Next Generation Equipment Committee NGEC

The NGEC will provide national leadership in standardization, acquisition, financing and management of passenger rail equipment.

Memorandum

To: Members of the NGEC Executive Board

From: Darrell Smith, Chair, Finance & Administrative Subcommitee (signed)

Re: Finance and Administrative Subcommittee Funding Options Recommendations

Date: November 18, 2015

BOARD DIRECTION

On October 24, 2014, the Next Generation Coridor Equipment Pool Committee's (NGEC) Executive Board directed the Finance and Administrative Subcommittee (FASC) to "develop a Statement of Work and budget for a no-cost Extension of the current grant agreement with FRA through September 30, 2017; and to recommend NGEC by-law changes, as appropriate, reflective of the changes resulting from adoption of the Committee Mode recommendation."

Additionally, the Executive Board directed the subcommittee to "propose/recommend" to the Board "potential funding options" for the NGEC beyond the expiration of the current grant agreement, and to do so by the end of October 2015.

The subcommittee successfully completed the first two tasks: (1) updating the NGEC by-laws, which were formally adopted by the Executive Board on February 3, 2015; and (2) proposing amending the grant agreement, which extended the agreement with a no-cost extension through September 30, 2017, and which was approved by the Executive Board, and executed in June 2015.

Since then, the FASC has directed its attention to examining potential funding options for the NGEC beyond September 30, 2017. In exploring possible funding options, the FASC examined the work of the first NGEC Future Working Group and its concept document, presented to the Executive Board in September, 2013, while also addressing a variety of items related to the future of the NGEC, both organizationally and financially over the years.

ACCOMPLISHMENTS

The NGEC accomplished much since its establishment in January, 2010, and that it continues to deliver positive results. To date, the NGEC's modest $2.5M in expenditures produced the following deliverables:

1. Five standardized intercity passenger rail vehicle specifications have been created by the NGEC, comprised of representatives from the Railroad manufacturing and supply industry, Amtrak, States, and the Federal Railroad Administration (FRA). Each specification is valued at $1.5 to $2M. A sixth vehicle specification is in the final stages of the NGEC approval process and is expected to be formally adopted by the Board by mid-November 2015.

2. Two multi-state procurements, with assistance from the NGEC, totaled more than $650 million in new vehicle investment. The winning bid for the procurement of 130 bi-level cars came in significantly lower than the anticipated cost estimates. This may be partly due to the bundling of demand for railcars from different regions to one large procurement amount.

3. Specifications have been updated and maintained throughout these historic procurements, utilizing the well-defined NGEC document management procedures, creating superior quality specifications.

4. The NGEC's 514 (Section 209/305) Subcommittee, initially established as a working group in September 2013, and formalized as a permanent subcommittee in October 2014, provides a collaborative platform for states and Amtrak to develop a unified capital plan to overhaul and maintain passenger rail coaches and locomotives. Increased collaboration between states and Amtrak in the decision making process resulted in an approximate $10 million reduction in capital charges for states in FY2016.

So where does the NGEC go from here? The $4 million (of the initial authorized amount of $5 million) awarded to the NGEC for its statutory mandate has about $1.5 million remaining due to its efforts to efficiently manage its costs while still delivering results. The NGEC has funding to run its business through September 2017. In the remaining time, the NGEC must define its future role, and identify funding to make it happen.

The purpose of this memorandum is to recommend a future structure and scope for the NGEC that considers available funding options. A lot of work has been done in this area, from exploring innovative financing, to identifying new NGEC functions, to rethinking expenditures. Previously, it was suggested that the NGEC become a subsidiary of Amtrak, which would handle all functions related to the design and development of vehicles. This idea was received with some reservation from states and Amtrak, as Amtrak faces many policy and regulatory challenges that do not favor that option.

Augmenting funding with ways to generate revenue for the NGEC is also an avenue that has been explored. One idea – to charge license or use fees for specifications is considered below. Other ideas that contemplated incorporation of the NGEC are complicated by concerns over the likelihood of continuing to receive federal funding and the additional costs associated with a corporate structure. Several scenarios have been examined and each has its own set of hurdles.

Finally, it appears that the most logical path forward for now is to continue as the NGEC is currently organized. This path will ensure the millions of dollars already invested in specifications, support and increase the domestic supply of passenger rail, by maintaining and updating the existing NGEC specifications. Additionally, the NGEC would be ready to support future procurements of equipment, and the ongoing maintenance of the specifications throughout the procurement process. The NGEC will also need to continue its collaborative work in the area of equipment capital, as this process is resulting in more predictable needs and associated costs. States also have more say in the decision making process through the NGEC. The partnership and collaboration between the FRA, Amtrak, the States and rail industry, through the NGEC activities, is invaluable to the United States' development of intercity passenger rail services.

