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# REAL PROPERTY MANAGEMENT:

Applying Best Practices Can Improve Real Property  
Inventory Management Information


Report No. OIG-A-2013-015 | June 12, 2013





# Memorandum

**To:** Joseph Boardman, President and CEO

**From:** Ted Alves 

**Date:** June 12, 2013

**Subject:** *Real Property Management: Applying Best Practices Can Improve Real Property Inventory Management Information* (Report No. OIG-A-2013-015)

This report provides you the results of our review of the adequacy of Amtrak's real property inventory management information. Private and public sector entities generally define real property as including land and anything permanently affixed to it, such as buildings, including their installed systems and equipment, other installed equipment, roads and parking facilities, fences, utility systems, and structures. Amtrak's real property was reported at a value of approximately \$10.7 billion as of September 30, 2012.<sup>1</sup> A portion of these real properties generated about \$94 million in reported commercial development revenues in Fiscal Year 2012. According to the Finance Department's Real Estate Development documents, those revenues include rents from retail leases; real estate sales and leases; and proceeds from parking facilities, telecommunication agreements, commercial advertising spaces, pipe and wire crossings, and easements.

We initiated this audit in August 2012. Our reporting objective is to provide an assessment of the adequacy of Amtrak's real property inventory management information in the context of best practices used in the public and private sectors.

For a discussion of our scope and methodology, see Appendix I.

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<sup>1</sup> Amount identified in Amtrak's Consolidated Financial Statement as of September 30, 2012, under the category of property and equipment (rights-of-way and other properties).

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## **SUMMARY OF RESULTS**

Our comparative analysis of best practices for real property inventory management information systems to Amtrak's practices show opportunities for improvement. Real property management responsibilities at Amtrak are divided among a number of departments, including the Finance, Engineering, Law, Transportation, Procurement, and Environmental Health and Safety departments. However, none of these departments has a comprehensive real property inventory management information system that could be used to accomplish all departments' diverse strategic real property goals.

Further, the real property inventory management information the departments maintain is incomplete and contains inconsistent data. The absence of a comprehensive real property management information system leaves Amtrak vulnerable to experiencing (1) higher than necessary operating and maintenance costs for underutilized and/or unnecessary real property, (2) higher than necessary leasing expenditures through lost opportunities to consolidate underutilized space, and (3) lower revenues for unidentified land and facilities available for sale or lease to other entities.

We were informed by the Finance Department's Real Estate Development officials that the corporation has efforts underway to improve the quality of its real property information. The information provided in this report can be useful in those efforts.

We are recommending that the President and Chief Executive Officer direct the development of a comprehensive real property inventory management information system that includes consideration of the best practices identified in this report. The President and Chief Executive Officer agreed.

## **BEST PRACTICES PROVIDE WAYS TO IMPROVE THE USEFULNESS OF REAL PROPERTY MANAGEMENT INFORMATION**

Our review identified best practices used by a freight railroad, a property management company, nonprofit organizations, and federal government agencies for inventorying real property. Many organizations decide before developing a real property inventory management information system what the objectives of the system are, then design it to

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meet those objectives. Consequently, there are different ways of organizing the data and of making the data available and searchable. Still, a single, integrated real property inventory management information system with complete and reliable data is a key element. Some other common elements are a single office responsible for developing and maintaining a single system that is readily available for all users; a single-point entry to accurately track real property information; a validation process to ensure the accuracy of information; and standardized data on property type, location, use, size, utilization, value, condition, restrictions, operating costs, as well as management information. Below we provide a discussion of the specific best practices our work highlighted:

- ***Assign a single office responsibility for developing and maintaining a single real property inventory management information system.*** A major freight railroad informed us that it assigns a single office the responsibility for developing and maintaining its single real property inventory management information system that is readily available to all responsible officials and satisfies all business requirements. According to officials of this freight railroad, they developed its system using in-house resources. They said, however, that there are several affordable real property management software applications available from commercial sources. Such applications can be tailored to meet the needs and goals of any organization.

Similarly, to increase the reliability of the federal real property data, the General Services Administration suggests that federal agencies identify individuals who are responsible for maintaining accurate, reliable, and complete real property data. It also notes that a single point of contact for managing an agency's real property assets would improve the accuracy, reliability, and usability of the inventory data.

