

**Special Committee to Study and Make Recommendations
Regarding Truck Traffic and Freight Movements
Along SR 41, SR 48 & SR 7**

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.

| | | | | |
|----------------|-------------------------------|--------------------------------------|--------------|--|
| Legend: | <u>Timeframe to Implement</u> | <u>Cost to Implement</u> | Black text: | Original ideas from Committee |
| | S: Short-term, 1-3 years | \$: <\$1 million | Green text: | Provided by project support staff |
| | M: Mid-term, 4-10 years | \$\$: >\$1 million - \$100 million | Purple text: | Revised following October 4, 2017 Committee Meeting (Meeting #4) |
| | L: Long-term, >10 years | \$\$\$: >\$100 million - \$1 billion | | |
| | | \$\$\$\$: >\$1 billion | | |
| | | ^A denotes recurring cost | | |

Ideas Matrix

| SR 10 Directive | Ideas/Approaches Received | Support Team Suggested Approach | Study | | Implementation | | |
|---|---|---|-----------|--------|----------------|----------|--|
| | | | Timeframe | Cost | Timeframe | Cost | |
| I. Reduce the number of trucks traveling along SR 41, SR 48, and SR 7 | 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 | \$\$\$\$ | |
| | 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, including impacts to SR 7, SR 41, and SR 48 | M | \$\$ | L | \$\$\$\$ | |
| | 3. 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 | M | \$\$ | L | \$\$\$\$ | |
| | 4. Toll travel along SR 7, SR 41, and SR 48 | Conduct a feasibility study of implementing tolls, including congestion pricing, on SR 7, SR 41, SR 48 or other Delaware state roads <List of other state roads developed by Committee> | M | \$\$ | | | |
| | 5. Toll travel along other DE state roads | | | | | | |
| | 6. Establish Alternate routes for trucks during assigned time frames | 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 | M S | \$\$\$ | | | |
| | 7. Establish routes for loaded vs. unloaded trucks | | | | | | |
| | 8. Require northbound trucks to take a different route and southbound trucks to take SR 48 | | | | | | |
| | 9. Provide incentives to trucks that switch to US 1, US 30, and US 202 | <NOTE: Text added to #4/#5 above to include congestion pricing.> | | | | | |
| | 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 896 | 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 | M | \$\$ | L | \$\$\$\$ | |
| | 13. Create a road parallel to SR 896 for trucks | | | | | | |
| II. Improvements in engineering, infrastructure, education and enforcement that can improve the quality of life for 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 | Re-install signs that were originally installed in July 2016 and removed in December 2016 directing Lancaster-bound truck traffic to use SR 48. See Figure 1. <NOTE: This is not an endorsement to re-install signs (or to not re-install signs). This recognizes that a "NO" vote to re-install signs is equivalent to a "YES" vote to not install signs.> | N/A | N/A | S | \$ | |
| | 15. Do not install signs directing trucks to any specific road (keep current state) | | | | | | |
| | 16. Perform a Road Safety Audit | Perform a Road Safety Audit on SR 7, SR 41 and SR 48 | S | \$ | 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 | \$ | |

**Special Committee to Study and Make Recommendations
Regarding Truck Traffic and Freight Movements
Along SR 41, SR 48 & SR 7**

Ideas Matrix

| SR 10 Directive | Ideas/Approaches Received | Support Team Suggested Approach | Study | | Implementation | |
|--|--|--|-----------|------|----------------|-----------------|
| | | | Timeframe | Cost | Timeframe | Cost |
| 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 7, SR 41, and SR 48 | S | \$ | S | \$ |
| | 19. Establish lower speed limits | | | | | |
| | 20. Provide greater uniformity of speed limits along all three roads | | | | | |
| | 21. Restrict trucks to right lane only | Perform a traffic engineering study to determine appropriate locations, if any, to install TRUCKS KEEP RIGHT EXCEPT LEFT TURNS sign along four-lane portions of SR 7, SR 41 and SR 48 | S | \$ | S | \$ |
| | 22. Establish curfew for trucks during nighttime hours a. 12:00 pm to 5:00 am b. During rush hour c. 10:00 pm to 6:00 am | Conduct a feasibility study of establishing time of day restrictions for trucks on SR 7, SR 41 and/or SR 48 <NOTE: This is incorporated in #6/#7/#8 above regarding a feasibility study of restricting trucks on SR 7, SR 41 and SR 48 during specified times.> | S | \$ | S | \$ |
| | 23. Restrict vehicles to 3-axles and/or 54,000 lbs GVW on SR 41 between SR 41/SR 48 split and SR 2 | Conduct a feasibility study of implementing an axle-based truck restriction restricting trucks on SR 7, SR 41 and/or SR 48 | M | \$\$ | | |
| | 24. Restrict vehicles to 7,000 lbs | | | | | |
| | 25. Impose a truck ban | | | | | |
| | 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, bicycle paths, bus stop parking | Perform a study to determine costs and benefits associated with Develop a process for state acquisition of privately owned property along SR 7, SR 41, and SR 48 that would be voluntarily initiated by the property owners | S | \$ | L | \$\$ |
| | 28. Establish state funded program to purchase existing housing too close to roadway | Continue to study options described in the Delaware Valley Regional Planning Commission (DVRPC) Chester County New Castle County Transit Study. | S | \$ | M | \$ ^A |
| | 29. Extend bus routes along SR 7, SR 41, and SR 48 into Chester County, PA | | | | | |
| | 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 potential noise mitigation measures | S | \$\$ | M | \$\$\$ |
| | 32. Provide dirt berms with planted trees and shrubs | | | | | |
| | 33. Relocate existing engine compression brake prohibition signs | Relocate existing engine compression brake prohibition signs to downhill locations approaching signalized intersections | N/A | N/A | S | \$ |
| | 34. Install engine compression brake prohibition sign with flashing beacons at PA state line | Install engine compression brake prohibition sign with flashing beacons at PA state line | N/A | N/A | S | \$ |
| | 35. Install traffic signals to slow down and/or deter trucks a. SR 48 and Old Wilmington Road b. SR 48 and Hercules Road c. SR 48 and Courtney Road d. SR 48 and Harlech Drive / Hedgegrow Place e. SR 48 and Old Hobson Farm | Conduct signal warrant studies for the following locations: <List of locations developed by Committee> | S | \$ | S | \$\$ |
| 36. Do not install additional traffic signals | 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 | \$ | |
| 37. Modify signal timings to account for trucks | | | | | | |
| 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 FLASHING signs <NOTE: this would be covered under a road safety audit> | S | \$ | S | \$\$ | |

