

CIOP CHAPTER 1351.39

Departmental Information Technology Governance Policy

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Section 39.1 Purpose

39.1.1 The Department of Transportation hereafter referred to as *DOT* or the *Department*, Information Technology (IT) Governance Policy serves as the Department-wide authority pertaining to the governance structure for IT management investments and operations.

39.1.2 The Departmental IT Governance Policy implements the requirements specified for all Federal agencies in laws, regulations, and other mandatory guidance and standards, such as the Government Performance and Results Act of 1993, the Federal Acquisition Streamlining Act of 1994, the Paperwork Reduction Act of 1995, the IT Management and Reform Act of 1996 (Clinger-Cohen Act) the e-Government Act of 2002, the Federal Information Security Management Act (FISMA) of 2002, and the Government Performance and Results Modernization Act of 2010.

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Section 39.2 Background

- 39.2.1 DOT owns and operates a wide array of information technology systems that enable employees to fulfill the Department's mission of ensuring a fast, safe, efficient, accessible, and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future.
- 39.2.2 DOT must establish and maintain an IT management program that links mission needs, information, and IT in an effective and efficient manner. DOT is transitioning from managing IT investments by organization affiliation to managing by segment or function using portfolios. Portfolios are intended to balance cost and risk, measure performance and business value, provide continuous feedback on both new and ongoing investments, ensure full visibility and architectural alignment of investments, leverage shared services opportunities where applicable, and prioritize investments.
- 39.2.3 The Department's IT governance structure leverages the portfolio based approach to integrate Federal IT mandates and directives into a seamless management system, focused on providing transparency, accountability, and responsibility throughout the DOT IT management process. Departmental portfolio initiatives will be mindful of and work closely with components to ensure that mission objectives are not negatively impacted.
- 39.2.4 The IT governance consists of multiple groups, processes, schedules, roles, and responsibilities that, working together, produce the information, provide the forums, and define the responsibilities for sound IT investment decision making. The operating procedures supporting the governance model will be defined for each phase of the process through stakeholder engagement, discussed with impacted parties prior to implementation and codified for consistent implementation.

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Section 39.3 Scope and Applicability

- 39.3.1 This policy applies to all DOT Secretarial Offices, Operating Administrations and the Office of the Inspector General (OIG), hereafter referred to as DOT Components. Congress and OMB require that each executive agency actively manage its IT investments to provide assurances that technology expenditures are necessary and result in demonstrated improvements in both mission effectiveness and customer service.¹ This policy includes organizations conducting business for and on behalf of the Department through contractual

¹ All recommendations and requirements contained in this directive are applicable to all Components but only to the extent that such requirements and recommendations are consistent with the expressed language contained in 49 U.S.C 106, 40110, 40121

relationships. DOT officials shall apply this policy to all Federal employees, contractor personnel, interns and other non-governmental employees. All organizations collecting or maintaining information or using or operating information systems on behalf of the Department are also subject to the stipulations of this policy.

39.3.2 Information technology as defined by the Clinger-Cohen Act, sections 5002, 5141, and 5142, includes any equipment or interconnected system or subsystem of equipment used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For purposes of this definition, equipment is "used" by an agency whether the agency uses the equipment directly or it is used by a contractor under a contract with the agency that (1) requires the use of such equipment or (2) requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product. Information technology includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources. It does not include any equipment acquired by a Federal contractor incidental to a Federal contract.

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Section 39.4 Policy

39.4.1 IT investments shall be managed as portfolios in accordance with the e-Government Act of 2002, with an emphasis on minimizing duplication, achieving efficiencies, and maximizing performance.

39.4.2 All DOT investments must align with the Common Approach to Federal Enterprise Architecture (EA) established by OMB.²

39.4.3 In accordance to the Clinger-Cohen Act, all portfolios will be managed by performing the following core functions, which are the core EA and Capital Planning and Investment Control (CPIC) processes:

39.4.3.1 *Analysis.* Links portfolio objectives to Enterprise vision, mission, goals, objectives, and priorities; develops quantifiable outcome-based performance measures; identifies capability gaps, opportunities, and redundancies; identifies risks; and provides for continuous process improvement. Reviews and sets strategic IT investment priorities based on the Administrations strategic objectives, OMB directives and federal IT guidance, and the DOT mission and goals.

39.4.3.2 *Selection.* Identifies and selects the best mix of IT investments to strengthen and achieve capability goals and objectives for the portfolio and

² <http://www.cio.gov/documents/Common Approach to Federal EA.pdf>

demonstrates the impact of alternative IT investment strategies and funding levels.

39.4.3.3 *Control.* Ensures a portfolio is managed and monitored using established, quantifiable outcome-based performance measures. Portfolios are monitored and evaluated against portfolio performance measures to determine whether to recommend continuation, modification, or termination of individual investments within the portfolio.

39.4.3.4 *Evaluation.* Measures actual contributions of the portfolio against established outcome-based performance measures to determine improved capability and to support adjustments to the mix of portfolio investments as necessary.