- ***Designate a single-point entry to accurately track real property information.*** A global real estate services firm that specializes in commercial property management, leasing, and investment recommends that real property administrators focus on establishing accurate data. According to the firm, determining an appropriate real property information technology solution and developing business rules such as single-point entry that promote a commitment to accurately tracking real property information, will be paramount to success.
- ***Develop a validation process to ensure accuracy of information.*** A global real estate services firm recommends that real property administrators institute a validation effort to ensure accuracy of real property inventory information. It reported that

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such a process also provides an opportunity to rectify outstanding data inaccuracies and to identify information gaps. It further noted that if an entity does not have a good perspective on its real property holdings because of poor data, it may be incurring costs needlessly. This can happen because some of its buildings and land could be put to more cost-beneficial uses, exchanged for other needed property, or sold.

Similarly, a global information services and consulting firm reports that a data validation process is the only way to ensure that the information captured is accurate. Without validation, most organizations experience a data entry error rate of between 2 and 8 percent. It noted that the weakest link in any process is at the point where the data are manually entered into the organization's system. If data validation does not take place at this time, the subsequent administrative cost of resolving the error at a later stage can be significant.

Further, the General Services Administration suggests that federal agencies establish a validation process, by random sampling, routinely scheduled site visits, financial audits, or a combination, to verify and validate their real property data. It also suggests that agencies establish independent review teams to verify that their real property inventory information is accurate, reliable, and complete.

- ***Standardize data on property type, location, use, size, utilization, value, condition, restrictions, and operating costs.*** A nonprofit organization that supports advances in the building sciences and technologies reported that the real property inventory management information system of an organization should include detailed documentation identifying the asset and its cost, including its initial acquisition and improvements. It noted that all real property information should include the asset's unique name (usually a descriptive title), unique facility number, address, type of facility, capacity, and unit of measure. While other information will depend on the requirements of an organization and its management, it may also include asset location, current replacement value, a prioritization code, use and status, condition status, projected year of replacement, previous operations and maintenance costs, and other requirements the organization may have.

This organization also reported that the real property inventory management information system should provide information necessary to formulate facility budgets, make decisions on facility replacement, identify repair costs, identify penalty costs, and improve the management of investments in real property assets,

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throughout the organization. It can also aid in determining space requirements, equipment locations, construction costs, environmental constraints, encroachments, and other critical planning functions. Typical benefits include more efficient space utilization to achieve cost savings and potential reduction in asset inventories; improved project planning leading to reductions in architectural and engineering, construction, and building maintenance costs; improved safety and environmental planning capabilities; and the elimination of redundant information held by multiple organizations in various degrees of quality and accuracy.

Similarly, in 2004 the National Research Council<sup>2</sup> reported that facilities' asset management data at a minimum should include inventory and attribute data. Inventory data describe elements of assets that do not change as a function of time. For example, the number, location, type, and size of facilities and the year of acquisition are all constant. Attribute data capture characteristics that do change over time, such as the demand for the facilities, usage, value, age, maintenance history, operating and repair costs, condition, and so forth.

Also, the Federal Real Property Council initially developed 23 data elements for inventorying real property, which also includes performance goals.<sup>3</sup> This was expanded to 25 data elements by 2012. The data elements include real property type, location, use, size, utilization, value, condition, restrictions, and operating costs. The General Services Administration reported that inventorying real property should result in reduced operating costs, improved asset utilization, disposal of unneeded real property, redirection of funds to higher priority asset management uses, and improved facility conditions, among others. A target objective is to reduce excess, nonusable space and to limit the use of leased space.

## **REAL PROPERTY INVENTORY MANAGEMENT INFORMATION CAN BE IMPROVED**

Because Amtrak real property management responsibilities are divided among several departments, the corporation does not have a comprehensive real property inventory

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<sup>2</sup> The National Research Council is a private, nonprofit institution that provides expert advice on some of the most pressing challenges facing the nation and the world.

<sup>3</sup> The interagency Federal Real Property Council was created by Executive Order 13327, "Federal Real Property Asset Management," to develop guidance, serve as a clearinghouse for best practices, and facilitate the efforts of senior real property officers in managing federal real property.

