

Traffic Safety Information Section  
Work Plan TSIS-003:

# **Review of STAA Dimensioned Vehicle Operation on State Maintained Roads**

*Prepared for:*

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### **PROJECT COORDINATOR**

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### **OVERSIGHT COMMITTEE**

R.J. (Jeff) Jaeger, P.E., Chair	Traffic Safety Information Engineer
J.K. (Kevin) Lacy, P.E.	State Traffic Engineer
D.D. (Bucky) Galloway, P.E.	Regional Traffic Engineer – Blue Ridge
P.H. (Haywood) Daughtry, III, P.E.	Regional Traffic Engineer – Eastern & OBX
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Stephen D. Lowry, P.E.	HSIP Engineer
Lisa N. Avery	Traffic Safety Project Engineer
Brad Hibbs, P.E.	Federal Highway Administration
Kevin Breedlove	Federal Motor Carrier Safety Administration

### **BACKGROUND – NATIONAL PERSPECTIVE**

Most states did not establish length, width, or height limits on trucks in the first part of the 20th century. However, most states had regulated these dimensions by 1929, and the most common width dimension was 96 inches. In 1946, the American Association of State Highway Officials (AASHO) adopted the 96 inch width as the maximum width for interstate facilities, and this maximum width for interstates was enacted by Congress as part of the 1956 Federal-Aid Highway Act.

In 1964, the Highway Research Board recommended to Congress that the maximum width should be increased to 102 inches, and that maximum lengths should be 40 feet for buses, single unit trucks, semitrailers, and full trailers, 55 feet for a tractor-semitrailer, and 65 feet for other combinations. In 1982, Congress enacted the Surface Transportation Assistance Act (STAA). This Act established the National Network (NN) for STAA-dimensioned vehicles that included the interstate system and designated parts of the Federal Aid Primary (FAP) system, prohibited states from limiting the length of semitrailers to less than 48 feet, and prohibited states from limiting the length of trailers in twin-trailer combinations to less than 28 feet.

The STAA included provisions that prohibited states from limiting the overall length of a 48-foot semitrailer and tractor combination, the overall length of two 28-foot semitrailers or trailers and tractor combination, and adopted the 102-inch width, provided lanes were at least 12 feet wide. The STAA also provided for reasonable access by STAA-dimensioned vehicles to facilities for food, fuel, repairs, rest, and loading/unloading locations. Following litigation that resulted from the STAA, courts ruled that states were prohibited from denying reasonable access outright but could decide what was reasonable based on safety.

In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA), which froze the length of trailers and semitrailers on interstates and qualifying federal aid primary highways. This act specified that no state can allow any commercial motor vehicle combination with two or more cargo carrying units, or the length of the cargo carrying units, in "lawful operation" in the state on or before June 1, 1991.

(The above information was based on Volume 2, Chapter 2 "Truck Size and Weight Limits" of the USDOT's "Comprehensive Truck Size and Weight Study", FHWA-PL-00-029, August 2000.)

However, that portion of the Code of Federal Regulations (CFR) that deals with National Network criteria states that the highway should have "adequate geometrics to support safe operations, considering sight distance, severity and length of grades, pavement width, horizontal curvature, shoulder width, bridge clearances and load limits, traffic volumes and vehicle mix, and intersection geometry" and that the "route consists of lanes designed to be a width of 12 feet or more or is otherwise consistent with highway safety" (23 CFR 658.9).

## **RECENT ISSUES – NORTH CAROLINA**

In late 2007, the State Highway Patrol (SHP) increased enforcement of STAA dimensioned vehicles, which resulted in a dramatic increase of requests from trucking companies, independent truckers, freight terminals, and others for information, route designations, and reasonable access. There was also a dramatic increase in complaints, and the limits of North Carolina's STAA network were questioned. In February of 2008, Lyndo Tippet and Bryan Beatty (Secretaries of the Departments of Transportation and Crime Control and Public Safety, respectively) requested a ruling from the Attorney General's office regarding the determination and establishment of North Carolina's STAA network. The Attorney General's office ruled that the procedures of the Department of Transportation were too restrictive and that 53 foot trailers should be allowed on interstates and on the federal aid primary system as it existed in 1991. STAA dimensioned vehicles already had approximately 3,600 miles of roads designated

for the use. However, this ruling added approximately 1,900 miles of additional roads that 53 foot trailers could also legally travel on.