But what additional tasks are in the future for the NGEC? There are several actions the NGEC could take, most notably the development of new specifications, including, but not limited to, the creation of standardized high speed rail specifications. This effort has been attempted in the past but has never come to fruition. The NGEC provides the perfect platform for this undertaking. The NGEC could also assist in other areas related to Section 209, as it already has all the right decision makers at the table.

FUNDING ALTERNATIVES

As noted previously, the NGEC's current funding, provided by the FRA through a grant to Amtrak, expires September 30, 2017. The FASC researched three potential funding sources to continue the NGEC beginning October 1, 2017. While each of these potential sources is presented here independently of one another, in reality the NGEC can, and likely should, consider a blended approach using a mix of funding from each of these sources.

A. Assessing Specification Use Fees

The FASC worked with AASHTO and determined that the NGEC specifications can be offered for sale through the AASHTO on-line bookstore. In AASHTO and Amtrak's existing contractual relationship, AASHTO can apply a credit against its invoiced costs to Amtrak for any specification use fees collected through the AASHTO bookstore.

There are a number of policy issues related to this type of fee. The most significant is who will be charged, and how much will the specifications cost? Since implementing the Specification Utilization restricted access on the NGEC website, the majority of the requests have come from industry parts suppliers, with some requests from specific rail operators (VIA Rail Canada) and equipment manufacturers, as well as numerous requests from those involved in the ongoing procurements.

The future need for the NGEC's specifications is significant for United States intercity passenger rail, as illustrated by the following two tables from Amtrak's Fleet Strategy, Version 3.1, providing the current number of passenger cars and locomotives in service and their respective ages. The generally accepted useful life for intercity passenger rolling stock is 30 years.

Amtrak Passenger Car Fleet - Age

Equipment Type	Active Units 12/1/2011	Year Started in Service	Age in 2012	Average Mileage	
Amfleet I	473	1974 to 1977	35 - 38 Years	4,125,000	(a)
Cab Cars / NPCU	39	1969	43 Years	2,980,000	(b)
Horizon	95	1988 to 1990	22 - 24 Years	2,750,000	
Surfliner (c)	49	2000 to 2002	10 - 12 Years	1,580,000	
California Cars	78	1995 -1996	17 - 18 Years	1,875,000	
North Carolina Cars	12	1950s	60+ Years	675,000	(d)
Amfleet II	145	1980 to 1981	31 - 32 Years	5,640,000	
Heritage	99	1948 to 1956	56 - 64 Years	5,000,000	(e)
Viewliner / LDSL	51	1995 to 1996	16 - 17 Years	3,065,000	
Superliner (I & II)	428	1979 - 1996	16 - 33 Years	4,880,000	(f)
Auto Carrier	80	2005	7 Years	1,160,000	
Other (2 wheel cars / 2 track insp. / 1 training)	4	Unknown	Unknown	N/A	
Total	**1,553**				

(a) Average Amfleet I mileage lower than previous report due to the return to service of 55 cars formerly in storage for 5+ years

(b) Cab Car average mileage = 1,800,000 Mileage since inception of Amtrak data systems in 1970's; estimates not available for prior period

NPCU average mileage = 3,900,000

(c) Includes cars owned by Amtrak (39) and California (10)

(d) Mileage since last major overhaul, approximately 1995

(e) Mileage since inception of Amtrak data systems in 1970's; estimates not available for prior period

(f) Average Superliner I mileage = 5,995,000 and Superliner II average mileage = 3,410,000

Locomotive Fleet Portfolio - Age

Equipment Type	Active Units 12/1/2011	Year Started in Service	Age in 2012	Average Mileage
P32	17	1991	21 Years	1,985,000
P32DM	17	1995 to 1998	14 - 17 Years	1,630,000
P40	15	1993	19 Years	2,035,000
P42	196	1996 to 2001	11 - 16 Years	2,250,000
F59PHI	21	1998	14 Years	1,580,000
AEM-7	47	1980 to 1988	24 - 32 Years	3,915,000
HHP-8	15	1999 to 2001	11 - 13 Years	1,095,000
Califonia Diesels *	17	1991 - 1994	18 - 21 Years	1,650,000
North Carolina Diesels *	6	1988 to 1998	14 - 24 Years	267,000
Switchers	45	1950 - 2010	2 - 62 Years	N/A
Total	**396**			

* Note: California and North Carolina diesel locomotives are <u>**not**</u> Amtrak owned.

B. Federal Grant

The NGEC's federal grant will fund the NGEC's activities through September 30, 2017. There is no ability for FRA to provide additional grant funding without Congressional action.

The FASC established a Legislative Outreach Task Force to develop a message and strategy to request future federal funding. The Task Force has determined that the NGEC must present a case that the NGEC has efficiently and effectively used its existing funds and that it has specific actions to take to warrant future federal funding. Ideally, federal funds would continue at a rate of $500,000 annually, with a provision for inflationary increases.

