U.S. Department of Transportation

WORKFORCE PLAN

2003-2008

FY 2006 UPDATE

March 2006

The people of DOT are … dedicated to improving transportation in the U.S. and around the world by making it safer, simpler and smarter.

- **Safer** - because we will place a greater emphasis than ever before on saving lives and reducing accidents.

- **Simpler** - because we will consolidate and streamline our programs.

- And **Smarter** - because we will focus on efficiency, achieving results and increasing accountability.

– DOT Strategic Plan (2003-2008)

EXECUTIVE SUMMARY

The U.S. Department of Transportation (DOT) is pleased to present the **2006 Plan Update** to the original Workforce Plan laid out by DOT in 2004, and updated in 2005.

The **2006 Plan Update** presents a snapshot of the DOT workforce at the end of FY 2005, with specific attention paid to demographics and employee strength in mission critical occupations (MCOs). The **Update** provides a renewed picture of the "supply and demand" forces in play in the labor market and within DOT, and their potential impact on the DOT workforce in FY 2006/07.

The **Update** details the critical elements of Workforce Planning as outlined in the Human Capital Assessment and Accountability Framework (HCAAF) of the President's Management Agenda. Most importantly, the **Update** fulfills the requirement of the President's Management Agenda in describing how the Office of the Secretary of Transportation (OST) and the Operating Administrations are working to shape an employee force that will continue to have the competencies required to fulfill DOT's mission in a changing environment.

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CURRENT WORKFORCE: FY 2005

At the end of FY 2005, DOT had **52,684** employees[1], with the majority concentrated in the Federal Aviation Administration (FAA). The workforce is 6.6% smaller than at the end of FY 04, due to strategic restructuring, downsizing, and the beginning of the retirement wave anticipated across the Federal Government.

The <u>average employee age</u> remained stable at **46.7**. <u>Average grade</u> remained essentially the same at **12.7** although <u>average salary</u> rose about 4% to **$96,000**.[2] The <u>percentage of supervisors</u> appears higher, at **15.6%.**[3]

Representation of all <u>women</u> <u>remained stable</u> at **26.7%**, lower than the representation of 45% in the Federal civilian workforce overall. Representation of <u>all minorities remained stable</u> at **21.7%**, lower than the representation of 31.4% in the Federal civilian workforce overall. Representation of African-Americans at DOT remained stable at 11%, compared to their 16.1% representation in the total Federal workforce. Representation of Asian/Pacific Islanders decreased to 3.3% of DOT, compared to 5.1% representation in the Federal workforce. Representation of American Indians/Alaskan Natives decreased slightly to 1.5% of DOT, compared to their 2.2% representation in the total Federal workforce. Representation of <u>Hispanics increased</u> **3.8**% to 5.9%, compared to 7.3% in the Federal workforce. Representation of <u>people with disabilities increased</u> remained stable (5.1% to 5.2%). Representation of <u>veterans</u>, is robust at **28.3 %** of the total DOT workforce. In addition, **22.1 %** of all new hires in 2005 were veterans.

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[1] *Full time and part-time employees on permanent appointments. Excludes temporary, intermittent and contract employees.*

[2] *This includes the sum of adjusted basic pay plus any administratively uncontrollable overtime (AUO) pay, availability pay, retention allowance, or supervisory differential after taking into account all pay caps that may be applicable . (WASS User Manual, Appendix A)*

[3] *This may represent a difference in data collection methodology between the 2004 Report and 2005 update.*

TURNOVER

Current rates of hiring are not high enough to effect a 1:1 replacement of employees at the current rate of departure. Separations from DOT (all reasons) outpaced new hires by a ratio of almost 3 to 1. Fully 75% of these separations were due to retirement, a trend that is expected to continue. Analysis of the ages and years of service of current DOT employees reveals that an additional **21%** of current employees are *eligible* to retire during 2006 alone.

WORKFORCE PROJECTIONS

Based on recent gain and loss patterns for each mode, projections for all of DOT through 2009 indicate a 13% decline in the size of the employee population over the next four years. Although growth is projected for some of the smaller Operating Administrations (OAs), in the model as a whole the overall workforce shrinks, and average experience levels generally decline.

Challenge: In 2003, Secretary Mineta challenged the Department to increase its hiring at entry levels, to expand outreach to women and minorities with particular emphasis on the Hispanic population – and to more actively recruit people with disabilities (See Appendix). In 2005, the Government Accountability Office (GAO) noted that DOT's workforce is older—and includes a larger proportion of white males— than the Federal workforce as a whole – a situation that required attention. GAO also suggested that DOT increase its efforts to hire veterans and people with disabilities[4].

Response: In response, the FY 2005 plan outlined specific initiatives, including:

- Take a "pulse check" on our diversity and succession planning efforts to determine where progress has been made.

- Review our "mission-critical" occupations to determine specific areas of risk that might warrant a heightened level of attention.

- Assess cross-cutting skill gaps across the OAs to identify areas where department-level resources or resources at the OA level can be best leveraged to close these gaps.

- Continue to focus on succession planning.

Results: By definition, the overall makeup of a workforce changes slowly. The size of the DOT workforce has continued to contract and 2005 was not characterized by the high volume hiring that would be necessary to effect immediate wholesale change. Even with hiring constraints, the Department made progress on its Workforce Plan goals. **At the end of FY 2005, DOT can report measurable, quantifiable progress in many areas of challenge.**

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[4] *As cited in the DOT 2005 Workforce Plan*

Increase hiring at entry levels:

- Note that for some OAs "entry level" is at the GS 11-12-13 or equivalent positions.

DOT piloted the new Transportation Career Residency Program and successfully hired six entry-level individuals with Master's Degrees into key positions.

- DOT continues to increase hires of people in early career stages and, therefore, at younger ages (30 and under). However, DOT also continues to hire individuals from the transportation industry into "second careers" at DOT, increasing the cohort of employees ages 40-54.

Progress in outreach to women and minorities:

- DOT ratcheted up participation in outreach, career fairs, and relationship building with campuses.

- In its Annual Report on Hispanic Employment in the Federal Government (December, 2005), the Office of Personnel Management (OPM) cited DOT for "effective practices" in outreach, recruitment, and accountability.

DOT actively participated in national career fairs sponsored by the Society of Hispanic Professional Engineers and the National Society of Black Engineers.

- The Diversity Advisory Council hosted an informational forum which provided the Department's senior leaders with specific tips for conducting recruitment and outreach.

- DOT is attracting a diverse applicant pool as recorded by the Quickhire[5] system.

Increase representation of people with targeted disabilities:

- DOT delivered awareness sessions to 100 supervisors on hiring and recruitment flexibilities related to hiring people with disabilities.

- The Departmental Office of Civil Rights has set a first-ever target to make 3% of all new hires in 2006 people with targeted disabilities.

Progress in managing mission critical occupations:

- DOT has completed competency assessment of employees in the Leadership and information technology (IT) occupations. Strategies to close competency gaps in IT are in progress. Strategies for closing critical competency gaps for the Leadership group are being implemented.

- A study of the competencies for four key Engineering job groups across DOT is under way.

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[5] Quickhire is the online recruiting system in use in all OAs except FAA, which uses the online system SWIFT (Selections Within Faster Times)

Progress in cross-cutting skills:

- DOT is actively managing its skill mix to emphasize cross-cutting skills including conflict management, project management, performance coaching, communication and other competencies that successful mission delivery requires across a variety of MCOs.

- OAs are sharing resources to address key skills including conflict management; and OST has contracted for supervisory training in performance management

Pulse check on diversity:

- The Diversity Council sponsors seminars to increase managers' awareness, and the Departmental Office of Civil Rights meets quarterly with OA Administrators on diversity issues.

- Representation by ethnic/national origin group remains stable. This does not reflect progress for groups with low participation rates.

- The Federal Human Capital Survey (FHCS) shows overall positive ratings of items concerning "managers support for diversity."

Manage Succession Planning:

- At the beginning of the Fiscal Year, a Department-wide succession planning model was already in place.

- During FY 2005, the OAs continued to develop high potential employees for MCOs.

- The Department Succession Planning model meets all the OPM criteria for stages 1-4 of a succession planning system.

In addition to DOT-wide results, some achievements and best practices specific to individual OAs have been highlighted in this *Update.*

Going Forward 2006: Going into FY 2006, DOT faces some challenges shared by other Federal Agencies, and other challenges unique to DOT and its highly-skilled professional and technical workforce. The 2004 *Update* cited the following challenges for DOT:

- The rising importance of technology in how the Department gets its work done and how it serves the public, its partners, and its stakeholders.

- The aging of the workforce, which leads to knowledge management and succession planning challenges.

- The importance of creating a DOT that reflects and values the diversity present in the federal and national civilian workforces.

- The changing nature of the roles in DOT from "doer" or "practitioner" to that of "overseer" or "program manager."

- The evolving nature of work that is often more complex and multi-faceted than in the past, and relies more heavily on advanced technical, analytical, and communication skills than ever before.

In addition to these continuing challenges, the new planning cycle also requires attention to:

- Diminishing Sources of Funding.

- Cost Effective Management Decisions: As the Agency invests in technologies and systems to modernize the National Airspace System (NAS), achieving cost-effective labor contracts, for example at the FAA, is a goal.

- Increasing emphasis on "inter-modal" cooperation to achieve results including, for example, renewed emphasis on reducing congestion in the nation's transportation systems.

- The challenge to all agencies to engage candidates in the ideal of public service and to position the Federal Government as a workplace of choice for multiple "market segments" of the American civilian labor force.

The **2005 Update** tracks the overarching operating goals that the Department has set in FY 2006 to meet these challenges. In addition, activities specific to individual OAs have been addressed in depth in each OAs workforce plan (Appendix).

DOT is utilizing strategies to shift from human resources "maintenance" activities (such as filling vacancies and orienting new employees) to a more proactive workforce replenishment effort through which builds competencies, creates career pipelines, provides training to retool the workforce when needed, and creates and maintains a diverse workforce.

Against this background, several recommendations are included for 2006.

Streamline the Human Capital Committee Structure to deliver a better "big picture" to OST and more value to the OAs.

Focus on Metrics: Develop a "dashboard" of a few, key human capital metrics to provide a uniform focus on results; and to capture the aggregate impact of individual activities.

Pursue Shared Goals: Set a few shared Department-wide goals for FY 2006, for example:

1. Develop a fact-based method to segment the employee "market" of both current and potential employees.

2. Use the data to create a variety of workplace choices that will appeal to potential employees.

3. Continue to focus on competencies.

4. Concentrate on retention.

Senior management's continued reinforcement of the importance of human capital management imperatives, tied to mission, will help managers focus on the impact of their daily decisions about managing the Agency's human capital.

TABLE OF CONTENTS

APPENDICIES TABLE OF CONTENTS

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CHARTS AND DIAGRAMS

INTRODUCTION

CHAPTER ONE: CURRENT WORKFORCE

CHAPTER TWO: MISSION CRITICAL OCCUPATIONS

CHAPTER THREE: TURNOVER AND PROJECTED WORKFORCE

CHAPTER FOUR: STRATEGIC INITIATIVES: RESULTS DURING FY 2005

CHAPTER FIVE: TALENT MANAGEMENT STRATEGIES

INTRODUCTION

CONTENTS OF THE 2006 *WORKFORCE PLAN UPDATE*

As one of the five President's Management Agenda (PMA) initiatives, the *Strategic Management of Human Capital* enables the Department of Transportation (DOT) to effectively attract, hire, develop, and deploy people in an often rapidly changing environment. By integrating its human capital efforts with those of other PMA initiatives—smart competitive sourcing, improved financial performance, better budget and performance integration, and expanded electronic government—the Department is maximizing its use of resources to achieve its goals. The Workforce Plan serves as a mechanism to ensure DOT is maintaining and growing a diverse workforce that achieves results for the American people.

The **2006 Plan Update** focuses on the following information for DOT as a whole:

- The size and deployment of the workforce across the organization.

- Statistics and forecasts for mission-critical occupations, including the status of leadership, information technology (IT), human resources (HR), and engineering competency assessments.

- Succession planning.

- Age distribution[6] of the workforce and the impact of anticipated "Baby Boom" retirements on workforce readiness.

- Employment status of veterans.

- Recruitment efforts and their relationship to the available pools of qualified talent in the U.S. civilian workforce.

In addition, the **Update** adds a new perspective with additional information and analysis on:

- Diversity planning[7], including specific data on each of the demographic groups previously aggregated as "minorities"; data on the positions and distribution of women; and data on people with targeted disabilities.

- Comprehensive turnover analysis, with detail on categories of hiring and separations and an analysis of the impact of retirement compared to other separations.

- An analysis on the overall age of the DOT workforce.

- Analysis of representation of veterans.

- Separation of "trades and crafts" positions for an accurate reflection of wage grades.

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[6] *As cited in the 2005 Workforce Plan, GAO has identified the aging of the DOT workforce as an area for attention*

[7] *GAO has identified the lack of racial and ethnic diversity relative to the rest of the Federal workforce, as areas for specific attention.*

- Crosswalk between the Workforce Plan *Update* and the Office of Personnel Management (OPM) Human Capital Assessment and Accountability Framework (HCAAF) "critical elements" for workforce planning.

The **2006 Plan Update** also reviews the status of the operating plans within the Talent Management system of the HCAAF that most directly impact workforce supply and demand: Staffing, Development, and Retention, in addition to DOT-wide trends. The *Plan* highlights issues specific to individual Operating Administrations (OAs).

WORKFORCE PLANNING

The **Strategic Management of Human Capital** is often described as some variation of "*Insuring the organization has the Right people, with the Right skills, in the Right jobs, and the Right place, at the Right time, for the Right Reason, to advance the mission of the Organization.*"

To achieve this, in addition to an overall **Strategic Plan**, the organization needs an aligned **Human Capital Plan** to set the strategic and operating priorities of human capital management activity over the long term. Both the Organization Strategy and the Human Capital Strategic Plan may remain relatively constant over at least a five-year horizon. However, the forces that impact the availability and readiness of the "right people" with the "right skills" constantly change.

The **Workforce Plan** is an organization's tool for monitoring the "supply and demand" vectors shaping its current and future workforce. The Plan must be updated regularly to adjust for changing internal and external factors that may influence the number and abilities of the people who join, stay with, or leave an organization.

Figure I-1. Role of Workforce Plan in the Strategic Management of Human Capital
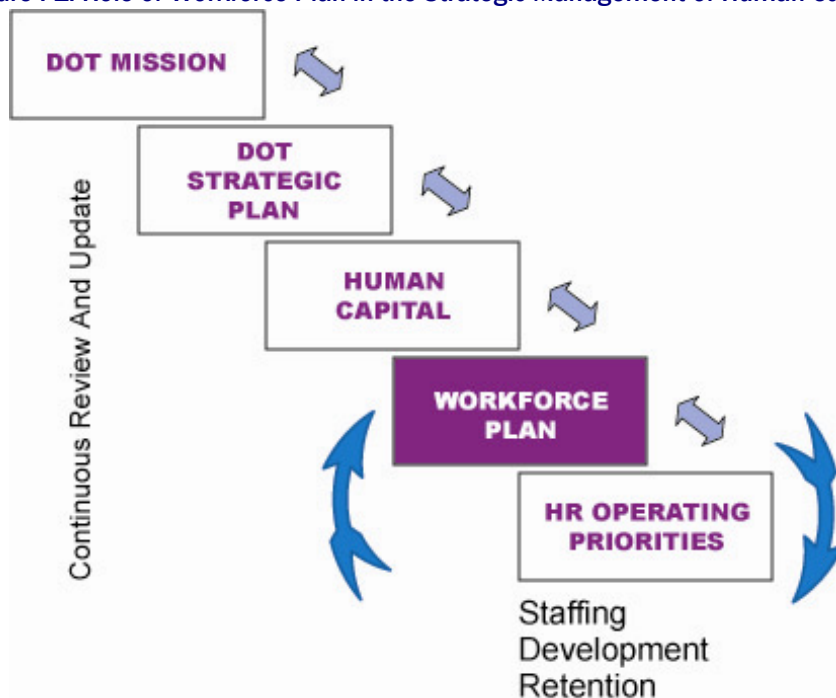
The **2006 Plan Update** has been constructed with specific attention to the definition of Workforce Planning in the HCAAF of the President's Management Agenda:

The organization identifies the human capital required to meet organizational goals, conducts analyses to identify competency gaps, develops strategies to address human capital needs and close competency gaps, and ensures the organization is appropriately structured.(HCAAF Practitioner's Guide, 2005) **http://www.opm.gov/hcaaf_resource_center/3-4.asp**

STRATEGIC ALIGNMENT OF THE WORKFORCE PLAN

The table below demonstrates the direct "line of sight" from DOT's Mission to its Strategic Objectives; and from there to the Strategic Human Capital Plan and the Workforce Plan to support the strategy.

"DOT employees knew and understood how their positions related to the Department's mission and goals"

-OPM Audit of DOT HR Practices, 2005

DOT Mission	
Why the Department exists	DOT's core mission emphasizes the national interest in safe and efficient transportation. DOT's mission, as stated in Section 101 of Title 49, United States Code, is as follows: *The national objectives of general welfare, economic growth and stability, and the security of the United States require the development of transportation policies and programs that contribute to providing fast, safe, efficient, and convenient transportation at the lowest cost consistent with those and other national objectives, including the efficient use and conservation of the resources of the United States*
DOT Strategy	
How the Department carries out its mission	**"Now, our challenge is to become architects of the future blending these separate constituencies into a single, fully coordinated system – one that connects and integrates the individual modes in a manner that is at once safe, economically efficient, equitable, and environmentally sound.** The American people require the safest and the most efficient transportation system we can provide… in light of the challenges inherent in a global context where expectations for the movement of people and goods are propelled by information technology. Americans will require even safer and more efficient domestic and international transportation to support their daily lives, to underpin the economy and to connect the United States to the rest of the world. " (*DOT Strategic Plan 2005-2008*

Human Capital Strategy

How the organization will manage its human capital systems to carry out the Department's Strategy	**"To strategically utilize human capital in full support of DOT's goals and mission, while empowering individual workers to utilize their full potential."** … Ensure that human capital executives are at the table as future strategic plan updates are written. DOT will institutionalize the links we have already forged, continue the participation and oversight of Department leaders, broaden understanding of and participation in human capital efforts at all levels, improve the data that monitor and guide our progress… and ensure that accountability mechanisms are utilized as intended. (Revised HC Plan, 2003- 2008)

Workforce Plan

How the Department will anticipate the supply and demand of the qualified workforce it needs for the success of the Department's Strategy	Perform annual, full-scope workforce analysis for the Department, and continue automated support for interim targeted analysis. DOT will ensure that the results of its analyses are broadly publicized and easily accessed so they can form the basis of human capital program revisions and individual human capital decision. DOT will continue to monitor and facilitate workforce and restructuring efforts, and publicize the workforce flexibilities that support them. DOT will continue its investment in automated systems to support recruitment, training, benefits counseling, and other human capital activities; and will educate leaders and HR staff about competitive sourcing as a strategic tool.

Mission Critical Occupations (MCOs)

Occupations agencies consider core to carrying out their missions. Such occupations usually reflect the primary mission of the organization without which mission-critical work cannot be completed	The management competencies are specifically aligned with Department objectives: "The management competencies used in this assessment were developed and tested with management focus groups to ensure their relevance to DOT's mission. These leadership competencies support DOT's Organizational Excellence goals, thus supporting the overall mission." (DOT Leadership Assessment Report Dec.2005). MCO competencies, currently under development for the Engineering job family, will be designed to align with the Department's Strategic Objectives: Safety, Mobility, Global Connectivity, Environmental Stewardship, Security, and Organizational Excellence.

KEY ELEMENTS OF A WORKFORCE PLANNING SYSTEM

*The HCAAF Practitioner's Guide (*US Office of Personnel Management, September 2005) outlines the key elements necessary for a workforce plan as required in the PMA. The DOT workforce plan, and this **Update**, covers all key elements as summarized below.

THE DEPARTMENT'S WORKFORCE PLANNING SYSTEM INCLUDES A WORKFORCE ANALYSIS PROCESS THAT:
Identifies mission-critical occupations and competencies essential to achieving strategic goals
☑ DOT has identified 10 job families as mission critical
☑ DOT has identified a group of four mission-critical engineering positions for the entire Department; a competency development and assessment plan have been funded and are underway
☑ All OAs have identified Department-specific mission-critical positions
☑ DOT is also participating in competency analysis of government-wide mission critical job families (i.e., Leaders, IT professionals, Human Capital professionals)
☑ Assessments of Leaders and IT workforce completed FY 2005
☑ Human Capital Competency Analysis underway
☑ Attrition patterns for mission-critical positions have been tracked, and issues flagged
☑ Each OA provides the Office of Human Resource Management (OHRM)/Office of the Secretary of Transportation (OST) with quarterly updates on the size and projected requirements of its Mission Critical Occupations
Uses workforce planning reports and studies in conjunction with the best practice benchmarks to determine the most effective work levels, workloads, and resources for efficient functioning
Bases decisions related to restructuring, redeployment, and reorganization on current empirical and workforce analysis
Conducts risk assessments to minimize adverse impacts on workforce due to restructuring
Documents and assesses key supporting functions of all business areas
☑ VERA/VSIPs are based on documented evaluation of effective structures and required ratios of supervisors and managers to employees based on the nature and geographic location of work
☑ Competitive sourcing as a workplace tool is designed in a joint effort between the (Competitive Sourcing) Procurement and Human Capital functions
Regularly evaluates customer/citizen needs and incorporates these needs into workforce plans, organizational goals, and functions
Forecasts future business changes in the work of the Department and how the changes will affect the workforce
☑ Human Resource Council, composed of executives of each OA, regularly meet to jointly manage the human capital response to changing business conditions and strategic challenges to the Department
Regularly tracks established performance measures, workforce trends, and technological advances to ensure updated models for meeting citizen and organization needs
☑ DOT has invested in membership in the Corporate Leadership Council, which provides current data and benchmarks for performance measures and workforce trends and examples of best-in-class approaches from the public and private sectors

THE DEPARTMENT'S WORKFORCE ANALYSIS PROCESS IS BASED ON SOURCES OF INFORMATION SUCH AS:

Current workforce demographic and competitive sourcing studies

Descriptive and documented plans and processes for hiring, recruiting, employment and retention efforts

Past assessments and workforce data

Information about anticipated changes related to e-Government and competitive sourcing, goals, and objectives

- ☑ Workforce plan uses current Bureau of Labor Statistics and Office of Personnel Management data on U.S. civilian workforce
- ☑ OHRM Manager of PMA regularly works with DOT Competitive Sourcing department
- ☑ Each OA has formal plans in place and provides quarterly updates on vacancy forecasts
- ☑ OST coordinates OA efforts through Program Manager for recruiting: office maintains data on candidate pools, outreach efforts, applicant pools (including data management through Quickhire)

THE DEPARTMENT'S WORKFORCE PLANNING SYSTEM INCLUDES AN ORGANIZATIONAL STRUCTURING PROCESS THAT:

Utilizes functional analysis to determine appropriate organizational and physical structure

Clearly organizes the Department staffing plan by workflow, organizational initiative, and functional area

Anticipates change in citizen needs by continuously monitoring the evolution of needs, trends, and events affecting workforce planning

Avoids excess organizational layers

Reduces redundant operations

Analyzes internal workforce statistics , data and trends to make the most efficient choices for workforce deployment

- ☑ The DOT-wide Human Capital Council, composed of workforce planning specialists from every OA, report quarterly on full-time equivalents (FTEs), anticipated changes, and anticipated structure needs and changes

THE DEPARTMENT'S ORGANIZATIONAL STRUCTURING PROCESS DEMONSTRATES THAT IT:
Includes statistics regarding number of supervisors, their series and grade/pay band, geographic location, and ratio of supervisors to employees
Obtains the mix of supervisory and non-supervisory positions to best meet customer needs
Documents the need for redirecting supervisory positions and the planned program design and assessment for the implemented changes
Addresses impediments to restructuring by analyzing solutions found within the current environment
Uses a documented change management strategy
Careful use of VERA/VSIP, monitoring of supervisory ratios, and a change management strategy that includes involvement and communication strategies at the Assistant Administrator level, demonstrate increasing use of statistics, metrics, and evaluation of results
The Department facilitates change by rolling out each new initiative with a consistent communication and sponsorship using DOT-wide councils.

METHODOLOGY AND ASSUMPTIONS

Data for the *2006 Plan Update* were gathered from the following sources, under the direction of the Office of Human Resource Management (OHRM) for the Office of the Secretary of Transportation (OST).

Unless otherwise noted, the collection and analyses of DOT data and the development of forecasts for future trends have been made utilizing the following assumptions:

- The source of all data was the Civilian Personnel Data File (CPDF) as of month end September 2005 (ME Sep 05).

- Data from the FY 2004 DOT Workforce Plan were used as the basis for developing historical trend analyses.

- The eHRI tools, Workforce Analysis Support System (WASS) and Civilian Forecasting System (CIVFORS), were used to draw data and forecast trends from the CPDF data source.

- The FY 2005 employee turnover was analyzed using specific, identifiable "nature of action" codes. However, due to requirements of the CIVFORS tool, the forecast for future turnover included unidentified personnel actions in the calculation basis.

- Only permanent employees on full-time or part-time work schedules were included in counts.

- Unless otherwise noted, analyses and forecasts were not broken out by OA, but were based on the entire DOT workforce.

- Senior Executive Service (SES) members were included in counts and data analyses, unless specifically excluded.

- People with targeted disabilities have not been shown separately from people with (all) disabilities in workforce projections, as the numbers are too small to be usable in statistical calculations.

- Work force strength is based on counts of those actually on-board, not on authorized full-time equivalent (FTE) allocations.

- Where percentages are shown, numbers may not add due to rounding.

