

RECOMMENDATIONS January 12, 2018

EXECUTIVE SUMMARY

Senate Resolution No. 10 (SR 10), sponsored by Senators Delcollo and Lavelle, was passed by the 149th General Assembly of the Delaware State Senate. SR 10 created a Special Committee to study and make recommendations regarding truck traffic movement along SR 41, SR 48, and SR 7 in New Castle County. Per SR 10 (see Appendix for full text), the Special Committee was directed to study and make recommendations regarding:

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

This report documents the process followed to fulfill the Special Committee's directive and the outcome

The Committee makes the following recommendations to DelDOT and the General Assembly:

- Conduct a feasibility study of constructing a bypass between US 1 and I-95
- 2. 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
- Conduct a feasibility study of constructing a dedicated freight line along the NE corridor from Perryville, MD to Newark, DE
- 4. Conduct a feasibility study of restricting trucks on SR 7, SR 41 and SR 48 during specified times, in specified directions, and based on loaded vs. unloaded conditions, determining impacts to, and improvements needed, on alternate routes
- 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
- Perform a Road Safety Audit on SR 7, SR 41 and SR 48
- 7. Perform a traffic engineering study to implement a school speed limit zone on SR 41 near Cooke Elementary School

- 8. Perform a traffic engineering study to determine appropriate speed limits on SR 7, SR 41, and SR 48
- Continue to study options described in the 2016 Delaware Valley Regional Planning Commission (DVRPC) Chester County New Castle County Transit Study
- 10. Consider the use of quiet pavement technology on SR 7, SR 41 and SR 48
- 11. Relocate existing engine compression brake prohibition signs to downhill locations approaching signalized intersections
- 12. Install engine compression brake prohibition sign with flashing beacons at PA state line
- 13. Conduct signal warrant studies for the following locations:
 - » SR 48 and Old Wilmington Road
 - » SR 48 and Courtney Road
 - » SR 48 and Harlech Drive/Hedgegrow Place
 - » SR 48 and Old Hobson Farm

of the Committee's work. First, subject matter experts presented information to the Committee to assist with framing the issues. Next, the Committee brainstormed ideas and approaches to address issues identified along each corridor. Following the initial brainstorming, ideas and approaches were refined to establish a list of potential recommendations for discussion and voting. Subsequently, the Committee discussed and voted on the potential recommendations to identify those that would

become, by majority vote, final recommendations to the Delaware Department of Transportation (DelDOT) and the Delaware General Assembly. Following the voting process, with recognition that it may be difficult to move all recommendations forward at one time, the Committee conducted a prioritization exercise to provide guidance to the General Assembly and DelDOT on which of the recommendations should be focused on first.

- 14. Install permanent YOUR SPEED XX MPH signs on SR 7, SR 41 and SR 48 and perform a "before" and "during" study to determine the effectiveness of these signs on arterial roadways over time
- 15. 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, based on WILMAPCO's Congestion Management Program Results
- 16. Provide additional enforcement of existing speed limits
- 17. Perform a study to identify feasible locations to install fixed virtual WIM stations on SR 7, SR 41 and SR 48
- 18. Increase the number of truck inspections
- 19. Recommend New Castle County Police increase enforcement of NCC Code Section 22.02.0008-B.2.a.i, which makes it unlawful to "race or gun any motor vehicle between the hours of 9:00 p.m. and 8:00 a.m."

- 20. Increase enforcement of Delaware Code, Title 21 §4311(a), which makes it unlawful to "drive a motor vehicle, including a motorcycle, on a highway, including residential streets, unless such motor vehicle or motorcycle is equipped with a muffler in good working order and in accordance with manufacturer's specifications and in constant operation to prevent excess or unusual noise."
- 21. Increase enforcement of engine compression brake prohibition
- 22. Continue enhanced truck enforcement on SR 41 and SR 48, and expand enhanced truck enforcement to SR 7
- 23. Establish a bi-state working/coordination group to discuss and address issues associated with regional freight movement. The working group should be comprised of representatives from DelDOT, PennDOT, WILMAPCO, Delaware Valley Regional Planning Commission (DVRPC), Delaware State Police, Pennsylvania State Police, and other relevant stakeholders
- 24. Request that existing legislation be re-written to bring Delaware's truck length laws in-line with surrounding states

INTRODUCTION

Senate Resolution No. 10 (SR 10), sponsored by Senator Anthony Delcollo and Senator Greg Lavelle, and passed by the 149th Delaware General Assembly, created a Special Committee to study and make recommendations regarding truck traffic movement along SR 41, SR 48, and SR 7 in New Castle County. Full text of SR 10 is included in the Appendix (Meeting #1).

