



FY 2012 Strategic Sustainability Performance Plan For the Railroad Retirement Board

844 N Rush St. Chicago IL 60611



**Rail Road Board 2012 Strategic Sustainability
Performance Plan**

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POLICY STATEMENT

The Railroad Retirement Board (RRB) is an independent agency in the executive branch of the Federal Government. The RRB's primary function is to administer comprehensive retirement-survivor and unemployment-sickness benefit programs for the nation's railroad workers and their families under the Railroad Retirement and Railroad Unemployment Insurance Acts.

We are committed to reducing energy consumption and establishing policies that will ensure our compliance with all environmental and energy statutes, regulations, and executive orders and meet required energy reduction goals. These goals are established by Executive Orders 13514, 13423, and 13327, and the National Energy Conservation Act and Energy Policy Act of 2005 (NECA/EPACT).

RRB is committed to enhancing its resiliency to climate change and establishing policies that will comply with, or exceed, required climate change goals and objectives established in environmental and energy statutes, regulations, and executive orders. RRB supports the climate change adaptation goals established by Executive Order 13514 Federal Leadership in Environmental, Energy, and Economic Performance. The RRB adopts the Interagency Climate Change Adaptation Task Force's guiding principles and framework for adaptation planning and is committed to working with other federal agencies, the scientific community, and local stakeholders in the Chicago region to conduct proactive adaptation planning of common interest to enhance the agency's resiliency to climate change.

This Strategic Sustainability Performance Plan (SSPP) demonstrates RRB's commitment to meeting all the energy goals established by this SSPP. RRB will continue in its efforts to meet or exceed the goals established for 2020.

Keith Earley (Signed)

Director of Administration/Senior Sustainability Officer, RRB

Chicago, Illinois

EXECUTIVE SUMMARY

RRB headquarters is located in the William O. Lipinski Federal Building, a thirteen-story 365,000-square-foot, historic building constructed in 1922 on North Rush Street in Chicago, Illinois. RRB occupies floors two through eleven of the Lipinski Federal Building, with commercial tenants on floor one and a vacant office space on floor twelve. The agency's 55 field offices (including the Legislative Office and OIG Field Office) are either co-located with other federal agencies in office buildings managed by GSA, or in other space that GSA leases. Approximately 900 employees work for the RRB, including approximately 250 in the agency's 55 field offices.

The headquarters building is the only facility of which the RRB has operational control. As the primary tenant, the RRB operates and maintains the building through a delegation of authority agreement with the General Services Administration (GSA) established on April 1, 1986. Under this agreement, projects over \$50,000 in value and any capital improvements are funded and approved by GSA.

RRB has a history of actively and successfully pursuing projects that will reduce energy and water consumption in its headquarters building. RRB also pursues mission-related projects that enhance the agency's overall sustainability.

RRB has increased its purchase of renewable energy to 5 percent since 2003, meeting their FY2011 requirements to purchase 5 percent of renewable electricity. Since 2003, RRB has reduced its energy intensity (Btu/GSF) by 13.2 percent, and reduced its water intensity (gallon/GSF) by 23.8 percent. These reductions exceeded the water intensity reduction goal of 8 percent, but did not meet the FY 2011 energy intensity reduction goal of 18 percent. Annual variations in seasonal temperatures affect the heating and cooling load in the headquarters building and thus can significantly affect the building's energy intensity metrics. As the RRB reports metrics solely for the headquarters building, the effects of annual temperature changes are not normalized over multiple facilities in different regions, as might be the case for other agencies. This can result in the potential for annual variations in temperature to limit the RRB's ability to manage energy intensity reductions on a year-over-year basis. For example, in FY 2010, winter and summer seasonal temperatures were relatively mild and the RRB achieved a 20.8 percent reduction in energy intensity relative to the 2003 baseline (well ahead of the FY 2010 goal of 15 percent), and a year-over-year reduction of 3 percent. However, in FY 2011, Chicago experienced extreme cold and heat events, greatly increasing heating and cooling requirements in the winter and summer months, respectively. This resulted in a year-over-year energy intensity increase of 6 percent, and only a 13.2 percent reduction in energy intensity as compared to the FY 2003 baseline. While the RRB continues to invest in energy efficiency projects to improve overall building performance, the RRB's ability to meet annual energy intensity reduction goals is decreased

by unpredictable annual variations in seasonal temperatures. RRB anticipates that further building renovations to create a more efficient data center and lighting systems will provide long-term reliable reductions in energy consumption at the RRB headquarters building.