- Population breakouts by demographic category were developed using the WASS tool. During FY 2006, the newly-purchased Visual Powerfiles for EEO (VPEEO) system will be adopted in all OAs, enabling a more detailed and robust analysis in subsequent Workforce Plan Updates.

- Forecasts were based on two assumptions: (1) current budget and FTE levels would be maintained into the future; and (2) core competencies would remain the same as they are today. Core competencies may be added or adjusted in subsequent plan years.

- The OPM website, Federal Employment Statistics (www.opm.gov/feddata), is the source for comparative government-wide numbers and statistics. The most recent data available are for 2004.

PLANNING ENVIRONMENT FOR FY 2006

Many contingencies will impact workforce and talent management in FY 2006. Some issues are Department-wide; others are more urgent in specific OAs.

- **Depleted Funding Streams**: Across the Federal Government, non-Department of Defense (DOD) Agencies experienced funding constraints during FY 2005. For DOT, sources of funding include funding from Congress and also significant income from Trust Funds and other sources, levels of which are influenced by volume of transportation, commercial travel, oil prices, and many additional market forces. The OAs anticipate additional challenges in FY 2006, including, for example:

  o Less funding from trusts -- for example, the Federal Aviation Administration (FAA) is exploring alternative financing options due to declining funds in the Aviation Trust

  o VERA/VSIP induced attritions and associated costs

  o Zero-based position allocation – Maritime Administration (MARAD)

  o Hiring Freeze (MARAD)

- **Workforce Attrition:** The DOT workforce continues to age in line with Federal Government workforce, and 21% [8] of DOT employees will be eligible to retire in FY 2006. Although there is a lag between retirement eligibility and actual retirements, retirements will occur. In Washington, DC, OAs affected by the move to a new headquarters building estimate additional 5–10% attrition due to the move in FY 2006. Attrition will impact, for example:

  o Leadership Attrition

  o Knowledge transfer

  o Additional rethinking and restructuring of work responsibilities and a shifting emphasis to entry-level hiring

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[8] *See Figure 1-6*

- **Continuing shift from "doing" to "managing":** DOT will deploy additional contract help as a strategy to respond to reduced budgets or FTEs, and to insure the latest technology is available as needed. This suggests an increased need for Project Managers and Contracting officials, and increased emphasis on project management and contract management and oversight competencies in the current workforce. Employees with these skill sets may be redeployed to meet these needs.

- **Federal Government as a desirable workplace:** DOT will be challenged to promote the ideals of public service and emphasize its appeal as an "employer of choice" to a changing workforce pool.

- **Diversifying workforce**. DOT continues its efforts to reflect the increased diversity in U.S. civilian labor force and to expand its recruiting outreach to all sources of talent to broaden its applicant pool. This has implications not only for the sources and methods of recruiting but also for successful orientation of new employees and increased responsibility of hiring managers for retaining new employees and positioning them for success.

- **New Leaders:** New Administrators are recently in place or waiting for confirmation in almost every OA except FAA.

- **Restructuring:** Anticipated restructuring in Research and Innovative Technology Administration (RITA), a new OA created in 2005, and the Pipeline Safety and Hazardous Materials Safety Administration (PHMSA), provides more focus for both Operating Administrations in making the mission and vision of each Operating Administration easier to articulate. In addition, MARAD's focus on intra-modal cooperation may require some restructuring. FAA's consolidation and restructuring efforts continue primarily affecting the non-safety workforces – administrative and staff support functions in accounting and the Air Traffic Organization (ATO). The centralization of Agency accounting functions to the FAA Enterprise Services Center in Oklahoma City, Oklahoma will be completed in FY 2006. The ATO is in its second phase of restructuring. In FY 2006, the ATO is initiating a restructuring of its field En Route, Terminal, and Technical Operations service areas and consolidating/streamlining administrative and support functions to provide better, more consistent service at less cost.

- **Additional Goal: "reduce congestion"** The Secretary's call for all OAs to concentrate on reducing congestion in the nation's transportation systems also suggests the need for greater intra-modal cooperation and use of technology, innovation, and increased use of tele-work arrangements.

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CHAPTER 1 - DOT CURRENT WORKFORCE

Chapter 1 provides a summary of current DOT workforce demographics and analyses in the following areas: strength, age, years of service, grade, gender, race/national origin, persons with disabilities, veterans and leaders. All data are drawn from the Office of Personnel Management's CPDF as of September 30, 2005 and are compared with data presented in the previous *Plan* of September 30, 2004.

THE PEOPLE OF DOT: AN OVERALL DEMOGRAPHIC PROFILE

At the end of FY 2005 DOT had 52,684 employees[9], with the majority concentrated in FAA. The DOT workforce includes professional, technical, managerial, academic, and administrative personnel in the Office of the Secretary, Office of the Inspector General, and 10 Operating Administrations.

DOT employees provide a wide range of critical services to the public and hold positions in extremely varied functions. Their work runs the gamut from rule-making at the policy level to large systems design; coordination with state agencies; on-the-ground examination of the nation's trucking and railroad fleets; certification of transportation professionals; oversight of the transportation of hazardous materials; education; and direct management of the nation's air traffic around the clock.

This variety of work adds complexity to managing talent and forecasting the future talent requirements for the Department as a whole, even as DOT strategy increases the need for "inter-modal" work, cooperation, and possibly increased future mobility across OAs.

Figure 1.1 provides a general snapshot of the people of DOT as of the end of FY 2005, compared to the end of FY 2004. Further breakout of minority data for FY 2005 is shown in Figure 1.10.

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[9] *Full time and part-time employees on permanent appointments. Excludes temporary, intermittent and contract employees.*

Figure 1.1: Workforce Facts

ALL DOT	FY 2005*	FY 2004
Total Number On Board	52,684	56,354
Average Age	46.7	46.7
Average Years of Service	18.5	18.1
Average Grade*	12.7	12.6
Average Salary ($000)[10]	96.2	91.9
Supervisor & Manager	15.6%	12.5%
Women	26.7%	26.6%
All Minorities[11]	21.7%	21.7%
Employees with Disabilities	5.3%	5.1%
Employees with Targeted Disabilities	0.54%	0.55%
Veterans	28.3%	Not Available

* All Strength counts and averages include SES/equivalents

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[10] *This includes the sum of adjusted basic pay plus any administratively uncontrollable overtime (AUO) pay, availability pay, retention allowance, or supervisory differential after taking into account all pay caps that may be applicable. (WASS User Manual, Appendix A)*

[11] *For 2004: African-Americans, Asian/Pacific Islanders, Hispanics, Native Americans. See Figure 1.10 for 2005 data identified separately for these groups, as requested by the DOT Departmental Office of Civil Rights. (DOCR)*

Figure 1.2   Workforce Strength for all DOT
Period Ending 09/2005
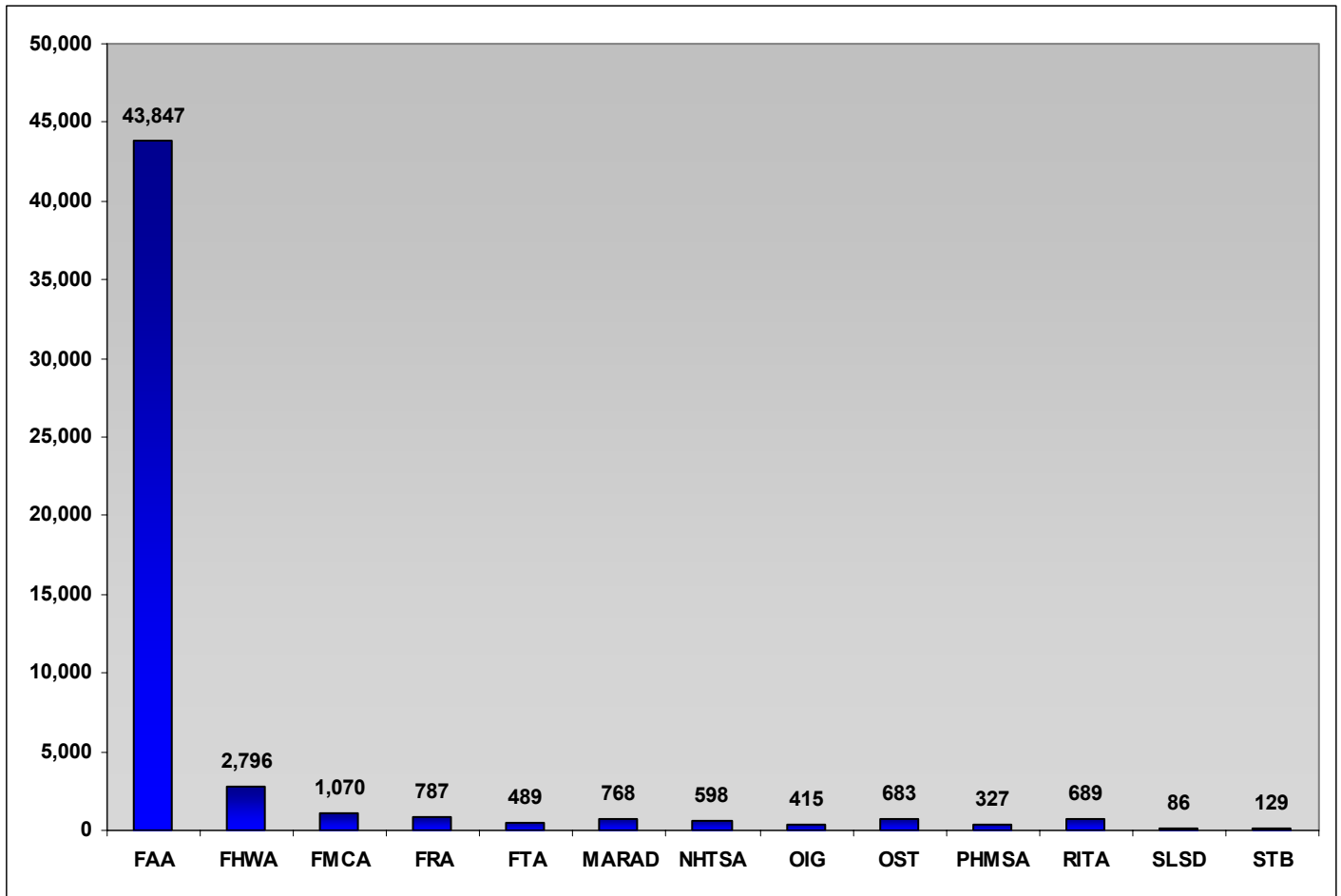
Figure 1.2 shows the strength of OST and the 10 Operating Administrations as of month-end, September 2005. In addition to the full-time/part-time staff on permanent appointments, DOT is currently carrying 1,056 temporary personnel on a variety of appointments.

Figure 1.3 Workforce Facts by Operating Administration
FY 2005 – data as of September 30, 2005
FY 2004 – data as of September 30, 2004

Please note: The numbers below were not formulated by WASS and therefore may not match exactly with other similar charts within the report.

OST	FY 2005*	FY 2004
Total Number On Board	690	729
Average Age	47.9	48.3
Average Years of Service	8.2	Not Available
Average Grade*	11.6	12.8
Average Salary ($000) (Base Salary Only)	92.9	88.4
Supervisor & Manager (Excludes Execs)	119	113
Women	382	410
All Minorities **	320	332
Employees with Disabilities	48	55
Veterans	90	Not Available
FAA	**FY 2005***	**FY 2004**
Total Number On Board	43,983	47,258
Average Age	46.7	46.6
Average Years of Service	19.0	19.1
Average Grade*	13.2	13.5
Average Salary ($000) (Base Salary Only)	$87.0	$88.0
Supervisor & Manager (Excludes Execs)	5,628	5,894
Women	Not Available	Not Available
All Minorities **	Not Available	Not Available
Employees with Disabilities	Not Available	Not Available
Veterans	13,587	Not Available
FHWA	**FY 2005**	**FY 2004**
Total Number On Board	2,874	2,916
Average Age	45.8	46.1
Average Years of Service	16.5	16.9
Average Grade*	11.8	11.7
Average Salary ($000)	$78.9	$75.6
Supervisor & Manager	1404	1466
Women	1047	1057
All Minorities **	738	745
Employees with Disabilities	187	184
Veterans	319	333
PHMSA	**FY 2005***	**FY 2004**
Total Number On Board	327	Not Available
Average Age	44.3	Not Available
Average Years of Service	8.8	Not Available
Average Grade*	12.7	Not Available
Average Salary ($000)	88.3	Not Available

Supervisor & Manager	14.7%	Not Available
Women	33.0%	Not Available
All Minorities **	34.2%	Not Available
Employees with Disabilities	4.9%	Not Available
Veterans	17.4%	Not Available

NOTE: Because PHMSA did not exist in FY 2004, separate data cannot be provided for that time period

RITA	FY 2005*	FY 2004
Total Number On Board	708	Not Available
Average Age	45.7	Not Available
Average Years of Service	10.3	Not Available
Average Grade*	12.0	Not Available
Average Salary ($000)	88.0	Not Available
Supervisor & Manager	62	Not Available
Women	287	Not Available
All Minorities **	146	Not Available
Employees with Disabilities	39	Not Available
Veterans	77	Not Available

NOTE: Because RITA did not exist in FY 2004, separate data cannot be provided for that time period

FMCSA	FY 2005*	FY 2004
Total Number On Board	1,074	1,017
Average Age	45.4	45.7
Average Years of Service	13.7	Not Available
Average Grade*	11.0	11.2
Average Salary ($000)	68.6	66.1
Supervisor & Manager	122	113
Women	375	354
All Minorities **	493	450
Employees with Disabilities	75	75
Veterans	252	Not Available
FRA	**FY 2005***	**FY 2004**
Total Number On Board	787	805
Average Age	51.6	51.6
Average Years of Service	11.2	Not Available
Average Grade*	12.1	12.3
Average Salary ($000)	82.9	79.4
Supervisor & Manager	106	64
Women	196	210
All Minorities **	147	148
Employees with Disabilities	64	74
Veterans	298	Not Available

SLSDC	FY 2005*	FY 2004
Total Number On Board	143	145
Average Age	48.1	48.1
Average Years of Service	14.4	Not Available
Average Grade*	9.1	10.9
Average Salary ($000)	59.2	31.7
Supervisor & Manager	25	18
Women	39	38
All Minorities **	11	6
Employees with Disabilities	15	10
Veterans	73	Not Available
FTA	FY 2005*	FY 2004
Total Number On Board	490	477
Average Age	47.6	48.6
Average Years of Service	11.8	Not Available
Average Grade*	12.0	12.5
Average Salary ($000)	88.2	87.5
Supervisor & Manager	69	73
Women	276	278
All Minorities **	254	246
Employees with Disabilities	40	42
Veterans	40	Not Available
NHTSA	FY 2005*	FY 2004
Total Number On Board	599	608
Average Age	47.6	47.9
Average Years of Service	12.4	Not Available
Average Grade*	12.2	12.6
Average Salary ($000)	90.7	87.5
Supervisor & Manager	103	106
Women	280	344
All Minorities **	244	252
Employees with Disabilities	25	27
Veterans	57	Not Available
OIG	FY 2005*	FY 2004
Total Number On Board	415	411
Average Age	42.8	43.1
Average Years of Service	7.9	Not Available
Average Grade*	12.0	12.3
Average Salary ($000)	87.9	80.0
Supervisor & Manager	91	92
Women	176	167
All Minorities **	150	143

Employees with Disabilities	20	23
Veterans	71	Not Available
MARAD	**FY 2005***	**FY 2004**
Total Number On Board	775	790
Average Age	51.1	50.8
Average Years of Service	14.9	Not Available
Average Grade*	9.9	11.4
Average Salary ($000)	78.5	67.4
Supervisor & Manager	126	130
Women	340	250
All Minorities **	252	250
Employees with Disabilities	36	42
Veterans	198	Not Available
STB	**FY 2005***	**FY 2004**
Total Number On Board	131	137
Average Age	50.6	50.9
Average Years of Service	20.8	Not Available
Average Grade*	12.2	12.9
Average Salary ($000)	97.9	95.1
Supervisor & Manager	23	22
Women	63	62
All Minorities **	40	35
Employees with Disabilities	11	7
Veterans	20	Not Available

** African-Americans, Asian/Pacific Islanders, Hispanics, Native Americans. See Figure 1.10 for 2005 data identified separately for these groups, as requested by the DOT Departmental Office of Civil Rights.

DOWNWARD TRENDING

Figure 1-3 below shows the specific events that have occurred over the last five years that have caused DOT's strength and organization structure to expand and contract to meet mission requirements.

Figure 1-4. Key Events Timeline

Workforce Strength	64,472	101,036	57,981	56,354	52,684
Fiscal Year	**2001**	**2002**	**2003**	**2004**	**2005**
Congress enacted legislation to make FAA's Air Traffic Organization a PBO (performance-based organization)	Jan: Secretary Mineta takes oath FAA begins to implement new ATO structure	DOT Releases first Human Capital Plan. February: new Transportation Security Administration opened for business December: Transportation Administrative Services Center s reorganized back into the Office of the Assistant Secretary for Administration	September: DOT issues Strategic Plan 2003-2008 and reissues HC strategic plan November: FAA establishes new organization, ATO March United States Coast Guard and the Transportation Security Administration moved to DHS December: restructuring of Research and Special Programs Administration	JULY: DOT awarded "green" status on Human Capital standard of the PMA	February the restructured Operating Administrations, RITA and PHMSA, established and were open for business MARAD downsized

Generally, however, with the exception of a growth surge in 2002, post 9/11, the overall strength of DOT onboard personnel has decreased steadily in the last several years, from 57,981 in FY 2003 to 56,354 in FY 2004 to 52,584 in FY 2005. This downward trend in overall strength is due to several factors, including:

Reorganizations to support mission

- The transfer of the U.S. Coast Guard (USCG) and the Transportation Security Administration (TSA) to the Department of Homeland Security (DHS) in March 2003.

- The completion of the restructuring which resulted in the dissolution of the Research and Special Programs Administration (RSPA), the merger of the several of its key components with the Bureau of Transportation Statistics and the OST Office of Inter-modalism into the new Research and Innovative Technology Administration (RITA), the transfer of the Emergency Transportation function to the Office of the Secretary and the creation of the Pipeline and Hazardous Materials Safety Administration (PHMSA) from the safety functions of RSPA in February 2005.

- The downsizing of MARAD in FY 2005.

Use of workforce reshaping strategies

- DOT used Voluntary Early Retirement (VERA) authority and Voluntary Incentive Separation Pay (VSIP) to reshape the workforce to accommodate the effects of its continued use of competitive sourcing (as reported in the *2004 Plan*), funding issues, mission changes, the application of new technologies and business process changes.

- In FY 2005, 302[12] people retired under VERA. Of those taking VERA, the average age range was between ages 51-56. The bulk of those reported to OPM as retiring under VERA were from the FAA where the average age at retirement was 52.5 and the average grade was FV-G (or GS-equivalent.)[13]

- DOT and its OAs paid VSIP to 55[14] people. The majority of VSIPs (73%) were paid to employees of OST in the Offices of the Chief Information Officer, Human Resources Management, Information Services, Security, Transportation & Facilities Management, Senior Procurement Executive, and Financial Management. These reshaping activities were in response to the President's Management Agenda directive to outsource and to accommodate reductions in funding.

- Only three persons were separated by reduction in force and two were terminated due to lack of funds[15].

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[12] *Data source: CPDF*

[13] *Data source: DOT Final report to OPM on VERA/VSIP usage*

[14] *Date source: DOT Final Report to OPM on VERA/VSIP usage.*

[15] *Data source: CPDF*

Attrition Due to Retirements

As anticipated in the 2004 *Workforce Plan*, DOT is experiencing the effects of the projected Federal retirement wave often associated with the fact that the "Baby Boom" generation is reaching retirement eligibility. In FY 2005, retirements represented 74% of the 3,416 employee separations. Additional analysis on the impact of retirements on the workforce is found in Chapter Five.

Strategic Vacancy Management

As technology enables greater efficiencies in work process design, and the Department shifts available FTEs to accommodate the need for a changing mix of skills in many positions, DOT continues to manage vacancies and monitor position management to maximize the impact of budget dollars spent on staffing.

WORKFORCE DEMOGRAPHICS: AGE

The average age of the workforce is one of several key factors needed to track staff losses due to retirement and the impact these losses can have on the ability of the staff to accomplish DOT's mission. This information is critical in the development of hiring strategies and succession planning.

The average age of DOT employees increased from 44.7 in FY 1999 to 46.7 in FY 2004[16]. During FY 2005, the DOT average age remained at 46.7[17]. DOT employees are slightly older on average than other Federal government employees.[18]

Figure 1.5 Age Distribution of DOT Employees, 2004 and 2005

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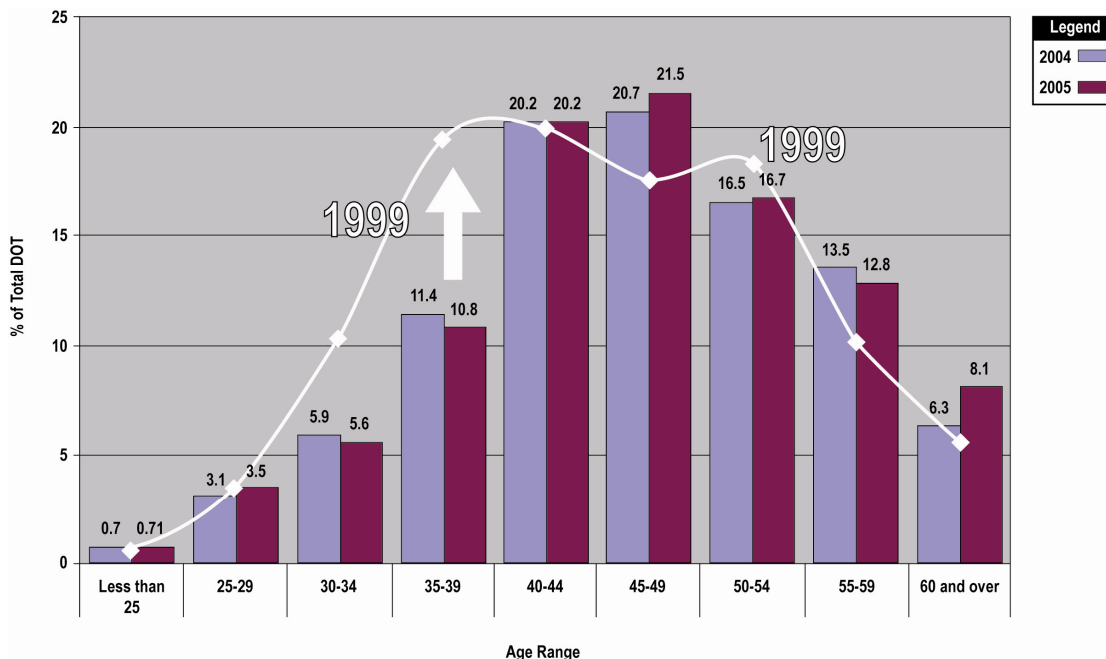
[16] *Source: DOT Workforce Plan 2004 Update*

[17] *Source: WASS*

[18] *For FY 2004, the average age Federal government-wide was 45.65, published by the Office of Personnel Management*

Figure 1.5 demonstrates the shift in age cohorts within the DOT population from 1999 to 2005. The white line indicates the 1999 population. The lighter plum bars show population levels in FY 2005; the darker plum bars, population levels in FY 2004, by age cohort. While the majority of DOT employees has remained in the 40-54 age cohort, the percentage of employees older than 55 has increased beyond 1999 levels. The proportion of employees younger than 40 has decreased over the same period, shown by the red arrow.

WORKFORCE DEMOGRAPHICS: YEARS OF SERVICE (YOS)

The Federal retirement system benefits package is based on a combination of years of service (YOS) and age making YOS a key predictor of work force attrition. YOS can also be used as an indicator of the experience, and thus the general capability, of the workforce to meet its mission.

Across DOT the average service is 18.5 years, a slight increase from 2004 when the average was 18.1. In comparison to other Federal agencies, where the average in FY 2004 was 14.7 years, DOT ranks third among the Executive Departments as having a staff with the most years of service. Only the Department of Housing and Urban Development and the Department of Energy have a higher average YOS. This has been the trend since 2000.[19]

Figure 1-8 shows the YOS by age of the overall DOT population. Using the general eligibility formula for Civil Service Retirement System (CSRS) or Federal Employees Retirement System (FERS), it is apparent that a large portion of the DOT workforce is *currently eligible to retire* or is within a five-year window of eligibility.

