IN RESPONSE TO STRONG GROWTH IN INTERCITY PASSENGER RAIL RIDERSHIP AND FORECASTS OF EVEN GREATER FUTURE DEMAND, THE PASSENGER RAIL INVESTMENT AND IMPROVEMENT ACT (PRIIA) WAS ENACTED IN 2008. PRIIA authorized capital grants to states for passenger rail infrastructure investment, including locomotives and cars. PRIIA directed Amtrak to establish the Next Generation Corridor Equipment Pool Committee (NGEC).

The NGEC was initiated with a simple statement of purpose in Section 305 of PRIIA: “…to design, develop specifications for, and procure standardized next-generation corridor equipment.”

From that starting point the NGEC has functioned as a uniquely productive partnership—public/public and public/private. The NGEC has created the foundation for providing the rolling stock needed to meet the continuously expanding demand for intercity passenger rail service. States will be able to acquire passenger cars and locomotives at a lower initial price, in a shorter time, and with lower long-term costs. The U.S. rail equipment manufacturing and supply industry will be able to compete on a level playing field which will result in the expansion of domestic manufacturing and the jobs it creates.

The NGEC Executive Board (Board) held its initial organizational meeting in January of 2010. At that meeting the Board established an ambitious agenda for action that has been carried out on schedule and under budget. What has the NGEC achieved? What are the benefits of its achievements? How is it organized? What process has led to success? Why has it worked?

The answers to these questions follow.

ACHIEVEMENTS
Launched in January 2010, the NGEC has developed, adopted, and promulgated five specifications for next generation rail equipment and initiated a ground-breaking multi-state procurement. The specifications (with date of approval by Board) are for:
- Bi-level cars (7/31/2010)
- Single-level cars (2/15/2011)
- Single-level trainsets (3/16/2011)
- Diesel-electric locomotives (7/2/2011)
- Diesel Multiple Units (DMUs) (9/4/2012)

A specification for dual-mode locomotives is currently under development.
The thousands of pages of technical text and diagrams reflect the thousands of hours invested in the effort by hundreds of private sector and public sector technical experts, providing technical support at no cost to the NGEC. (The organization and process followed will be described below.)

PRIIA requires that equipment purchased with federal funds comply with specifications developed by the Section 305 NGEC. In addition to developing standardized specifications, the NGEC was given the job of making sure that equipment consistent with those specifications was procured. As a result, a landmark multi-state procurement was undertaken for the purchase of bi-level passenger rail cars. The California Department of Transportation served as the lead state on behalf of itself and the Illinois Department of Transportation representing Missouri, Michigan and Iowa. Doing this procurement required unprecedented cooperation among the states, their counsels, and procurement officers to reconcile differences among the states and make a group purchase possible. Amtrak provided technical expertise and the FRA provided substantial support and coordination throughout the process.

In September, 2012, a Notice of Intent to Award to Sumitomo Corporation of America (SCOA) and Nippon Sharyo USA was announced. The bid submitted was well below the original estimated cost. (Artist rendering of bi-level passenger car shown on previous page.)

On November 6, 2012, a Notice to Award to Sumitomo Corporation and Nippon Sharyo was announced by California and Illinois, The formal execution of the contract took place on November 27, 2012. A multi-state procurement of diesel-electric locomotives is currently being organized with a lead state to be announced shortly.

**WHAT ARE THE BENEFITS OF THE NGEC ACHIEVEMENTS?**
The achievements of the NGEC are stated above in terms of specifications developed and the current and future procurements. The benefits produced are broader, deeper, and more far-reaching.

While, it might seem self-evident that you cannot provide rail service without trains, in the past this truth has sometimes been ignored by advocates for passenger rail. In PRIIA the link was made. Capital grants were authorized for infrastructure—rail, ballast, sidings, etc., which is necessary in and on the ground to support the movement of trains. In addition, PRIIA authorized the NGEC to address the availability of the necessary rolling stock.

By providing publicly available standardized specifications the NGEC has created a common platform from which multiple states can procure rail equipment. The standardized specifications make it possible to buy equipment faster, at a lower cost, and with lower future costs relating to maintenance, rebuilding, and the purchase of additional equipment.