The following is a summary of recently completed or ongoing projects that align with the agency's goal to become more sustainable and that have contributed significantly to the above stated reductions in water and energy consumption at the RRB headquarters.

* At the time of this report preparation, the RRB retrofitted the hot water recirculating system on each floor in the headquarters building to tie into the main vertical hot water pipe. This retrofit significantly decreased water usage associated with waiting for hot water at faucets (hot water is now instant).

* In FY 2011, RRB completed renovation of the building elevator lobbies which included the installation of energy efficient heating, ventilation and air conditioning (HVAC) systems and direct digital controls in the first floor main lobby. The lobby renovation also included an energy efficient lighting control system (digital addressing lighting interface or DALI) and energy efficient lighting (compact fluorescents and LEDs) in the main lobby and remaining elevator lobbies throughout the building. Installation of the DALI system throughout the center of the building presents an opportunity for the system to be expanded throughout floors in the future, and to significantly reduce energy use associated with lighting.

* RRB has an ongoing program to conserve water. This includes replacing 3 gallon-per-flush toilets with 1.25 gallon-per-flush toilets, and installing automatic flush valves. Aerators have also been installed on various faucets in the building, as applicable. At the time of this report preparation, 60 toilets have been replaced throughout the building. The RRB expects to complete the replacement of toilets throughout the building by the end of FY 2013.

* In October 2010, a comprehensive energy and water conservation audit was conducted by Energy Engineering & Consulting Services, LLC (EECS). This audit provided a complete life cycle cost analysis on various energy projects utilizing building energy simulation modeling. The RRB and/or GSA are using the recommendations from the audit to guide planning of future projects to support the RRB's sustainability goals.

It should be noted that as previously mentioned, the majority of the William O. Lipinski Federal Building (comprised of 12 floors and a basement) is occupied by RRB with the exception of two restaurants and one car dealership on the first floor, and an office tenant (formerly the Department of Labor) on the 12th floor. Utilities consumed on the 12th floor

(electricity, natural gas, water and solid waste) are included in the RRB inventory data; however, as the 12th floor tenant vacated the building in December 2009, the decrease in consumption of electricity, natural gas, water and solid waste as reported by RRB in FY 2010 reflects this vacancy. The impact of the reduction in aforementioned utility use cannot be reliably quantified against the 2008 Greenhouse Gas (GHG) baseline inventory as this office space is not separately metered or measured. Based on square footage, the 12th floor represents approximately 8 percent of building use. If the 12th floor is leased again, annual utility consumption will increase and the RRB will need to find innovative ways to continue to achieve reduction targets.

RRB is unique in two key ways that impact the goals discussed in Section 2. First, RRB operates its headquarters building under delegation authority from GSA, as previously described. Second, RRB will not enter into any energy savings performance contract (ESPC) or other alternative investments unless authorized by GSA. The delegation of authority agreement with GSA makes ESPCs unavailable for procurement by RRB. Therefore alternative financing agreements are not included in the following discussion.

RRB does not address field office operations except under Goal 1, Scope 3 GHG emissions, which are impacted by field office employee travel. RRB will work in concert with GSA to implement aspects of GSA's SSPP that impact RRB field offices. Additionally, RRB will continue to modify business practices to increase efficiency and customer service while reducing GHG emissions from its field office operations. During this FY, we will continue to work with GSA in establishing energy-saving projects that will enhance the agency's mission and provide necessary energy reductions for the headquarters facility. For example, in FY 2010 GSA awarded \$2 million to completely renovate the first floor lobby of the RRB facility as described above.

Other important projects and investments planned for FY 2012 are highlighted in the following:

* The RRB intends to continue to reduce water consumption throughout the Lipinski building. We will continue a program to replace 3 gallon-per-flush toilets with 1.25 gallon-per-flush toilets and automatic flush valves, and to place aerators on faucets, as applicable. This program is expected to be completed in FY2013.

* RRB continues to work with the GSA to identify priority projects from the aforementioned 2010 audit to implement at the headquarters building in order to meet energy reduction goals.