Figure 1.6 DOT Employees Eligible for Retirement

Eligibility Point	#	% of total workforce
CSRS		
Age 55 + 30 YOS	4,714	8.9
Age 60 + 20 YOS	1,187	2.3
Age 62 + 5 YOS	640	1.2
FERS		
Age 55 + 10	3,913	7.4
Age 62 + 5 YOS	640	1.2
Total Eligible	**11,094**	**21.0**
Median retirement age: 5720		

Source: OPM

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[19] *Source: OPM, Federal Employment Statistics, Table 10*

[20] *Source: WASS*

Figure 1.7: Retirement Eligibility by SES, Manager/Supervisor and DOT MCO

	% Eligible to Retire	Total MCO Strength
SES	34.5%	438
Manager/ Supervisor	18.5%	8,245
	MCO	
Community Planning	10.8%	212
Information Technology	11.8%	2,039
Program Management	24.8%	541
Financial Management	15.4%	794
Engineering	14.1%	5,487
Physical Scientist	14.8%	366
Transportation Safety	8.3%	23,997
Transportation Specialist	15.3%	7,089
Transportation Industry Analyst	19.9%	136

Figure 1.8 DOT WORKFORCE: Age vs. Years of Service

Eligibility:

Age 55 + 30 YOS (CSRS)

Age 60 + 20 YOS (CSRS)

Age 62 + 5 YOS (CSRS)

age	YOS 0 - 1	2 - 3	4 - 5	6 - 7	8 - 9	10 - 11	12 - 13	14 - 15	16 - 17	18 - 19	20 - 21	22 - 23	24 - 25	26 - 27	28 - 29	30 - 31	32 - 33	34 - 35	36 - 37	38 - 39	40 - 41	42 - 43	44 - 45	46 - 47
19	4																							
20	10																							
21	16	4																						
22	44	16	3	1																				
23	72	35	5	1																				
24	73	54	8	4	1																			
25	86	115	23	24	2																			
26	98	106	41	55	9																			
27	80	129	74	70	33	1																		
28	66	111	78	88	47	14	1																	
29	67	81	106	87	64	35	1																	
30	59	86	67	94	69	38	20	3																
31	57	80	75	93	79	68	62	6																
32	47	75	73	82	81	64	90	20																
33	30	87	93	71	103	77	113	89	11															
34	40	77	64	87	88	78	141	161	35	3														
35	27	62	82	75	92	90	148	198	120	18														
36	37	53	88	83	83	75	176	230	179	54	1													
37	28	56	83	69	69	44	149	272	190	134	13													
38	30	62	60	71	49	57	144	303	250	174	41													
39	41	47	55	52	55	53	137	256	348	197	141	10												
40	41	69	62	50	48	54	110	273	369	322	256	56												
41	53	63	63	68	58	50	119	239	378	362	321	189	11											
42	42	72	52	51	69	48	108	232	320	383	403	322	89											
43	44	84	72	43	60	44	83	218	274	356	419	349	202	15										
44	48	78	71	68	52	36	85	181	274	354	425	454	299	96	3									
45	42	80	60	55	52	36	77	138	205	253	322	443	262	224	17									
46	49	59	76	47	60	41	57	106	157	244	280	482	233	333	79									
47	37	60	70	56	71	33	63	81	119	173	249	458	229	344	233	19								
48	30	56	67	69	51	44	39	82	103	178	213	421	223	327	310	83	2							

U.S. Department of Transportation

age \ YOS	0-1	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22-23	24-25	26-27	28-29	30-31	32-33	34-35	36-37	38-39	40-41	42-43	44-45	46-47
49	32	66	59	54	64	33	44	71	77	151	163	359	205	336	253	214	21							
50	38	59	55	60	72	35	53	69	72	92	132	286	166	233	224	226	73							
51	25	47	42	62	60	41	47	65	69	68	115	231	149	202	227	201	156	14						
52	23	50	50	54	58	38	42	68	59	79	75	161	113	191	194	225	194	64	1					
53	22	44	43	52	50	34	45	74	58	83	64	138	101	135	170	265	170	117	11					
54	19	30	34	50	47	45	43	69	67	69	77	102	88	129	135	200	201	180	56					
55	6	29	38	39	41	37	43	85	66	95	67	66	72	87	113	149	142	153	72	9				
56	20	28	37	36	23	23	33	72	88	87	97	72	78	83	94	101	120	137	91	36				
57	13	36	33	35	35	41	41	69	82	98	75	75	84	89	83	116	121	159	95	52	5			
58	16	25	44	36	45	34	42	70	100	116	96	91	68	73	74	81	99	159	127	103	25	1		
59	14	12	26	30	33	33	27	49	55	65	59	65	52	49	58	43	62	69	102	82	21			
60	9	15	25	21	24	32	22	54	45	70	48	45	44	36	40	41	37	56	68	71	24	5		
61	6	13	21	25	31	27	38	27	50	77	47	47	37	36	36	29	34	51	53	66	31	16	1	
62	5	15	20	18	19	16	19	38	34	50	37	49	27	37	35	32	38	33	48	48	34	18	7	1
63	4	11	14	14	22	17	19	19	27	28	30	25	22	22	16	19	19	21	27	35	15	13	5	2
64	1	11	7	15	11	16	11	13	17	30	17	13	23	16	22	15	11	17	15	20	18	10	7	3
65		6	5	12	11	5	9	15	13	17	8	8	11	7	12	6	8	11	8	14	19	11	9	1
66	1	4	2	5	10	10	8	8	14	15	9	6	14	10	7	13	9	8	9	13	12	14	5	5
67	2	2	5	4	7	10	11	5	10	11	5	11	10	6	7	7	8	6	11	6	6	5	5	5
68	1			4	7	5	3	5	9	5	5	3	6	6	4	6	7	8	5	6	4	7	2	5
69			1	1	4	2	6	9	7	7	6	6	2	6	7	7	3	6	3	7	3	2	6	4
70	3	1		4	2	3	7	2	8	4	2	2	5	5	4	6		1	1	2	1	2	2	1
71							1	1	3	4	7	1	1		3	4	2		5	2	1	3	2	3
72		1	5	2	2		2	3	5	3	5		1	1	4	3	2	2	7		2		2	1
73				1	2		2	1		4	1	3	2	2		3	3	1	1	1	2		1	3
74			1	1		1	1		1	1			2		4	2	1	1	1	3	4	2	2	1
75	3			1	1			2	1	4	1	1	1	2		2	1	2	1	1	3		1	
76		1		1	1											1		1		1				
77									2			1	1			1		1	1	1		1		
78								1	1	1						2					1	1	1	
79							1			1	1			1								1		2

YOS

age	0 – 1	2 - 3	4 - 5	6 - 7	8 - 9	10 - 11	12 - 13	14 - 15	16 - 17	18 - 19	20 - 21	22 - 23	24 - 25	26 - 27	28 - 29	30 - 31	32 - 33	34 - 35	36 - 37	38 - 39	40 - 41	42 - 43	44 - 45	46 - 47
80							1												1			1		
81													1				1						1	
82																	1		1					
83																					1			1
84								1												1		1		
85																							1	

WORKFORCE DEMOGRAPHICS: GRADE

Grade is a baseline indicator of the qualifications required to perform a specific job.

The Federal Aviation Administration (FAA) operates under an excepted authority allowing it to set pay outside the General Schedule for its white collar employees. Therefore, the overall DOT average has been derived through a crosswalk that converts FAA pay bands and salaries to General Schedule equivalents.

Figure 1.9 Pay Distributions, DOT-Wide
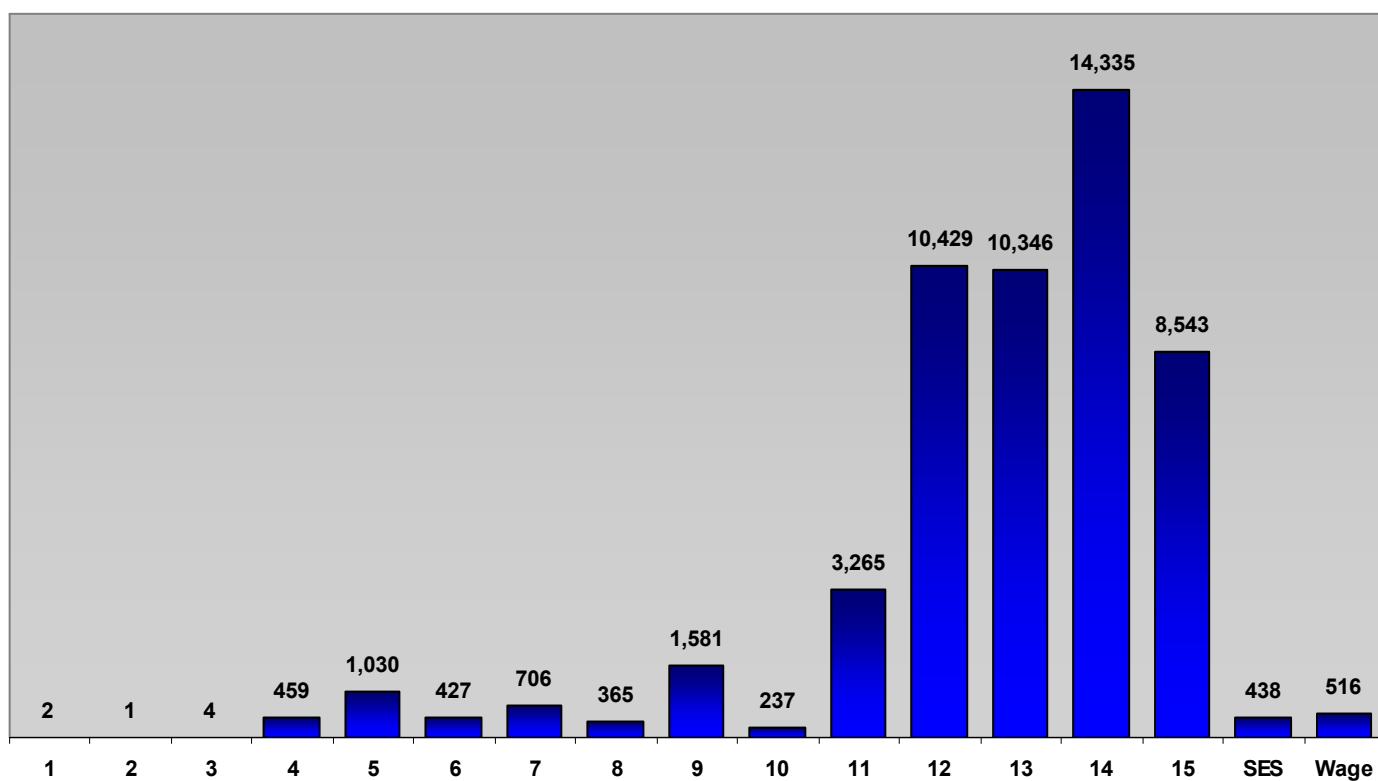
The average grade for DOT, based on an equivalency to the General Schedule scale, is 12.7, with 63% of employees holding high grade positions as GS-13/14/15, or equivalent. This grade structure is significantly higher than the Federal Government average grade for General Schedule employees, which in 2003 were 9.82.[21] However in some OAs *(e.g. Federal Highway Administration (FHWA))*, "entry level" positions are, in fact, GS 11/12/13 due to the highly technical and scientific qualifications required by the positions. Note that full performance level for Air Traffic Controllers (ATC) is equivalent to a GS-14, and ATC employees are 36.3% of the DOT workforce.

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[21] *Source: Office of Personnel Management, Federal Statistics Home Page (OPM 2004 Fed Facts) (www.opm.gov/feddata)*

WORKFORCE DEMOGRAPHICS: GENDER, ETHNICITY AND PERSONS WITH DISABILITIES

It is the goal of DOT to employ a workforce representative of the nation as a whole. Secretary Mineta states in the DOT Diversity Action Plan: "*I see the diversity of our workforce as a source of strength, insight, and versatility.*"

In support of the Secretary's guidance, the DOT Office of Civil Rights has set aggressive goals to:

Increase the numbers of American Indian men, Blacks, Hispanics, and persons with targeted disabilities in the supervisory, managerial, and executive ranks; and

Assure that 3% of all new hires are persons with targeted disabilities.

The following data were developed using the WASS reporting tool. DOT has recently purchased a commercial-off-the-shelf (COTS) package, Visual Powerfiles for EEO (VPEEO). This solution will provide an easy-to-use and powerful reporting tool for the Civil Rights/EEO community, including supporting the Equal Employment Opportunity Commission Management Directive 715 (MD-715). Each OA is being trained on the use of this system during FY 2006. This robust automated tool will enable further demographic breakouts (e.g., gender representations within each race/national origin group) in the 2007 Workforce Plan Update.

Figure 1.10 Race, National Origin and Gender
DOT-Wide, 2004 and 2005

Race/ National Origin	Total Strength	% of Total Strength	Total Strength	% of Total Strength	% Change[22]	% of Federal workforce (2004) [23]	% of Civilian Workforce (2005)[24]
	2005		2004				
American Indian/Alaskan Native							
Female	221	0.4%	242	0.4%	-2.3%	2.2%	Not Available
Male	565	1.1%	611	1.1%	-1.1%		
Asian/Pacific Islander							
Female	461	0.9%	517	0.9%	-4.6%	5.1	4.6
Male	1,266	2.4%	1,447	2.6%	-6.4%		
Black, not of Hispanic origin							
Female	3,042	5.8%	3,243	5.8%	0.3%	16.1	11.3
Male	2,794	5.3%	2,971	5.3%	0.6%		
Hispanic							
Female	800	1.5%	826	1.5%	3.6%	7.3	13.1
Male	2,288	4.3%	2,355	4.2%	3.9%		
White, not of Hispanic Origin							
Female	9,471	18.0%	10,149	18.0%	-0.2%		
Male	31,541	59.9%	33,865	60.1%	-0.4%		
Not Specified	235		128				
Total	**52,684**		**56,354**				

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[22] *% Change is the change in the percentages from 2005 to 2004. This number represents the growth/decline of the % of total strength only.*

[23] *Ibid, Table 1—R/NO Distribution of Federal Civilian Employment, 30 Sep 04*

[24] *Source: Bureau of Labor Statistics Data for 2005 (http://data.bls.gov/PDQ). BLS data were used in lieu of Census data because they are more frequently updated and reflect population available to work rather than the entire domestic population.*

Women continue to represent **26.7%** of the DOT workforce[25], the same overall percentage as in FY 2004. This percentage is significantly below the **44.4%** of women employed by the Federal Government in FY 2004[26], and the **42.6%** of women employed in the civilian labor force (CLF) as of the end of 2005. Women represented **53%** of the candidates for employment at DOT in FY 2005.[27] **Minorities** continue to represent **21.7%** of the DOT workforce[28], the same overall percentage as FY 2004.[29] This percentage is lower than the 2004 Federal Government minority representation of **31.4%**.[30] Minorities represented **56%** of the candidates for employment at DOT in FY 2005.[31]

Figure 1.11: Race, National Origin and Gender Representation of Managers and Supervisors

	Manager/ Supervisor	% of Manager/ Supervisor	% of DOT-wide population	SES Strength	% of SES	% of DOT-wide population
FEMALE						
American Indian/ Alaskan Native	25	0.3%	0.4%	1	0.2%	0.4%
Asian/ Pacific Islander	45	0.5%	0.9%	3	0.7%	0.9%
Black, not of Hispanic origin	334	4.1%	5.8%	20	4.6%	5.8%
Hispanic	91	1.1%	1.5%	6	1.4%	1.5%
White, not of Hispanic Origin	1,284	15.6%	18.0%	90	20.5%	18.0%
Total Female	**1,779**	**21.6%**	**26.6%**	**120**	**27.4%**	**26.6%**
MALE						
American Indian/ Alaskan Native	108	1.3%	1.1%	0	0.0%	1.1%
Asian/ Pacific Islander	168	2.0%	2.6%	12	2.7%	2.6%
Black, not of Hispanic origin	513	6.2%	5.3%	23	5.3%	5.3%
Hispanic	334	4.1%	4.2%	10	2.3%	4.2%
White, not of Hispanic Origin	5,318	64.5%	60.0%	273	62.3%	60.0%
Total Male	6,441	78.1%	73.4%	318	72.6%	73.4%
Not Specified	25	0.3%	0.4%	0	0.0%	0.4%
Total	**8,245**		**438**			

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[25] *Source: WASS*

[26] *OPM, the Fact Book (2004) Table 10*

[27] *Source: OST Office of Employment and Executive Resources*

[28] *Source: WASS*

[29] *Source: OPM, the Fact Book (2004) Table 10*

[30] *Source: OPM, the Fact Book (2004) Table 1*

[31] *Source: OST Office of Employment and Executive Resources*

Figure 1-12. Employee Representation by Grade by Race/National Origin

Grade	Male	Females	American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, not of Hispanic origin	Hispanic	White, not of Hispanic Origin	Not Specified*
1	2						2	
2		1					1	
3	3	1			3		1	
4	85	374	3	19	100	39	297	1
5	110	920	32	42	214	95	639	8
6	45	382	7	10	99	33	277	1
7	250	456	4	19	199	61	419	4
8	93	272	6	6	115	28	208	2
9	660	921	23	46	393	224	887	8
10	119	118	7	6	49	8	158	9
11	1,904	1,361	62	93	476	253	2,329	52
12	8,112	2,317	192	291	1,146	694	8,063	43
13	7,822	2,524	140	574	1,174	591	7,824	43
14	12,022	2,313	130	331	808	554	12,472	40
15	6,631	1,912	160	264	920	449	6,730	20
SES **	318	120	1	15	43	16	363	0
Wage	462	54	19	11	97	43	342	4
	38,638	14,046	786	1,727	5,836	3,088	41,012	235
Average Grade	13.2	11.6	12.5	12.7	11.9	12.2	12.9	

* Coded "other" in data files   ** Represents SES and equivalents

Figure 1-12 shows the representation of women and minorities by grade. These data suggest that a "glass ceiling" may exist in DOT affecting both minorities and women. Men occupy 79.9% of the 33,224 highest graded positions (GS 13-15 or equivalent) while women occupy 20.3% of these positions, although women comprise 27% of the entire DOT workforce. Minorities, who comprise 21.7% of the total workforce, occupy only 18.3% of the highest graded jobs.

Analysis of women in supervisory/management ranks by race/national origin reveals that 4.1% of African-American women hold these positions compared to their representation in DOT at 4.8% overall. White women represent 18% of the DOT population but only 15.6% of the supervisory positions. However, at the SES level, representation of *white* women exceeds their representation in the DOT population overall (18% of DOT employees overall are white women, and 20.5% of SES are white women).

In contrast, white men, and to a lesser extent Black/African-American men in the supervisory ranks, exceed their total representation in the workforce as a whole. At the SES level, the representation of *white* men exceeds their representation in the overall population.

The data presented in this **Update** establish a baseline for reporting future progress against DOT's goal to increase the numbers of women, minorities, and persons with disabilities in the supervisory, managerial, and executive ranks. With reduced hiring in DOT, progress against this baseline will be minimal – workforce composition will shift slowly as DOT's predominately white, male workforce retires.

GEOGRAPHIC DISTRIBUTION OF RACE/ETHNIC GROUPS

Further analysis reveals that racial/ethnic diversity at DOT is concentrated in a few specific geographic locations across the country. The majority of American Indian/Native Alaskans are employed in Oklahoma and California; Hispanic/Latinos in Texas, California, and Florida; and, Asian/Pacific Islanders in California. A high concentration of Black/African American employees is located in Washington DC and Maryland. For a chart showing a complete breakout of minority employment by state, see Appendix.

Representation of persons with disabilities has increased as a percentage of the total DOT work force, as shown in Figure1-14. Of the 1,384 new hires made at DOT during FY 2005, 92 people, or 6.6% of total hires, were persons with disabilities.

At the end of FY 2004, persons with *targeted* disabilities represented 1.0% of the total Federal population, while DOT's population of persons with targeted disabilities is .52%. Additionally, of the 92 people with disabilities hired at DOT, seven people were persons with targeted disabilities. Based on these data, DOT will need to do more to reach its goal of 3% of all new hires be persons with targeted disabilities.

Figure 1.13 Persons with Disabilities, 2004-2005

FY	Total DOT Population	All Disabilities (includes Targeted Disabilities)			Targeted Disabilities		
		Number	% of total DOT workforce	% of Federal Workforce	Number	% of total DOT work-force	% of Federal Workforce
2004	56,354	2,872	5.1	6.8%	*	*	1.0%
2005	52,684	2,780	5.3	*	276	.52	*

*Data not available

Figure 1-14. Persons with Disabilities by RNO and Leader Position

	Manager/ Supervisor	% of Manager/ Supervisor	% of total PWD population by RNO	SES Strength	% of SES	% of total PWD population by RNO
American Indian/ Alaskan Native	7	2.0%	3.0%		0.0%	3.0%
Asian/ Pacific Islander	12	3.4%	2.9%		0.0%	2.9%
Black, not of Hispanic origin	40	11.4%	11.6%	3	15.0%	11.6%
Hispanic	14	4.0%	5.3%	2	10.0%	5.3%
White, not of Hispanic Origin	278	79.2%	76.8%	15	75.0%	76.8%
Not Specified			0.3%			0.3%
	351	4.3%		20	4.6%	

WORKFORCE DEMOGRAPHICS: VETERANS

DOT has a history of hiring America's veterans.[32] Overall, representation of veterans in the Federal Government in FY 2004 was **21.5%**[33]. With **28.3%** of the total workforce as veterans, DOT ranks among the top Executive Departments in veteran hiring. In addition, **22.1%** of all new hires in 2005 were veterans.

Figure 1.15 shows veterans on board by race/national origin and their representation in leadership ranks. Veterans appear to be integrated generally into the total leader population in proportion to their representation in the workforce as a whole.

Figure 1-15 Veterans by RNO and Leader Position

	Manager/ Supervisor	% of Manager/ Supervisor	% of total Veteran population RNO	SES Strength	% of SES	% of total Veteran population RNO
American Indian/ Alaskan Native	52	2.3%	1.9%		0.0%	1.9%
Asian/ Pacific Islander	25	1.1%	1.6%	1	1.5%	1.6%
Black, not of Hispanic origin	218	9.6%	8.8%	7	10.4%	8.8%
Hispanic	112	4.9%	5.8%	1	1.5%	5.8%
White, not of Hispanic Origin	1,906	84.1%	81.4%	58	86.6%	81.4%
Not Specified	5	0.2%	0.5%		0.0%	0.5%
	2,266	27.5%		67	15.3%	

Figure 1.16: Veterans by Gender and Disability Status

Equiv Grade	Total Strength	Supv/Mgr Strength		Female		PWD		Veteran	
SES	438	355	81.1%	120	27.4%	20	4.6%	67	15.3%
15	8,543	5,191	60.8%	1,017	11.9%	227	2.7%	1,670	19.5%
14	14,335	1,098	7.7%	279	1.9%	63	0.4%	232	1.6%
13	10,346	1,391	13.4%	335	3.2%	79	0.8%	283	2.7%
12	10,429	172	1.6%	33	0.3%	2	0.0%	54	0.5%

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[32] The Washington Post (January, 2006) cited DOT as having one of the best records of hiring veterans among the Federal agencies

[33] OPM The Fact Book (2004)Table 8

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CHAPTER 2 - MISSION CRITICAL OCCUPATIONS

Chapter 2 provides general demographic information on Department of Transportation employees in Mission Critical Occupations (MCOs), and information and analysis of DOT's progress in addressing competency requirements for these categories.

COMPETENCY ASSESSMENT

DOT is embarking on a new enterprise-wide initiative using a DOT Competency Assessment and Management Tool, or CAMT. The CAMT, as a core function of the web-based eLMS, is a foundation tool allowing DOT to perform an organizational gap analysis. This Competency Assessment Management Tool will allow DOT to look across the enterprise to identify the types and levels of competencies currently inherent to the workforce. It will also help uncover potential future organizational gaps based on trends such as: retirement rates, new competency requirements, and turnover.

CAMT will identify work functions and job competencies critical for specific MCO job families. When fully implemented, CAMT will:

- Allow employees to view critical competencies and work functions for successful job performance.

- Determine if there are any gaps between their perceived levels of proficiency and those determined by DOT managers.

- Help employees identify learning and developmental resources that can help close any identified gaps via eLMS.

By identifying DOT's competency gaps, the Agency can create enterprise-wide programs to develop or recruit targeted competencies or MCOs. [34]

MISSION CRITICAL OCCUPATIONS

The Office of Personnel Management has defined "mission critical occupations" as *"Occupations agencies consider core to carrying out their missions. Such occupations usually reflect the primary mission of the organization without which mission-critical work cannot be completed."*

DOT and the OAs have focused their attention on the following categories of employees designated as Mission Critical across the government:

- Leaders – executives, managers and supervisors
- Information technology (IT) professionals
- Human Capital (HC) professionals

In addition, DOT has designated the following job families as Mission Critical across the Agency: (in some cases, single occupations within a job family, but not the entire job family, were identified by an OA as a MCO). DOT Mission Critical Occupations and Series include:

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[34] *Leadership Assessment Report, December 2005*

- Planning (0020)
- Program Management (0340)
- Financial Management (0501, 0505, 0510, 0511, 0525, 0540, 0544, 0560)
- Engineer (0801, 0802, 0803, 0806, 0807, 0808, 0809, 0810, 0817, 0818, 0819, 0830, 0850, 0855, 0856, 0861, 0871, 0873, 0896)
- Legal (0905, 0935, 0950, 0963, 0986)
- Physical Scientist (1301, 1306, 1310, 1320, 1340, 1350, 1361, 1370, 1371, 1373, 1384)
- Transportation Specialist (2101)
- Transportation Industry Analyst (2110)
- Transportation Safety (1825, 2121, 2123, 2125, 2152)
- Information Technology (2210, 0334, 0391, 1550, 0854)

Representation of Mission Critical Occupations

DOT is concentrating its resources on managing its mission critical occupations. Figure 2-1 below shows the percentage of the total strength of the DOT workforce that is "mission critical." At the end of FY 2005, the MCO population totaled 41,321 and represented 78.4% of DOT's total population. As in FY 04, the largest MCO groups are the Transportation Safety, Transportation Specialist, and Engineering job families.