NGEC-developed specifications available to all competitors in the rail equipment marketplace will mean that equipment procured will expand the U.S. domestic production and supply as well as manufacturing employment.

**ORGANIZATION**
Referring to the NGEC as a Committee does not communicate the complexity of its task or the extent of the organization developed to carry out its responsibilities.

PRIIA instructed Amtrak to establish the NGEC. When the NGEC was formed in January of 2010 an Executive Board was established, comprised of representatives from eleven (11) states, Amtrak, and the Federal Railroad Administration (FRA). (Current Executive Board Members and Officers are shown on attachment.) The American Association of State Highway and Transportation Officials was retained to provide support services.
At the same time, the Executive Board approved a set of by-laws, established a Technical subcommittee, a Finance subcommittee, and an Administrative task force, and approved an aggressive work plan with a goal of developing standardized specifications that would help to rebuild the railroad equipment manufacturing and supply industry here in the United States.

As the specifications were adopted, the NGEC Technical subcommittee added specialized sub groups and task forces. For managing changes and generally maintaining the specifications a Document Control Management process was developed. To research locomotive technology the subcommittee formed the Locomotive Technology Task Force (LTTF); and to ensure appropriate accessibility for the disabled community, the Technical subcommittee formed the Accessibility Working Group (AWG).

Early in its existence the Executive Board recognized the need to explore opportunities for creating an entity that will carry on the work of the NGEC as it moves from specification development to putting steel wheels on tracks and, formed---the Structure and Finance Task Force (SFTF) which directly reports to the Board and is responsible for implementing the Board's vision, mission and goals for the future of the NGEC.

The Executive Board also established a Joint Procurement Task Force (JPTF) to take on the tasks of developing a process and the ability to conduct multi-state next generation equipment procurements now and into the future. The first efforts of the JPTF resulted in the successful solicitation, described above, of a Request for Proposals for the manufacture of 130 bi-level rail cars for the first ever multi-state procurement. (See organization chart for complete picture of NGEC structure.)

**PROCESS**

The complexity of the NGEC organization is matched by a rigorous and systematic process for the development of specifications. (See diagram of specifications process.) The process begins with a decision by the Executive Board to initiate the development of the specification, based on an estimate of priority for procurement and the size of the potential market. The Board decision is communicated to the Technical Subcommittee which begins the process by adhering to a Requirements Document provided by the Executive Board to guide the working groups which will develop the various specifications.
components of the specification. Through dozens of meetings over several months involving hundreds of technical experts the specification will be developed and approved by the Technical Subcommittee. It is reviewed by a Review Panel which may direct questions to the Technical Subcommittee. Upon approval by the review panel the specification is sent to the Executive Board for approval. Subsequent to approval the specification may be corrected and changed through the Document Control Management process.

The process for the development, approval, and maintenance of the specifications by the NGEC is elaborate but efficient. It must yield a result as quickly as possible that is technically sound and cannot be challenged on substance or process.

**WHY HAS THE NGEC BEEN SUCCESSFUL?**
The single word that explains the success of the NGEC is Partnership. The public/public partnership includes multiple states, the FRA, and Amtrak. The public/private partnership has added hundreds of private sector experts from dozens of equipment manufacturers and supplier companies.

Partnership is a term that has lost some of its meaning as a result of overuse. The meaning and value of the NGEC partnership is best expressed when terms such as inclusive, open, committed, tireless, and consensus-based are added. Organizations and sectors that do not always cooperate and sometimes are in conflict have been committed to a common purpose and have invested an immense effort on a sustained basis to produce the achievements and benefits described above. Without the NGEC partnership it is inconceivable that the process of developing next generation passenger rail equipment could have moved as far and as fast as it has.

**CONCLUSION**
Because the NGEC has taken a broad and ambitious view of its mission, and has organized effectively to carry out its vision; its success to date has met and even exceeded the expectations expressed in PRIIA. There are many beneficiaries of the NGEC success. States and the federal government will spend less on passenger rail equipment. Amtrak, its funding partners and other passenger rail operators will have lower operating and maintenance costs. The U.S.-based rail equipment manufacturing and supply industry will increase its output and employ more workers. Ultimately, and most importantly, the traveling public who will get more and better equipment to satisfy the demand for rail travel as part of the nation's multimodal passenger mobility system.