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management information system that can be used to accomplish all departments' real property responsibilities. Further, inventories the departments do maintain are incomplete and contain inconsistent data. Consequently, the responsible department managers lack key data related to space utilization, facility location, condition, and age. This lack of information hampers decisionmaking for budgeting, operating, and financial investment purposes. This situation leaves the corporation vulnerable to wasteful practices. Below are examples of potential vulnerabilities that we noted in the various departments due to the weaknesses in real property inventory management information systems.

### **Finance Department: Real Estate Development Office**

The office is responsible for planning real estate development and manages contracts, leases, and easements for retail space, telecommunications, parking, advertising, pipe and wire, filming, and pay phones. However, the department does not have a comprehensive real property inventory management information system. As a result, the department does not have the complete information needed to ensure that it is identifying all available land and facilities with opportunities for generating additional revenues, and to identify for disposal unneeded and underutilized land and facilities.

The Real Estate Development Office's inventory includes maintenance facilities, crew facilities, commissaries, reservations centers, offices, and land. It also contains useful information on ownership, existing agreements, location of the structure (global positioning system and address information), primary user, contact information, and size.

However, the inventory data were neither consistent nor complete. The data differed by facility type, and some data elements—such as location, ownership, and size—were missing. The data listed 911 properties and facilities—458 fewer items than listed on the Engineering Department Structures Office real property inventory (discussed in more detail below). Some of this difference is due to the Structures Office's data containing items that may be considered temporary and not meeting the definition of real property, such as trailers and metal cargo containers used mostly for offices or storage. Still, the Real Estate Development data excluded some crew facilities, offices, and storage buildings that were listed on the Structures Office inventory. We also found that a vacant Amtrak-owned station in Connecticut, being considered for sale, was not

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included on the Real Estate Development list of passenger stations. Instead, department officials said, this station was included on a separate excess property list.

In December 2011, the Amtrak President and Chief Executive Officer assigned the Real Estate Development Office with responsibility for planning the development of the corporation's real estate. He specified that "Facility planning, which will be within Real Estate under the Chief Financial Officer, will become much more active in proper planning for our real estate assets, including our stations." Although this tasking did not specifically direct the development of a comprehensive real property inventory, Real Estate Development officials said that they hired additional staff to develop an inventory in mid-2012. These officials also said that they were still in the process of improving the quality of their real property information, and that the development of a comprehensive inventory is a work in progress.

### **Engineering Department: Structures Office**

The office operates, repairs, and upgrades structures, such as train stations and facilities. However, the department does not have a comprehensive real property inventory management information system. As a result, the department may not have all the information needed to ensure that it identifies those structures that require repair and upgrade. A comprehensive real property inventory management information system would provide information necessary to help track the status of work on structures and the associated costs of that work, to formulate budgets, and to help decide on the need for replacement.

According to an Engineering Department official, he has an inventory of facilities that the Structures Office is responsible for operating and maintaining. The inventory provided useful data, such as the location of the structure (global positioning system and address information), primary user and use, contact information, and size. However, some data—such as user and data entry date—were missing. Further, the inventory did not include information on Amtrak- owned passenger stations, communications and signals structures, and electric traction structures. It also did not include some transportation and mechanical facilities and offices that were listed on the Real Estate Development inventory.



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The Engineering Department also uses another software application to help monitor and control tracks, electric substations, and relays along the Northeast Corridor. This inventory does not include other real properties.

## **Law Department**

The Law Department spent resources and time during 2008 and 2009 to determine who had responsibility for complying with the Americans with Disabilities Act of 1990 at each Amtrak-served station.<sup>4</sup> A Law Department official said that they developed an inventory to identify passenger station structures, such as buildings and shelters, subject to the Act's requirements. Their inventory does not include other real properties.