Figure 2.1. Representation of Internally Designated Mission Critical Occupations in DOT September 30, 2005
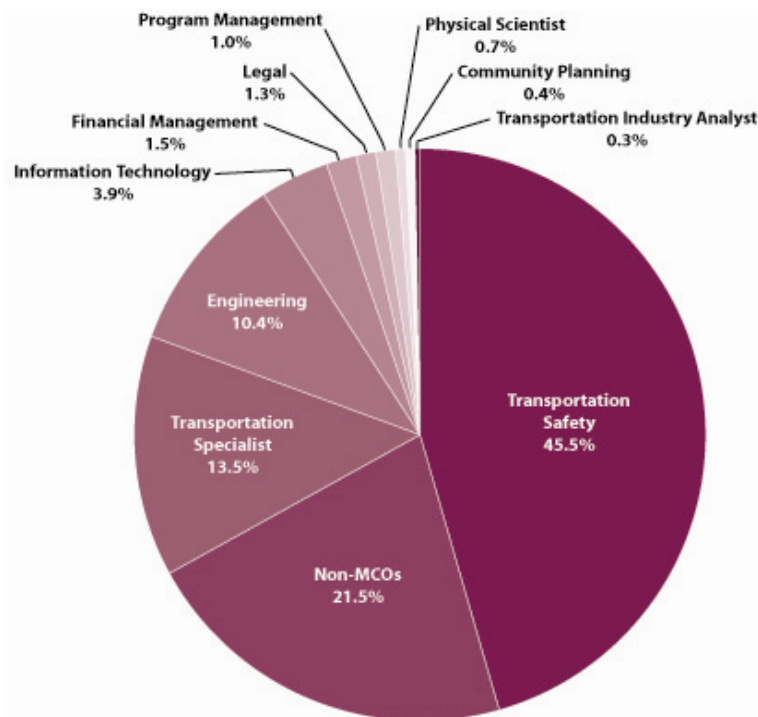
***Note*: Leaders and Human Capital Professionals (series 201) are not represented in this chart. However, Leaders represent 15.6 % of the total DOT workforce and Human Capital professionals represent 1% of the total DOT workforce.**

The following sections provide information on representation and current competency levels and trends, where available, for each Mission Critical Occupation.

LEADERS

Defined: For the purposes of this *Update,* the following definitions apply:

- Executive – Members of the SES or its equivalent (identified in pay plans AD, AL, CA, ES, EV, EX, and SL).

- Managers and supervisors – These two categories of leaders have been combined. Supervisory Codes 1-5 were used to identify this population in the CPDF. However, competencies for managers (i.e., supervisors of supervisors) and supervisors (i.e., those individuals who may have subordinate team leaders but are the responsible official for managing people and work in an organizational unit) have been analyzed separately.

Representation

Figure 2.2 shows the distribution of leaders throughout DOT at the end of FY 2005. In FY 2004, DOT employed 7,052 supervisors and managers, representing **12.5%** of the DOT workforce. This number *appears* to have increased to 8,245 or 15.6% of the total workforce in FY 2005.

However, this cannot be characterized definitively as an increase because the change may be due to a difference in how data were collected in the preparation of the two plans. For the 2005 *Update*, a broader group of supervisory codes (1 – 5)[35] was used; in 2004 it appears that only positions in codes 2 – 3 were collected.

Figure 2.2. LEADERS: Representation by Operating Administration as of September 30, 2005

Leader Family by OA

Operating Administration	Total Strength	PWTD Strength	% of PWTD	PWD Strength	% of PWD	Veterans Strength	% of Veterans
FAA	5,622	12	0.2%	201	3.6%	1,938	34.5%
FHWA	1,398	11	0.8%	82	5.9%	139	9.9%
FMCSA	324	7	2.2%	23	7.1%	62	19.1%
FRA	114	2	1.8%	5	4.4%	40	35.1%
FTA	100	3	3.0%	10	10.0%	10	10.0%
MARAD	132	0	0.0%	4	3.0%	40	30.3%
NHTSA	105	1	1.0%	5	4.8%	10	9.5%
OIG	100	1	1.0%	4	4.0%	15	15.0%
OST	183	0	0.0%	7	3.8%	33	18.0%
PHMSA	45	0	0.0%	2	4.4%	5	11.1%
RITA	68	1	1.5%	4	5.9%	13	19.1%
SLSDC	18	0	0.0%	1	5.6%	6	33.3%
STB	36	0	0.0%	4	11.1%	7	19.4%
Total	8,245	38	0.5%	352	4.3%	2,318	28.1%

* Persons with Targeted Disabilities   ** Persons with Disabilities

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[35] *At the direction of Dr. Ivan Armfield, Program Manager, Workforce Planning*

Figure 2.2a: Leadership Demographics Permanent Employees Snapshot for period ending 09/2005

Grade	Male	Females	American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, not of Hispanic Origin	Hispanic	White, not of Hispanic Origin	Not Specified
12	8,112	2,317	192	291	1,146	694	8,063	43
13	7,822	2,524	140	574	1,174	591	7,824	43
14	12,022	2,313	130	331	808	554	12,472	40
15	6,631	1,912	160	264	920	449	6,730	20
SES	318	120	1	15	43	16	363	0

Figure 2.2b: Leadership Pipeline Attrition Permanent Employees Snapshot for period ending 09/2005

Equiv Grade	Total Strength	American Indian/ Alaskan Native		Asian/ Pacific Islander		Black, not of Hispanic origin		Hispanic		White, not of Hispanic Origin		Not Specified	
SES	438	1	0.2%	15	3.4%	43	9.8%	16	3.7%	363	82.9%		0.0%
15	8,543	109	1.3%	108	1.3%	520	6.1%	273	3.2%	4,165	48.8%	17	0.2%
14	14,335	6	0.0%	46	0.3%	125	0.9%	61	0.4%	858	6.0%	2	0.0%
13	10,346	12	0.1%	47	0.5%	139	1.3%	58	0.6%	1,109	10.7%	9	0.1%
12	10,429	3	0.0%	1	0.0%	14	0.1%	10	0.1%	143	1.4%		0.0%

Leadership Impact

- **Demographics:** As noted in the Introduction to this **Update,** DOT has one of the highest average ages of the workforces among the Federal agencies in the Executive Branch. Among DOT's most senior Leaders in the executive ranks (e.g., SES and equivalent), 34.5% are currently eligible to retire. Among supervisors and managers, generally at the GS-13-15 grade level, 18.5% are eligible to retire today. With the median retirement age at 57, even allowing for variations in the age at which eligible individuals choose to retire, demographics dictate that DOT will experience attrition among its most experienced leaders beginning during FY 2006 and continuing in subsequent years.

- **Operating Focus:** In addition to having an adequate *number* of leaders, DOT is committed to maintaining a leadership cadre whose skills and competencies anticipate the needs of the Department as it evolves. The increasing emphasis on intra-modal communication and cooperation, technology, and management of outside contractors, has been captured in the leadership competency model (DOT Leadership Assessment Report December 2005).

- **Employee Perceptions**, **2004 FHCS Survey Results:** Like Federal employees across the government, DOT employees flagged "Leadership" as a challenge in their responses to the 2004 FHCS survey.

  OPM has highlighted the DOT response to survey item #40 ("*In my organization, leaders generate high levels of motivation and commitment in the workforce*") as a leadership "challenge" area. OPM did not highlight any leadership "strengths" for DOT based on its analysis of the survey results.

  The survey items concerning leadership (below) suggest ties to the competencies that DOT has already identified for development. Skill in influencing/negotiating, team-building, and conflict management will be required for leaders to communicate and relate individuals' work to overall "big picture" goals in an environment of continuous change.

Figure 2.3. DOT Scores on Federal Human Capital Survey "Leadership" Items

Section Item	Leadership 2004 DOT % Positive	2002 DOT % Positive	2004 FHCS Benchmarks % Positive			2004 Private Sector % Positive
			High	Medium	Low	
39. I have a high level of respect for my organization's senior leaders	37	NA	68	47	33	–
40. In my organization, leaders generate high levels of motivation and commitment in the workforce.	27	32	51	35	27	–
41. My organization's leasers maintain high standards on honesty and integrity.	37	44	65	48	34	–
42. Managers communicate the goals and priorities of the organization.	54	NA	75	62	49	–
43. Managers review and evaluate the organization's progress toward meeting its goals and objectives	53	63	73	60	40	–
44. Employees are protected from health and safety hazards on the job.	74	NA	91	74	48	–
45. My organization has prepared employees for potential security threats.	72	NA	88	73	60	–
46. Complaints, disputes or grievances are resolved fairly in my work unit.	40	39	47	37	29	–
47. Arbitrary action, personal favoritism and coercion for partisan political purposes are not tolerated.	50	42	60	48	33	–
48. Prohibited Personnel Practices (for example, illegally discriminating for or against any employee/applicant, obstructing a person's right to compete for employment, knowingly violating veterans' preference requirements) are not tolerated.	64	NA	72	61	49	–
49. I can disclose a suspected violation of an low, rule or regulation without fear of reprisal.	47	50	63	47	38	–

Competency Analysis

During FY 2005, DOT developed, tested, and validated a leadership competency model based on OPM's Executive Core Qualifications (ECQs).

- The model identifies leadership competencies and their descriptions at four levels: Basic, Supervisor, Manager, and Executive

- DOT and the OAs have adopted this model with some modifications to include:

  o A Managerial Success Profile for use in a 360 degree feedback system.

  o A detailed leadership development framework to address issues identified by a Workforce Planning and Professional Development task force as well as the 2001 All Employee Survey.

  o Competencies and work behaviors tailored to specific OA management needs.

  o A complete library of detailed competency reports to include Executives, Managers, Supervisors, and Team Leaders.

Figure 2.4 shows the critical competencies and desired competency levels for supervisors, managers, and executives. As leadership roles and responsibilities change, so does the number of critical competencies.

Figure 2.4: DOT Leadership Competency Model36

Competency	Supervisor Performance	Critical	Manager Performance	Critical	Executive Performance	Critical
Accountability	3.36	✓	3.63	✓	4.00	✓
Conflict Management	2.55		3.25		4.00	✓
Creative Thinking/Innovation			2.75		3.80	✓
Entrepreneurship			2.75		3.40	
External Awareness					3.80	
Financial Management			3.13		3.80	✓
HR Management	2.55		3.25	✓	3.80	✓
Influencing / Negotiating	2.55		3.25	✓	4.00	✓
Leveraging Diversity	3.00		3.50	✓	4.00	✓
Political Savvy					3.80	✓
Resilience	3.00		3.63	✓	4.00	✓
Service Motivation	3.18		3.38	✓	4.00	✓
Strategic Thinking					3.80	✓
Team Building	3.27		3.38	✓	3.80	✓
Technology Management			2.63		3.20	✓
Vision					3.80	✓

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[36] Source: "Managerial Competency and Assessment Framework Development", 3/18/2005, BoozAllenHamilton

Results

DOT has introduced an annual web-based survey to develop a gap-focused assessment of leadership competency levels. The first Leadership Assessments were conducted throughout the entire DOT organization and completed on December 12, 2005.

In this first year, the participation results by OA, and within each OA varied by leadership group.

Of the completed surveys, competency gaps were more pronounced for managers than for supervisors and more pronounced for executives than for managers in all DOT OA. This is due to some extent to the progressively higher competency targets for higher-level managers. For example, targets for critical executive competencies are all set at the "Mastery" or near-mastery level.

KEY: Overall Averages, Targets, and Gaps (NB: Bold Faced competencies are critical competencies for each group)

Gap	Color
- .55 or higher	
Between - .56 & -. 89	
- 0.90 or lower	

Closing Leadership Competency Gaps at DOT

Competency gaps identified across DOT are shown in Figures 2-5 a, b, and c.

Figure 2-5a. Competency Gaps by Leadership Group across DOT[37]

Executives
December, 2005

EXECUTIVE SCORES	Average	Target	Gap
Vision	**2.91**	3.80	**- 0.89**
Resilience	**3.16**	4.00	**- 0.84**
Team Building	**3.00**	3.80	**- 0.80**
Accountability	**3.03**	4.00	**- 0.98**
Political Savvy	3.10	3.80	- 0.70
Service Motivation	3.12	4.00	- 0.88
Strategic Thinking	2.96	3.80	- 0.84
Conflict Management	**2.55**	4.00	**- 1.46**
Financial Management	**2.86**	3.80	**- 0.94**
Leveraging Diversity	**3.02**	4.00	**- 0.98**
Technology Management	**2.91**	3.20	**- 0.29**
Influencing/ Negotiating	**3.01**	4.00	**- 1.00**
HR Management	**2.94**	3.80	**- 0.86**
Creative Thinking/ Innovation	**2.96**	3.80	**- 0.84**
Entrepreneurship	**2.96**	3.40	**- 0.44**
External Awareness	**3.05**	3.80	**- 0.76**

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[37] *Source: "DOT Leadership Assessment Report", December 2005*

Figure 2.5b. Competency Gaps by Leadership Group Across DOT

Managers
December, 2005

MANAGER SCORES	Average	Target	Gap
Resilience	3.00	3.63	- 0.63
Team Building	2.79	3.38	- 0.59
Accountability	3.07	3.63	- 0.56
Service Motivation	3.07	3.38	+ 0.31
Leveraging Diversity	2.81	3.50	- 0.69
Influencing/ Negotiating	2.88	3.25	- 0.37
HR Management	2.90	3.25	- 0.35
Entrepreneurship	2.62	2.75	- 0.13
Conflict Management	2.72	3.25	- 0.53
Financial Management	2.55	3.13	- 0.58
Technology Management	2.58	2.63	- 0.05
Creative Thinking/ Innovation	2.77	2.75	+ 0.02

Figure 2.5c. Competency Gaps By Leadership Group Across DOT,

Supervisors
December, 2005

SUPERVISOR SCORES	Average	Target	Gap
Accountability	2.89	3.36	- 0.47
Resilience	2.92	3.00	- 0.08
Team Building	2.93	3.27	- 0.34
Service Motivation	2.98	3.18	- 0.20
Conflict Management	2.63	2.55	+ 0.08
Leveraging Diversity	2.88	3.00	- 0.12
Influencing/ Negotiating	2.81	2.55	+ 0.26
HR Management	2.78	2.55	+ 0.23

DOT will track and report results on efforts to narrow the gap in *conflict management* in eight participating OAs. *Conflict management* was chosen because it is a significant gap (i.e., scores show a wide variance from the target) in all eight OAs at the *executive level*, and in several at the management level as well. Additionally, it is linked to other competencies that also show gaps. Finally, it is a competency for which improvement interventions can be readily identified. DOT will pursue these interventions while strategies for closing other gaps are being devised and implemented. Because planned training interventions in some OAs will not be completed at the end of June, 2006, DOT will not be able to retest and measure progress until the end of the fiscal year. No cross-cutting significant gaps were identified for *first-line supervisors*, and Department-wide efforts will therefore concentrate on significant gaps identified for managers and executives. OAs are individually developing strategies to close gaps specific to their own workforce.

Figure 2-6. Gap Analysis for FMCSA, NHTSA, FTA, MARAD, PHMSA, RITA, OST, and OIG.

2.6a Leadership Occupations: Executive Level					
Conflict Management	FMCSA	NHTSA	FTA	MARAD	PHMSA
Baseline	2.00	2.45	Data unavailable	2.68	2.45
Overall Target/**Gap**	4.00/ **-2.00**	4.00/ **-1.55**	4.00/ unknown	4.00/ **-1.32**	4.00/ **-1.55**
Target by 9/30/06	2.20	2.60	2.70	2.81	2.60

2.6b Leadership Occupations: Managerial Level					
Conflict Management	FMCSA	NHTSA	FTA	MARAD	PHMSA
Baseline	2.35	2.57	(within range)	(within range)	2.35
Overall Target/**Gap**	3.25/ **-0.90**	3.25/ **-0.68**	3.25	3.25	3.25/ **-0.90**
Target by 9/30/06	2.44	2.64	3.25	3.25	2.44

2.6c Leadership Occupations: Managerial Level					
Conflict Management	FMCSA	NHTSA	FTA	MARAD	PHMSA
Baseline	N/A*	2.45	(within range)	(within range)	N/A*
Overall Target/**Gap**		3.25/ **-0.80**	3.25	3.25	
Target by 9/30/06		2.53	3.25	3.25	

*Note: PHMSA is a relatively flat organization with few non-executive managers.

Federal Motor Carrier Safety Administration (FMCSA) is approaching the need to close leadership competency gaps with a multi-dimensional strategy. FMCSA's Office of Human Capital Assets is working closely with Agency managers to ensure that learning opportunities and gap closing activities are leveraged to maximize resources, expedite the gap-closing process, and support program requirements and needs. Figure 2.7 shows the tactics chosen to close the leadership competency gaps in FMCSA at multiple levels.

Figure 2.7 PHMSA Leadership Assessment 2nd Quarter FY 2006

Conflict Management	PHMSA Managers	PHMSA Executives	PHMSA Supervisors
Baseline	N/A *(few non-executive managers in PHMSA)*	2.45	3.07
Overall Target/**Gap**	N/A	4.00/ **-1.55**	2.55/+.52
Target by 9/30/06	N/A	3.0	3.38

PHMSA leadership believes a 10% increase in executive scores on conflict management would not be fast enough progress and has set a higher goal accordingly. As a succession planning measure, PHMSA also hopes to increase conflict management skills of its supervisors by 10%. Tactics include a presentation to Senior Staff (including most PHMSA supervisors), on "Dealing with Difficult People" by the PHMSA Director of Civil Rights, and a one-day Conflict Management Training presented by the Department's Center for Alternative Dispute Resolution to PHMSA supervisors.

Although an explicit goal was not set, PHMSA also hopes to increase leaders' competency in Human Resources management. PHMSA is providing an eight-day, four-module supervisory refresher training in human resources management to 100% of its supervisors. The training is scheduled for March 2006 and June 2006.

NHTSA requires conflict management training for all managers and supervisors. In addition, NHTSA Office of Human Resources (OHR) conducted **mandatory** classroom style training titled "Strategic Performance Management" for all Managers and Supervisors in headquarters and the regions. As a result of the previous training more managers are contacting OHR for guidance in addressing performance issues and they have been following through with the recommendations.

The Federal Highway Administration (FHWA) and FAA have each chosen different gaps that have strategic importance to their organizations. Each has a large, geographically dispersed workforce, and the competencies selected require a suite of interventions which will take time to administer.

In FHWA, the Financial Management competency is the target of a major improvement effort at all levels, including leadership.

Figure 2.8 Leadership Gap Analysis for FHWA

Financial Management	FHWA
Baseline	1.89
Target/**Gap**	3.13/**-1.24**
Target by 9/30/06	2.01

FHWA has taken several steps to increase this competency

- A competency framework was developed for the Financial Management occupation and is currently being updated by the Chief Financial Officer.

- Online training – Currently one Division Office is requiring all employees take at least one Financial Management course online by the end of FY 2006.

- A webinar was conducted on FIRE –The Deputy Administrator, the Executive Director, the Chief Financial Officer, the Deputy Financial Officer, and the Associate Administrator for Professional and Corporate Development participated in the webinar. The expected audience was 150 in attendance. The actual count was closer to 300.

- E-Gov: the use of Electronic Learning Management System (eLMS) – As curricula are defined by the Office of Finance and the Training Team they will be updated to the eLMS.

In FAA, the target leadership cohorts and competencies are: Frontline Managers who tested at the Beginner Level in *Managing Organizational Performance;* Middle Managers who tested at the Beginner Level in *Strategy Formulation* and *Developing Talent;* and Senior Managers who tested at the Beginner Level in *Business Acumen* and *Building Alliances*. FAA will pursue an integrated strategy to close targeted leadership skills gaps through its Managerial Workforce Planning process. FAA has implemented systems to track Middle and Senior Manager development through the eLMS-based Individual Development Plan (IDP) process.

FAA policy requires that first and second level supervisors of probationary managers certify acceptable proficiency in the specific duties covered in the Managing Organizational Performance competency areas. FAA has set a target of 60% certification.

No significant gaps were identified for the Federal Railroad Administration (FRA) and they are not included in tracking and reporting for this initiative. They will work on a moderate gap in connection with a performance culture training initiative. There were no significant gaps among managers in the Saint Lawrence Seaway Development Corporation (SLSDC).

INFORMATION TECHNOLOGY (IT) PROFESSIONALS

Defined

The DOT IT Workforce Capability Assessment, completed in August, 2005, provides the following picture of the "Typical "Transportation IT Worker.[38]

- Is classified as a GS-0334

- Is male and white (non-Hispanic)

- Has a grade level of GS-13/14

- Has little to no private sector experience

- Is eligible to retire in the next 11 to 20 years

- Holds a Bachelors Degree

- Is 45 – 50 years old

The government-wide important (specialized) IT job activities are defined as follows:

IT Project Management typically involves exercising centralized authority and responsibility for planning, organizing, staffing, and controlling efforts of participating personnel and organizations for management of one or more specific IT project(s) throughout the life cycle (from initiation to deployment and closeout) of the system. IT project management includes responsibilities such as definition of requirements, development of project plans, acquisition, risk mitigation, deployment and maintenance, and ensuring the project is on schedule and within budget.

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[38] US Department of Transportation "IT Workforce Gap Analysis and Skill Gap Closure Plan", August 30, 2005, p.3

IT Security/Information Assurance ensures the integrity, availability, and confidentiality of information and information systems through the planning, analysis, development, implementation, maintenance, and enhancement of systems, programs, policies, procedures, and tools.

Enterprise Architecture (EA) links the business mission, strategy, and processes of an organization to its IT strategy. It is documented using multiple architectural models or views that show how the current and future needs of an organization will be met. By focusing on strategic differentiators and working across the enterprise, there is a unique opportunity to create leverage and synergies and avoid duplication and inconsistencies across the enterprise.

Solutions Architecture (SA) primarily studies and defines solutions for a single system, department, or solution area within an agency. The Solutions Architect is primarily concerned with issues including fundamental business and technology issues: alignment with core agency business strategies, business process simplification, and the implementation of information technology that enables the realization of key business objectives but on a small scale and within the scope of a single project or system.

Representation

Figure 2-9 shows the representation of IT workers in the DOT OAs as of September 30, 2005.

Figure 2-9.   INFORMATION TECHNOLOGY FAMILY BY OA
Year-End FY 2005

Information Technology Family by OA

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of PWTD	PWD Strength	% of PWD	Veterans Strength	% of Veterans
FAA	1,759	46.8	126	7.2%	17	1.0%	160	9.1%	374	21.3%
FHWA	49	48	20	40.8%	1	2.0%	7	14.3%	13	26.5%
FMCSA	16	44.9	13	81.3%	0	0.0%	4	25.0%	1	6.3%
FRA	26	46.7	2	7.7%	1	3.8%	1	3.8%	5	19.2%
FTA	8	48.6	1	12.5%	0	0.0%	1	12.5%	2	25.0%
MARAD	10	45.7	3	30.0%	0	0.0%	2	20.0%	3	30.0%
NHTSA	15	49.7	3	20.0%	0	0.0%	1	6.7%	3	20.0%
OIG	20	40.9	2	10.0%	0	0.0%	0	0.0%	0	0.0%
OST	25	48.3	3	12.0%	0	0.0%	3	12.0%	3	12.0%
PHMSA	9	41.7	0	0.0%	0	0.0%	0	0.0%	1	11.1%
RITA	95	46.5	1	1.1%	0	0.0%	7	7.4%	13	13.7%
SLSDC	2	41.5	0	0.0%	0	0.0%	0	0.0%	1	50.0%
STB	5	48.4	1	20.0%	0	0.0%	1	20.0%	2	40.0%
Total	2,039	46.7	175	8.6%	19	0.9%	187	9.2%	421	20.6%

Competency Analysis

DOT continues to participate in the government-wide management of each of the following important (specialized) IT job activities: IT Project Management, IT Security/Information Assurance, and IT Architecture (Enterprise and Solutions). DOT summarized self-rated proficiencies for competency and skill "Supply" data based on the 2004 Federal IT Workforce Assessment (Clinger-Cohen Survey). DOT also summarized the competency and skill "demand" data generated through the Federal IT Workforce Capability Planning and Analysis Tool (CPAT). A summary of the competency and skill gaps from that analysis is presented in Figure 2.10.

Figure 2-10. IT Workforce Competency and Skill Gaps[39]

Key:	Strength Proficiency gap of 0.0 or less	Medium Gap Proficiency gap of 0.6 to 1.9
	Large Gap Proficiency gap of 2.0 or more	Small Gap Proficiency gap of 0.1 to 0.5

IMPORTANT/ SPECIALIZED JOB ACTIVITY*	COMPETENCIES	SKILLS	COMPETENCY GAPS (out of 103)	SKILL GAPS (out of 34)
IT Project Management	27	8	Large: 0 Medium: 15 Small: 9 Strength: 3	Large: 1 Medium: 5 Small: 0 Strength: 2
IT Security/ Information Assurance	12	11	Large: 0 Medium: 5 Small: 3 Strength: 4	Large: 1 Medium: 6 Small: 2 Strength: 2
Enterprise Architecture	14	5	Large: 0 Medium: 7 Small: 5 Strength: 2	Large: 1 Medium: 2 Small: 1 Strength: 1
Solutions Architecture	20	10	Large: 0 Medium: 8 Small: 6 Strength: 6	Large: 0 Medium: 4 Small: 2 Strength: 4
Summary of competency and skill gap totals	103	34	0 large gaps 35 medium gaps 23 small gaps 15 strengths	3 large gaps 17 medium gaps 5 small gaps 9 strengths

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[39] US Department of Transportation "IT Workforce Gap Analysis and Skill Gap Closure Plan", August 30, 2005, p.6

Strategies to Asses and Close Competency Gaps

The Department has created a Workforce Action Plan (See Appendix J for the DOT-Wide IT Implementation Calendar) to address gaps in the specialized IT job activities. The Action Plan includes performance measures that are aligned with DOT's 2004-2009 Information Resource Management (IRM) Plan strategy: *"Assuring assimilation of a qualified IT workforce to improve IT product and service delivery, through the development, recruitment and retention of highly qualified project managers, solution architects, and security specialists, and other personnel as identified."*

HUMAN CAPITAL PROFESSIONALS

Like all Federal Agencies, DOT will assess the competencies of its HC professionals (job series 201) using the Chief Human Capital Officer (CHCO) Council-sponsored Human Capital competencies during FY 2006.

