.
- Yes Awareness of traffic control techniques.
- Yes I did benefit from this course by having a chance to go through the MUTCD manual and asking questions to traffic engineers. It will make inspections, installation and maintenance of traffic control run more smoothly. I am more familiar with the manual for unexpected situations on a project.
- Yes Better overall view of traffic control.
- Yes To make work zones safer.
- Yes This was the first time that this class covered some of the sign procedures I knew and others I did not.
- Yes Because I learned things I thought I knew but did not. I found out now is better for me and my coworkers and also the public.
- Yes Good refresher course on old rules and updated on new procedures.

- Yes I learned a lot of things I did not know. For example: R,W,G,A,B on the sign codes; nor did I realize the importance of over or under signing an area. Yes this class is helpful although it can be tiring at times.
- Yes It was beneficial to get an overview of traffic control problems, new policies and products even though I had been exposed to TCP for several years.
- Yes I feel the class will be very beneficial in the future for traffic control. I think since most of our construction projects are now in metric this class should also be taught in metric.
- Yes Very informative.
- Yes McCarthy made a good point about signs staying up when not being used. Those signs do need to come down or be covered, i.e. Opelika at Midway Plaza. However if you are going to teach people to contradict a professional engineer's design, then you have to teach/show them how to document and handle it. There are too many risks with TCP's and lawsuits, and your students need to know what is involved when you change a TCP. You as a P.E. do not need to give engineer assistants a false impression.
- Yes More aware about what signs I need to use in my work.
- Yes Some devices changed and were explained why, along with their proper usage.
- Yes Expense accounts.
- Yes It was a little longer than I realized. For some of the things that occur on job sites, I think we could have read the manuals and could have used more guidance on actual situations that we were going to be inspecting. Not installing or actually flagging.
- Yes I benefitted most from slides and manuals.
- Yes Basically the size of most signs and how to set up for a closed road and one lane roads. How to set up the barricades and their differences.
- Yes This program was very beneficial. We need more classes like this so that we can keep up with this type training. Job well done.
- Yes I was informed on new types of traffic control through the work zones.
- Yes (4)

#### **Other Comments:**

All ALDOT employees need to attend.

Do it again next year but shorten the hours.

More examples of actual TCP design, problems, etc.

Class is boring. Also needs better pictures.

This class was too long.

Need more time, maybe a two day class.

#### **APPENDIX**

#### **Example of Training Certificate**



# ALABAMA DEPARTMENT OF TRANSPORTATION Auburn University Highway Research Center

This is to certify that

### **John Doe**

has successfully completed 6.5 hours of training in

## **Traffic Control through Construction Work Zones**

May 7, 1997

State Tráffic Engineer

Alabama Department of Transportation

Assistant Traffic Operations Engineer

Alabama Department of Transportation



Robert L. Vacellio
Instructor

Auburn University

Instructor

Auburn University