### **PURPOSE**

With the exception of a few revisions to statutes, rules, and procedures, the STAA program has not been addressed in any meaningful way since 1982. A number of issues with the program have arisen recently following increased enforcement and an advisory ruling by the Attorney General's office including the restrictiveness of the program and the addition of hundreds of new miles available to 53 foot trailers (of which approximately 600 miles have potential safety issues, primarily in the western part of the state). Therefore, the purpose of this project is to review the entire STAA program and any other items that may impact the movement of STAA dimensioned vehicles on the State Highway System.

## **GOALS AND OBJECTIVES**

The goal of this project is to review the entire STAA program from the perspective of legislation, rules, design, cost, safety and operational investigations, and processes and procedures, and to identify areas for change, improvement, and/or streamlining. The following objectives will be addressed by this project:

1. Review of North Carolina General Statutes, Administrative Code, and design policies for upgrades, streamlining, and flexibility,
2. Review of the cost of administering the STAA program to determine general public expenses versus the direct cost of doing business by private trucking companies, independent truckers, freight warehouses, and end users,
3. Review of safety and operational analysis and investigation processes to identify any changes, improvements, streamlining, and minimum criteria for approval/rejection of designated routes or reasonable access, and
4. Review of the processes and procedures of the STAA program to identify any changes, improvements, and streamlining.

## **WORK PLAN**

This work plan is divided into six distinct tasks to better address the specific objectives and to attain the project goal.

### ***Task 1: Project Management***

The purpose of this task is to oversee the progression of the project, to ensure that tasks are completed in a timely manner in accordance with the project schedule, to ensure completion of documentation, and to periodically assess the status and/or continued feasibility of the project as a whole. Subcommittee chairpersons will be responsible for ensuring their subcommittees remain on task and report to the oversight as needed and as scheduled. The chairperson of the oversight committee will be responsible for coordinating the reports, comments, and recommendations of the subcommittees, convening the oversight committee as needed, and ensuring the overall project remains on schedule.

**Task 2:        *Program Related Legislation, Rules, Design, and Planning***

The purpose of this task is to research, review, and identify any changes to the North Carolina General Statutes, Administrative Codes, and planning and design policies that affect the movement of STAA dimensioned vehicles on the State Highway System. This task is delegated to a subcommittee that shall report to the oversight committee on findings and recommendations. Suggested committee members are as follows:

Subcommittee Chairperson: J.K. (Kevin) Lacy, P.E.

Subcommittee Members:     Rick Cates  
   John Stokes  
   John F. Permar  
   Art McMillan, P.E. (or representative)  
   Mike Bruff, P.E. (or representative)  
   Tony Wyatt, P.E.  
   Ebony J. Pittman (or representative)  
   Mark Nichols (or representative)  
   Brad Hibbs, P.E.  
   Kevin Breedlove

This subcommittee is tasked with addressing the following:

1. Statutes and rules affecting 53 foot trailers, twin trailers, and 57 foot trailers
2. Legislative restraints on the performance of traffic engineering safety and operational investigations (vehicle templates, test vehicles, etc.) and increased allowance for engineering judgment
3. Attorney general advisories and rulings and advisories related to statutes, rules, and codes
4. Basis for removal of STAA designated routes (red lines or blue lines) and truck prohibitions based on safety and/or operational issues
5. Feasibility of the three mile legislative mandate for reasonable access
6. Feasibility of the “short cut” prohibition
7. Feasibility of municipal concurrence
8. Feasibility of the 90 day automatic approval for reasonable access
9. Automatic approval by municipalities for designation if there is no response within a required time frame (i.e. 120 days)
10. Design vehicles
11. Design policies for bridges and roadways on designated routes and within the three mile reasonable access limit
12. Any other issues designated by the oversight committee
13. Any other related issues identified by the subcommittee

**Task 3:        *Investigative Processes and Procedures***

The purpose of this task is to research, review, and identify any changes to the current traffic engineering safety and operational investigation processes of STAA dimensioned vehicles. These processes are generally initiated either from the identification of safety issues, or the application for designation or reasonable access by private companies or individuals. This task is delegated to a subcommittee that shall report to the oversight committee on findings and recommendations. Suggested committee members are as follows:

Subcommittee Chairperson: D.D. (Bucky) Galloway, P.E.