Background

The purpose of the Special Committee was to study and make recommendations to the Delaware Department of Transportation (DelDOT) and the General Assembly regarding truck traffic and freight movement along SR 41, SR 48, and SR 7 in New Castle County. The Special Committee was directed to study and make recommendations regarding:

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

Per SR 10, the Special Committee was required to submit its findings and recommendations to DelDOT and the General Assembly by January 12, 2018.

This report documents the process followed to fulfill the Special Committee's directive, as set out in SR 10, and the outcomes of this process. The report includes a brief description of each element of the process, including identification of the Committee Members and technical support staff; the date, time, and location of all meetings; and activities conducted by the Committee during meetings. The Appendix (a separate notebook) contains all materials provided to Committee Members at each meeting, including agendas, meeting minutes, presentation handouts, and working documents. The Appendix is organized by meeting in chronological order.

Committee Membership

SR 10 specified the Members of the Special Committee to include the Executive Director of the Wilmington Area Planning Council (WILMAPCO), a representative from the Diamond State Port Corporation Board of Directors, two representatives from the SR 41 area, two representatives from the SR 48 area, two representatives from the SR 7

area, a representative from the Delaware State Police Truck Enforcement Unit, the Secretary of DelDOT, and the Chief Traffic Engineer of DelDOT. Members were appointed by the Governor, the President Pro Tempore of the Senate, the Senate Minority Leader, and the Superintendent of the State Police, as described in SR 10. The following individuals comprised the Special Committee:

Tigist Zegeye, Chair *Executive Director, WILMAPCO*

Mike Begatto

Diamond State Port Corporation Board of Directors

Mike Censurato Route 7 Representative

Jennifer Cohan

Secretary, Delaware Department of Transportation

Matthew Cox

Delaware State Police Truck Enforcement Unit

Nick Ferrara

Route 48 Representative

Gale Hamilton *Route 48 Representative*

Michael Lewandowski Route 7 Representative

Mark Luszcz

Chief Traffic Engineer, Delaware Department of Transportation

MaryAnn Summers *Route 41 Representative*

Bill Taylor Route 41 Representative

SR 10 also permitted a designee for the Executive Director of WILMAPCO or the Secretary of the Department of Transportation. For select meetings, Nicole Majeski, Deputy Secretary of DelDOT, attended on behalf of Secretary Jennifer Cohan. No other proxy attendees or designees were permitted. Attendance records for each meeting are available in the meeting minutes contained in the Appendix.

Technical Staff

In addition to the Committee Membership, SR 10 required that the Special Committee be chaired by the Executive Director of WILMAPCO, and that DelDOT provide administrative staff support. Accordingly, WILMAPCO requested that Kramer & Associates facilitate the Special Committee and Rummel, Klepper & Kahl, LLP (RK&K) provide technical staff support throughout the duration

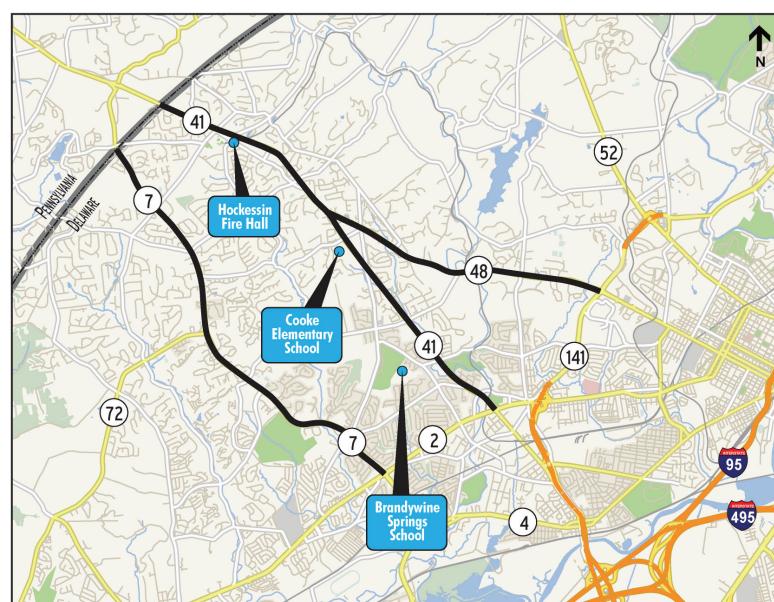
of the Special Committee process. Jim Burnett, P.E., PTOE from RK&K provided technical traffic engineering support and Andrew Bing from Kramer & Associates served as facilitator at all Special Committee meetings.

