John Carney Governor

The matrix below documents ideas and approaches to address issues raised by the Committee at Special Committee Meeting #3 on September 13, 2017, as well as those received from Committee members as of September 22, 2017 regarding Senate Resolution #10. Each of the ideas received has been categorized based on the stated purpose and role of the Special Committee. Per Senate Resolution #10, the Special Committee shall study and make recommendations regarding:

- 1. How to reduce the number of trucks traveling along SR 7, SR 41 and SR 48; and
- 2. Any improvements in engineering, infrastructure, education and enforcement that can improve the quality of life for those that live along these roadways.

The project support staff has developed suggested revised text, as well as timeframe and cost estimates, for the ideas and approaches submitted to date based on their technical expertise.

<u>Legend:</u>	Time	frame to Implement	Cost to	o Implement		
	S:	Short-term, 1-3 years	\$:	<\$1 million		
	M:	Mid-term, 4-10 years	\$\$:	>\$1 million - \$100 million		
	L:	Long-term, >10 years	\$\$\$:	>\$100 million - \$1 billion		
			\$\$\$\$:	>\$1 billion		
			^A denotes recurring cost			

Ideas Matrix

CR 10 Divertine	Ideas/Approaches Received	Command Taran Command American	Study		Implementation	
SR 10 Directive		Support Team Suggested Approach		Cost	Timeframe	Cost
I. Reduce the number of trucks	1. Conduct interagency study for a bypass between US 1 and I-95	Conduct a feasibility study of constructing a bypass between US 1 and I-95	M	\$\$	L	\$\$\$\$
traveling along SR 41, SR 48, and SR 7	2. Re-evaluate feasibility of passenger and freight rail spur from Wilmington that parallels the SR 41 corridor	Conduct a feasibility study of constructing a passenger and freight rail spur from Wilmington that parallels the SR 41 corridor	M	\$\$	L	\$\$\$\$
	Build dedicated freight line along the NE corridor from Perryville, MD to Newark, DE	Conduct a feasibility study of constructing a dedicated freight line along the NE corridor from Perryville, MD to Newark, DE	М	\$\$	L	\$\$\$\$
	4. Toll travel along SR 7, SR 41, and SR 485. Toll travel along other DE state roads	Conduct a feasibility study of implementing tolls on SR 7, SR 41, SR 48 or other Delaware state roads List of other state roads developed by Committee	M	\$\$		
	 6. Establish Alternate routes for trucks during assigned time frames 7. Establish routes for loaded vs. unloaded trucks 8. Require northbound trucks to take a different route and southbound trucks to take SR 48 	Conduct a feasibility study of restricting trucks on SR 7, SR 41 and/or SR 48 during specified times, in specified directions, and based on loaded vs. unloaded conditions, determining impacts to, and improvements needed, on alternate routes	М	\$\$		
	9. Provide incentives to trucks that switch to US 1, US 30, and US 202					1
	10. Re-direct truck traffic from the Port					
	11. Install signs at the Port directing trucks to use I-95	Install signs at the Port of Wilmington providing route guidance for trucks to reach I-95	N/A	N/A	S	\$
	12. Make improvements to SR 89613. Create a road parallel to SR 896 for trucks	Conduct a feasibility study for improvements to the SR 896 corridor, including a potential alternate parallel route, to encourage trucks to use I-95 to SR 896	М	\$\$	L	\$\$\$\$
II. Improvements in engineering, infrast	ructure, education and enforcement that can improve the quality of life f	or those that live along SR 41, SR 48, and SR 7				
II. A. Engineering/Infrastructure	 14. Re-install signs that were originally installed in July 2016 and removed in December 2016 directing Lancaster-bound truck traffic to use SR 48 15. Do not install signs directing trucks to any specific road (keep 	Re-install signs that were originally installed in July 2016 and removed in December 2016 directing Lancaster-bound truck traffic to use SR 48 <note: "no"="" "yes"="" (or="" a="" an="" endorsement="" equivalent="" is="" not="" re-install="" recognizes="" signs="" signs).="" td="" that="" this="" to="" vote="" vote<=""><td>N/A</td><td>N/A</td><td>S</td><td>\$</td></note:>	N/A	N/A	S	\$
	current state) 16. Perform a Road Safety Audit	to not install signs.> Perform a Road Safety Audit on SR 7, SR 41 and SR 48	S	ć	S-M	\$-\$\$
	17. Establish reduced school speed limit zone with 25 mph speed limit near Cooke Elementary School and install appropriate signs, including a Speed Limit Sign Beacon	Perform a traffic engineering study to implement a school speed limit zone on SR 41 near Cooke Elementary School	S	\$	S	\$