Defined

The following competencies comprise the Human Capital competency model:

HR Technical
1) Technical Competence – Uses knowledge that is acquired through formal training or extensive on-the-job experience to perform one's job; works with, understands, and evaluates technical information related to the job; advises others on technical issues.

2) Legal, Government, and Jurisprudence – knowledge of laws, legal codes, court procedures, precedents, legal practices and documents, government regulation, executive orders, agency rules, government organization and functions, and the democratic political process.

People
3) Interpersonal Skills – Shows understanding, courtesy, tact, empathy, and concern; develops and maintains relationships; may deal with people who are difficult, hostile, or distressed; relates well to people from varied backgrounds and situations; and is sensitive to individual differences.

4) Teamwork – Encourages and facilitates cooperation, pride, trust, and group identity; fosters commitment and team spirit; and works with others to achieve goals.

Consulting
5) Customer Service – Works with customers to assess needs, provides assistance, resolves problems, satisfies expectations, and knows products and services; is committed to providing quality products and services.

6) Client Engagement/ Management (organizational Development) – Knowledge of the principles of organizational development and change management theories, and their applications.

7) Knowledge of the Agency's Business (Organizational Awareness) – Knows the organization's mission and functions, and how its social, political, and technological systems work and operate effectively within them. This includes the programs, policies, procedures, rules, and regulations of the organization.

Analytical

8) Project Management – Knowledge of the principles, methods, or tools for developing, scheduling, coordinating, and managing projects and resources, including monitoring and inspecting costs, work, and contractor performance.

9) Problem Solving – Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make recommendations.

Representation

The 2005 *Workforce Plan* did not track this job family. Therefore, no comparison may be made with FY 2004 data.

Figure 2-11. Human Capital Family (Series 201) as of September 30, 2005

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of PWTD	PWD Strength	% of PWD	Veterans Strength	% of Veterans
FAA	380	74	19.5%	2	0.5%	27	7.1%	28	7.4%	380
FHWA	48	16	33.3%	0	0.0%	3	6.3%	4	8.3%	48
FMCSA	11	8	72.7%	0	0.0%	0	0.0%	0	0.0%	11
FRA	13	1	7.7%	0	0.0%	1	7.7%	1	7.7%	13
FTA	2	1	50.0%	0	0.0%	0	0.0%	0	0.0%	2
MARAD	11	4	36.4%	0	0.0%	0	0.0%	1	9.1%	11
NHTSA	11	1	9.1%	0	0.0%	0	0.0%	2	18.2%	11
OIG	3	0	0.0%	0	0.0%	1	33.3%	0	0.0%	3
OST	25	7	28.0%	0	0.0%	2	8.0%	1	4.0%	25
PHMSA	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4
RITA	12	1	8.3%	0	0.0%	1	8.3%	1	8.3%	12
SLSDC	3	1	33.3%	0	0.0%	0	0.0%	0	0.0%	3
STB	2	1	50.0%	0	0.0%	0	0.0%	1	50.0%	2
Total	525	115	5.6%	2	0.1%	35	1.7%	39	1.9%	525

* Data not provided in 2005 *Workforce Plan*

Strategies to Assess and Close Competency Gaps

DOT is pursuing the assessment schedule established by the Chief Human Capital Officers (CHCO) Council, as follows:

March: Supervisors register in the system and complete their assessments; Human Resource Management Specialists register in the system and complete the assessment; Supervisors review results for direct reports who complete the assessment.

March/April: Supervisors complete assessments of their direct reports.

March to May: Agencies define and set their optimal proficiency levels (to be) for HRM specialists based on the needs and priorities of their agencies.

By June 30: Submit gap analyses and improvement plan (developmental strategies) for closing Human Resource Management Specialists competency gaps.

DOT–WIDE MISSION CRITICAL OCCUPATION STUDY

ENGINEERING FAMILY

Defined

Engineering work is central to every aspect of DOT's mission, and engineers are at the center of the Agency's strategy to deliver "Safer, Smarter, Simpler" transportation solutions to the nation. DOT has commissioned a competency analysis for **four key engineering jobs** that will continue throughout FY 2006. Note that these four jobs (see Figure 2.12) do not include all mission-critical engineering occupational titles.

Representation

DOT employs people in 19 of the job categories identified by the Office of Personnel Management in its Position Classification Standards. Figure 2-12 provides data on the four key engineering positions, as compared to data provided in the *2005 Workforce Plan*.

DOT will focus its attention and resources on identifying competencies and assessing and closing gaps for the four most populous engineering job categories. These four categories are defined below and their representation by OA is shown in Figure 2-12.

Figure 2-12. Key Engineering Series by OA

Series	Occupational Title	FAA	FHWA	FRA	FTA	FMCSA	MARAD	NHTSA	OST	PHMSA	RITA	Total
801	General Engineering	760	7	17	40	3	7	95		104	39	**1,072**
810	Civil Engineering	359	1,089	2			2				7	**1,459**
830	Mechanical Engineering	68	1	6		1	3	25			34	**138**
855	Electronics Engineering	884	2	6				3	1		37	**933**
TOTAL		2,071	1,099	31	40	4	12	123	1	104	117	**3,602**

Note: See Table 2.16 for the representation of employees in *all* engineering occupation series.

General Engineering, series 801

A professional position in a recognized branch of engineering comprises duties which require in their successful performance: (1) the practical application of basic scientific principles, particularly those of higher mathematics, and physical and engineering sciences; (2) an intimate knowledge of the fundamental engineering concepts and terminology, the units of measurement, and their interrelationship common to all branches of engineering; and (3) a thorough understanding of engineering techniques and methods such as can be gained through four years of engineering training in a recognized college or university, or training equivalent in *type, scope* and *thoroughness*.

Civil Engineering, series 810

This series includes professional positions in the field of civil engineering, typically requiring application of general knowledge of the physical sciences and mathematics underlying engineering, and specialized knowledge of: (a) mechanics of solids, particularly of soils; (b) hydraulics; (c) theory of structure; (d) strength of materials; (e) engineering geology; and (f) surveying. Positions in this series have responsibility for management, supervision or performance of: (1) planning, designing, constructing, and/or maintaining structures and facilities that provide shelter, support transportation systems, and control natural resources; (2) investigating, measuring, surveying and mapping the earth's physical features and phenomena; and (3) research and development activities pertaining to (1) or (2).

Mechanical Engineering, series 830

This series includes professional positions in the field of mechanical engineering, typically requiring the application of thermo-dynamics, mechanics, and other physical, mathematical, and engineering sciences to problems concerned with the production, transmission, measurement, and use of energy, especially heat and mechanical power.

Electronics Engineering, series 855

This series includes professional engineering positions which require primarily application of knowledge of: (a) the physical and engineering sciences and mathematics; (b) electrical phenomena; and (c) the principles, techniques, and practices of electrical engineering. The work pertains primarily to electrical circuits, circuit elements, equipment, systems, and associated phenomena concerned with electrical energy for purposes such as motive power, heating, illumination, chemical processes, or the production of localized electric or magnetic fields.

Gap Analysis[40]

Competency Assessment and Gap Analysis will proceed throughout FY 2006, with key milestones as follows:

- Quarter 3 : Identify competencies for the mission critical occupations to perform successfully; Identify competency gaps

- Quarter 4: Identify strategies to close skill gaps and improve operations

DOT MISSION CRITICAL OCCUPATIONS

DOT Mission Critical Occupations and Series include:

- Planning (0020)
- Program Management (0340)
- Financial Management (0501, 0505, 0510, 0511, 0525, 0540, 0544, 0560)
- Engineer (0801, 0802, 0803, 0806, 0807, 0808, 0809, 0810, 0817, 0818, 0819, 0830, 0850, 0855, 0856, 0861, 0871, 0873, 0896)

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[40] Source: 2006 Workforce Analysis Pilot Plan of Action Timeframes and Steps Overview , January 19, 2006

- Legal (0905, 0935, 0950, 0963, 0986)

- Physical Scientist (1301, 1306, 1310, 1320, 1340, 1350, 1361, 1370, 1371, 1373, 1384)

- Transportation Specialist (2101)

- Transportation Industry Analyst (2110)

- Transportation Safety (1825, 2121, 2123, 2125, 2152)

- Information Technology (2210, 0334, 0391, 1550, 0854)

The following tables and text provide FY 2005 data and analyses for each MCO by OA. Comparisons are to data provided in the **2005 Workforce Plan,** where appropriate.

MISSION CRITICAL OCCUPATIONS BY OPERATING ADMINISTRATION

Office of the Secretary
201 Human Resource Management
500 Financial Mgt (501, 510, 560)
905 Attorney
1102 Contract Specialist
2110 Transportation Specialist.

Federal Aviation Administration
2152 Air Traffic Controllers
2101 Airway Transportation. System Specialist
801 General Engineers
810 Civil Engineers
855 Electronics Engineers
861 Aerospace Engineers
334, 391, 1550, 854, 1550 - Information Technology
1825 Aviation Safety Inspector
1801 Aviation Security Inspectors

Office of Inspector General
511 Auditors
1811 Criminal Investigators
1801 Investigator

Federal Motor Carrier Safety Administration
2123 Motor Carrier Specialist – Border and Safety Invest. Border Auditors and Inspectors; Hazardous Material (Hazmat) Sp.; State Program Sp.; Federal Program. Sp.
2125 Hwy Safety Sp.; Federal Program Sp.; Enforcement Sp.
2101 Transportation. Specialist

Federal Highway Administration
0020 Planning
0028 Environment
0501/505 Financial Mgmt.
0810 Civil Engineer
0802 Engineer Technician
1170 Reality (Right of Way)
2101 Transportation Specialist

National Highway Traffic Safety Administration
2125 Highway Safety sp./Program Managers
800 Engineers (801, 802, 830, 850, 855)

Federal Railroad Administration
2121 Railroad Safety Inspectors

St. Lawrence Seaway Development Corporation
GS-2150 Marine Transportation Specialist
GS-2210 Information Technology Specialist
WG-2805 Electrician
WG-4701 Trades Helper-Relief Line handler
WG-5201 Linehandler
WG-5352 Industrial Equipment Mechanic
WL-5426 Lock & Dam Operator Leader
WG-5426 Lock & Dam Operator
WG-5426 Linehandler-Relief LDO

Federal Transit Administration
0020 Community Planning
0801 General Engineering
2101 Transportation. Specialist
2210 Information Technology Specialist

Research and Innovative Technology Administration
0020 Community Planning
0110 Economist
0180 Engineering Psychologist
0800 Engineer (0801,0810,0854,0855,0819, 830)
1102 Contract Price Analyst/Spec/Procurement
1301 Physical Scientist
1515 Operations Research Analyst
1815 Air Safety Investigator
1712 Training Specialist
2110 Transportation Industry Analyst
2210 Information Technology Specialist

Maritime Administration

0028 Environment
0080 Security Administrator
0110—Economist
301 Administration & Program Staff (specific titles can be found in MARAD's workforce plan)
343 Mgt and Program Analyst
346 Logistics Mgt
391 Telecommunications Spec
0500 Financial Mgmt (501,510,0560,561)
800 Engineer (801, 830, 871, 873)
1101- Business and Industry Spec
1102 Contract Spec
1140 Trade Spec
1160 Financial Analyst
1163 Examiner
1530 Statistician
1710 Faculty Instructor
2003 Supply Mgt Spec
2010 Inventory Mgt Spec
2101 Transportation Spec
2110 Transportation Industry Analyst
2210 Information Technology
5334 Marine Machiner Mechanic

Pipeline & Hazardous Materials Safety Administration

0110 Economist
0300 (301 Program Specialist, Environmental Program Specialist, Grants Management Specialist, Information Manager, 343 Management and/or Program Analyst)
340 Program Manager
0800 Engineer (801, 806)
905 Attorney
1001 Training and Information Specialist
1300 Physical Sciences (1301, 1306, 1320
1515 Operations Research Analyst
2101 Transportation. Specialist
2210 Information Technology Specialist

Surface Transportation Board

0028 Environment
0110 Economist
0500 Financial Mgmt (501, 505, 1160)
801 General Engineer
0900 Legal (905, 950, 986)
2110 Transportation Industry Analyst

COMMUNITY PLANNING FAMILY

Defined

This series includes professional positions concerned with community planning and with developing the art and science of planning to apply to communities such as urban or rural neighborhoods, villages, Indian reservations, cities, counties, regions, states, or the nation. Community planning work requires knowledge of planning concepts, principles, techniques, and practices; the social, economic, political, and physical elements involved in human settlements; and the dynamics of change within these elements. Planners identify community needs, resources, and problems, and assist citizens to make decisions on goals, policies, priorities, plans, programs, and methods of implementation designed to create a physical, economic, and social environment in which the human activities desired by the members of the community may flourish.

Representation

Figure 2-13. Representation of Community Planning Family

Community Planning Family (occupational series 0020)

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	28	45.8	0	0.0%	0	0.0%	1	3.6%	7	25.0%
FHWA	117	43.6	72	61.5%	1	0.9%	10	35.7%	8	28.6%
FTA	56	43.1	3	5.4%	0	0.0%	4	14.3%	2	7.1%
RITA	11	40.8	1	9.1%	0	0.0%	0	0.0%	1	3.6%
Total	212	43.6	76	35.8%	1	0.5%	15	7.1%	18	8.5%
Comparison to 2004	203	44.3	23	13.3			13	6.4	*	*

* Data not provided in 2005 *Workforce Plan*

The data show:

- Onboard strength has remained constant in this series.

- The average age has decreased by 7/10th of one year.

- The number of supervisors and managers has increased, but this may be due to differences in data collection.

- The number of persons with disabilities has increased and is higher than the overall DOT average of 6.6%.

PROGRAM MANAGEMENT FAMILY

Figure 2-14: Representation of Program Management Family by OA

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	253	52.7	223	88.1%	2	0.8%	22	8.7%	67	26.5%
FHWA	134	50.4	132	98.5%	0	0.0%	7	5.2%	15	11.2%
FMCSA	57	46.3	57	100.0%	0	0.0%	2	3.5%	11	19.3%
FRA	10	51.5	10	100.0%	1	10.0%	1	10.0%	2	20.0%
FTA	12	53.3	12	100.0%	1	8.3%	1	8.3%	1	8.3%
NHTSA	51	52	49	96.1%	0	0.0%	4	7.8%	2	3.9%
OST	10	50.5	9	90.0%	0	0.0%	0	0.0%	1	10.0%
PHMSA	3	51.3	3	100.0%	0	0.0%	2	66.7%	0	0.0%
RITA	7	56.7	7	100.0%	0	0.0%	0	0.0%	0	0.0%
SLSDC	3	48.7	3	100.0%	0	0.0%	0	0.0%	0	0.0%
STB	1	57	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Total	541	51.4	506	93.5%	4	0.7%	39	7.2%	99	18.3%
Comparison To 2004 (series 0340)NH	522	51.3	446	85.40%	*	*	27	5.20%	*	*

* Data not provided in 2005 *Workforce Plan*

The data show:

- The number of Program Managers has grown in FY 2005. This growth is spread in small numbers among the OAs.

- The average age has only increased slightly in the past 12 months, but is still higher at 51.4 than the overall average of 46.7. The **2005 *Workforce Plan*** suggested that the projected attrition trend was higher for this category of employees due to higher grades of their positions and their proximity to retirement eligibility. With the median retirement age at DOT of 57, this remains a concern.

- Veterans are not represented at the same rate as their representation in the DOT-wide workforce.

- The number of persons with disabilities has grown and exceeds the 6.6% average rate for DOT.

FINANCIAL MANAGEMENT FAMILY

Defined

DOT has identified three categories of Financial Management personnel as key.

(1) Professional and Administrative Work in the Accounting and Budget Group

- 0501, Financial Administration and Program

- 0510, Accounting

This series covers positions that advise on or administer, supervise, or perform professional accounting work that requires application of accounting theories, concepts, principles, and standards to the financial activities of governmental, quasi-governmental, or private sector organizations. The work includes:

- Designing, developing, operating, or inspecting accounting systems;

- Prescribing accounting standards, policies, and requirements;

- Examining, analyzing, and interpreting accounting data, records, and reports; or

- Advising or assisting management on accounting and financial management matters.

- 0511, Auditing

This series covers positions that apply professional accounting and auditing knowledge, standards, and principles when performing these duties:

- Advising on, supervising, or performing work consisting of a systematic examination and appraisal of financial records, financial and management reports, management controls, policies and practices affecting or reflecting the financial condition and operating results of an activity;

- Analyzing work related to the developing and executing audit policies and programs;

- Conducting performance audits; or

- Conducting activities related to the detection of fraud, waste, and abuse

- 0560, Budget Analysis

This series covers positions that perform, advise on, or supervise work in any of the phases of budget administration when such work requires knowledge and skill in applying budget-related laws, regulations, policies, precedents, methods, and techniques.

(2) Clerical and Technical Accounting and Budget Work

- 0525, Accounting Technician

- 0540, Voucher Examining

- 0561, Budget Clerical and Assistance

Employees in this series perform clerical and technician work in support of accounting, budget, financial management, or fiscal operations not readily classified to another more specific series, or that includes a combination of work classifiable to two or more series in the GS-500 group when no one series predominates. Clerical work involves compiling figures, maintaining records, compiling reports, or performing other procedural work which represents the transactions or business of an organization. Technician work involves various kinds of duties which require applying a practical knowledge of regulations and precedent cases. Technicians apply specific procedures and established methods. Some technicians may perform specialized non-administrative work preparing data for automated financial systems or may support professionals by writing synopses of audits or financial reports or deciding entitlement against definitive criteria.

(3) Financial Management Series

- 0505

This series includes all classes of positions the duties of which are to manage or direct a program for the management of the financial resources of an organizational segment, field establishment, bureau, department, independent agency, or other organizational entity of the Federal Government when the duties and responsibilities include: (a) developing, coordinating, and maintaining an integrated system of financial staff services including at least accounting, budgeting, and management-financial reporting, and sometimes also one or more of such related staff services as auditing, credit analysis, management analysis, etc.; (b) exercising effective control over the financial resources of the organization; (c) coordinating and synthesizing financial and management data so as to interpret the composite financial results of operations to all levels of the organization's management; (d) advising on, developing, coordinating, and carrying out financial policies, procedures, and plans; (e) reviewing, analyzing, evaluating, and reporting upon program accomplishments in financial terms; and (f) advising and assisting the management officials of the organization served by supplying financial management advice required to make management decisions, establish organizational goals and objectives, and in all respects to manage the organization.

Representation

Figure 2-15. Representation of Financial Management Family by OA

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	425	47.9	48	11.3%	2	0.5%	26	6.1%	43	10.1%
FHWA	106	47.3	49	46.2%	0	0.0%	13	12.3%	16	15.1%
FMCSA	7	44.3	5	71.4%	1	14.3%	1	14.3%	1	14.3%
FRA	13	48.2	1	7.7%	0	0.0%	3	23.1%	2	15.4%
FTA	27	47.1	5	18.5%	1	3.7%	6	22.2%	0	0.0%
MARAD	26	52.1	9	34.6%	0	0.0%	1	3.8%	3	11.5%
NHTSA	8	45	2	25.0%	0	0.0%	0	0.0%	0	0.0%
OIG	116	46.4	37	31.9%	0	0.0%	8	6.9%	17	14.7%
OST	25	46.6	8	32.0%	0	0.0%	1	4.0%	2	8.0%
PHMSA	8	39.3	1	12.5%	0	0.0%	0	0.0%	0	0.0%
RITA	24	49.3	3	12.5%	0	0.0%	3	12.5%	2	8.3%
SLSDC	5	49.6	2	40.0%	0	0.0%	0	0.0%	1	20.0%
STB	4	58.5	2	50.0%	0	0.0%	0	0.0%	1	25.0%
Total	794	47.6	172	21.7%	4	0.5%	62	7.8%	88	11.1%
Comparison To 2004	831		134	16.1%	*	*	62	7.5	*	*

*Data not provided in 2004 Workforce Plan

Strategies to Asses and Close Competency Gaps

Example: FHWA

The Financial Management occupation is one of the FHWA's seven mission critical occupations. The FHWA administers a large Federal-Aid program with oversight and stewardship of a $300 billion dollar program. There has been a shift in the skills and competencies needed by those in the Financial Management occupation, and the competency of "Federal-Aid Delivery and Stewardship" has been selected as a base to begin this improvement.

This improvement plan is targeted at the specific competency of "Federal-Aid Delivery and Stewardship" for the Financial Management Occupation. The development of this plan included input from the Chief Financial Officer, Human Resources Training Team, and the FHWA Workforce Planner.

This plan is broken into five areas; tactics, rationale, progress evaluation components, evaluation methodology, and accountability.

Figure 2-16. Representation of Engineering Family

Engineering Family by OA (2005)

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	3,713	47.3	358	9.6%	15	0.4%	285	7.7%	885	23.8%
FHWA	1,257	44.9	630	50.1%	7	0.6%	100	8.0%	131	10.4%
FMCSA	4	46.7	4	100.0%	0	0.0%	0	0.0%	0	0.0%
FRA	32	52.2	6	18.8%	3	9.4%	5	15.6%	5	15.6%
FTA	42	45.5	1	2.4%	0	0.0%	1	2.4%	4	9.5%
MARAD	76	54.6	12	15.8%	0	0.0%	4	5.3%	22	28.9%
NHTSA	124	45.3	14	11.3%	0	0.0%	4	3.2%	9	7.3%
OIG	1	48	0	0.0%	0	0.0%	0	0.0%	0	0.0%
OST	2	43	0	0.0%	0	0.0%	0	0.0%	0	0.0%
PHMSA	103	50.4	8	7.8%	1	1.0%	6	5.8%	20	19.4%
RITA	124	42.2	11	8.9%	0	0.0%	6	4.8%	13	10.5%
SLSDC	5	46.8	1	20.0%	0	0.0%	1	20.0%	0	0.0%
STB	4	52	2	50.0%	0	0.0%	0	0.0%	0	0.0%
Total	5,487	46.8	1,047	19.1%	26	0.5%	412	7.5%	1,089	19.8%
Comparison To 2004	5,674	*	585	10.3%	*	*	324	5.7	*	*

The data show:

- The total size of the Engineering family has decreased since September 30, 2004.

- The number of managers and supervisors has increased (this may be due to new rules for data collection).

- The numbers of Engineers with disabilities is relatively representative of the population as a whole (DOT PWD% of strength is 6.6%) and has increased from 2004.

- FHWA employs 23% of all DOT engineers and FAA employs 67.6% of all engineers.

- 19.8% of all engineers are veterans, which is below the DOT-wide average of 28.3%.

LEGAL FAMILY

Defined

DOT employs personnel in the following professional, clerical and technical series:

General Attorney, 0905. This series includes professional legal positions involved in preparing cases for trial and/or the trial of cases before a court or an administrative body or persons having quasi-judicial power; rendering legal advice and services with respect to questions, regulations, practices, or other matters falling within the purview of a Federal Government agency (this may include conducting investigations to obtain evidentiary data); preparing interpretive and administrative orders, rules, or regulations to give effect to the provisions of governing status or other requirements of law; drafting, negotiating, or examining contracts or other legal documents required by the agency's activities; drafting, preparing formal comments, or otherwise making substantive recommendations with respect to proposed legislation; editing and preparing for publication statutes enacted by Congress and opinions or decisions of a court, commission, or board; and drafting and reviewing decisions for consideration and adoption by agency officials. Included also are positions, not covered by the Administrative Procedure Act, involved in hearing cases arising under contracts or under the regulations have the effect of law, and rendering decisions or making recommendations for disposition of such cases. The work of this series requires admission to the bar.

Paralegal Specialist, 0950. This series includes positions not requiring professional legal competence which involve various legal assistance duties, of a type not classifiable in some other series in the Legal and Kindred Group, in connection with functions such as hearings, appeals, litigation, or advisory services. The specialists analyze the legal impact of legislative developments and administrative and judicial decisions, opinions, determinations, and rulings on agency programs; conduct research for the preparation of legal opinions on matters of interest to the agency; perform substantive legal analysis of requests for information under the provisions of various acts; or other similar legal support functions which require discretion and independent judgment in the application of a specialized knowledge of laws, precedent decisions, regulations, agency policies and practices, and judicial or administrative proceedings. Such knowledge is less than that represented by graduation from a recognized law school, and may have been gained from formalized, professionally instructed agency or educational institution training or from professionally supervised on-the-job training.

Legal Instruments Examining, 0963. This series covers one-grade interval administrative support positions that supervise, lead, or perform support and related work in connection with the examination of legal instruments and supporting documents, other than claims, to determine whether a requested action complies with certain provisions of various laws. The work requires the application of particular regulatory and procedural knowledge that is based on those laws.

Legal Assistance, 0986. This series covers one-grade interval administrative support positions that supervise, lead, or perform legal assistance work not classifiable in any other series in the Legal and Kindred Group, GS-0900. The work requires specialized knowledge of processes, procedures, and practices to support legal activities.

Representation

Figure 2.17 Representation of Legal Family by OA

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	342	47.6	69	20.2%	3	0.9%	26	7.6%	37	10.8%
FHWA	50	45.5	43	86.0%	0	0.0%	3	6.0%	4	8.0%
FMCSA	34	45	25	73.5%	1	2.9%	2	5.9%	2	5.9%
FRA	27	42.3	5	18.5%	1	3.7%	2	7.4%	2	7.4%
FTA	22	49.9	7	31.8%	0	0.0%	0	0.0%	0	0.0%
MARAD	22	48.8	4	18.2%	0	0.0%	2	9.1%	6	27.3%
NHTSA	27	41.9	5	18.5%	0	0.0%	0	0.0%	0	0.0%
OIG	10	37.7	3	30.0%	1	10.0%	2	20.0%	0	0.0%
OST	80	50.5	46	57.5%	0	0.0%	9	11.3%	18	22.5%
PHMSA	19	45.4	3	15.8%	1	5.3%	2	10.5%	3	15.8%
RITA	9	50.4	4	44.4%	0	0.0%	1	11.1%	2	22.2%
SLSDC	2	40	1	50.0%	0	0.0%	0	0.0%	0	0.0%
STB	61	48.6	16	26.2%	1	1.6%	12	19.7%	3	4.9%
Total	705	47.2	231	32.8%	8	1.1%	61	8.7%	77	10.9%
Comparison To 2004	717	*	127	17.7%	*	*	45	6.3%	*	*

* Data not provided in 2005 *Workforce Plan*

The data show:

- Overall strength has remained constant in the last year.