Special Committee Meetings

Committee Meetings were held at three locations in New Castle County: the Hockessin Fire Hall (1225 Old Lancaster Pike, Hockessin, Delaware); Cooke Elementary School (2025 Graves Road, Hockessin, Delaware); and Brandywine Springs School (2916 Duncan Road, Wilmington, Delaware). Special Committee Meetings were held on the second Wednesday of each month starting at 6:00pm. In addition to the regularly scheduled meetings, two additional meetings were scheduled to provide the Committee adequate time to achieve the objectives outlined in SR 10 by the January 12, 2018 deadline.

A total of nine (9) Special Committee Meetings were held on the following dates and times, at the following locations:

- July 12, 2017, 6:00pm, Hockessin Fire Hall
- August 9, 2017, 6:00pm, Hockessin Fire Hall
- September 13, 2017, 6:00pm, Hockessin Fire Hall
- October 4, 2017, 6:00pm, Cooke Elementary School
- October 25, 2017, 6:00pm, Brandywine Springs School
- November 8, 2017, 6:00pm, Cooke Elementary School
- November 29, 2017, 6:00pm, Cooke Elementary School
- December 13, 2017, 6:00pm, Cooke Elementary School
- January 10, 2018, 6:00pm, Hockessin Fire Hall



PROCESS

The following sections briefly describe the process conducted over the course of nine meetings to develop recommendations to DelDOT and the General Assembly regarding truck traffic movement along SR 41, SR 48, and SR 7 in New Castle County. Additional details about each step in the process, including discussions, working documents, and committee exercises, are documented in the Appendix.

Framing the Issues

The first three meetings included a variety of presentations from subject matter experts to help inform the Committee's discussions, generate ideas, and assist in decision making. Jim Burnett, who provided technical traffic engineering support to the Committee, gave presentations on available traffic data (Meeting #1), safety data (Meeting #2), and a comprehensive sign inventory (Meeting #3) that was conducted at the recommendation of the Committee. Details of Jim Burnett's presentations to the Committee are included in the Appendix.

Subject Matter Experts

In addition to the presentations by Jim Burnett, the following subject matter experts were invited to speak at Special Committee Meetings:

Dan Blevins, WILMAPCO | *Previous Studies along the Corridors*

Jim Corbett, University of Delaware | *Freight: Global & Economic Perspective*

Lee Derrickson, Delaware Motor Transport Association

Trucking: In Delaware, Through Delaware & Beyond

Gene Bailey, Diamond State Port Corporation | *Port of Wilmington, Delaware*

Sergeant Dan Parks, Delaware State Police | *Commercial Vehicle Enforcement Unit*

Ted Dahlburg, Delaware Valley Regional Planning Commission | Freight Facilities and Planning in the
Delaware Valley

Details of each of the subject matter experts' presentations are included in the Appendix.

Ideas and Approaches Brainstorming

During Meeting #3, Committee Members representing each of the three corridors – SR 7, SR 41, and SR 48 – were asked to present the top five issues for each of their

respective corridors. Details about the presentations from corridor representatives on the Committee are included in the Appendix. The goal of the presentations from the corridor representatives was to identify and document issues before developing recommendations.

Following the presentations from the corridor representatives, the Special Committee was divided into two groups (a "blue" group and a "green" group) for a breakout session to initiate brainstorming ideas and approaches to address the issues presented at Meeting #3. At the end of the breakout session, each group reported back to the Committee with ideas and approaches developed by their breakout group.

Following the breakout session conducted at Meeting #3, Committee Members provided additional ideas and approaches to the Committee Chair Tigist Zegeye via email. The technical support staff organized the ideas and approaches received both during the earlier meetings and between meetings into a matrix for discussion at future meetings. As shown in the Appendix, there were a total of 88 different ideas and approaches generated by the Committee.

Refining Potential Recommendations

Beginning in Meeting #4, the technical support staff guided the Committee through an "Ideas and Approaches Matrix" to refine the initial 88 ideas into potential recommendations that could be discussed and voted on at later meetings. The process to refine potential recommendations was iterative and conducted over three meetings. The goal of the refining process was to develop clear and actionable potential recommendations before Committee Members began discussing and voting on the specific recommendations. Between meetings, the technical support staff revised the "Ideas and Approaches Matrix" to reflect the Committee's discussion and input for each potential recommendation. The matrix also contained time-frame and cost estimates for each idea and approach, to assist the Committee in decision-making. The support staff provided these rough estimates based on their technical expertise. All versions of the "Ideas and Approaches Matrix" are provided in the Appendix (Meeting #4, Meeting #5, and Meeting #6). As shown in the Appendix, the Committee refined the initial list of ideas and approaches into 47 potential recommendations that were discussed and voted on.