Subcommittee Members:     Dean Ledbetter, P.E.  
   Kelly L. Becker, P.E.  
   Susie J. James, P.E.  
   Stephen Lowry, P.E.  
   Brian Murphy, P.E.  
   Regina E. Page, P.E.  
   Pamela L. Alexander, P.E.  
   First Sergeant W.A. Hook

This subcommittee is tasked with addressing the following:

1. Traffic engineering safety and operational investigative processes and procedures
2. Crash history analyses and evaluations
3. Minimum safety and/or operational criteria for automatic denial of designation or reasonable access requests
4. Identification of additional routes for designation (red and/or blue lines)
5. Any other issues designated by the oversight committee
6. Any other related issues identified by the subcommittee

**Task 4:        *Program Costs and Financial Management***

The purpose of this task is to research, review, and identify the cost of doing business with respect to the STAA program, the feasibility of passing direct costs to private firms and individuals, and the management of finances. This task is delegated to a subcommittee that shall report to the oversight committee on findings and recommendations. Suggested committee members are as follows:

Subcommittee Chairperson: Lisa N. Avery

Subcommittee Members:     Cindy B. Millikin  
   Terry W. Norris (or representative)  
   Tammy C. Denning  
   Stephanie J. King (or representative)

This subcommittee is tasked with addressing the following:

1. Identification of costs associated with the STAA program
2. Charging direct costs (legal notices, maps, personnel, etc.) to private companies or individuals requesting designation or reasonable access (non general expenses)
3. Fees for filing an application for designation or reasonable access
4. Establishment of a statewide fund (i.e. WBS element) to administer the expenses and receipts of the STAA program
5. Process for handling accounts receivable and payable
6. Any other issues designated by the oversight committee
7. Any other related issues identified by the subcommittee

**Task 5:        *Program Processes and Procedures***

The purpose of this task is to review the processes and procedures associated with managing the STAA program, and to identify any changes to these processes and procedures. This task is delegated to a subcommittee that shall report to the oversight committee on findings and recommendations. Suggested committee members are as follows:

Subcommittee Chairperson: R.J. (Jeff) Jaeger, P.E.

Subcommittee Members:    Lisa N. Avery  
   P.H. (Haywood) Daughtry, III, P.E.  
   Jimmy Hamrick, P.E.  
   Renee B. Roach, P.E.  
   Doumit Y. Ishak

This subcommittee is tasked with addressing the following:

1. North Carolina designation versus federal designation
2. Rules and basis for relocated routes and movement of red/blue lines when routes change
3. Process for the removal of designated routes
4. Review of the designated route application process
5. Instructions for municipalities explaining what they need to do
6. Designated routes in municipalities – certificate of concurrence if approval or certification of denial (i.e. vote by town/city council)
7. Review of the reasonable access application process
8. Permanency of reasonable access approval
9. Process and revocation of reasonable access if terminals close or relocate
10. Streamlining of all processes and procedures
11. Map terminology
12. Any other issues designated by the oversight committee
13. Any other related issues identified by the subcommittee

***Task 6: Development of Documentation***

The purpose of this task is to document the entire STAA program and incorporate any changes recommended and approved by the oversight committee. This task is delegated to staff currently managing the program: Jeff Jaeger, Lisa Avery, and Jackie Johnson.

**SCHEDULE**

This project will proceed as follows:

- April – initial meeting of the oversight committee and the establishment and tasking of subcommittees
- April – subcommittees begin work
- May – initial reports and recommendations to oversight committee by subcommittees
- July – interim reports and recommendations to oversight committee by subcommittees
- September – final reports and recommendations to oversight committee by subcommittees
- September – initial draft documentation and revised processes and procedures provided to oversight committee for comments
- September – comment period opened on initial draft documentation and revised processes and procedures for others (RTEs, DTEs, Traffic Engineering, Work Zone Traffic Control, PDEA, Transportation Planning, Roadway Design, Structure Design, etc.)
- October – comment period closed on initial draft documentation and revised processes and procedures, and comments reviewed by oversight committee
- November – final draft documentation and revised processes and procedures submitted to oversight committee for approval
- December – approved documentation distributed, and revised processes and procedures initiated