39.4.4 Governance forums shall be leveraged or established to manage portfolios, sub portfolios, or capability areas at the DOT-wide, Segment Area, and OA levels.

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Section 39.5 Roles and Responsibilities

39.5.1 The **Departmental Chief Information Officer (DOT CIO)** shall:

39.5.1.1 Ensure balanced oversight and coordinated improvement in the efficient use of IT resources supporting organizational missions, with a focus on the overall benefit to the Department in meeting its public services responsibility and compliance with IT external mandates, OMB reporting, etc.

39.5.1.2 Participate in Departmental strategic and performance planning under the Government Performance and Results Act Modernization Act of 2010 (GPRAMA) to link the large IT investment portfolio with strategic direction of the Department and the budget.

39.5.1.3 Lead, coordinate, and support key IT initiatives within and across OAs to support the mission goals of the Department and improve management of the IT program through enterprise architecture, IT investment control, strategic management, consolidated common infrastructure, and web-based projects.

39.5.1.4 Develop and implement policies, guidance, procedures, standards and tools in consultation with stakeholders necessary to support effective and efficient implementation of the IT Governance policy.

39.5.2 The **Departmental Chief Financial Officer (CFO)** shall:

39.5.2.1 Integrate the IT governance policy and processes with the processes for making budget and financial management decisions at DOT.

- 39.5.2.2 Integrate IT management goals into the DOT Strategic Plan, in coordination with the Departmental CIO. Goals for IT shall:
- 39.5.2.2.1 Ensure the efficiency and effectiveness of agency's accounting, financial management, and internal control systems to improve the management of information technology. Ensure the delivery of services to the public through the effective use of information technology.
- 39.5.2.2.2 Assist the Departmental CIO and Component offices in the analysis and assessment of all DOT mission systems and, based on that analysis, provide leadership and support for revising DOT mission-related processes and administrative processes as appropriate. This is to be completed before making significant investments in information technology for use in support of mission performance.
- 39.5.2.3 Advise the Departmental and Component CIOs in establishing policies and procedures to ensure that:
- 39.5.2.3.1 The accounting, financial, asset management, and other DOT information systems are designed, developed, maintained, and used effectively to provide financial or program performance data for DOT financial statements.
- 39.5.2.3.2 Financial and related program performance data are provided on a reliable, consistent, and timely basis to executive agency financial management systems.
- 39.5.2.3.3 Financial statements support assessments and revisions of mission-related processes, administrative processes, and measurement of the performance of DOT investments in information systems.
- 39.5.3 The **Departmental Office of the Senior Procurement Executive (OSPE)** shall:
- 39.5.3.1 Coordinate with the Departmental CIO to ensure that IT acquisitions comply with EA standards and policies.
- 39.5.3.2 Integrate IT governance policy and processes with DOT acquisition management decisions. Promulgate clarifying guidance to ensure that IT acquisitions follow industry best practices including, but not limited to, the use of modular development and contracting practices.
- 39.5.3.3 Coordinate with the Departmental CIO to support the strategic sourcing of commodity IT, fully leveraging the buying power of DOT to ensure best value for the acquisition of IT-related hardware, software, and services.
- 39.5.3.4 Negotiate enterprise-wide purchasing agreements where appropriate.

39.5.3.5 When enterprise-wide purchasing agreements are in place, promulgate guidance and enforce DOT Component compliance with the requirement to leverage such agreements.

39.5.3.6 Assist the Departmental CIO in the analysis of all DOT mission systems and, based on the analysis, revise DOT mission-related processes and administrative processes as appropriate. This is to be completed before making significant investments in information technology for use in support of mission performance.

39.5.4 **Operating Administrations** shall:

39.5.4.1 Implement portfolio based management of IT investments in accordance with DOT policy and consistent with statute.

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Section 39.6 Dates

39.6.1 This policy is effective on the date signed.

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Section 39.7 Cancellations

39.7.1 This policy does not cancel any other DOT orders or notices.

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Section 39.8 Compliance

39.8.1 The DOT Components must comply with and support the implementation of a Departmental IT Governance process, to include compliance with Federal requirements and programmatic policies, standards, procedures, and information management controls. This policy applies to all DOT Components. This policy does not supersede any other applicable law, high-level agency directive, or existing labor management agreement in place as of the effective date of this policy.

39.8.2 Departmental officials must apply this policy to all IT systems or other technologies purchased, developed, or contracted for in support of DOT mission.

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Section 39.9 Waiver

39.9.1 Compliance with this policy is mandatory

39.9.2 DOT Component Heads may request that the DOT CIO grant a waiver of compliance based on a compelling business reason. The request must include: (1) justification, (2) what measures have been implemented to ensure that the principles of portfolio based management have been implemented, and (3) waiver period. The DOT CIO shall provide a written waiver or justification for denial.