## **Finance Department: Controller**

This office is responsible for billing, collecting, and monitoring revenues from contracts, leases, easements, telecommunications, parking, advertising, pipe and wire, filming, and pay phones, and for paying expenses to support real property, such as utilities and maintenance. According to a Controller official, no comprehensive real property inventory management information system exists. Instead, the office uses a commercial and residential property lease software system to administer all the terms of property-related leases, such as percentage rents, Consumer Price Index calculations, and other related calculations that are specific to these leases. A Controller official stated that she believes that they have captured all billable leases. However, without a real property inventory management information system, the office may not have access to all the information needed to ensure and verify that it is billing and collecting all the revenues due from its land and properties. Further, it may increase the risk of unnecessarily paying expenses, such as rents and utilities, for land and properties that Amtrak does not own or lease.

## **Transportation Department**

This department coordinates the activities involved in managing stations, such as facility maintenance, baggage handling, and passenger services. A real property

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<sup>4</sup> *Americans with Disabilities Act: Leadership Needed to Help Ensure That Stations Served By Amtrak Are Compliant* (Report No. 109-2010, September 29, 2011).

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inventory management information system would provide needed facility information, such as station condition, that could be used to make informed decisions on maintenance requirements. This, in turn, would help provide the information necessary to formulate maintenance budgets and backlog data.

## **Procurement and Materials Management Department**

This department solicits and obtains independent contractors, materials, and equipment needed to maintain Amtrak-owned train stations and properties. Because the department does not have a real property inventory management information system, it may not have the necessary information to verify the need for maintenance contracts, materials, and equipment on Amtrak-owned stations and properties. The Chief Logistics Officer stated that his department does not determine requirements. Once a requisition is approved, it is considered by his office as a valid need.

## **Environmental Health and Safety Department**

The Environmental Health and Safety Department uses the Real Estate Development Office's real property inventory information to manage environmental compliance activities for properties and facilities. However, according to an Environmental Department official, in her opinion, the inventory information is neither comprehensive nor complete. A comprehensive real property inventory management information system could provide information on the environmental contamination of both Amtrak land and facilities. Further, the condition of real property—which is collected and documented in some real property inventories used by the public and private sectors—bears directly upon concerns about security and safety. The environmental official also noted that a real property asset that is in good condition is less likely to be one where a person may fall and be hurt, where loose materials may become dislodged, or where drinking water may be unsafe because of contaminants in the pipes.

## **RECOMMENDATION**

To create a more efficient and accurate real property inventory management information system, we recommend that the President and Chief Executive Officer direct the departments having real property management responsibilities to work

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together to develop a comprehensive real property inventory management information system that includes consideration of the best practices identified in this report.

## **MANAGEMENT COMMENTS AND OIG ANALYSIS**

In commenting on a draft of this report, the President and Chief Executive Officer agreed with our recommendation to develop a comprehensive real property inventory management information system that includes consideration of the best practices.

Amtrak's memorandum commenting on the draft report is reprinted in its entirety as Appendix II.

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## Appendix I

### SCOPE AND METHODOLOGY

This report discusses the weaknesses and gaps we observed in the corporation's real property inventory practices. We conducted this audit work from August 2012 through April 2013, in Washington, D.C., and Philadelphia.

We compared Amtrak's procedures and practices for developing a real property inventory to those established by a Class 1 railroad,<sup>5</sup> a property management company, a global firm, nonprofit organizations, and federal agencies. Based on these comparisons, we performed an analysis to determine whether there were any gaps in Amtrak's procedures and practices for developing a real property inventory management information system compared against those established by other organizations. We used this gap analysis as a basis for discussing with Amtrak officials the reasons for any potential deficiencies or limitations, such as root causes for having incomplete/inaccurate inventory data.

During our audit, we collected information from officials of the Transportation, Engineering Structures, Real Estate Development, Controller, Procurement and Materials Management, Environmental Health and Safety, and Law departments, to (1) gain an understanding of how staff managed and maintained an inventory of real property assets; (2) identify any limitations or challenges; and (3) determine the extent to which department and offices maintain accurate and complete real property inventory records. We also discussed with officials, properties that are either underutilized or in excess of needs, and the rationale for maintaining these properties or for not using them to their full potential. We also discussed whether there are any barriers or impediments to removing properties from the inventory.

Our work was performed in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained

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<sup>5</sup> The Surface Transportation Board defines a Class I railroad in the United States as having annual carrier operating revenues of \$250 million or more after adjusting for inflation using a Railroad Freight Price Index. There are seven Class I railroads.