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Ideas Matrix

SR 10 Directive	Ideas/Approaches Received	Support Team Suggested Approach		Cost	Implemen Timeframe	
II. A. Engineering/Infrastructure (continued)	18. Establish differential speed limits for trucks and cars	Perform a traffic engineering study to determine appropriate speed limits on SR				1
	19. Establish lower speed limits	7, SR 41, and SR 48		\$	S	\$
	20. Provide greater uniformity of speed limits along all three roads					
	21. Restrict trucks to right lane only					
	22. Establish curfew for trucks during nighttime hours	Conduct a feasibility study of establishing time of day restrictions for trucks on				
	a. 12:00 pm to 5:00 am	SR 7, SR 41 and/or SR 48	S	\$	S	Ś
	b. During rush hour			*		Ψ
	c. 10:00 pm to 6:00 am					
	23. Restrict vehicles to 3-axles and/or 54,000 lbs GVW on SR 41	Conduct a feasibility study of restricting trucks on SR 7, SR 41 and/or SR 48				
	between SR 41/SR 48 split and SR 2		M	\$\$		
	24. Restrict vehicles to 7,000 lbs					
	25. Impose a truck ban	December and that New Cookle County and that are against actions along CD 7 CD				
	26. Offer commercial re-zoning of housing too close to the roadway	Recommend that New Castle County evaluate re-zoning options along SR 7, SR 41 and SR 48	S	\$	M-L	\$
	27. Create buffer zone along routes using open recreational areas,	Perform a study to determine costs and benefits associated with state				
	bicycle paths, bus stop parking	acquisition of privately owned property along SR 7, SR 41, and SR 48	S	Ś	1	\$\$
	28. Establish state funded program to purchase existing housing too close to roadway			Ψ	_	77
	29. Extend bus routes along SR 7, SR 41, and SR 48 into Chester County,	Continue to study options described in the Delaware Valley Regional Planning	S	\$	М	\$ ^A
	PA	Commission (DVRPC) Chester County New Castle County Transit Study.		_		
	30. Develop and use low noise road surface specification	Perform testing and evaluation of low-noise road surface options and, if feasible, develop a specification for use in Delaware	S	\$	M	\$\$
	31. Erect sound barriers	Collect noise data on SR 7, SR 41 and SR 48, and conduct a feasibility study of				+
	32. Provide dirt berms with planted trees and shrubs	potential noise mitigation measures	S	\$\$	M	\$\$\$
	33. Relocate existing engine compression brake prohibition signs	Relocate existing engine compression brake prohibition signs to downhill				<u> </u>
	g or good and good good good good good good good go	locations approaching signalized intersections	N/A	N/A	S	\$
	34. Install engine compression brake prohibition sign with flashing	Install engine compression brake prohibition sign with flashing beacons at PA	21/2	21./2	6	
	beacons at PA state line	state line	N/A	N/A	S	\$
	35. Install traffic signals to slow down and/or deter trucks	Conduct signal warrant studies for the following locations:				
	a. SR 48 and Old Wilmington Road	<list by="" committee="" developed="" locations="" of=""></list>				
	b. SR 48 and Hercules Road					
	c. SR 48 and Courtney Road		S	\$	S	\$\$
	d. SR 48 and Harlech Drive / Hedgegrow Place					
	e. SR 48 and Old Hobson Farm					
	36. Do not install additional traffic signals					
	37. Modify signal timings to account for trucks	Perform a traffic engineering study to determine appropriate signal timing		_	_	
		plans for SR 7, SR 41, and SR 48 to ensure adequate acceleration and braking time for heavy vehicles	S	\$	S	\$
ı	38. Install RED SIGNAL AHEAD WHEN FLASHING signs	Perform a traffic engineering study to determine any appropriate locations on				
		SR 7, SR 41 and SR 48 for the installation of RED SIGNAL AHEAD WHEN	S	\$	S	\$\$
		FLASHING signs < NOTE: this would be covered under a road safety audit>				