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Section 39.10 Audit Procedures

39.10.1 The DOT OCIO shall develop and distribute implementation guidance.

39.10.2 The DOT OCIO shall develop and execute management oversight processes including, but not limited to, face-to-face accountability reviews of IT investment performance and in-person, evidence-based reviews of IT portfolios.

39.10.3 The DOT OCIO shall require Components to maintain appropriate records of governance activities including, but not limited to, meeting minutes, records of decision, etc.

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Section 39.11 Approval



Name

DOT Chief Information Officer

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Date

Appendix A – Legal Authorities and Guidance

Legislation

- Government Performance and Results Act of 1993 (GPRA), Pub. L. No. 103-62, 107 Stat. 285.
- Federal Acquisition Streamlining Act of 1994 (FASA), Pub. L. No. 103-355. 108 Stat. 3346-47.
- Paperwork Reduction Act of 1995, 44 U.S.C. § 3501 *et seq*, as amended.
- Clinger-Cohen Act of 1996, 40 U.S.C § 11101 *et seq*, as amended.
- E-Government Act of 2002, Pub. L. No. 107-347, 116 Stat. 2899-2970.
- Federal Information Security Management Act of 2002, §§ 1001-1006, Pub. L. No. 107-296, 116 Stat. 2135-2321.

National Policy, Directives and Memorandum

- OMB Circular No. A-130: Management of Federal Information Resources (Nov. 28, 2000).
- NIST Special Publication 800-65: Recommendations for Integrating Information Security into the Capital Planning and Investment Control Process (CPIC) (Ver.1) (Jan 2005).
- Office of Management and Budget, The Common Approach to Federal Enterprise Architecture (Apr. 30, 2012).
- Office of Management and Budget Circular A-11: Preparation and Submission of Budget Estimates (August 2012).

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Appendix B – Definition of Terms

Capital Planning and Investment Control (CPIC) is a process that ensures that a portfolio of Information Technology (IT) projects adequately addresses investment prioritization and risk management techniques in order to achieve expected benefits in accordance with cost, schedule, technical, and performance baselines.

e-Government Act of 2002 aims to enhance the management and promotion of electronic Government services and processes by establishing a Federal Chief Information Officer within the Office of Management and Budget, and by establishing a broad framework of measures that require using Internet-based information technology to enhance citizen access to Government information and services, and for other purposes.

Enterprise Architecture (EA) is a strategic information asset base, which defines the mission; the information necessary to perform the mission, the technologies necessary to perform the mission, and the transitional processes for implementing new technologies in response to changing mission needs; and includes a baseline architecture, a target architecture, and a sequencing plan. (Source: Common Approach to Federal Enterprise Architecture)

Federal Acquisition Streamlining Act of 1994 (FASA) requires agencies to define the cost, schedule and performance goals for major acquisitions and to monitor and report annually on the degree to which those goals are being met.

Federal Information Security Management Act of 2002 (FISMA) requires agencies to integrate IT security into their capital planning and enterprise architecture processes at the agency, conduct annual IT security reviews of all programs and systems, and report the results of those reviews to the Office of Management and Budget (OMB). (Source: NIST SP 800-65)

Governance is a group of policies, decision-making procedures, and management processes that work together to enable the effective planning and oversight of activities and resources. (Source: Common Approach to Federal Enterprise Architecture)

Government Performance and Results Act of 1993 (GPRA) requires agencies to prepare strategic plans and performance plans for each program displayed in the annual budget; performance plans must establish (a) performance goals that are objective, quantifiable and measureable, (b) performance indicators that measure outputs, service levels and outcomes.

Government Performance and Results Modernization Act of 2010 (GPRAMA) adds new requirements for agency-level goal-setting, implementation reviews, and plans and reports. The updated Act includes changes to both contents and timing requirements of the strategic plan, performance plan, and performance update (formerly program performance report).

IT Management and Reform Act of 1996 (Clinger-Cohen Act of 1996) requires agencies to undertake capital planning and investment control by establishing a systematic process for maximizing the value, and assessing and managing the risks of IT acquisitions.

Mission Systems represent a unique service area defining the mission or purpose of the agency, such as safety. These systems directly contribute to the achievement of one or more DOT performance outcomes and/or generate data that are required to calculate a DOT performance outcome, as published in the DOT Annual Performance Report.

Paperwork Reduction Act of 1995 (PRA)'s purpose remains to ensure that federal agencies do not overburden the public with federally sponsored data collections. The PRA establishes the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget (OMB) and assigns it the authority, as delegated by the Director, OMB, to administer all functions of the PRA.

Portfolios, at DOT, will be integrated at DOT-wide, Segment, and Operating Administration (OA) levels. The DOT-wide portfolio shall be divided into Segment Area portfolios, which are defined as Business Systems, Business Support Systems, and Infrastructure. Segment Area and OA portfolios may be divided into sub portfolios or capability areas that represent common collections of related, or highly dependent, information capabilities and services.

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