C. PRIIA 209-Based Membership Fee

The FASC considered several approaches to establish a membership fee for those state agencies funding intercity passenger rail service through PRIIA Section 209. Through this effort, the FASC evaluated the impact on each existing PRIIA 209 state corridor if the entire $500,000 annual NGEC cost was distributed to each corridor based on:

a. Flat fee per corridor
b. Fee per number of units used, regardless of rolling stock ownership
c. Percent fee of PRIIA 209 Turnaround and Car and Locomotive Maintenance Costs
d. Percent fee of PRIIA 209 Total Route Costs

A table displaying these amounts is attached at the end of this memorandum.

RECOMMENDATIONS TO THE NGEC EXECUTIVE BOARD

Having completed its examination of potential funding sources, and having come to the conclusion that it would be most effective and efficient for the NGEC to conduct its activities as currently organized the FASC recommends the following actions for the NGEC Executive Board's consideration:

1. Consider a Specification Use Fee as a supplement to funding provided through a continuing federal grant and/or a PRIIA 209 support fee. Narrow the scope of a Specification Use Fee to the following two components:

    a. Parts Suppliers, being the primary requestors of the specifications, charged a nominal fee to be recommended by the FASC by March 31, 2016.

    b. Non-NGEC Members using a full specification for purchasing rolling stock charged a significant fee, on the order of $250,000 per equipment-type specification, mechanics of which are to be recommended by the FASC by March 31, 2016. The mechanics include but are not limited to determining who is considered a NGEC Member for this purpose, developing the method of fee collection, and establishing the specification use rights of the purchaser.

2. Direct the FASC's Legislative Outreach Task Force to present a complete Congressional Outreach Implementation Plan by March 31, 2016, including draft educational materials for consideration for AASHTO's production, and specific next steps for members to request

continuing NGEC funds.

3. Present the concept of a new annual PRIIA 209 support fee to the State Amtrak Intercity Passenger Rail Committee (SAIPRC) to determine the level of interest of the Amtrak state funding agencies. If SAIPRC expresses an interest, then the NGEC will direct either the FASC or a new task force to coordinate with SAIPRC a recommended methodology.

The FASC limits its recommendations to funding options only. Through its discussions, it is clear that the members have a number of concerns of the legal and organizational structure of the NGEC, especially if it collects specification use fees.

