Agenda Item 10-A
Information Item

To: Chairman Skinner and the VRE Operations Board
From: Doug Allen
Date: February 19, 2016
Re: Program Management Services

The purpose of this item is to provide information on an approach to advancing the funded capital improvement projects before seeking Operations Board authorization to begin procurement for these kinds of services.

The current VRE six-year Capital Improvement Plan (FY 2017-FY 2022) includes 30 projects and nearly $1.15 billion in expenditures for stations, parking lots, track, signals, bridges, yards, and maintenance facilities. The work includes development (planning, environmental, preliminary design) and implementation (final engineering, construction) phases of project delivery. These projects are all related to fulfillment of either our agreements with CSX Transportation or the System Plan 2040.

Project development and implementation is the responsibility of the VRE Office of Development which currently has six full-time equivalents (FTEs)—one executive FTE, two planner FTEs for development, and three project manager FTEs for implementation. FTEs for a fourth project manager and an engineering administrator are in the FY 2017 operating budget.

With the growth in the number and complexity of projects anticipated in the CIP for the next six years, VRE needs to expand its managerial capacity and capabilities in order to develop and deliver capital projects in a timely and scalable manner. We also need to improve project oversight procedures so that VRE can more precisely and consistently
monitor the progress of individual projects as well as that of the program of projects as a whole.

VRE could address these needs directly by hiring additional staff, but that approach has serious flaws beyond the obvious long-term impact on operating costs. For example, it would be difficult to hire three or four additional administrative personnel whose skillsets encompass all the requirements needed to create and maintain an effective suite of program controls. It would be equally ineffective to expand VRE’s project management capacity solely through the hiring additional FTEs due to the relatively short-term “spike” projected in project volume over the next five years and/or the intermittent requirement for technical specialists.

We believe a better approach is to consider hiring a Program Management Consultant (PMC) to augment VRE’s in-house staff and to provide a comprehensive set of program controls to track budgets, expenditures, schedules and other key performance metrics applied to all projects. This is the approach many operating agencies with an operational focus take in order to augment their management and administrative capabilities for the delivery of a large program of capital improvement projects while minimizing the amount of overhead incurred.

An effective and experienced PMC would augment VRE staff capabilities in two ways:

1. **Expanded Staff Capacity**: As the number and complexity of active projects increase, additional staff resources will be required to manage and administer capital program projects—the PMC approach is scalable, allowing project management and administration capabilities to be added or reduced as needed by the volume of workload. Additional staff capabilities will also be needed to address special skills and/or certifications that must be demonstrated in order to comply with Commonwealth and/or Federal requirements. The following list identifies the kind of staff augmentation capacities and capabilities that may be needed:

   - Project Management Augmentation
   - Project Administration Augmentation
   - Procurement Augmentation
   - Property Acquisition

2. **Improved Program Controls**: Program controls are tools used to consistently and comprehensively monitor and manage progress for individual projects as well as the capital improvement program as a whole. They include the items of the following list, which are required by the Federal Railroad and/or Transit Administrations.

   - Project Management Plans
   - Integrated Master Schedule
   - Integrated Master Budget
   - Risk Management
- Cost Estimating
- Document Controls
- Quality Assurance/Quality Control
- Change Order Tracking
- Program Audits (PMPs, QA/QC, Safety)
- Updates to Standard Procedures and Specifications
- Program/Project Reporting

VRE’s current practices rely on its individual project contractors to supply these controls on a project-by-project basis, resulting in a balkanized system of progress reports and activities that are inconsistent and difficult to integrate on the programmatic level. This results in a less than comprehensive assessment of project progress and a less than timely identification of potential problems.

With an effective and experienced PMC, VRE can update and improve its capital project delivery processes to match best industry practice using state-of-the-art management tools. Potential risks to project schedules, scopes, and budgets will be identified, monitored, and mitigated before rising to the level of a problem that threatens project completion. The PMC will work through VRE’s current project managers to develop project execution strategies that improve resource allocation, planning, communication, documentation, quality control, risk management, and safety for projects and the program as a whole. A PMC would also assess VRE’s current Project Control practices and tools relative to industry best practices and recommend means and methods to better track project progress and performance on a comprehensive and continuing basis.

VRE staff recommends contracting with a PMC consultant with skills and experience to be able to optimize VRE current management systems and implement improved management processes and systems that will deliver the current plan of capital projects. Our intention is to return to the March VRE Operations Board with a request for authorization to issue a request for proposals for these program management services.