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Ideas Matrix

SR 10 Directive	Ideas/Approaches Received	Support Team Suggested Approach	Study		Impleme			
II. A. Engineering/Infrastructure	39. Install advance warning signs, with or without flashing beacons, to	Perform a traffic engineering study to determine any appropriate locations on	Timeframe	Cost	Timeframe	Cost		
(continued)	warn drivers of upcoming blind spots, unexpected curves, large hills, and lane drops a. SR 48 near Canterbury Hills b. SR 48 from Centerville Road towards Hercules Road	SR 7, SR 41 and SR 48 for the installation of advance warning signs < NOTE: this would be covered under a road safety audit>	S	\$	S	\$-\$\$		
	 40. Install sign, with or without flashing beacons, informing drivers of 60-foot length limit a. SR 41 near PA state line b. SR 7 near PA state line 				S	\$		
	41. Install END 48 sign at SR 41/SR 48 split in westbound direction	Already underway				•		
	42. Install YOUR SPEED XX MPH signs	Install YOUR SPEED XX MPH signs on SR 7, SR 41 and/or SR 48 as a pilot project to determine the effectiveness of these signs on arterial roadways	S	\$	S	\$		
	43. Install street lights on SR 48 between Hercules Road and Old Wilmington Road	Perform a lighting study of SR 48 between Hercules Road and Old Wilmington Road	S	\$	S-M	\$-\$\$		
	44. Remove or prune large tree limbsa. SR 48 between Loveville Road and SR 41b. SR 48 between Loveville Road and Hercules Road	Remove large tree limbs on SR 48 between Loveville Road and SR 41, and on SR 48 between Loveville Road and Hercules Road	N/A	N/A	S	\$		
	45. Ensure signs are not covered up	Already underway						
	46. Install acceleration and deceleration lanes47. Expand and/or improve shoulders	Perform a traffic engineering study to determine any appropriate locations on SR 7, SR 41 and SR 48 for the construction of auxiliary lanes and/or improved	S	\$	M	\$\$		
	48. Install traffic calming devices	shoulders <note: a="" audit="" be="" covered="" road="" safety="" this="" under="" would=""> <note: and="" appropriate="" appropriate.="" arterials,="" calming="" collectors="" considered="" is="" local="" major="" not="" on="" only="" roads.="" streets="" subdivision="" traffic=""></note:></note:>	N/A	N/A	N/A	N/A		
	49. Provide spot improvements at any intersections operating at LOS C or worse	Perform a traffic engineering study to determine any potential improvements for intersections on SR 7, SR 41 and SR 48 that are currently operating at LOS E or worse	S	\$	S-M	\$-\$\$		
	50. Widen SR 41 to four lanes51. Widen SR 48 to four lanes52. Widen SR 7 to six lanes	Conduct a feasibility study of widening SR 7, SR 41 and/or SR 48	М	\$\$	L	\$\$\$		
	53. Upgrade secondary roads to provide relief to the SR 7, SR 41, and SR 48 corridors							
	54. Do not use rumble strips		N/A	N/A	N/A	N/A		
II. B. Education	55. Develop school program for teens taking Drivers' Ed/Novice Drivers class to study the features of each road and their safety challenges							
	56. Pair elder drivers from Cokesbury Village and/or other local facilities with young drivers to study the features of each road							
II. C. Enforcement	57. Pass legislation to enable, then install, speed cameras	Introduce legislation that would enable speed cameras to be installed on SR 7, SR 41 and SR 48	S	\$	M	\$		
	58. Provide additional enforcement of existing speed limits	Provide additional enforcement of existing speed limits	N/A	N/A	S	\$ ^A		

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Ideas Matrix

CD 40 D'	Ideas/Approaches Received		Study		Implementation	
SR 10 Directive		Support Team Suggested Approach	Timeframe	<u></u>		
II. C. Enforcement (continued)	59. Install portable/virtual truck weigh stations	Perform a study to identify feasible locations to install virtual WIM stations on SR 7, SR 41 and SR 48	S	\$	М	\$
	60. Increase weight and size enforcement at the DE state line	Increase weight and size enforcement at the DE state line	N/A	N/A	S	\$ ^A
	61. Establish Initial Entry Control Point (IECP) at DE/PA state line to stop trucks and check log books and weights	Perform a study to identify feasible locations to construct one or more weigh and inspection stations on SR 7, SR 41 and/or SR 48		\$	L	\$\$
	62. Add weigh stations in DE					
	63. Enforce 60-foot length limit				S	\$\$ ^A
	64. Increase the number of truck inspections	Increase the number of truck inspections		NI/A	c	\$ ^A
	65. Increase ticketing			N/A	S	\$**
	66. Use electronic tickets					
	67. Enforce noise level limits					
	68. Provide stricter inspections and enforcement of vehicle noise abatement equipment laws/standards	Increase inspections of vehicle noise abatement equipment	N/A	N/A	S	\$ ^A
	69. Provide strict enforcement of engine compression brake prohibition	Increase enforcement of engine compression brake prohibition	N/A	N/A	S	\$ ^A
	70. Establish method for reporting noise level infractions and muffler issues					
	71. Continue enhanced enforcement on SR 41 and SR 48	Continue enhanced enforcement on SR 41 and SR 48	N/A	N/A	S	\$ ^A
	72. Expand enhanced enforcement to SR 7	Expand enhanced enforcement to SR 7	N/A	N/A	S	\$ ^A
III. Miscellaneous suggestions	 73. Perform forensic vibration tests for any resident who requests one and lives within 50 feet of SR 41 74. Offer state sponsored home noise reduction surveys 					
	75. Establish SR 7, SR 41, and SR 48 "stickers" similar to International Fuel Tax Agreement (IFTA)					
	76. Implement "special use" or "restricted use" licenses of permits for class 6, class 7, and/or class 8 trucks on SR 7, SR 41, and SR 48					
	77. Divert the problem upstream in PA					
	78. Convince PA to reduce tolls on the PA turnpike					
	79. Add weigh stations in PA					
	80. Provide weight and size enforcement at White Clay Point in PA					
	81. Use a flash drive that can show images of speeding trucks					
	82. Create Citizens' Truck Watch					
	83. Develop electronic noise infraction tickets					
	84. Develop and install colorful, glow-in-the-dark guardrails					
	85. Conduct letter writing campaign to trucking companies					
	86. Cover ears and make "silent scream" faces whenever loud trucks drive by					
	87. Install Warning Signal Ahead sign near existing RED SIGNAL AHEAD WHEN FLASHING sign south of Centerville Road and Greenbank Road					

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