Two potential future projects that will further RRB's energy reduction program are 1) to realign building cooling zones to properly cool the RRB on-site data center; and 2) to expand the newly installed DALI system to significantly improve lighting management within the building.

* At the time of this report preparation, RRB has begun participating in a recycling program to collect used, depleted and unwanted instruments. Through the waste recycling company, Terracycle, RRB has partnered with a major retailer, Staples ®, to contribute to the Writing Instrument Brigade, which creates new products using used writing utensils. RRB expects to continue its participation in this program through 2012.

These, and previous RRB programs addressing water and energy conservation at the RRB headquarters, not only help RRB meet its reduction goals, but also assist RRB in meeting future challenges posed by anticipated climate change in the Chicago area. As RRB climate change planning has shown, increased extremes in temperature and storminess, as well as longer periods of drought, are expected to impact the Chicago area. By reducing water and energy consumption, RRB will more likely be able to meet increased heating and cooling demands with existing systems, and reduce RRB's vulnerability to regional drought and resulting high water prices.

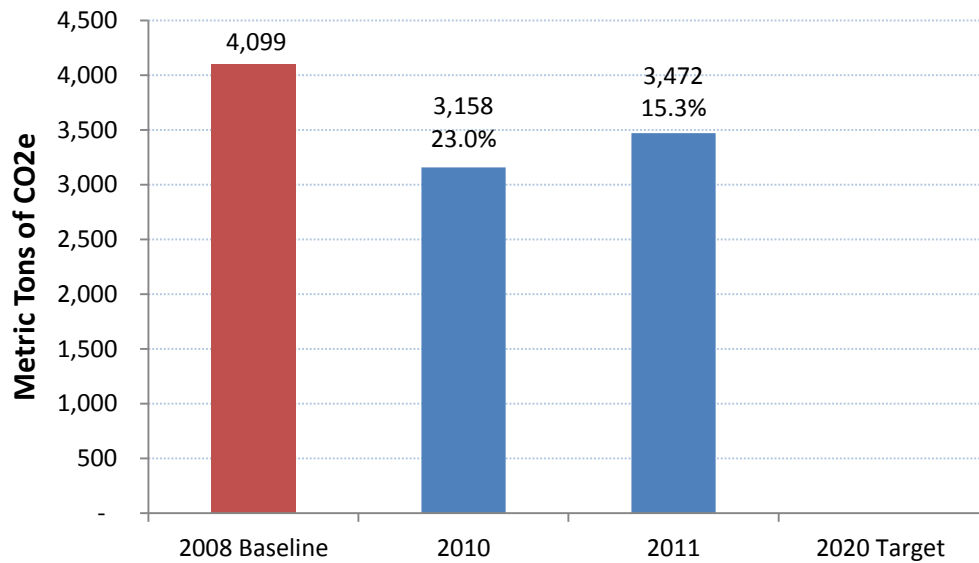
TABLE 1: SIZE AND SCOPE OF AGENCY OPERATIONS

Agency Size and Scope	FY 2011
Total Number of Employees as Reported in the President's Budget	903
Total Acres of Land Managed	1
Total Number of Facilities Owned	0
Total Number of Facilities Leased (GSA and Non-GSA lease)	56
Total Facility Gross Square Feet (GSF)	365,000
Operates in Number of Locations Throughout U.S.	56
Operates in Number of Locations Outside of U.S.	0
Total Number of Fleet Vehicles Owned	0
Total Number of Fleet Vehicles Leased	0

GOAL 1: GREENHOUSE GAS REDUCTION AND MAINTENANCE OF AGENCY COMPREHENSIVE GREENHOUSE GAS INVENTORY

Agency-Specific Performance Metrics for Scope 1 & 2 GHG Emissions Reduction:

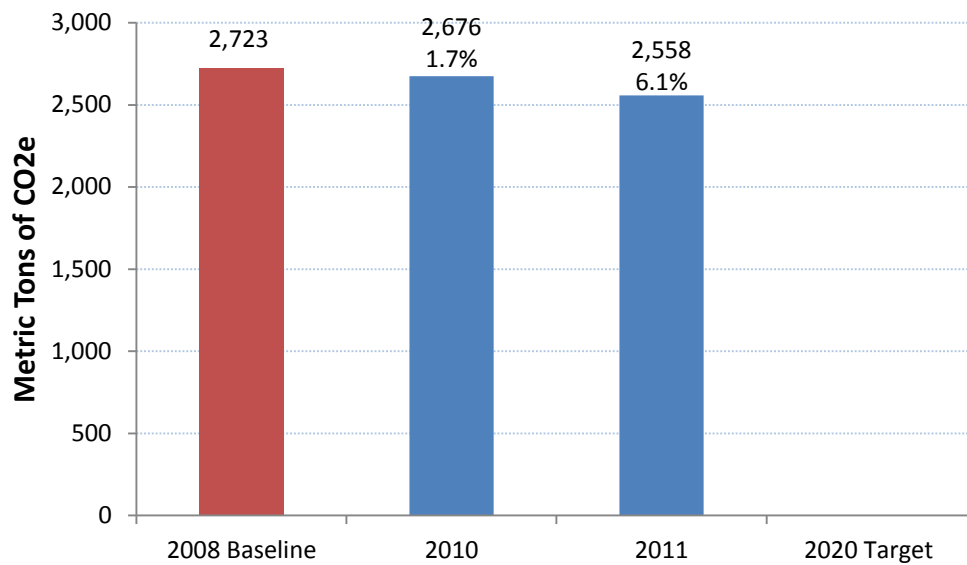
Progress toward Scope 1 & 2 Greenhouse Gas Goals



Note: E.O. 13514 requires each agency to establish a scope 1 & 2 GHG reduction target for FY2020. This agency has not set a target for FY2020. The red bar represents the agency's FY2008 baseline. The green bar represents the FY2020 target reduction. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2008 baseline.

Agency-Specific Performance Metrics for Scope 3 GHG Emissions Reduction:

Progress toward Scope 3 Greenhouse Gas Goals

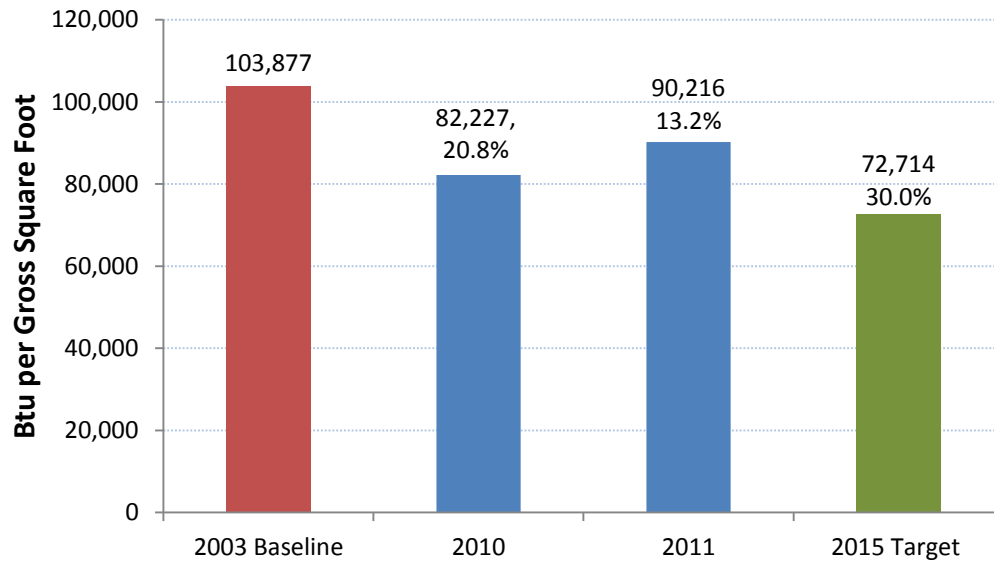


Note: E.O. 13514 requires each agency to establish a scope 3 GHG reduction target for FY2020. This agency has not set a target for FY2020. The red bar represents the agency's FY2008 baseline. The green bar represents the FY2020 target reduction. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2008 baseline.