- The average age of those in the legal family is higher than the DOT-wide average of 46.7.

- The numbers of persons with disabilities has increased to 8.7% from 6.3% in 2004.

- The representation of veterans is not comparable to the overall DOT-wide average of 28.3%.

Strategies to Asses and Close Competency Gaps

Example: FMCSA

FMCSA will pursue solutions principally requiring formal training. Attorneys usually have either self-initiated or required developmental regimens, especially in the area of continuing legal education, that are spelled out in annual performance or individual development plans.

The findings from the competency surveys will be applied to the individual attorney's efforts for the upcoming year to assure that those areas with the largest reported present and future competency gaps are addressed.

For Attorneys/Attorney Advisors only one competency with a current gap greater than .50 is needed now at an advanced level: *policy development*.

A few other competencies have a gap of at least two-thirds of a level and are needed in the future at an intermediate-to-advanced level: bankruptcy law, project management, partnering, and public affairs.

For Trial Attorneys, few competencies with current gaps greater than .50 are needed at a very high level. *Regulatory analysis*, with a gap of 1.00, is needed now at an advanced level, and *external awareness* and *vision*, with gaps of .60, are needed now at an intermediate-to-advanced level.

For the Adjudications Counsel, a few of the competencies with future gaps greater than .50 are needed in the future at an intermediate-to-advanced level: training development and delivery and UFA.

PHYSICAL SCIENTIST FAMILY

Defined

In the **2005 Workforce Plan**, the following series were defined as key in both professional and technical fields of the Physical Science occupational family.

General Physical Science, series 1301. This series includes positions that involve professional work in the physical sciences when there is no other more appropriate series, that is, the positions are not classifiable elsewhere. This series also includes work in a combination of physical science fields, with no one predominant.

Health Physics, series 1306. This series includes positions that require primarily application of professional knowledge and competence in health physics, which is concerned with the protection of persons and their environment from unwarranted exposure to ionizing radiation.

Physics, series 1310. This series includes positions that advise, administer, supervise, or perform research or other professional and scientific work in the investigation and application of the relations between space, time, matter, and energy in the areas of mechanics, sound, optics, heat, electricity, magnetism, radiation, or atomic and nuclear phenomena.

Chemistry, series 1320. This series includes all positions involving work that requires full professional education and training in the field of chemistry. This work includes the investigation, analysis, and interpretation of the composition, molecular structure, and properties of substances, the transformations which they undergo, and the amounts of matter and energy included in these transformations. This work includes the investigation, analysis, and interpretation of the composition, physical and chemical properties, molecular structure and chemical reactions of substances; the prediction of transformation they undergo; and the amount of matter and energy included in these transformations.

Meteorology, series 1340. This series includes positions that involve professional work in meteorology, the science concerned with the earth*s atmospheric envelope and its processes. The work includes basic and applied research into the conditions and phenomena of the atmosphere; the collection, analysis, evaluation, and interpretation of meteorological data to predict weather and determine climatological conditions for specific geographical areas; the development of new or the improvement of existing meteorological theory; and the development or improvement of

meteorological methods, techniques, and instruments. Positions in this occupation require full professional knowledge and application of meteorological methods, techniques, and theory.

Navigational Information , series 1361. This series includes positions involving the acquisition, collection, evaluation, selection, and preparation of vital aeronautical information for dissemination in official publications concerning safe navigation and related operations, requiring the technical and practical knowledge of air navigation and operations.

Cartography, series 1370. This series includes positions requiring the application of professional knowledge and skills in mapping and related sciences, and relevant mathematics and statistics to plan, design, research, develop, construct, evaluate, and modify mapping and charting systems, products, and technology.

Cartographic Technician , series 1371. This series includes technician positions that supervise, lead, or perform nonprofessional work that requires a practical knowledge of the processes, practices, methods, and techniques involved in constructing new or revised maps, charts, and related cartographic products. This work does not require full professional knowledge equivalent to that represented by completion of a bachelor's degree in cartography or a related science.

Land Surveying, series 1373. This series includes positions that involve professional work in land surveying, which is concerned with establishing, investigating, and reestablishing land and property boundaries, and with preparing plats and legal descriptions for tracts of land. The work requires application of professional knowledge of the concepts, principles and techniques of surveying, including underlying mathematics and physical science, in combination with a practical knowledge of land ownership laws.

Textile Technology Series, series 1384. This series includes classes of professional positions involving scientific and technological work with textile or fibers, including investigation, development, production, processing, evaluation, and application.

Representation

Figure 2-18. Representation of Physical Scientist Family by OA

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	321	47	44	13.7%	5	1.6%	43	13.4%	94	29.3%
FHWA	19	55.7	8	42.1%	0	0.0%	2	10.5%	5	26.3%
FMCSA	1	54	1	100.0%	0	0.0%	0	0.0%	1	100.0%
NHTSA	7	54.7	2	28.6%	0	0.0%	0	0.0%	2	28.6%
PHMSA	11	54.6	2	18.2%	0	0.0%	0	0.0%	1	9.1%
RITA	7	51.3	0	0.0%	0	0.0%	1	14.3%	1	14.3%
Total	366	47.9	57	15.6%	5	1.4%	46	12.6%	104	28.4%
Comparison To 2004 (series 0340)	376	*	40	10.6%	*	*	42	11.2%	*	*

* Data not provided in 2005 *Workforce Plan*

The data show:

- Total strength has decreased in FY 2005 as predicted in the workforce projected attrition analysis in the **2005 Workforce Plan**.

- While the Physical Scientists in FAA represent 87.7% of the total Physical Scientists employed at DOT, FAA does not list this occupation as Mission Critical. In other OAs where Physical Scientists are listed as Mission Critical, the average age is much higher than the overall average age at DOT.

- Veterans and persons with disabilities are well represented in this occupational grouping.

- The number of those in the leader ranks has grown; however, this may be due to data collection differences between 2004 and 2005.

TRANSPORTATION SPECIALIST FAMILY

Defined

This series covers administrative positions the duties of which involve transportation work not specifically covered by other series in the transportation group (2100). Within PHMSA, Transportation Specialists develop hazardous materials transportation and pipeline safety regulations, interpret and provide special permits under hazardous materials safety regulations, and conduct hazardous materials safety inspections.

Representation

Figure 2-19 Representation of Transportation Specialist Family by OA

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	6,407	47.3	768	12.0%	13	0.2%	482	7.5%	3,418	53.3%
FHWA	226	46.9	167	73.9%	1	0.4%	19	8.4%	20	8.8%
FMCSA	105	50.9	70	66.7%	3	2.9%	7	6.7%	14	13.3%
FRA	68	53.9	36	52.9%	0	0.0%	5	7.4%	27	39.7%
FTA	128	52.1	43	33.6%	3	2.3%	9	7.0%	14	10.9%
MARAD	13	52.6	2	15.4%	0	0.0%	0	0.0%	3	23.1%
OST	26	50.8	10	38.5%	1	3.8%	4	15.4%	3	11.5%
PHMSA	89	48.7	16	18.0%	0	0.0%	7	7.9%	26	29.2%
RITA	27	50.5	0	0.0%	0	0.0%	3	11.1%	1	3.7%
Total	7,089	47.5	1112	15.7%	21	0.3%	536	7.6%	3,526	49.7%
Comparison To 2004	6,641	47.6	662	10.00%	*	*	396	6.00%	*	*

* Data not provided in 2005 Workforce Plan

The data show:

- The average age has decreased very slightly in FY 2005, but is higher that the overall average age of DOT at 46.7.

- Veterans comprise almost one half of all personnel in this career family.

- The number of persons with disabilities has grown to 7.6% from 6% in 2004.

Strategies to Assess and Close Competency Gaps

FAA: Airway Transportation System Specialists (2101). Faced with growing retirement rates and resulting loss of institutional knowledge, the ATO, where virtually all Airway Transportation System Specialists (ATSS) reside, is presently studying its Technical Operations workforce, the workforce that installs, maintains, and operates the technical systems that support the NAS.

NAS modernization continues to introduce new systems for ATSS to integrate, implement, maintain, construct, and certify. The implication for ATSS is the need to acquire the competencies and skills to ensure the integration of new systems in the NAS. Standard training development requirements are now included in all new system/equipment contracts. As new systems/equipment is deployed, employees at the sites receiving the equipment must receive the appropriate training to understand how to maintain the new equipment. Statements of work for all new systems ensure that training and performance exams are purchased and validated. The ATO is implementing an integrated training and certification program for the ATSS workforce. Also, formal on-the-job training and performance exam packages for all certifiable systems are offered. Over 400 technical training courses are being delivered. In FY 2005, 31 new courses were developed and work is underway on an additional 27 new courses.

TRANSPORTATION INDUSTRY ANALYST FAMILY

Defined

This occupation includes positions that involve analytical, evaluative, advisory, or similar work pertaining to regulation of the transportation industry with regard to operations, economics, equity in industry practices, and protection of the public interest. The work requires a knowledge of transportation industry regulatory controls, of the customs and competitive practices of carriers, and of carrier operations, services, and facilities. It also requires a general knowledge of economics, statistics, law, business management and related subject-matter areas, but does not require full training and professional competence in any of those fields.

Representation

Figure 2-20: Representation of Transportation Industry Analyst by OA

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	21	42	0	0.0%	0	0.0%	5	23.8%	2	9.5%
FRA	3	40.7	0	0.0%	0	0.0%	0	0.0%	1	33.3%
MARAD	25	50	3	12.0%	0	0.0%	3	12.0%	4	16.0%
OIG	1	55	0	0.0%	0	0.0%	0	0.0%	0	0.0%
OST	58	46	15	25.9%	0	0.0%	5	8.6%	8	13.8%
RITA	12	45	2	16.7%	0	0.0%	0	0.0%	1	8.3%
STB	16	53.7	4	25.0%	0	0.0%	5	31.3%	5	31.3%
Total	136	46.9	24	17.6%	0	0.0%	18	13.2%	21	15.4%
Comparison To 2004	136	47.8	14	10.40%	*	*	7	5.2%	*	*

* Data not provided in 2005 *Workforce Plan*

The data show:

- The strength of this family remained steady in FY 2005.

- The percentage of persons with disabilities grew significantly from 5.2% in FY 2004 to 13.2% in FY 2005.

TRANSPORTATION SAFETY FAMILY

Defined

The Transportation Safety family is one of the largest groups of mission-critical occupations. It includes

- Railroad Safety Inspectors

- Motor Carrier Safety Inspectors

- Highway Safety Specialists

- Aviation Safety Inspectors

- Air Traffic Controllers

DOT has included a number of series in this family, including:

Aviation Safety, series 1825. This series includes positions that involve primarily developing, administering, or enforcing regulations and standards concerning civil aviation safety, including: (1) the airworthiness of aircraft and aircraft systems; (2) the competence of pilots, mechanics, and other airmen; and (3) safety aspects of aviation facilities, equipment, and procedures. These positions require knowledge and skill in the operation, maintenance, or manufacture of aircraft and aircraft systems.

Railroad Safety, series 2121. This series includes positions that are involved in developing, administering, or enforcing railroad safety standards and regulations or investigating and preventing railroad accidents. These positions require: (1) broad knowledge of railroad operating practices and recordkeeping; (2) practical knowledge of methods used in the installation, maintenance, or manufacture of railroad equipment, signal systems, or track; (3) knowledge of safety practices applicable to the railroad industry and related laws, regulations, and standards; and (4) knowledge of the investigative techniques used in determining the cause of accidents.

Motor Carrier Safety, series 2123. This series includes positions the duties of which are to administer, supervise, or perform work involved in promoting or enforcing compliance with Federal laws, standards, and regulations related to the safe operation of commercial motor vehicles on the public highways. Included are positions concerned with promoting safe operating practices and enforcing compliance by shippers of hazardous materials; motor carrier accident investigation and prevention; developing regulations and standards; and providing technical assistance to the industry and other jurisdictions involved in motor carrier safety. The work requires: (1) comprehensive knowledge of the laws, standards, and regulations governing motor carrier safety; (2) knowledge of the safety principles and practices applicable to the motor carrier industry; (3) practical knowledge of the competitive and operating practices, policies, organization, equipment, facilities, and recordkeeping systems of motor carriers; and (4) knowledge of investigative techniques used in compliance enforcement and accident investigation.

Highway Safety, series 2125. This series includes positions the duties of which primarily involve: (1) development and administration of highway safety regulations, standards and programs to elicit and promote governmental and public support for highway safety; (2) conducting studies or performing other analytical work directed toward identification of current highway safety problems and evaluation of the effectiveness of highway safety programs and methods; or (3) providing state and local governments with technical assistance in planning, developing, monitoring, funding, managing, promoting, or evaluating programs and systems to improve vehicle, passenger, or pedestrian safety and to identify, control, or eliminate the factors that influence highway accidents. All positions in this series require specialized knowledge of highway safety programs and the factors that influence highway safety and the safe performance and operation of motor vehicles. Most positions also require a high degree of analytical ability and a general knowledge of the principles and processes of program management and intergovernmental relations.

Air Traffic Control, series 2152. This series includes positions concerned with: (a) the control of air traffic to insure the safe, orderly and expeditious movement along air routes and at airports when a knowledge of aircraft separation standards and control techniques, and the ability to apply them properly, often under conditions of great stress, are required; (b) the providing of preflight and in-flight assistance to aircraft requiring a knowledge of the information pilots need to conduct safe flights and the ability to present that information clearly and concisely; or (c) the development, coordination, and management of air traffic control programs. Positions in this occupation require an extensive knowledge of the laws, rules, regulations and procedures governing the movement of air traffic.

Representation

Figure 2-21: Representation of Transportation Safety Family by OA

Operating Administration	Total Strength	Average Age	Manager/ Supervisor Strength	% of Manager/ Supervisor	PWTD Strength	% of All PWTD	PWD Strength	% of All PWD	Veterans Strength	% of All Veterans
FAA	22,801	45.4	3,316	14.5%	36	0.2%	848	3.7%	7,109	31.2%
FHWA	6	47.5	4	66.7%	0	0.0%	1	16.7%	1	16.7%
FMCSA	650	44.3	95	14.6%	4	0.6%	68	10.5%	195	30.0%
FRA	447	53.2	46	10.3%	4	0.9%	47	10.5%	237	53.0%
NHTSA	93	49	15	16.1%	0	0.0%	9	9.7%	9	9.7%
Total	23,997	45.5	3,476	14.5%	44	0.2%	973	4.1%	7,551	31.5%
Comparison To 2004	26,871		3495	13.0%	*	*	841	3.1%	*	*

* Data not provided in 2005 *Workforce Plan*

The size of this Mission Critical Occupation has decreased since FY 2004.

NHTSA Office of Traffic Injury Control Workforce Staffing Study

The Traffic Injury Control (TIC) staffing study, begun in July 2005, is examining TIC's resource requirements to: 1) identify staffing imbalances, shortages, and/or excess resources requirements in both its headquarters and field offices; 2) assess if staff resources are utilized efficiently and effectively; and 3) determine whether future program goals can be addressed within projected modest staff growth over the next six years. Findings from this study will be provided upon completion.

FAA – Aviation Safety Inspectors (1825s). The Aviation Safety organization has launched a Curriculum Transformation project to provide an integrated training system for employees to create a learning organization of skilled aviation safety inspectors. A goal of the curriculum transformation initiative is to streamline the time period for new-hire inspector initial training and expand the use of distance learning to be able to provide training when it is needed.

Figure 2.22 Air Traffic Controllers (2152)

		All Air Traffic Controllers	Air Traffic Controller Managers	Air Traffic Controller Supervisors
Size	**n**	19,140	148	2,687
Average Age	**Years**	43.9	50.4	48.2
Average Tenure	**Years**	19.8	26.7	24.4
Retirement Eligibility	**FY 06** **n**	2,006	33	356
	%	10.5	22.3	13.2
	FY 10 **n**	4,288	63	755
	%	22.4	42.6	28.1

Source: FAA 2005 Workforce Plan

Representative Strategies to Close Gaps

FAA: Due to the large percentage of Air Traffic Controllers expected to retire in the next 10 years, as well as the lead time required to train a controller, the FAA is implementing its *Air Traffic Workforce Plan* to address future attrition in this workforce.

Air Traffic Controllers (2152). The Air Traffic Controller Workforce Plan discusses training strategies that will capitalize on technological advances in simulator training that will help meet the training requirements of 12,500 new controllers to be hired by FY 2014. Simulator training technique mimics pragmatic job situations and systems that will facilitate improved training time and conditions for new controllers coming on board. The installation of four new state-of-the-art tower simulators, with the capacity of voice-recognition technology imitates the tower cab venue, providing a realistic setting for training. This tower simulation system has doubled training capacity and high fidelity simulation allows the students to reach higher skill levels and prepares them to begin on the job training in the field. Likewise, the Display System Replacement (DSR) Lab mimics the en route operational setting and technology systems using an actual sector in Memphis Air Route Traffic Control Center. Students are provided experiences identical to those they will encounter at their facilities meaning they are better prepared to begin the challenge of training on live traffic. It is anticipated that the introduction of innovative simulation training technology much like the aforementioned, will decrease training time and prepare students to take on air traffic controller positions in record time. Thus, the time it takes for a controller to reach certified professional level (CPC) level will be shorter.

CHAPTER 3. DOT FUTURE WORKFORCE

Chapter 3 provides an analysis of the future workforce by looking at the following information:

- The most recent FY hires and losses

- A forecast of future workforce strength, using a statistical regression test based on past history and FY 2005 strength, where possible.

TURNOVER ANALYSIS, FY 2005

Analysis of employee turnover—losses and gains to an organization—makes it possible to assess whether an organization's people will be positioned to meet its future mission needs. A turnover analysis forms the basis for developing effective workforce plans and associated recruitment plans, succession plans, and career management objectives. These systems are covered in subsequent chapters of this **Update**.

The methodology for calculating a rate of turnover is: to divide the number of losses by the average strength for the year, and multiply that number by 100. Using the average strength offsets the gains and losses to the workforce during the year. Figure 3.1 shows the turnover rate at DOT for the last five years. Turnover has been gradually climbing since FY 2002. In FY 2005, the rate of turnover was 28% higher than in FY 2004.

Figure 3.1 DOT Turnover Rates, FY 2001-2005

FY	Average Strength	Losses	Turnover Rate
01	63,519	2,764	4.4
02	82,754	2,977	3.6
03	795,085	36,151	4.5
04	57,165	2,810	4.9
05	54,519	3,436	6.3

Examination of turnover by race/national origin reveals that the majority of separations in all racial groups are due to retirement.

Fig. 3.2 Turnover Rates by Race/National Origin

Equiv Grade	Separation Action	Nbr of Actions	American Indian/ Alaskan Native		Asian/ Pacific Islander		Black, not of Hispanic origin		Hispanic		White, not of Hispanic Origin	
SES	Resignation	9	0	0.0%	0	0.0%	1	11.1%	0	0.0%	8	88.9%
	Retirement	44	0	0.0%	5	11.4%	4	9.1%	0	0.0%	35	79.5%
	Separations-Other	1	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
	Transfer	4	0	0.0%	0	0.0%	2	50.0%	0	0.0%	2	50.0%
	Total	58	0	0.0%	5	8.6%	8	13.8%	0	0.0%	45	77.6%
15	Resignation	9		0.0%		0.0%	2	22.2%		0.0%	7	77.8%
	Retirement	368	10	2.7%	2	0.5%	35	9.5%	13	3.5%	308	83.7%
	Separations-Other	8	0	0.0%	0	0.0%	1	12.5%	1	12.5%	6	75.0%
	Transfer	26	0	0.0%	0	0.0%	7	26.9%	1	3.8%	18	69.2%
	Total	411	10	2.4%	2	0.5%	45	10.9%	15	3.6%	339	82.5%
14	Resignation	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	100.0%
	Retirement	59	0	0.0%	0	0.0%	2	3.4%	2	3.4%	55	93.2%
	Separations-Other	1	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%
	Transfer	17		0.0%	2	11.8%	5	29.4%	0	0.0%	10	58.8%
	Total	81	0	0.0%	2	2.5%	8	9.9%	2	2.5%	69	85.2%
13	Resignation	9		0.0%	0	0.0%	1	11.1%		0.0%	8	88.9%
	Retirement	97	1	1.0%	0	0.0%	11	11.3%	5	5.2%	80	82.5%
	Separations-Other	4	0	0.0%	1	25.0%	0	0.0%	0	0.0%	3	75.0%
	Transfer	6	0	0.0%		0.0%	4	66.7%	1	16.7%	1	16.7%
	Total	116	1	0.9%	1	0.9%	16	13.8%	6	5.2%	92	79.3%
12	Resignation	0							0			
	Retirement	15	0	0.0%	0	0.0%	0	0.0%	0	0.0%	15	100.0%
	Separations-Other	0							0			
	Transfer	0							0			
	Total	15	0	0.0%	0	0.0%	0	0.0%	0	0.0%	15	100.0%

To understand the impact of these turnover rates, a more in-depth assessment of the following key components of workforce planning is required:

- Current and future mission requirements and their impact on skills required by the workforce.

- The experience level of the current on-board staff, represented by years of service/age and possession of competencies, as shown by grade and possession of knowledge, skills, abilities, and behaviors. (An assessment of competencies may be found in Chapter 2).

- Losses to current staff and the effect these losses will have on staff capabilities.

- Accessions to the workforce required to assure that the staff has sufficient capability and capacity to assure mission accomplishment.

Current and future mission requirements

DOT will continue to face many of the same organizational challenges shared by other Federal agencies and private sector organizations. These challenges, all of which impact the human resource requirements for DOT, include:

- Rapidly changing technologies and their impact on product design and delivery, internal business processes and employee skills requirements.

- The trend towards a blended workforce contracting work to the private sector and its impact on DOT's role as it changes from "operator "to "program manager" or "overseer."

- The importance of hiring new employees in a distribution representative of America and managing the diversity of the DOT workforce so that it is not only representative of the gender, race/national origin of the population it serves, but is able to leverage the capabilities of a diverse workforce.

- The members of the "Baby Boom" generation—a large population from which to draw workers—are turning 60 and are beginning to retire. This has several consequences: an aging current workforce, a smaller future labor pool and differing values toward work based on generational differences.

- The evolving nature of work which requires people who can "multi-task," assimilate information quickly from multiple sources and make quick decisions, and work in less hierarchical organizational relationships.

Unique to DOT is the criticality of its highly technical mission to the safety of the nation and to the U.S. economy and the requirement to maintain its skilled professional and technical workforce in support of that mission.

Experience level of the DOT workforce as measured by years of service (YOS) and grade

Years of Service. In Chapter 1, *Current Workforce*, the composition of the DOT workforce by age and YOS is graphically displayed in Figure 1.7. The data show that between 12-15% of the DOT workforce was eligible to retire in FY 2005 and that increasing numbers will be eligible to retire in the next four years.

Figure 3.3 Years Of Service by OA

	FAA	FHWA	FMCSA	FRA	FTA	MARAD	NHTSA	OIG	OST	PHMSA	RITA	SLSDC	STB
0	625	91	70	38	30	23	28	25	17	18	35	1	5
1	406	83	34	26	8	22	8	17	13	17	13	3	2
2	725	98	39	34	14	8	22	4	17	15	23	1	10
3	1,041	124	118	18	17	12	31	8	20	18	40	1	4
4	1,050	133	50	47	8	15	26	17	26	9	46	3	9
5	536	126	30	31	15	17	19	14	15	9	29	2	3
6	754	48	34	32	19	14	15	19	17	11	28	1	3
7	1,016	62	38	20	11	20	27	12	18	8	17	4	2
8	1,062	64	28	23	7	14	12	15	7	13	19	1	3
9	684	63	17	19	7	12	11	7	14	3	19	1	
10	679	60	20	20	10	13	5	16	14	11	18	5	1
11	618	33	14	16	4	12	5	13	6	4	18	1	2
12	913	58	18	27	12	10	11	12	15	8	11		
13	1,206	82	31	19	16	16	14	8	20	12	20	1	3
14	1,666	97	43	26	13	23	17	19	22	15	29	2	2
15	1,762	93	64	35	10	21	28	11	17	18	16	3	1
16	1,976	92	38	21	7	29	15	27	25	9	14	2	
17	1,821	125	33	27	14	22	12	17	17	6	20	5	
18	2,123	103	62	27	27	27	26	26	27	10	23	3	2
19	1,803	79	37	18	9	35	13	16	20	5	9	7	2
20	2,004	74	17	13	7	40	18	4	17	16	28	3	3
21	1,872	84	18	18	3	21	14	13	21	7	15	3	1
22	2,182	63	16	16	10	27	17	12	13	4	15	4	
23	2,522	40	14	13	14	18	13	3	14	10	7	3	3
24	1,296	43	17	19	12	21	10	7	15	8	14	3	1
25	1,244	70	12	24	14	27	19	10	20	7	18	4	1
26	1,202	69	19	17	12	16	12	13	17	8	6	3	2
27	1,510	77	17	20	23	19	16	4	28	3	20	1	4
28	1,100	59	19	16	10	24	14	7	21	6	13	1	2
29	979	54	21	15	21	28	17	4	16	9	10	1	2
30	853	66	12	19	21	25	14	2	25	5	13	6	6
31	853	70	16	15	11	27	10	7	18	4	18		6
32	663	56	7	11	9	26	14	8	25	1	10		12
33	587	22	10	14	9	11	14	4	10	2	13	1	8
34	525	50	8	10	12	15	7	4	10	1	11	1	7
35	474	51	5	6	15	14	16	3	20	6	1	1	4
36	348	38	6	6	9	11	8	3	10	4	9	2	6
37	282	31	4	3	7	5	9		12	2	5		1
38	282	18	3	2	2	9	4	3	3	2	7		2
39	200	10	3	3	3	5	2		10		6		
40	121	10	1		1	4	2		1	2		1	4
41	61	7	2		2	5	1	1	4		1		
42	52	6	1	2	1	1	1		1	1			

	FAA	FHWA	FMCSA	FRA	FTA	MARAD	NHTSA	OIG	OST	PHMSA	RITA	SLSDC	STB
43	37	5	2			1			2		1		
44	32	1	1	1	2				2				
45	17	2			1	1							
46	17												
47	15	1									1		
48	23	2										1	
49	14						1		1				
50	5	2				1							
51	2	1											
52	1												
53						1							
54	2												
55													
56													
57	2												
58	1												
59	1												
60													
61													
62													
63			1										

Age. Figure 3.4 shows the trend in age (FY 1999-2005) for those in age categories 45 to 60 and above. The average age of people in each of the Mission Critical Occupations is shown in Figure 3.4. These data show:

- A progressive aging of the DOT workforce since FY 1999, which could be equated to the depth of experience of those onboard.

