

Bus Overhauls 101

(Tips, Tricks and Tough Issues)



Hosted by the Virginia Transit Association

Virginia Transit Association

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Our Panelists:

- **Eric Marx**, Director of Planning and Operations, Potomac and Rappahannock Transportation Commission (PRTC), Woodbridge, VA
- **Ryan Jones**, Special Projects Coordinator, Potomac and Rappahannock Transportation Commission (PRTC), Woodbridge, VA
- **John Schiavone**, Senior Consultant on Advanced Bus Technology, Transit Resource Center, Guilford, CT
- **Ed Harmon**, National Director of Operations, ABC Companies, Winter Garden, FL
- **Todd Johnson**, Director of Maintenance, Potomac and Rappahannock Transportation Commission (PRTC), First Transit, Woodbridge, VA

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Questions:

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ERIC MARX



RYAN JONES



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**POTOMAC & RAPPAHANNOCK
TRANSPORTATION COMMISSION**

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PRTC Background

- Suburban VA transit agency 25 miles SW of D.C.
- Express bus, Metrorail feeder, local flex-route
- 139 buses, 19 routes, 14,000 daily riders
- Bus services and maintenance contracted w/ First Transit
- PRTC owns buses and facility



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PRTC's History of Overhauls

- 2004 - 5 1993 MCIs
- 2006 - 4 1995 MCIs – same vendor
- 2008 - 13 2000 Orion Vs – different vendor
- 2010 - 61 2002-2006 MCIs – ABC Bus (on-going)
 - Vehicles provide commuter service via HOV lanes
 - 210 daily trips to DC, Pentagon, Arlington, Tysons Corner
 - 19 completed to date
 - 3 buses simultaneously
 - Transit Resource Center, PRTC's vehicle consultant
 - Assisted with spec and procurement
 - Provides project management and on-site staff





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JOHN SCHIAVONE



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TRANSIT RESOURCE CENTER



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TODD JOHNSON



First  **Transit**



FIRST TRANSIT

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Today we will discuss ...

- 1. MOTIVATIONS FOR OVERHAULS**
- 2. TECHNICAL SPECIFICATION/SCOPE DEVELOPMENT, PROCUREMENT AND CONTRACTING ISSUES**
- 3. OVERSIGHT AND QUALITY ASSURANCE**
- 4. ISSUES WITH COMMUNICATIONS AND CLARIFICATIONS**

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Motivations for Overhauls

1. Why would you want to overhaul a bus?
2. Why do this comprehensive overhaul program when you're already doing maintenance in house?

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Technical Specification/Scope Development, Procurement and Contracting Issues

1. What is the best way to begin developing a specification?
2. What should be included in an overhaul and how specific does it need to be with regard to the scope of work tailored to the particular buses?
3. Should you use a low-bid (IFB) or proposal (RFP) procurement process?
4. What is the function of the pre-proposal conference –(i.e., what information should be provided to describe the buses and what should the agency and proposers know about each other)?
5. Should performance incentives /liquidated damages be built into the contract?
6. What steps can be taken to help ensure the overhaul company makes a reasonable profit *and* the public agency pays a fair price?

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Oversight and Quality Assurance

1. What can you do to assure a high quality product?
2. What is the role and importance of the on-site inspector?
3. How does the contractor's crew respond to the presence of the on-site inspector?
4. What training should overhaul employees have, to be competent?

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Issues with Communications and Clarifications

1. How often do parties communicate /how is communication initiated?
2. What type of reporting is used to communicate project status?
3. How should problems with quality/consistency/timelines be handled?
4. What constitutes a change order and how are “gray-area” issues resolved (e.g., hidden damage issues)?
5. What can you tell us about the return delivery, inspection, and acceptance process?



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TRC
 Weekly Bus Inspection Summary Report
 PRTC Rehab

To: E. Marx, R. Jones, T. Johnson, J. Vincent
 Date: Activity as of 5:00 PM Friday, Dec. 09, - 2011
 Agency: PRTC
 Project: Bus Rehab, MCI; 30 Units; 45 ft. Commuter Style Bus
 Inspector: Doug Thomas
 Engineers: Dan Denman/Mike Delaney

ITEM	Bus 318	Bus 320	Bus 314
Start-Up Date	Nov. 14, 2011	Oct. 25, 2011	Oct. 03, 2011
Estimated Release from ABC	Target: Dec. 26, 2011 Weeks past six: n/a	Target: Dec. 8, 2011 Weeks past six: n/a	Target: Nov 14, 2011 Weeks past six: 3.5
Weeks Since Start-Up	Week 3.5 1. Upholstery completed (Sardo) 2. A/C completed regarding components. Charging system and setting thermostat pending. 3. Interior completed 4. Drivers Dash area completed along with Drivers console and switches. 5. Battery Compartment complete including installation of new Batteries. 6. New Starter on Order; expect early to mid week start-up of engine.	Week 6.0 1. All interior and exterior lights completed (LED). 2. ABC paint inspection completed. Noted defects and work-off pending. 3. Engine cross-members reinstalled. 4. Air Valves completed (those related to Suspension and Brakes). 5. New Headlights installed and Bezels reinstalled. 6. This Unit will not need any new side passenger windows. 7. Bent rear bumper frame repaired. C/O approved. 8. Mud Flaps Installed and completed.	Week 9.5-released 8 th Dec. 1. ABC PDI Inspection completed and noted work off done. 2. Unit presented for final TRC Inspection 5 th of Dec. 3. Noted Defects found during TRC final Inspection. a. Power Steering Box leaking b. W/C restraint Belt not working correct. c. W/C-Passenger Touch Tape lift door not working d. Both positive and negative cables on Unit equalizer component lose. e. Docking Light on exterior Dockinglight inop. f. CAC mounting bolts loose. 4. Noted defects found during TRC Inspection repaired by Staff with great cooperation. 5. Unit released 8 th Dec. 2011. 6. Web-Site supports inspection.
Notes/Comments		C/O work completed.	



