

DELAWARE VALLEY REGIONAL PLANNING COMMISSION



Highlights of November 10, 2005 Engineering Subcommittee Meeting

Attendees

Rosemarie Anderson
Stacy Bartels
Matt Bochanski
Larry Bucci
John Coscia, Jr.
Charles Dougherty
Matt Gates
George Fallet
Jerry Lutin
Jim Madera
Regina Moore
Jabulani Moyo
Kevin Murphy
Jessica Savidge
Deborah Schaaf
John Ward
Karen Yunk
Karl Ziemer

Organization

Delaware Valley Regional Planning Commission
Delaware Valley Regional Planning Commission
Pennsylvania Department of Transportation
Pennsylvania Department of Transportation
Delaware Valley Regional Planning Commission
Delaware Valley Regional Planning Commission
Delaware Valley Regional Planning Commission
Mercer County Engineering
New Jersey Transit
SE Pennsylvania Transportation Authority
Delaware Valley Regional Planning Commission
City of Philadelphia Planning Commission
Delaware Valley Regional Planning Commission
Gloucester County Planning Department
City of Philadelphia Planning Commission
Delaware Valley Regional Planning Commission
Federal Highway Administration – NJ
Delaware River Port Authority

Introduction & Overview

Everyone in attendance introduced themselves and briefly mentioned their relationship to the transportation safety committee.

John Coscia Jr., Manager of NJ Project Implementation, chaired the meeting and began with opening remarks. From the 4 E's concept of safety conscious planning, the purpose of the subcommittee is to focus on the Engineering portion of the Regional Safety Action Plan by identifying current programs, and developing strategies as it pertains to transportation safety for the region.

Review of Emphasis Areas

Rosemarie Anderson, Manager, Office of Corridor Planning and Project Manager for DVPRC's Safety Program briefed the committee on the emphasis areas identified by

AASHTO, PennDOT, NJDOT, and DVRPC. Both PennDOT and NJDOT have adopted AASHTO's goal of 1.0 fatality per million vehicle miles traveled (PMVMT) for 2008. The current fatality rate for the region is 1.3 PMVMT where PA is 1.43 (based on 2003 data), and NJ is 1.07. The five counties in PA are lower than the PA state average rate of 1.48. The four counties in NJ are higher than the NJ state average rate of 1.05. The handout provided in the folder, listed AASHTO, PennDOT, NJDOT, and DVRPC emphasis areas. SAFETEA-LU legislation mandates that all states have to have a strategic highway safety plan. AASHTO identified 22 goals. Both states used AASHTO goals as the basis in developing their plans. Charles Dougherty, Associate Director of Transportation Planning Division, provided the committee with an overview on how PennDOT came about developing their safety plan. PennDOT has identified 19 areas for emphasis on safety. The other 4 areas listed will be included in the plan; however these areas will not have any major emphasis or funding. NJDOT has identified 8 emphasis areas. There are actually a total of 10 areas, however the pedestrian, bike, and railroad have been combined to form one of these areas. Hit fixed objects has been included in the minimize run off the road crashes category to formulate the other emphasis area. The crash data for the region served as a basis for developing DVPRC list of 13 emphasis areas. DVRPC is going to concentrate on these areas for the region's action plan. Therefore the main purpose of this subcommittee meeting is to incorporate the engineering component of the plan by finding out what other organizations are doing and to develop strategies in that will assist in the development of the regional safety plan.

Although there are 13 emphasis areas, six were chosen as a main priority for the day's discussion. Input on the other areas would be given if time permitted. The tables listed below provide information on the existing programs and strategies discussed for each of the emphasis areas for the region.

Proficiency among older drivers

Existing program(s)	Description
PennDOT – Clear view font	This font is strictly for guide signs (interstate signage)
Strategies	Description
Font on signs	Increase in the size and style of lettering -
Enhancement of highway conditions	Ways to enhance visibility of pavement markings in accordance with older driver handbook
National mandate for headlights	Establishing a specific height for headlights, and new high intensity headlights; AARP may be advocates;
Increase the postage of advanced signage	Warning motorists of an approaching intersection, multiple intersections and merging
Pavement marking	Making pavements for different roadway conditions
Raised pavement markers (RPM's)	
Centerline and edge line rumble strips	
General Comment(s):	
<ul style="list-style-type: none"> • The word proficiency may seem like dealing with the behavior of the drivers, 	

- however for the sake of engineering, proficiency means developing strategies and programs that enhance the drivability of the roads for older drivers.
- Maybe there should be a policy for designing transportation system for the older driver which will benefit everybody regardless of age
 - Given the age and conditions of the roads, some treatments may not be feasible (i.e. rumble strips, RPM's – PennDOT)
 - Maintenance issue
 - It was proposed that DVRPC could be an effective voice for the region (along with other MPO's) to influence a national initiative/policy to maximize vehicle technology among auto makers and Feds
 - Sign pollution is a concern