Voting

Voting procedures were governed by Delaware Code under

the Freedom of Information Act (FOIA) sections 10001 and 10004. A quorum, or majority, of Members were required to be present to vote on any decisions made by the Committee, including voting on recommendations. Therefore, six (6) of the eleven (11) Committee Members were required to be present to vote. Potential recommendations became official recommendations of the Committee if a majority of the Members present voted in favor. All votes were public votes. Voting records for each motion are available in the meeting minutes contained in the Appendix. As documented in the Appendix, Mark Luszcz and Secretary Jennifer Cohan recused themselves from voting on any of the Special Committee recommendations. Based on the process described above, the Committee voted in favor of 24 recommendations to be made to DelDOT and the General Assembly.

Prioritization

Following the voting process, the Special Committee conducted a prioritization exercise to provide guidance to the General Assembly and DelDOT on which recommendations should be focused on first. The exercise was not meant to diminish any of the recommendations; rather, it was meant to highlight certain recommendations, recognizing that it may be difficult to move all recommendations forward at one time. For the prioritization exercise, each Committee Member received eight (8) dots to place on recommendations that they felt deserved priority. The eight (8) dots represented one-third of the total number of recommendations. At the end of the dot exercise, the project technical staff tabulated the number of dots placed next to each recommendation. Five (5) recommendations received five (5) or more priority dots during the exercise. The results of the dot exercise are available in the meeting minutes contained in the Appendix.

Public Involvement

All Committee Meetings were open to the public. PowerPoint presentations were projected on display screens and posted on the WILMAPCO website. In addition, microphones were used to allow the public to hear all aspects of the meetings. However, the focus of each meeting was directed to the Committee Members, and members of the public were not permitted to participate in the meeting. Time was reserved at the end of each Special Committee Meeting for public comment. Public comments from each meeting are included in meeting minutes contained in the Appendix.

RECOMMENDATIONS

The Committee makes the following recommendations to DelDOT and the General Assembly:

- Conduct a feasibility study of constructing a bypass between US 1 and I-95
- 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
- Conduct a feasibility study of constructing a dedicated freight line along the NE corridor from Perryville, MD to Newark, DE
- Conduct a feasibility study of restricting trucks on SR 7, SR 41 and SR 48 during specified times, in specified directions, and based on loaded vs. unloaded conditions, determining impacts to, and improvements needed, on alternate routes
- 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
- Perform a Road Safety Audit on SR 7, SR 41 and SR 48
- Perform a traffic engineering study to implement a school speed limit zone on SR 41 near Cooke Elementary School
- Perform a traffic engineering study to determine appropriate speed limits on SR 7, SR 41, and SR 48
- Continue to study options described in the 2016 Delaware Valley Regional Planning Commission (DVRPC) Chester County New Castle County Transit Study

- Consider the use of quiet pavement technology on SR 7, SR 41 and SR 48
- Relocate existing engine compression brake prohibition signs to downhill locations approaching signalized intersections
- 12. Install engine compression brake prohibition sign with flashing beacons at PA state line
- 13. Conduct signal warrant studies for the following locations:
 - » SR 48 and Old Wilmington Road
 - » SR 48 and Courtney Road
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- 14. Install permanent YOUR SPEED XX MPH signs on SR 7, SR 41 and SR 48 and perform a "before" and "during" study to determine the effectiveness of these signs on arterial roadways over time
- 15. 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, based on WILMAPCO's Congestion Management Program Results
- Provide additional enforcement of existing speed limits
- 17. Perform a study to identify feasible locations to install fixed virtual WIM stations on SR 7, SR 41 and SR 48

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- 19. Recommend New Castle County Police increase enforcement of NCC Code Section 22.02.0008-B.2.a.i, which makes it unlawful to "race or gun any motor vehicle between the hours of 9:00 p.m. and 8:00 a.m."
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- 24. Request that existing legislation be re-written to bring Delaware's truck length laws in-line with surrounding states

The five (5) recommendations prioritized by five (5) or more Committee Members are highlighted below:

- Conduct a feasibility study of constructing a bypass between US 1 and I-95
- 6. Perform a Road Safety Audit on SR 7, SR 41 and SR 48
- 8. Perform a traffic engineering study to determine appropriate speed limits on SR 7, SR 41, and SR 48
- 22. Continue enhanced truck enforcement on SR 41 and SR 48, and expand enhanced truck enforcement to SR 7
- 23. Establish a bi-state working/coordination group to discuss and address issues associated with regional freight movement. The working group should be comprised of representatives from DelDOT, PennDOT, WILMAPCO, Delaware Valley Regional Planning Commission (DVRPC), Delaware State Police, Pennsylvania State Police, and other relevant stakeholders