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Acceptance & Warranty Information

Buses Released to Date						
Bus Number	Start Date (Departure from PRTC)	Date Released from ABC	Elapsed Time: Pickup at PRTC to Release from ABC	Date Accepted at PRTC	Elapsed time to acceptance	Bus Life Mileage @ Acceptance Date
300	May 3, 2010	August 9, 2010	13 weeks, three days (TRIAL BUS)	August 17, 2010	14 weeks, 4 days	355,421 miles
302	May 3, 2010	July 28, 2010	12 weeks (TRIAL BUS)	August 13, 2010	14 weeks, 2 days	374,751 miles
303	August 2, 2010	October 12, 2010	10 weeks (TRIAL BUS)	October 18, 2010	10 weeks, 4 days	323,370 miles
304	August 16, 2010	October 25, 2010	9 weeks, 4 days (TRIAL BUS)	November 3, 2010	11 weeks, 1 day	317,822 miles
305	October 18, 2010	December 3, 2010.	6 weeks, 2 days (32 days)	December 30, 2010	10 weeks	384,193 miles
307	October 26, 2010	December 17, 2010	7 weeks, 1 day CO side panel 2 days Net: 6 weeks, 4 days (34 days)	December 30, 2010	9 weeks	366,905 miles
306	December 6, 2010	January 26, 2011	7 weeks (35 days)	February 11, 2011	9 weeks, 2 days	337,947 miles
308	December 21, 2010	Feb. 16, 2011	7 weeks, 4 days (39 days)	February 23, 2011	8 weeks, 4 days	431,216 miles
309	January 28, 2011	March 24, 2011	7 weeks, 4 days CO 3 panel-rail repairs, no time impact given, assume 3 days	March 31, 2011	8 weeks, 4 days	377,171 miles

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WARRANTY INFORMATION				
Bus Number	Acceptance Date In-Service Date	Engine Number	Transmission Number	Bus Life Mileage @ Acceptance Date
302 - 1M8PDMRA22P054742	August 13, 2010	06RE125678 5-year war. coverage	9420010599	374,751 miles
300 - 1M8PDMRA92P054740	August 17, 2010	06RE125788 5-year war. coverage	9420010575	355,421 miles
303 - 1M8PDMRA42P054743	October 18, 2010	06RE125786 5-year war. coverage	9420010737	323,370 miles
304 - 1M8PDMRA62P054744	November 3, 2010	06RE125677 5-year war. coverage	9420010738	317,822 miles
305 - 1M8PDMRA82P054745	December 30, 2010	06RE126334 5-year war. coverage	9420010896	384,193 miles
307 - 1M8PDMRA12P054747	December 30, 2010	06RE126335 5-year war. coverage	9420010882	366,905 miles
306 - 1M8PDMRAX2P054746	February 11, 2011	06RE126742 3-year warranty - \$550 credit due	9420010731	337,947 miles
308 - 1M8PDMRA32P054748	February 23, 2011	06RE126743 3-year warranty - \$550 credit due	9420010734	431,216 miles
309 - 1M8PDMRA52P054749	March 31, 2011	06RE127204 3-year warranty - \$550 credit due	9420010974	377,171 miles
310 - 1M8PDMRA12P054750	May 4, 2011	06RE127206 3-year warranty - \$550 credit due	9420010978	368,795 miles
324 - 1M8PDMRA12P055266	June 10, 2011	06RE127207 3-year warranty - \$550 credit due	9420011060	368,762 miles
315 - 1M8PDMRA02P054755	July 15, 2011	06RE127205 3-year warranty - \$550 credit due	9420011092	411,132 miles
313 - 1M8PDMRA72P054753	August 12, 2011	06RE128032 1-year warranty, \$2,250 Warranty credit due	9420011086	344,284 miles

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LESSONS LEARNED

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General Recommendations

1. Stay consistent with what is promised, be honest and fair
2. Keep the lines of communication open
3. Work through every issue, regardless of how small
4. Maintain a good, open, and a mutually-beneficial working relationship

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Technical Specification/Scope Development and Contract Issues



1. Use a RFP vs. IFB; make sure vendor quality is a significant consideration in proposal evaluations
2. Write a clear, comprehensive specification tailored to bus type; seek professional expertise if not available in-house
3. Contractor should read and understand the specifications completely (i.e., ABC turned the specification language into a checklist)
4. Have a pre-bid meeting that includes reactions about the specifications and reply with detailed Q & A that identifies any modifications to the revised RFP language
5. Provide ample inspection time and opportunities for the fleet inspection in the pre-bid review period

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Successful implementation

1. Hire an on-site inspector to be the agent for the transit agency
2. A successful contractor will respond to the needs of the transit operator and to the requests of the on-site inspector
3. Include provisions for change orders to allow agency and contractor to address special repair needs
4. Have on-site inspection company provide engineering services at the start to ensure appropriate procedures by the contractor; on-site inspector can certify procedures are being followed throughout project

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Thank you for attending!

Please take a moment to complete the brief evaluation at the end of the webinar.
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