



I-95 Corridor Coalition

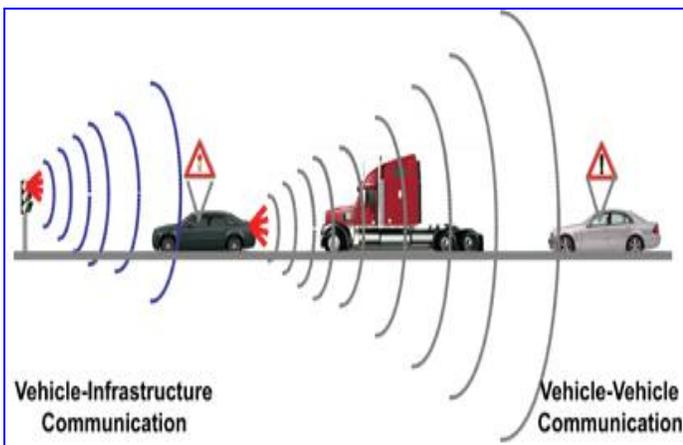
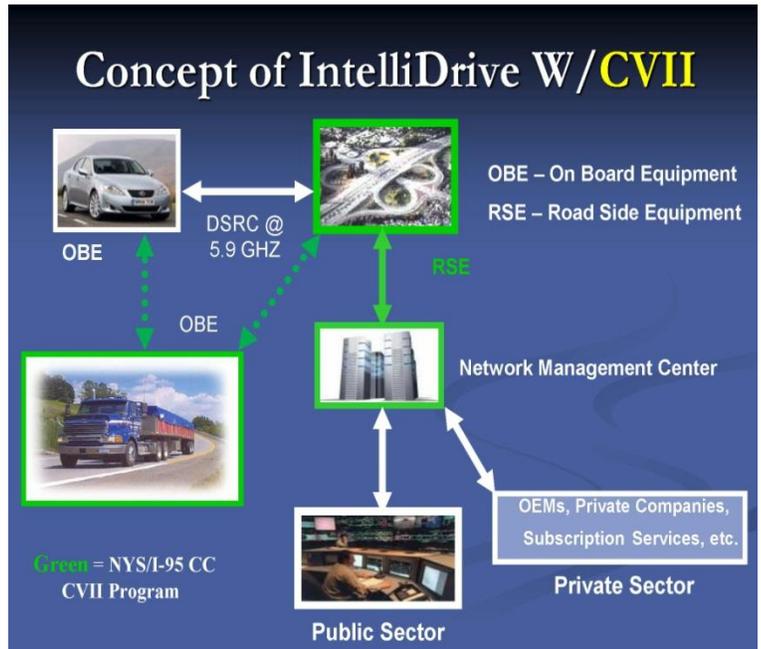
Commercial Vehicle Infrastructure Integration

Supporting Commerce and Improving the Movement of Freight



The I-95 Corridor Coalition is building upon the national Intellidrive effort by broadening its initial passenger vehicle focus to include heavy vehicles. Critical to the U.S. economy is the safe, secure, and efficient movement of freight by commercial vehicles on the nation's transportation infrastructure. Intellidrive applications for commercial vehicles can help enhance this commerce and improve transportation system asset management.

The I-95 Corridor Coalition and the New York State Department of Transportation -- in cooperation with the U.S. Department of Transportation -- have developed and tested early applications for a pilot demonstration of regional **Commercial Vehicle Infrastructure Integration (CVII)** operations utilizing multi-agency, permanently deployed infrastructure. CVII uses 5.9 GHz dedicated short-range communications (DSRC) technologies to wirelessly exchange real-time information between *Intellidrive*-compliant roadside infrastructure and commercial vehicles. Shown here, since the program's inception a year and a half ago, on-board equipment and the necessary human-vehicle interfaces have been prototyped and tested, along with several CVII DSRC "e-screening" applications including commercial vehicle credentialing, driver identification and verification, with vehicle ignition disabling, and wireless vehicle safety inspection for such items as brake condition, tire pressure, and light status. Interfaces for third party government back office systems and fleet managers have also been developed.



Currently underway is the development and testing of Commercial Vehicle to Maintenance Vehicle Communication ("Here I Am/Plowing") and the installation of the system in four New York State Department of Transportation and New York State Thruway Authority maintenance vehicles. Upcoming activities include the development of interoperable compliance screening between existing mainline screening systems (915 MHz) and trucks using 5.9 GHz. Also planned is the development of Light Vehicle to Heavy Vehicle Driver Safety Warnings (e.g., tailgate, emergency braking ahead, blind spot, safe to pass/safe to merge) and Highway Railroad At-Grade Crossing Driver Warnings. Future applications include development of real-time geo-based routing applications for 5.9 GHz DSRC and Smartphones.

CVII Team Members: I-95 Corridor Coalition, New York State Department of Transportation, New York State Thruway Authority, Volvo Technology of America, Inc., Kapsch, Southwest Research Institute, Booz/Allen/Hamilton, TechnoCom Corp., Cambridge Systematics, Inc., and Fitzgerald and Halliday, Inc.

A partnership of the Departments of Transportation and related authorities and organizations, from Maine to Florida, working together to accelerate improvements in long-distance freight movement and passenger travel.