GOAL 2: BUILDINGS

Agency-Specific Performance Metrics for Facility Energy Intensity Reduction:

Progress toward Facility Energy Intensity Reduction Goals

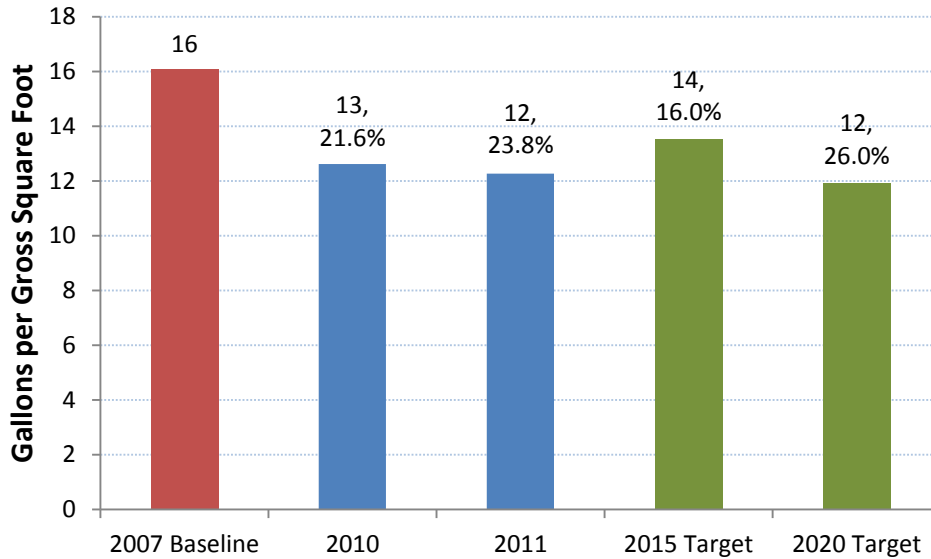


Note: EISA requires agencies to reduce energy intensity by 18% for FY2011, compared to an FY2003 baseline; a 30% reduction is required by FY2015. The red bar represents the agency's FY2003 baseline. The green bar represents the FY2015 target reduction. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2003 baseline.

GOAL 4: WATER USE EFFICIENCY AND MANAGEMENT

Agency-Specific Performance Metrics for Potable Water Intensity Reduction:

Progress toward Potable Water Intensity Reduction Goals

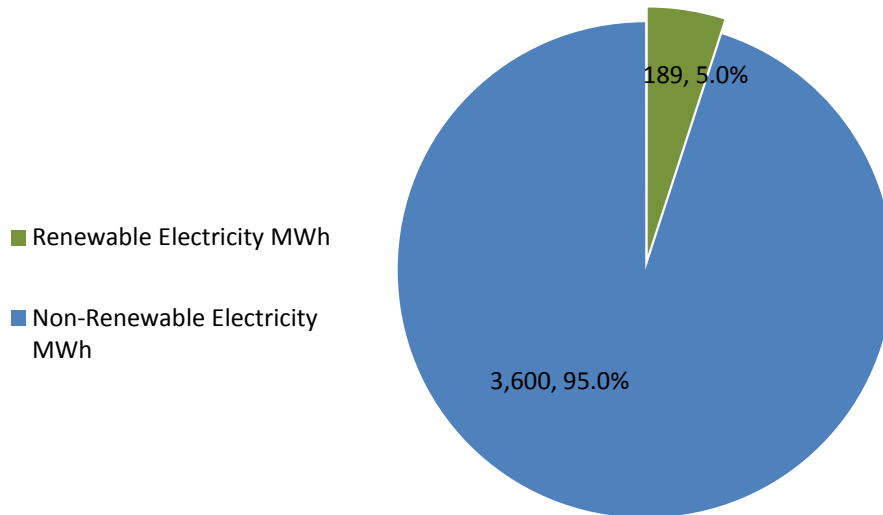


Note: E.O. 13514 requires agencies to reduce potable water intensity by 2% annually through FY2020, compared to an FY2007 baseline. Consequently, by FY2011 agencies are required to reduce potable water intensity by 8%, compared to an FY2007 baseline. A 16% reduction is required by FY 2015 and a 26% reduction is required by FY2020. The red bar represents the agency's FY2007 baseline. The green bars represent the FY2015 and FY2020 target reductions. The blue bars show actual status in relationship to the target. The percentage on each bar shows the reduction or increase from the FY2007

GOAL 2: BUILDINGS

Agency-Specific Performance Metrics for Renewable Energy:

RRB Use of Renewable Energy as a Percentage of Electricity Use



Note: EAct requires agencies to increase the use of renewable energy as a percentage of electricity use to 5% by FY2010-2012 and 7.5% by FY2013 and beyond.