- The changing skew of the workforce. In FY 1999, the age structure of the oldest third of the DOT workforce was skewed towards ages 50-54. By FY 2005, this age skew had shifted. The numbers of employees in age group 50-54 had actually *decreased* by 4.5% and the numbers in the age ranges above 54 have increased.

- The median retirement age in FY 2004 and FY 2005 was 57 (see Figure 3.6). This provides a baseline against which to look at the ages of those in MCOs and those voluntarily leaving DOT.

    o The average age of people in Mission Critical Occupations is shown in Figure 3.4.

Figure 3.4 Strength by Age Category (FY 1999-2005)

Age Category	FY 99	FY 04	FY 05	% of DOT Difference FY 99 & 05
60+	3,047/5.3%	3,557/6.3%	4,261/8.1%	+2.8%
55-59	5,581/9.7%	7,616/13.5%	6,733/12.8%	+2.3%
50-54	9,984/17.4%	9,314/16.5%	6,822/12.9%	-4.5%
45-49	9,537/16.6%	11,642/20.7%	10,661/20.2%	+3.6%
Total Strength (all ages)	57,533	56,354	52,684	

Figure 3.5 Mission Critical Occupations (MCOs) by Average Age

Mission Critical Occupation	Average Age
Community Planning	43.6
Engineering	46.8
Financial Management	47.6
Information Technology	46.7
Legal	47.2
Physical Sciences	47.9
Program Management	51.4
Transportation Industry Analyst	46.9
Transportation Safety Specialist	45.5
Transportation Specialist	47.5

Grade. The grade of a position indicates the level of qualifications required to perform competently in that position. The conclusion may be drawn that higher graded positions would be occupied by individuals possessing a combination of experience and education leading to a higher level of competence in the performance of their work.

In FY 2005, the Department's employees were distributed across the grades with the average grade equating to **GS-12.7,** and the modal grade of 13.

This distribution shows the extent to which current employees occupy positions of greater experience and education.

Further analysis in Figure 3.6 shows the distribution of grades across DOT by gender and race/national origin. Key points to consider are that:

- Men exceed the average grade by ½ grade and women are, on average, 1.1 grades lower than the total population.

- Minorities, in total, are represented comparably to the average, with the exception of Black (not of Hispanic Origin) employees who are 8/10 of a grade lower than the total population.

**Figure 3.6 Representations by Gender/RNO by Grade**

Grade	Male	Females	American Indian/ Alaskan Native	Asian/ Pacific Islander	Black, not of Hispanic origin	Hispanic	White, not of Hispanic Origin	Not Specified
1	2						2	
2		1					1	
3	3	1			3		1	
4	85	374	3	19	100	39	297	1
5	110	920	32	42	214	95	639	8
6	45	382	7	10	99	33	277	1
7	250	456	4	19	199	61	419	4
8	93	272	6	6	115	28	208	2
9	660	921	23	46	393	224	887	8
10	119	118	7	6	49	8	158	9
11	1,904	1,361	62	93	476	253	2,329	52
12	8,112	2,317	192	291	1,146	694	8,063	43
13	7,822	2,524	140	574	1,174	591	7,824	43
14	12,022	2,313	130	331	808	554	12,472	40
15	6,631	1,912	160	264	920	449	6,730	20
SES	318	120	1	15	43	16	363	0
Wage	462	54	19	11	97	43	342	4
	38,638	14,046	786	1,727	5,836	3,088	41,012	235
Average Grade	13.2	11.6	12.5	12.7	11.9	12.2	12.9	
Total population Average = GS 12.7[41]								

Losses and Gains to DOT

Figure 3.7 shows a comprehensive comparison of losses, due to retirement and other reasons, to gains in relation to the median age of retirement for DOT over the last decade (1995-2005). The key conclusion based on the data is that, with the exception of the surge in hiring in 2002, **losses have exceeded gains since 1995.** In FY 2005, losses were 2.4 times greater than gains. Additional charts showing information on losses and gains in greater detail can be found in Appendix A.

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[41] Source WASS

Figure 3.7 Gains/Losses, by assigned NOA codes only, Historical Trends FY 1995-2005[42]
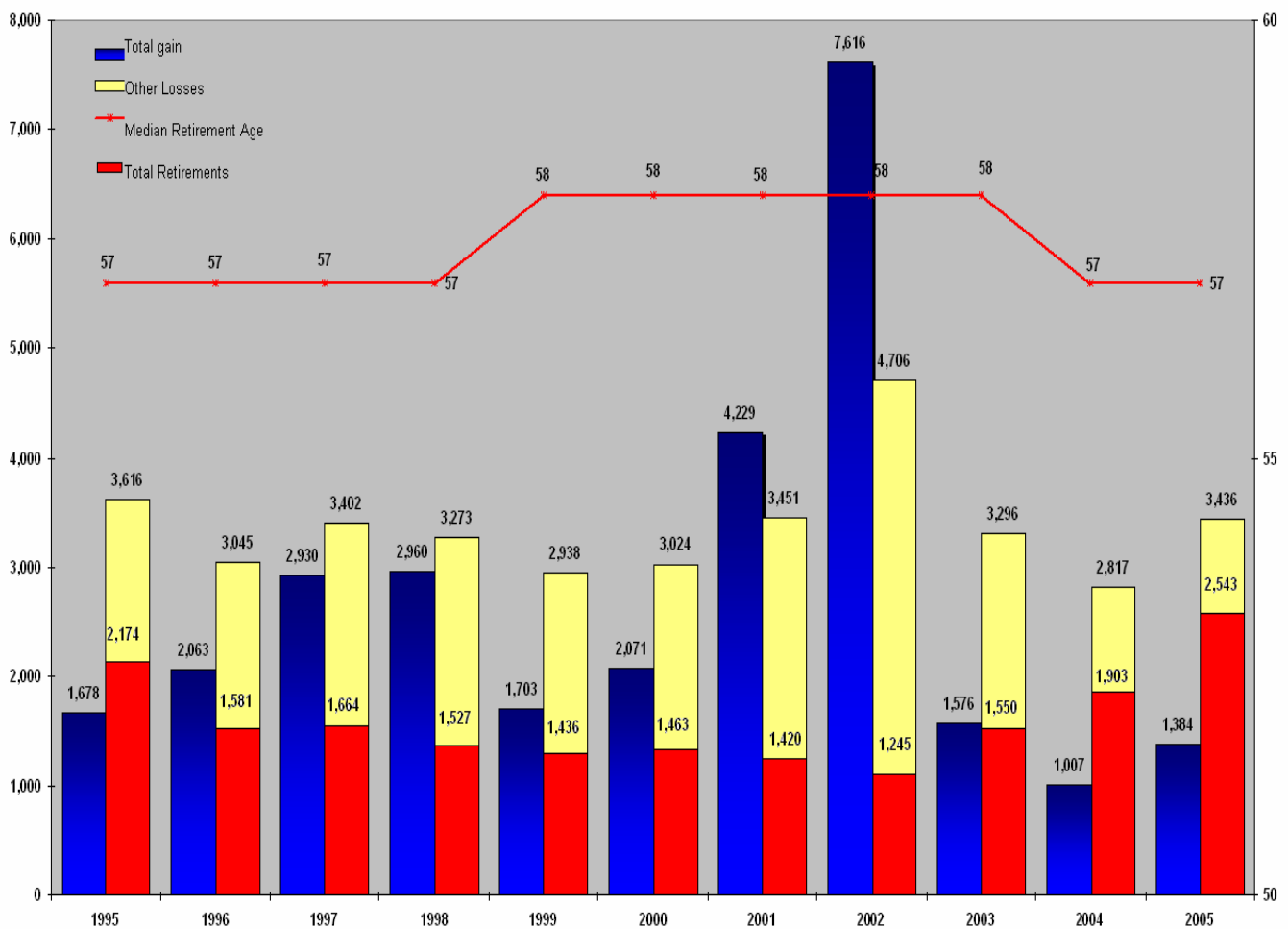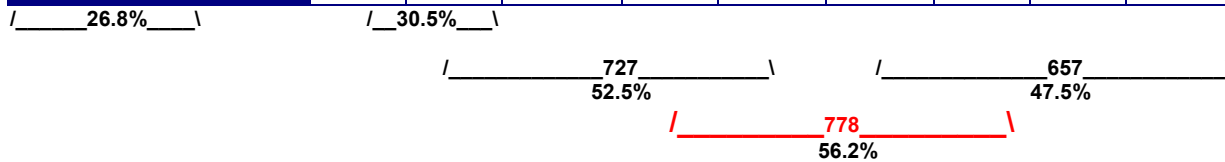

Gains. Figure 3.8 shows the source of new hires to DOT in FY 2005. The staffing strategy of many OAs includes recruiting experienced professionals to a "second career" at DOT from the transportation industry. This causes a "bi-modal" distribution in the ages of new hires with 26.8% of new hires below age 29 and 30.5% between the ages of 40-49. This hiring strategy affects the overall average age of the DOT workforce.

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[42] See Appendix B for NOA Codes

Figure 3.8 Hires by Age, 2005

NOA (type appointment)	>25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	Total
100 Career				1	8	6	7	2	2	**26**
101 Career-Conditional	11	33	48	42	46	33	35	19	4	**271**
130 Transfer – In	2	7	11	19	31	31	26	14	1	**142**
140 Reinstatement-Career	1	2	3	6	11	4	7	2	1	**37**
141 Reinstatement-Car/Cond			1				1			**2**
170 Excepted	132	183	118	107	144	108	54	39	21	**906**
TOTAL:	146	225	181	175	240	182	130	76	29	**1,384**
% NEW HIRES	**10.5%**	**16.3%**	**13.1%**	**12.6%**	**17.3%**	**13.2%**	**9.4%**	**5.5%**	**2.1%**	

/_____26.8%____\   /__30.5%___\

/_____727_____\   /_____657_____\
52.5%   47.5%

/_____778_____\
56.2%

Key Findings

Turnover

- The calculated turnover rate for DOT has increased since FY 2002 by 28%. The 2004 rate was 4.9%; it has increased to 6.3% of the average total strength in 2005.

Gains and Losses

- For FY 2005, losses were 2.4 times greater than gains to DOT.

- Voluntary losses are 92.3% of all losses. This includes retirements, which represent 74% of all losses.

- Involuntary losses are 7.7% of all losses.

Age

- Age data show that even with a significant effort to hire persons who are younger, the percent of those eligible to retire will continue to grow.

- 26.8% of new hires are below age 29 and 30.5% are between the ages of 40-49. This hiring strategy affects the overall average age of the DOT workforce.

- The age of those in MCO positions is generally between 45 and 47. Given the fact that 27% of losses to the DOT workforce occur between the ages 45-54, it is important that DOT continue to monitor closely loss trends of those in mission critical occupations.

- The addition of people in lower grades may initially decrease the overall competency level of the workforce.

Grade

- Women hold positions with a lower average grade than men.

- Blacks/African Americans and Hispanics on average hold positions at a grade lower than the DOT-wide average. Other Race/National Origin (R/NO) groups hold positions on or close to the average.

FUTURE WORKFORCE PROJECTIONS, FY 2006 - 2009

An analysis of turnover cannot stand alone. In order to use the information generated from an assessment of turnover, it is important to take the next step and use statistical modeling to anticipate future workforce requirements. The resulting information provides a plan for designing recruitment, retention and succession planning goals and strategies.

Forecasting models are developed based on:

- **The patterns of gains and losses to the workforce in the past**. For the purposes of the **2006 Update**, the forecasts were based on the gain/loss patterns from FY 2004-2005[43]. The model finds relationships and uses those relationship to forecast the future. *Note: Software did not permit reasonable projections based on prior years for the newly created organizations of PHMSA and RITA.*

- **Leadership decisions about future mission and associated budget and personnel strength requirements**. For the purposes of this **Update**, the DOT leadership determined that a "no goal" projection model be used: that is, assume no significant change in mission or resource requirements when projecting future human capital requirements. Individual OAs, such as MARAD, have completed their own forecasts based on different future scenarios. This difference in decisions about the OAs future could lead to differing workforce projections.

PROJECTIONS BY DOT OVERALL AND OPERATING ADMINISTRATION

Reading the Graphs

This projection was modeled using the CIVFORS system. This system works with data from CPDF and makes projections based on historical tendencies, and hiring and loss trends.

With in the model OAQ codes have been provided. The conversion is as follows:

- TD01 = OST

- TD03 = FAA

- TD04 = FHWA

- TD05 = FRA

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[43] *Only two years of history were used to avoid using the large increase of TSA hirings in 2002 and the large transfer out in 2003.*

- TD06 = SLSD

- TD09 = FTA

- TD10 = NHTSA

- TD11 = RITA

- TD12 = OIG

- TD13 = MARAD

- TD15 = STB

- TD16 = PHMSA

- TD17 = FMCA

Accuracy of the model. Note that the CIVFORS system does not immediately categorize all the losses that occur in a fiscal year. For example, many of the 2005 losses (over 2,000 incidents) have not yet been categorized as "NOA 75" which is an unspecified loss. Therefore, while the total number of gains and losses in the system for each year is fairly accurate, the system has not completely assigned all of those gains and losses into specific loss types. Many of the gains and losses for FY 2005 that are currently in the system as "NOA 75" and "NOA 85" (unspecified gain) will later be categorized, but it may be as long as 9-12 months[44] later.

Please note that forecasts were not run for the PHSMA. This is a new OA and therefore, does not have any historical personnel data that can be used in the regression analysis.
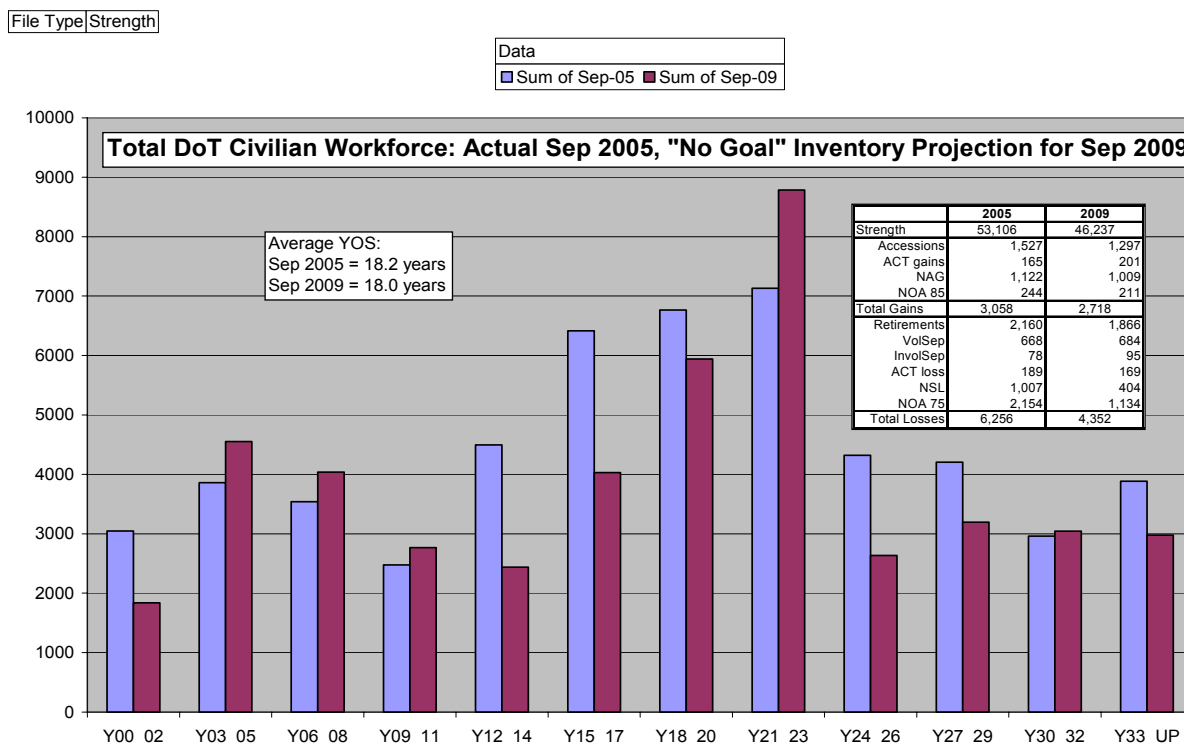
Reading the Graphs

- The horizontal axis is years of service in three-year increments

- The vertical axis is strength

Each bar represents total strength for that particular YOS range. The light bar on the left is represents 2005 strengths and the darker bar on the right represents 2009 strengths.

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[44] *Conservative estimate by CIVFORS administrators*

Figure 3.9 Projected Workforce: All DOT

File Type | Strength

Data
☐ Sum of Sep-05 ☐ Sum of Sep-09

Total DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009

Average YOS:
Sep 2005 = 18.2 years
Sep 2009 = 18.0 years

	2005	2009
Strength	53,106	46,237
Accessions	1,527	1,297
ACT gains	165	201
NAG	1,122	1,009
NOA 85	244	211
Total Gains	3,058	2,718
Retirements	2,160	1,866
VolSep	668	684
InvolSep	78	95
ACT loss	189	169
NSL	1,007	404
NOA 75	2,154	1,134
Total Losses	6,256	4,352

X-axis categories: Y00_02, Y03_05, Y06_08, Y09_11, Y12_14, Y15_17, Y18_20, Y21_23, Y24_26, Y27_29, Y30_32, Y33_UP

DOT overall. Over the four-year projection period, the Department's total strength is projected to drop from the FY 2005 current strength of 53,106 to future strength of 46,237 by FY 2009, at the rate of about 1,700 per year[45] because historic loss rates generate more losses than the historic number of gains will replace.

Over the same period, the average workforce experience is projected to drop slightly (18.2 years down to 18.0 years). However, if the Department maintains a constant strength by bringing in 1,700 new accessions each year, the average experience level should drop as less experienced workers are hired.

If the recent patterns of gains and losses continue into the future, the total DOT workforce will decline by about 13% over the next four years. Retirements will continue to be the largest category of losses from the workforce. The average experience level of the department will decline slightly due to smaller populations in the 12 to 29 YOS groups, except for YOS 21-23, where the population will increase due to the large number of the workforce with 15–17 YOS and 18–20 YOS. To maintain the end FY 2005 strength level, the Department will have to increase hiring, which will reduce the average experience level even more, because an increase in hiring tends to be at the entry level. As can be seen on the following charts, all of the decline in DOT strength can be

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[45] *(53,106 minus 46,237 divided by four)*

attributed to two operating administrations (the FAA and FHWA); all other OAs either increase in strength or remain constant.

By Operating Administration

Below are workforce inventory projections from CIVFORS broken out by OA. Where available (not all individual OA workforce plan have been submitted) each OA projection will be compared and analyzed against the CIVFORS projections. The purpose of this comparison is to understand the differences between a model projection (using data entries/transactions) and a projection based on working knowledge of a particular OA. An individual OA forecast, as presented in its workforce plan, may use different forecast models or scenarios linked to their specific business needs.

DOT OFFICE OF THE SECRETARY

**Figure 3.10 Projected Workforce, OST**
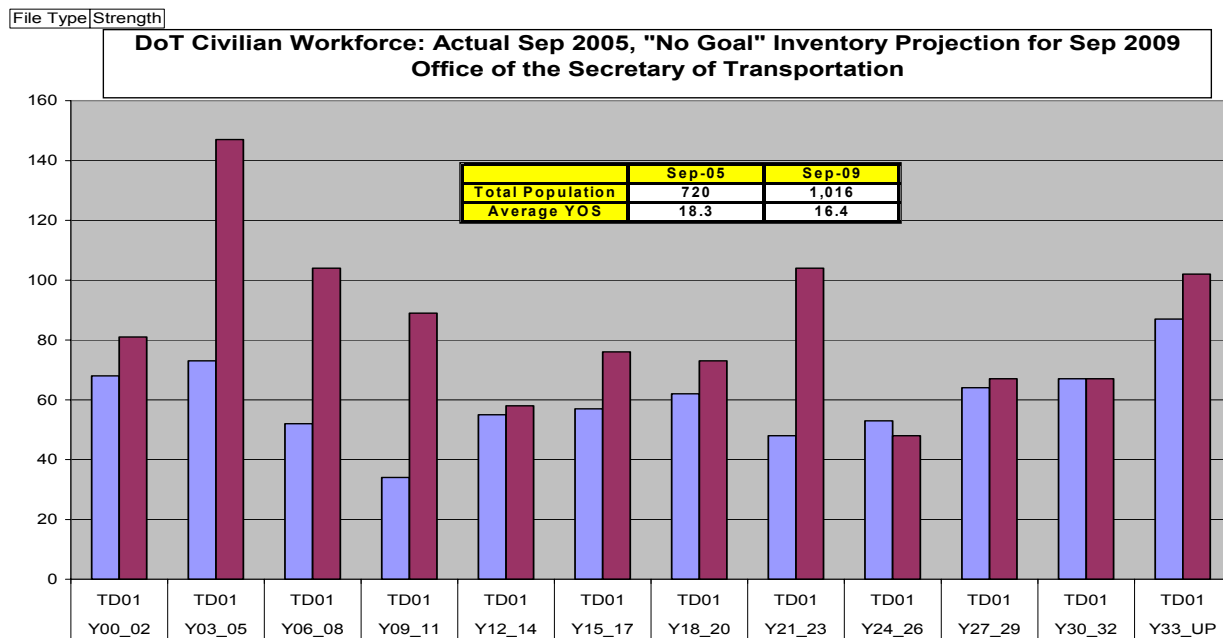
Based on historical trends, the Office of the Secretary will grow substantially over the next four years, from 720 in FY 2005 to 1,018 in FY 2009. The projected 41% increase in strength is primarily due to growth in all YOS groups up to 23, with the largest increase in YOS 3-11. This influx of less-experienced workers will bring the average experience level in the office down from 18.3 years to 16.4.

The model above shows the following:

- If current hiring trends continue OST should experience a greater number of new gains compared to losses.

- The number of losses will remain low (about 3.8% of total workforce)[46]. Transitions out—mainly retirements—should not outpace gains; based on historical behavior, OST employees do not tend to retire as soon as they become eligible.

Figure 3.11 Projected Workforce, FAA
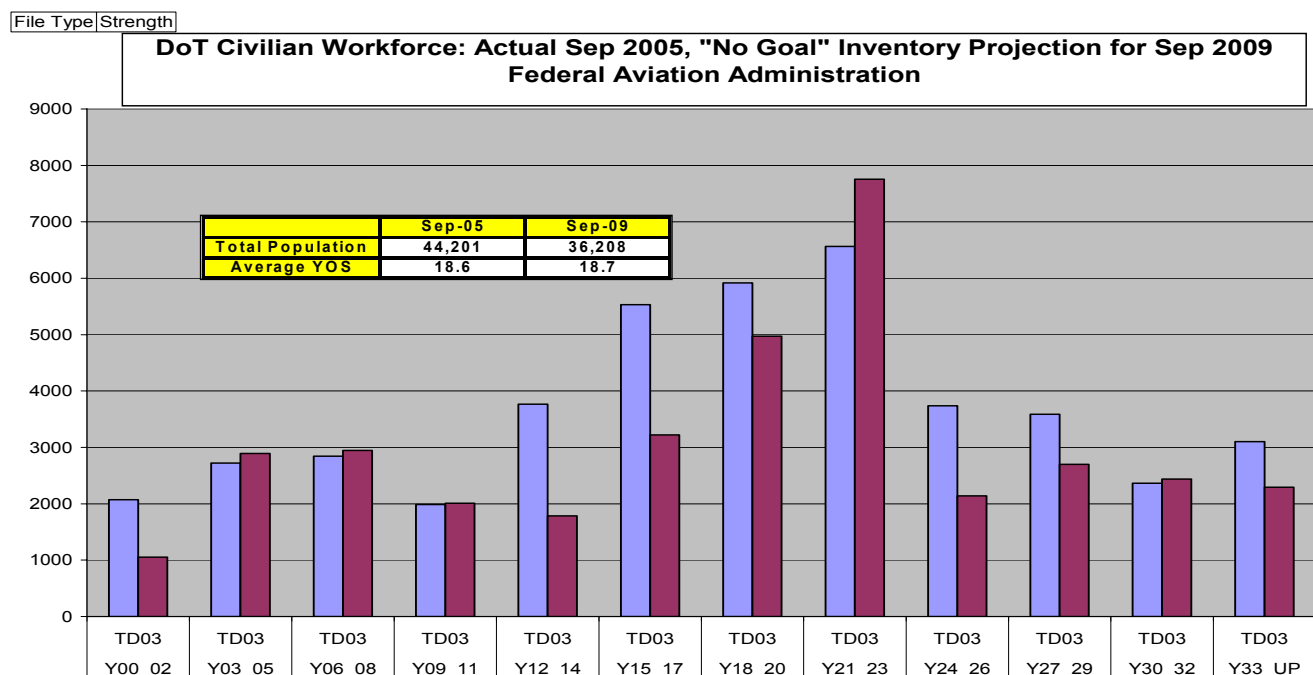
Based on recent trends in gains and losses, FAA is projected to decline 18% in strength by the end of FY 2009, from 44,201in FY 2005 to 36,208 in FY 2009. Most of the decline will occur in the 12 to 20 YOS groups. Much of this decline can be derived from:

- The attrition rate for FAA in FY 2005.