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provides a reasonable basis for our findings and conclusions based on our audit objective.

## **Internal Controls**

In conducting this audit, we reviewed internal controls related to the maintenance and accountability for real property inventory records. The weaknesses and gaps in these controls that we identified are discussed in the body of the report.

## **Computer-Processed Data**

We received and analyzed computer-processed Excel spreadsheet real property inventories from various departments. We could not validate the inventory information with any other information system because no real property information system currently exists. We compared the departments' spreadsheets for consistency, and found each department's inventory to be inconsistent, deficient, and unreliable. These issues are discussed in the body of the report.

## **Prior Audit Reports**

We reviewed the following audit reports and used information from them in conducting our analysis of issues:

*Federal Real Property: Improved Data and a National Strategy Needed to Better Manage Excess and Underutilized Property (GAO-12-958T, August 6, 2012)*

*Federal Real Property: National Strategy and Better Data Needed to Improve Management of Excess and Underutilized Property (GAO-12-645, June 20, 2012)*

*Federal Real Property: An Update on High Risk Issues (GAO-09-801T, July 15, 2009)*

*Federal Real Property: Authorities and Actions Regarding Enhanced-Use Leases and Sale of Unneeded Real Property (GAO-09-283R, February 17, 2009)*

*Federal Real Property: Progress Made Toward Addressing Problems, but Underlying Obstacles Continue to Hamper Reform (GAO-07-349, April 13, 2007)*

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*High-Risk Series: Federal Real Property (GAO-03-122, 2003)*

*Federal Real Property: Better Governmentwide Data Needed for Strategic Decisionmaking  
(GAO-02-342, April 16, 2002)*

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**Appendix II**

**COMMENTS FROM AMTRAK  
 PRESIDENT AND CHIEF EXECUTIVE OFFICER**

NATIONAL RAILROAD PASSENGER CORPORATION  
 60 Massachusetts Avenue, NE, Washington, DC 20002  
 tel (202) 906-3960, fax (202) 906-2850

**Memo**

Date June 6, 2013  
 To Ted Alves, Inspector General



From Joseph H. Boardman  
 Department President and CEO  
 Subject Real Property Management:  
 Applying Best Practices Can  
 Improve Real Property Inventory  
 Management Information (Draft  
 Report No. 016-2012)  
 cc Eldie Acheson  
 DJ Stadler  
 Joe McHugh  
 Byl Herrmann  
 Dan Black  
 Bruce Looloian  
 Matthew Gagnon  
 Melantha Paige  
 Peggy Reid

Message We have reviewed your draft report entitled "Real Property Management: Applying Best Practices Can Improve Real Property Inventory Management Information."

We agree with the recommendations regarding the consideration of best practices in developing a real property inventory management information system. I will direct the Amtrak departments to form a working group to work together to complete the development of the system with consideration of best practices. We estimate the timeframe for completing the inventory system will be 24 months, with continuing validation of the database, subject to funding. The Real Estate Development Department will be the lead department for coordinating this activity.

Thank you for your cooperation.

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**Appendix III**

**OIG TEAM MEMBERS**

David R. Warren	Assistant Inspector General, Audits
Mark A. Little	Senior Director
Al Murray	Auditor-in-Charge
Joseph Zammarella	Audit Manager
Courtney Catanzarite	Auditor



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## OIG MISSION AND CONTACT INFORMATION

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<b>Amtrak OIG's Mission</b>	The Amtrak OIG's mission is to provide independent, objective oversight of Amtrak's programs and operations through audits, inspections, evaluations, and investigations focused on recommending improvements to Amtrak's economy, efficiency, and effectiveness; preventing and detecting fraud, waste, and abuse; and providing Congress, Amtrak management, and Amtrak's Board of Directors with timely information about problems and deficiencies relating to Amtrak's programs and operations.
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<b>Congressional and Public Affairs</b>	David R. Warren Assistant Inspector General, Audits  Mail: Amtrak OIG 10 G Street, N.E., 3W-300 Washington, D.C. 20002  Phone: (202) 906-4742 Email: <a href="mailto:david.warren@amtrakoig.gov">david.warren@amtrakoig.gov</a>

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