APPENDIX 1: CLIMATE CHANGE ADAPTATION PLAN

Subject: Railroad Retirement Board Policy for Climate Change Adaptation

Purpose and Background:

This memorandum establishes the Railroad Retirement Board's (RRB) policy for climate change adaptation. This policy sets up RRB's vision and starts a process that will help its employees integrate climate change adaptation considerations into how the Agency deals with risk, vulnerability, and overall resiliency issues.

The RRB is an independent agency in the executive branch of the Federal Government, with the primary function of administering comprehensive retirement-survivor and unemployment-sickness benefit programs for the nation's railroad workers and their families under the Railroad Retirement and Railroad Unemployment Insurance Acts. RRB has a staff of approximately 900 employees, with over 250 of them located throughout the country across 53 field offices. Our headquarters is located at the William O. Lipinski Federal Building, in Chicago, Illinois. The headquarters building is the only facility over which the RRB has operational control.

Climate Change Adaptation Policy Statement:

RRB is committed to enhancing its resiliency to climate change and establishing policies that will ensure compliance with all environmental and energy statutes, regulations, and executive orders to meet and exceed required goals and objectives. RRB supports the climate change adaptation goals established by Executive Order 13514 *Federal Leadership in Environmental, Energy, and Economic Performance*. The RRB adopts the Interagency Climate Change Adaptation Task Force's guiding principles and framework for adaptation planning and is committed to working with other federal agencies, the scientific community, and local stakeholders in the Chicago region to conduct proactive adaptation planning of common interest to enhance the agency's resiliency to climate change.

The RRB recognizes that climate change poses additional challenges to implementing the agency's mission, programs, and operations. To meet these challenges, RRB will leverage innovative thinking, technology, new partnerships, and strong collaboration with federal agencies, the climate science community, and various local and regional stakeholders to conduct effective and holistic adaptation planning. Further, RRB will add climate change considerations to its long term planning and operations considerations to ensure that it continues to be customer-focused, quality-driven, and fiscally responsible while effectively adapting to a changing environment.

The agency's culture for continuous improvement and learning provides a strong platform from which to incorporate climate change adaptation considerations as part of the cross-cutting drivers that will influence the future effectiveness of the agency in meeting its commitments to its customers.

Climate Change Adaptation Actions:

RRB will do its part to support the nation's vision to enhance resiliency to climate change by mainstreaming climate change adaptation planning into its on-going mitigation efforts. RRB understands that in order for adaptation strategies and initiatives to be successful, they have to be aligned with and complement on-going mitigation efforts. To maximize joint benefits of mitigation efforts, RRB will work with its federal partners, including the regional General Services Administration (GSA) and Department of Energy (DOE) offices – Argonne National Laboratory, to expand vulnerability analysis and engineering assessments to incorporate climate change components. In addition, where feasible, RRB will strive to work with these partners to apply new tools that inform decision makers as to the climate change risks and vulnerability levels at the headquarters building and potential environmental health conditions that impact its stakeholders.

RRB will leverage knowledge related to likelihood, magnitude, and the agency's ability to adapt to climate change impacts as it considers adaptation options, and the timeline and costs of implementing those options. RRB will evaluate climate change adaptation strategies with an understanding of the agency's financial, capacity, and operational constraints and the uncertainty inherent in downscaled projections of future changes in climate characteristics. The agency will leverage the tools and resources developed and made available by other agencies to mainstream climate change considerations into its existing operations, policies, and programs. As part of its on-going risk assessment efforts, RRB will evaluate and prioritize adaptation options and consider adaptation requirements as needed to meet its other sustainability requirements of EO 13514.

To accomplish this, RRB's Senior Sustainability Officer (SSO), the Director of the Office of Administration with the support of the senior leadership team at the headquarters facility in Chicago, will lead the Agency's effort to consider climate stressors in the development of agency-wide decision making to effectively deliver on its program and operational plans. The SSO and his administrative staff will also work in partnership with other federal agencies and authorities in Chicago.

Keith Earley (Signed)

Director of Administration/Senior Sustainability Officer, RRB

Chicago, Illinois