Minimize Run-off the Road Crashes

Existing program(s)	Description
Increase the postage of advanced signage	Warning motorists of an approaching intersection, multiple intersections and merging
Raised pavement markers (RPM's)	
Centerline and edge line rumble strips	
Increase shoulder widths	For recovery, safe haven, bicycles and pedestrians, drainage
Strategies	Description
Better maintenance program for signage	
Vehicle speed reduction	PennDOT vehicle speed policy statement may be an educational issue
Incorporate traffic calming effects	Speed reduction measure including bulb outs, narrower lanes, landscaping
Improving drainage	
Improving guide rails	End treatments are an issue; especially after being hit and cannot function as intended until repaired or replaced
Increasing roadway lighting	
Skid resistant pavements	
Substandard curves	These curves could use super elevation; designing roads to a consistent standard
Clear striping in work zones	Outlining temporary lanes
General Comment(s):	
<ul style="list-style-type: none"> • Problem with speeds increasing as roadway improvements are made; cars are easier to maneuver on these roads • Truck crashes are significantly less than motor vehicles <ul style="list-style-type: none"> ○ 10% of all fatalities in NJ occur among trucks • The narrowing of lanes <ul style="list-style-type: none"> ○ may impact heavy trucks 	

- may increase the number of crashes but the severity of the crashes may be lessened because of lower travel speeds
- Consider inviting someone from American Trucking Association to gain their input

Improve Design and Operation of Intersection

Strategies	Description
Improve signals	
Improve the geometry	
Visibility at unsignalized intersections	Sight distance issues
Red light cameras	Advance warning signs of approaching a signalized intersection; increases rear end crashes
Obstruction to visibility	Creating policy with signs obstructing the view of oncoming traffic
Roundabouts	
Advanced signage	Warning of an approaching intersection
Lower travel speeds	Increases pedestrian safety; changing
Access management	

Pedestrian/Bike

Existing	Description
PennDOT – Yield to Pedestrian signs/paddles	Municipalities are encouraged to take advantage of free pedestrian signs; website link; they do not have to be used on a state highway
Strategies	Description
Back plates for signal heads	
Lower travel speeds	Increases pedestrian safety
Other pedestrian improvements	Adequate sidewalks, refuge islands, low spots in sidewalk where snow accumulates, crossings for handicapped (audio, physical indicators), color coded curb-cut ramps with truncated domes, pedestrian flags, cycle timing at the crossing, lighted roadway crossing, lighted signal buttons
Increase bike lanes	
Designation of bike routes	Complete streets concepts

General Comments:

- ADA requirements at the intersection (i.e. curb cuts)
- Pedestrians ignore the pedestrian signal – cause of incidents
- Many people do not understand the share the road signs
 - Bicycles are by law vehicles
 - Need for education for motorists about bicyclists
- Concept of “complete streets” which designs roads not only for motorists but also provides space (shoulder area, etc.) for bicyclists. Provide “Share the Road” signs where bicycles and motor vehicles must share the travel lane.

Hit Fixed Object Crashes

Strategies	Description
Clearing trees	
Redesigning Utility Poles	Including break-away poles; relocation
Underground wiring for utility	
Better Guide rail/Cable/Jersey Barriers	
Redesign end treatments of guide rails	
Mailboxes too close to the roads	Possible restrictions on distance from roadway, problem is that the state does not own that ROW
Operations and Maintenance Focus	
Removing object as appropriate	
General Comments: <ul style="list-style-type: none"> • There are limitations to engineering regarding the placement of utility poles; PennDOT does not control the ROW where poles are located. • Engineering design should be involved in setting guidelines for the location of utility poles. 	

Enhance Safety on Local Roads

Strategies	Description
Access management and functionality	
Unified safety standards	The local road will have certain requirements
Road Safety Audits	Very popular in South Jersey
Lighting	
Data is a problem	Better inventory management roadway system; the data doesn't correlate
Pedestrian signage	
Sidewalks	
Improving design	Vertical sightlines on rural roads
Traffic calming devices	
General Comments: <ul style="list-style-type: none"> • There is some confusion on what a local road is versus a non local roads • Some of the other strategies used in other emphasis areas applies to this category • Most of the crashes occur on local roads 	

Next steps

The next meeting for the engineering subcommittee will be held on Wednesday, December 14th at 1:00PM at DVRPC in the 3rd Floor Conference Room 3B. A light lunch will be provided.

The next meeting of the **Regional Safety Task Force** will be held on Tuesday, January 31st at 9:00 AM at DVRPC. More information will be forthcoming.