Conceptual "NGEC Charge" Based on FY2015 Contract Forecast Data

Assumes Annual NGEC Budget of: ***$500,000*** Prepared 10/19/2015

		FY2015 Contract Basis			Conceptual NGEC Charge Based on:			
	State Corridor	Average Daily Units Used (regardless of ownership, FY2014 Actuals)	PRIIA 209 Turnaround and Car & Locomotive Maintenance Costs	PRIIA 209 Route Costs	Flat Fee per Route	Fee per Units Used	% of Turnaround and Car & Locomotive Maintenance	% of PRIIA 209 Total Route Costs
APT_RT_03	Ethan Allen Express[1]	2.86	$858,000	$3,367,000	$17,241	$2,395	$3,186	$3,183
APT_RT_04	Vermonter[2]	8.11	$2,269,000	$7,370,000	$17,241	$6,790	$8,425	$6,967
VT tot	*Vermont Total[1]*	*10.97*	*$3,127,000*	*$10,737,000*	*$34,482*	*$9,185*	*$11,611*	*$10,150*
APT_RT_07	Maple Leaf	28.23	$5,500,000	$20,774,000	$17,241	$23,637	$20,423	$19,639
APT_RT_15	Empire Service	47.41	$24,238,000	$73,165,000	$17,241	$39,694	$90,003	$69,169
APT_RT_40	Adirondack	8.82	$1,559,000	$6,681,000	$17,241	$7,385	$5,789	$6,316
NY tot	*New York Total[1]*	*84.46*	*$31,297,000*	*$100,620,000*	*$51,723*	*$70,715*	*$116,215*	*$95,124*
APT_RT_09	The Downeaster (Maine)	20.29	$2,512,000	$7,473,000	$17,241	$16,989	$9,328	$7,065
APT_RT_12	New Haven - Springfield (CT-MA	13.12	$3,839,000	$12,287,000	$17,241	$10,986	$14,255	$11,616
APT_RT_14	Keystone Service	31.90	$10,926,000	$27,478,000	$17,241	$26,706	$40,572	$25,977
APT_RT_57	Pennsylvanian	10.61	$1,820,000	$6,216,000	$17,241	$8,880	$6,758	$5,876
PA tot	*Pennsylvania Total*	*42.50*	*$12,746,000*	*$33,694,000*	*$34,482*	*$35,586*	*$47,330*	*$31,853*
APT_RT_46	Washington-Lynchburg	6.01	$975,000	$4,624,000	$17,241	$5,034	$3,620	$4,371
APT_RT_47	New York-Newport News	11.62	$3,612,000	$16,654,000	$17,241	$9,732	$13,412	$15,744
APT_RT_50	Washington-Norfolk	6.39	$722,000	$4,596,000	$17,241	$5,348	$2,681	$4,345
APT_RT_51	Washington - Richmond	9.08	incl in APT_RT_47	incl in APT_RT_47	$17,241	$7,604	$0	$0
VA tot	*Virginia Total*	*33.10*	*$5,309,000*	*$25,874,000*	*$68,964*	*$27,718*	*$19,713*	*$24,460*
APT_RT_66	Carolinian	10.77	$1,831,000	$12,943,000	$17,241	$9,018	$6,799	$12,236
APT_RT_67	Piedmont	10.39	$0	$4,969,000	$17,241	$8,696	$0	$4,698
NC tot	*North Carolina Total*	*21.16*	*$1,831,000*	*$17,912,000*	*$34,482*	*$17,714*	*$6,799*	*$16,934*
APT_RT_20	Chicago-St.Louis (IL)	26.42	$7,485,000	$23,379,000	$17,241	$22,124	$27,794	$22,102
APT_RT_23	Illini/Saluki (IL)	14.10	$4,293,000	$12,047,000	$17,241	$11,805	$15,941	$11,389
APT_RT_24	Illinois Zephyr/C. Sandburg (IL)	11.84	$3,307,000	$9,621,000	$17,241	$9,915	$12,280	$9,096
APT_RT_21	Hiawathas (75% WI, 25% IL)	18.23	$4,003,000	$13,984,000	$17,241	$15,268	$14,864	$13,220
IL tot	*Illinois Total*	*56.92*	*$16,085,750*	*$48,543,000*	*$56,033*	*$47,661*	*$59,731*	*$45,892*
WI tot	*Wisconsin Total*	*13.68*	*$3,002,250*	*$10,488,000*	*$12,931*	*$11,451*	*$11,148*	*$9,915*
APT_RT_22	Wolverines	29.03	$7,709,000	$24,252,000	$17,241	$24,304	$28,626	$22,927
APT_RT_41	Blue Water	8.81	$2,419,000	$8,540,000	$17,241	$7,380	$8,982	$8,074
APT_RT_65	Pere Marquette	5.98	$1,560,000	$4,581,000	$17,241	$5,009	$5,793	$4,331
MI tot	*Michigan Total*	*43.82*	*$11,688,000*	*$37,373,000*	*$51,723*	*$36,692*	*$43,401*	*$35,332*
APT_RT_29	Heartland Flyer	5.29	$1,492,000	$4,791,000	$17,241	$4,427	$5,540	$4,529
OK tot	*Oklahoma Total*	*2.64*	*$746,000*	*$2,395,500*	*$8,621*	*$2,214*	*$2,770*	*$2,265*
TX tot	*Texas Total*	*2.64*	*$746,000*	*$2,395,500*	*$8,621*	*$2,214*	*$2,770*	*$2,265*
APT_RT_54	Hoosier State (Indiana)	3.41	$468,000	$2,317,000	$17,241	$2,856	$1,738	$2,190
APT_RT_56	Kansas City-St.Louis	9.49	$1,922,000	$8,606,000	$17,241	$7,942	$7,137	$8,136
APT_RT_35	Pacific Surfliner	64.12	$12,909,000	$70,825,000	$17,241	$53,684	$47,935	$66,957
APT_RT_39	San Joaquins	41.49	$9,987,000	$60,190,000	$17,241	$34,741	$37,085	$56,903
CT tot	*CalTrans Total*	*105.61*	*$22,896,000*	*$131,015,000*	*$34,482*	*$88,426*	*$85,020*	*$123,860*
APT_RT_37	Capitols (CCJPA)	49.16	$7,889,000	$38,632,000	$17,241	$41,163	$29,294	$36,522
APT_RT_36	Cascades	84.19	$8,547,000	$38,525,000	$17,241	$70,489	$31,738	$36,421
OR tot	*Oregon Total*	*15.97*	*$1,621,366*	*$7,308,193*	*$3,271*	*$13,372*	*$6,021*	*$6,909*
WA tot	*Washington State total*	*68.22*	*$6,925,634*	*$31,216,808*	*$13,970*	*$57,117*	*$25,717*	*$29,512*
State Supported Service Total		**597.17**	**$134,651,000**	**$528,887,000**	**$499,989**	**$500,000**	**$499,998**	**$499,999**

Notes:

[1] The *Ethan Allen Express* is shown in total here with Vermont, but is actually shared between Vermont and New York.

[2] The *Vermonter* is shown in totla here with Vermont, but is actually shared between Vermont, Massachusetts, and Connecticut.