**Special Committee to Study and Make Recommendations
Regarding Truck Traffic and Freight Movements
Along SR 41, SR 48 & SR 7**

Ideas Matrix

| SR 10 Directive | Ideas/Approaches Received | Support Team Suggested Approach | Study | | Implementation | |
|---|--|---|-----------|------|----------------|--------|
| | | | Timeframe | Cost | Timeframe | Cost |
| II. A. Engineering/Infrastructure (continued) | 39. Install advance warning signs, with or without flashing beacons, to 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 | Perform a traffic engineering study to determine any appropriate locations on 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 | Install signs with flashing beacons near the Pennsylvania state line on SR 41 and SR 7 reminding motorists of the 60-foot overall vehicle length limit in the Delaware Code | N/A | N/A | 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 permanent YOUR SPEED XX MPH signs on SR 7, SR 41 and or SR 48 as a pilot project and perform a "before" and "during" study to determine the effectiveness of these signs on arterial roadways over time | 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 limbs a. SR 48 between Loveville Road and SR 41 b. 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 Already underway <NOTE: Based on discussion at Meeting #4, DelDOT has initiated tree-trimming on SR 7, SR 41, and SR 48.> | N/A | N/A | S | \$ |
| | 45. Ensure signs are not covered up | Already underway | | | | |
| | 46. Install acceleration and deceleration lanes | 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 shoulders <NOTE: this would be covered under a road safety audit> | S | \$ | M | \$\$ |
| | 47. Expand and/or improve shoulders | | | | | |
| | 48. Install traffic calming devices | <NOTE: Traffic calming is only considered appropriate on subdivision streets and local roads. On major collectors and arterials, traffic calming is not appropriate.> | 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 lanes | Conduct a feasibility study of widening SR 7, SR 41 and or SR 48 | M | \$\$ | L | \$\$\$ |
| | 51. Widen SR 48 to four lanes | | | | | |
| | 52. Widen SR 7 to six lanes | | | | | |
| 53. Upgrade secondary roads to provide relief to the SR 7, SR 41, and SR 48 corridors | | | | | | |
| 54. Do not use rumble strips | <NOTE: The Project Team reviewed DGM 1-18 (Design Guidance Memorandum regarding rumble strips). It notes that generally rumble strips should not be applied within developed and urban areas and in suburban areas, Engineering Support should be consulted to determine if noise will be a concern> | 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 | | | | | |

**Special Committee to Study and Make Recommendations
Regarding Truck Traffic and Freight Movements
Along SR 41, SR 48 & SR 7**

Ideas Matrix

| SR 10 Directive | Ideas/Approaches Received | Support Team Suggested Approach | Study | | Implementation | |
|---|---|---|-----------|------|----------------|-------------------|
| | | | Timeframe | Cost | Timeframe | Cost |
| 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 |
| | 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 | \$ | M | \$ |
| | 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 | S | \$ | L | \$\$ |
| | 62. Add weigh stations in DE | | | | | |
| | 63. Enforce 60-foot length limit | Increase enforcement along SR 7, 41 and 48 of the 60-foot overall vehicle length limit in the Delaware Code | N/A | N/A | S | \$\$ ^A |
| | 64. Increase the number of truck inspections | Increase the number of truck inspections | N/A | N/A | S | \$ ^A |
| | 65. Increase ticketing | | | | | |
| | 66. Use electronic tickets | <NOTE: This may be covered by #57 above> | | | | |
| | 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 | | <NOTE: This appears to be covered by #57 above> | | | | |
| 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 | | | | | | |

Special Committee to Study and Make Recommendations
 Regarding Truck Traffic and Freight Movements
 Along SR 41, SR 48 & SR 7

Ideas Matrix

| SR 10 Directive | Ideas/Approaches Received | Support Team Suggested Approach | Study | | Implementation | |
|-----------------|---|---------------------------------|-----------|------|----------------|------|
| | | | Timeframe | Cost | Timeframe | Cost |
| | 87. Install Warning Signal Ahead sign near existing RED SIGNAL AHEAD WHEN FLASHING sign south of Centerville Road and Greenbank Road | | | | | |
| | 88. Do not issue any future offloading, freight transfer or onloading permits to any corporation, LLC, or logistics agency until an approved infrastructure improvement plan is in place for the western New Castle County freight corridor, precluding improvements to the Boxwood Road side, the Port of Wilmington, and fulfillment centers which use the corridor into southeastern Pennsylvania <NOTE: Received following 10/4/2017 meeting.> | | | | | |