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[46] *Source:* Workforce Plan FY 2003 – 2008*, Office of the Secretary*
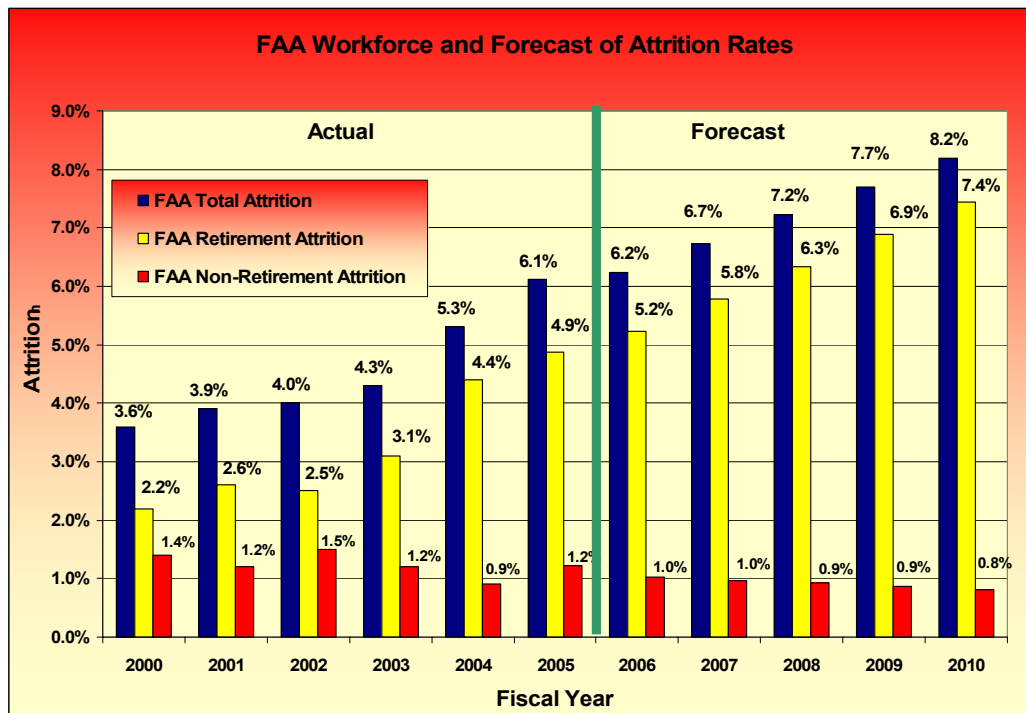
- Over the next four years, FAA is predicted to have its total attrition rate increase from 6.1% in FY 2005 to 7.7% in FY 2009, with almost 90% of the losses coming from retirements. (This is the FAA model—see earlier comments)

In this scenario, average years of experience would remain the same from 2005 to 2009. However, if FAA increases hiring to maintain its strength level, average experience would be expected to drop.

The graph below shows the predicted steady increase in total attrition rates, driven by an increase in expected retirements. If recent hiring trends continue, FAA should expect losses to outpace gains.
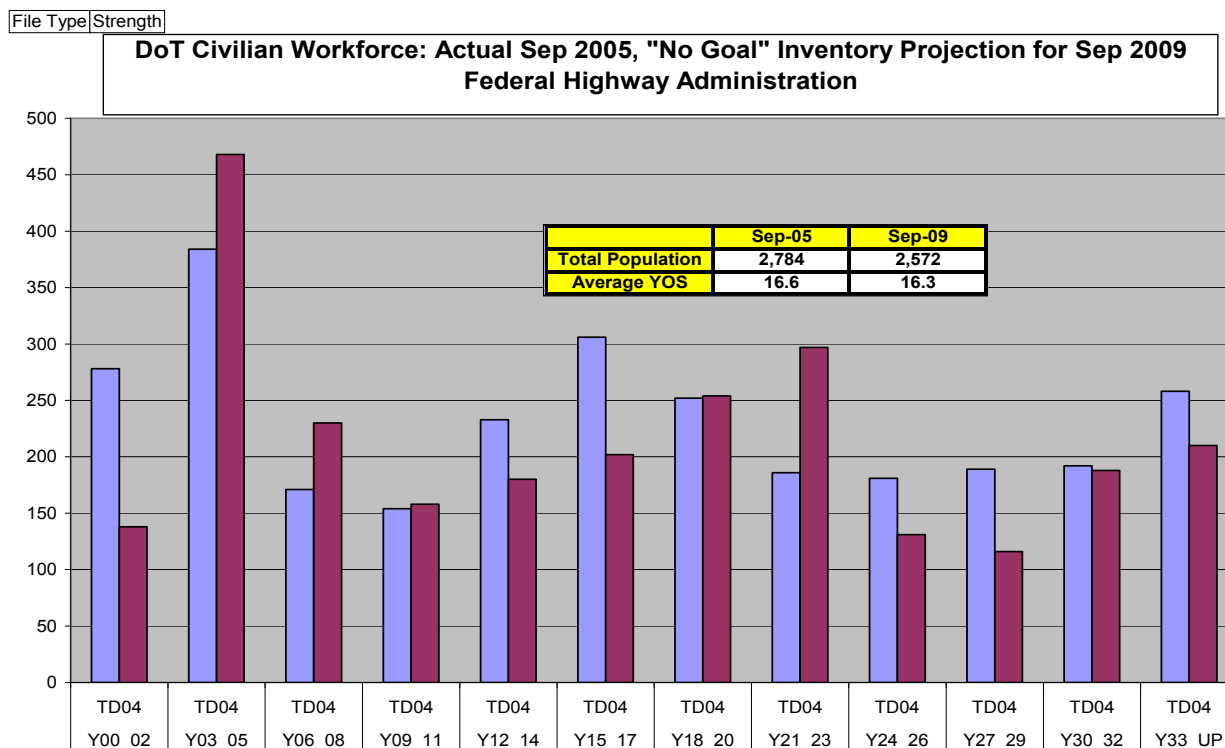
Figure 3.12 Projected Attrition Rates

Source: FAA Human Capital Plan, FY 2006 - 2010

U.S. Department of Transportation
Federal Highway Administration

Figure 3.13 Projected Workforce, FHWA

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
Federal Highway Administration

	Sep-05	Sep-09
Total Population	2,784	2,572
Average YOS	16.6	16.3

The FHWA is the only other DOT Administration for which the model projects a decline in strength by the end of FY 2009 (a 7.6% drop). Average employee experience levels would remain approximately the same throughout the next four years, but would decline somewhat if hiring were increased to offset the projected decline in strength.
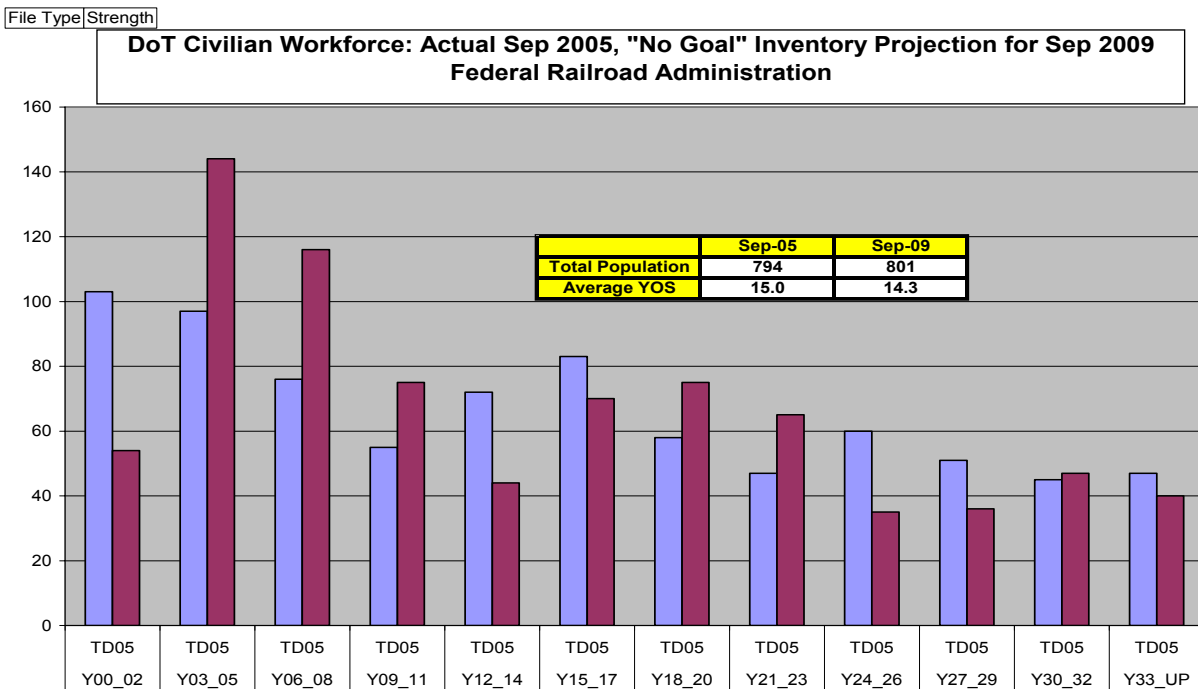
Most of the YOS decline can be attributed to anticipated losses of the GS14-15-SES employees. Nearly 38% of FHWA employees in those grade levels will become retirement eligible over the next five years, including 66.6% of current SES employees.[47]

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[47]*Source:* FHWA Workforce Plan, *Update for 2006*

D⊕T FEDERAL RAILROAD ADMINISTRATION

Figure 3.14 Projected Workforce, FRA

File Type | Strength

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
Federal Railroad Administration

|	Sep-05	Sep-09
Total Population	794	801
Average YOS	15.0	14.3

The FRA workforce is projected to remain at approximately the same size over the next four years, with a slight decline in average experience levels as older workers retire and are replaced with younger employees. YOS bands 3-11 are expected to see the greatest growth.
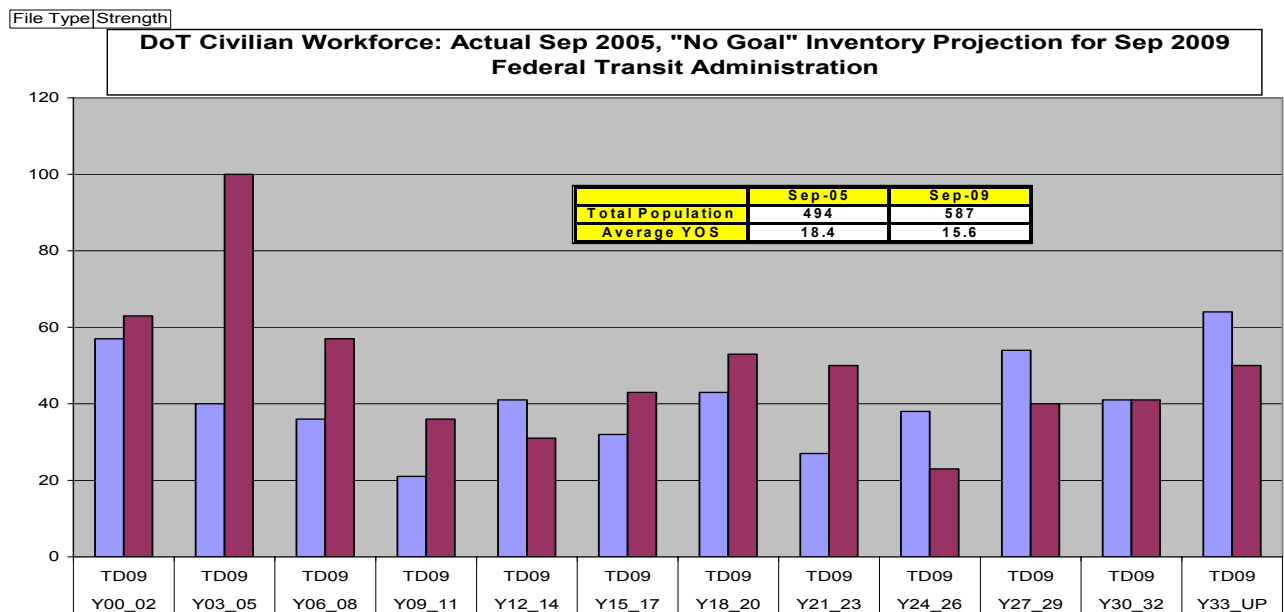
Figure 3.15 Projected Workforce, SLSDC

	Sep-05	Sep-09
Total Population	89	135
Average YOS	18.2	14.8
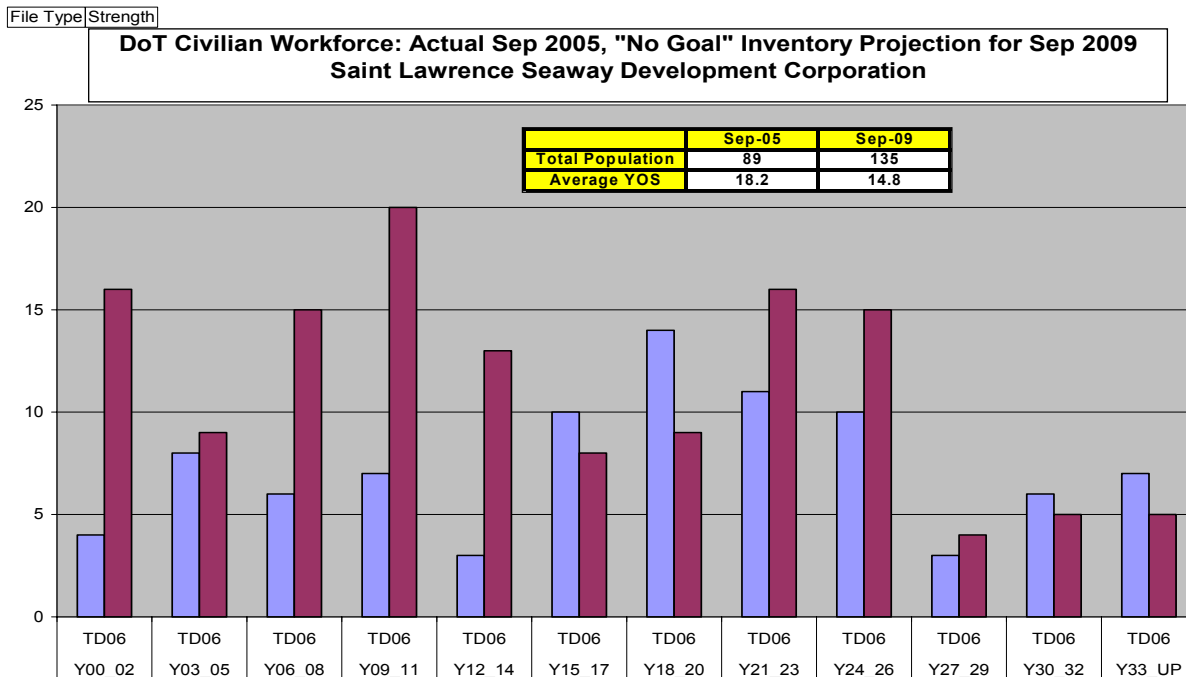
If recent trends continue, the Saint Lawrence Seaway Development Corporation will grow by more than 50% over the next four years. Most of the growth will be confined to employees within the first 14 years of service, which will significantly reduce the overall average experience level of the organization.
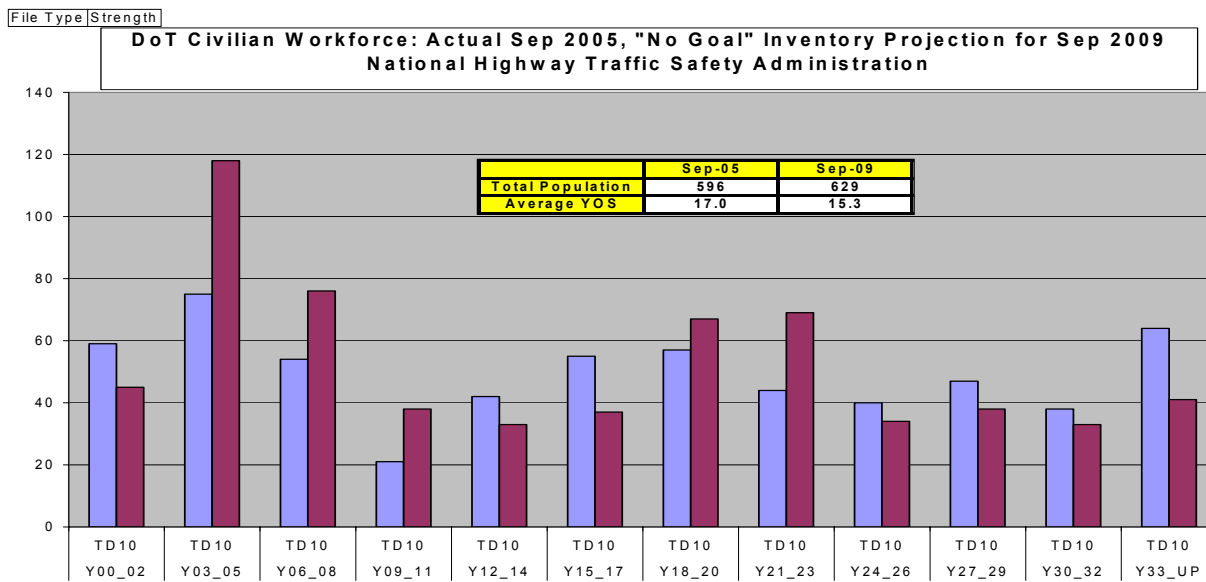
Figure 3.16 Projected Workforce, FTA

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
Federal Transit Administration

	Sep-05	Sep-09
Total Population	494	587
Average YOS	18.4	15.6

Projecting historical trends into the future indicates that the FTA will grow by approximately 19% in the next four years. Most growth will be in YOS 3-11, thus reducing the administration's average experience level.

nhtsa "People Saving People"

Figure 3.17 Projected Workforce, NHTSA

File Type Strength

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
National Highway Traffic Safety Administration

	Sep-05	Sep-09
Total Population	596	629
Average YOS	17.0	15.3

The NHTSA will grow by about 5.5% by the end of FY 2009 if recent hiring and attrition trends continue. Average experience levels will decline due to growth in YOS 3-11 and reduction in numbers among employee groups with more years of service.
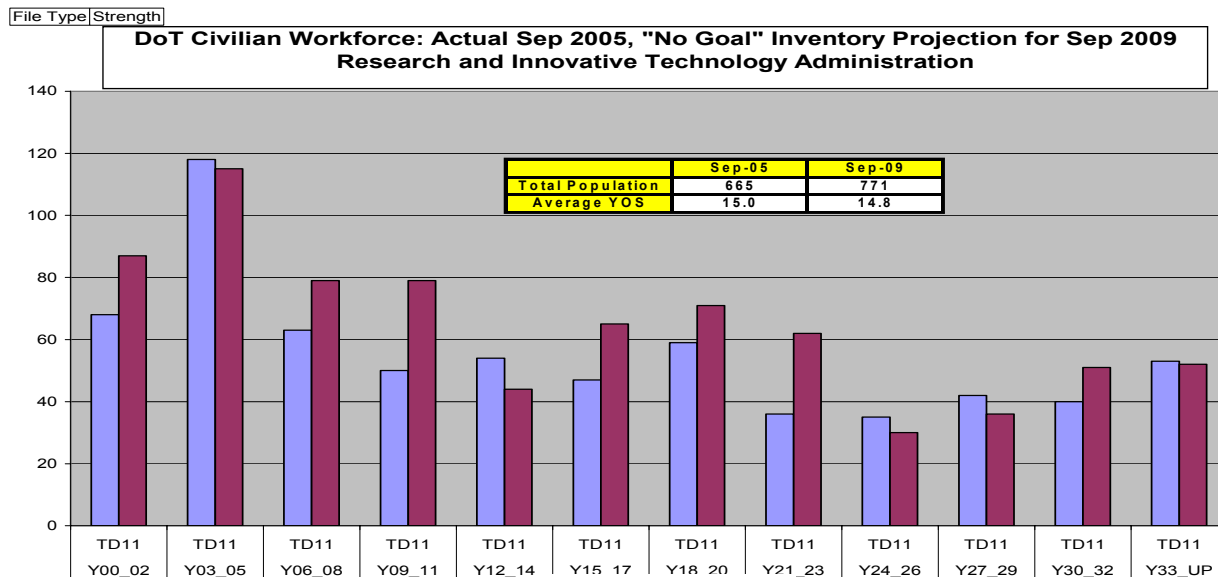
Projected growth of the OA as a whole is due to the impact of actual hiring in FY 2005. Anticipating a potential exodus of highly technical and experienced staff as a result of retirement eligibility, NHTSA focused recruitment efforts in 2005 and successfully filled gaps in critical mission and mission-support areas.[48]

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[48] *Source:* January 2006 Workforce Plan Update, *National Highway Traffic Safety Administration*

Research and Innovative Technology Administration

Figure 3.18 Projected Workforce, RITA

File Type	Strength

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
Research and Innovative Technology Administration

	Sep-05	Sep-09
Total Population	665	771
Average YOS	15.0	14.8

RITA is projected to grow another 16% by the end of FY 2009 if recent trends continue. The growth would be fairly evenly spread across the YOS spectrum, so average experience levels would change only slightly. The projected growth within RITA can be attributed in part to the formation of a new Sub Agency in 2005. This included the merging of the Research and Special Programs Administration (RSPA), the Bureau of Transportation Statistics (BTS), the Volpe National Transportation Systems Center (Volpe), and Transportation Safety Institute (TSI). Because the forecasting process uses recent past data to form projections the merging may have caused an artificial "bump" in growth that was carried out into the projections.

By 2009, the percentage of retirement eligible employees will remain roughly the same. Because of that, RITA should not experience an immediate drop in employee experience levels.

Specifically within Volpe and TSI, the occupations below have been placed into three categories based on the number of employees eligible for retirement.[49] Having a large group of their occupations in the first category will help keep the overall retirement percentage down throughout RITA as a whole.

---

[49] *Source:* 2006 Workforce Plan, *p. 6 - RITA*

1) Retirement eligibility less than 33% of the occupational population in the next three years; and/or a replacement pipeline is in place:

- Acquisitions

- All Engineering with more than 10 positions

- Economics

- Engineering Psychology

- Finance (Volpe only)

- Information Technology

- Management, Program, Transportation, Safety Analysis

- Miscellaneous Professional

- Planning

- Training/Information Specialist

- Transportation Specialist/Analysis

2) Retirement eligibility between 33% and 50% of occupational population in the next three years:

- Human Resources (except in senior positions at Volpe)
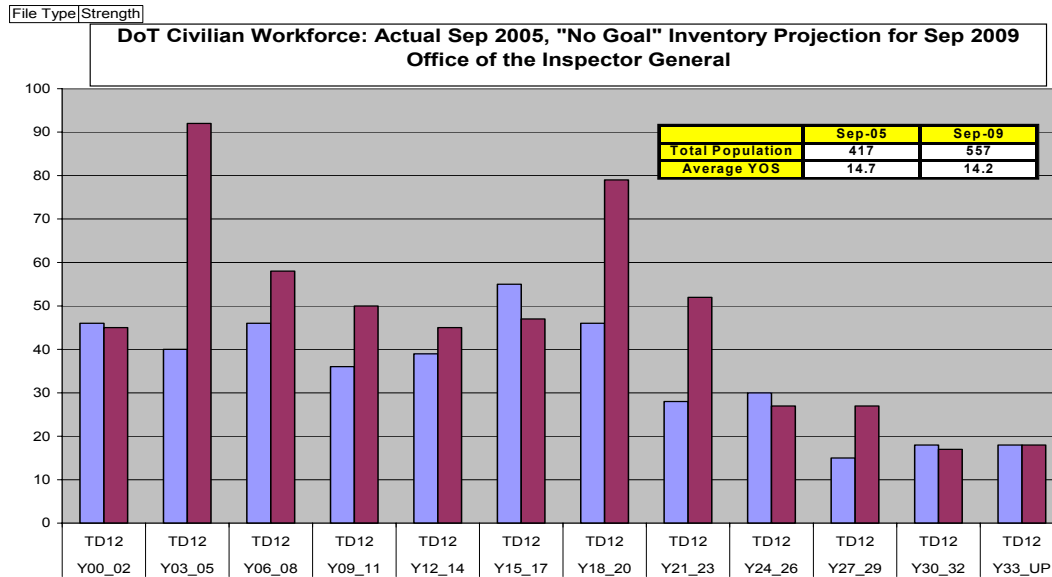
- Legal

- Physical Science

3) Retirement eligibility greater than 50% of the occupational population in the next three years; the occupations below are at high risk due to retirement eligibility greater and/or an insufficient pipeline in place:

- Financial Management (TSI only)

- Human Resources (senior positions at Volpe)

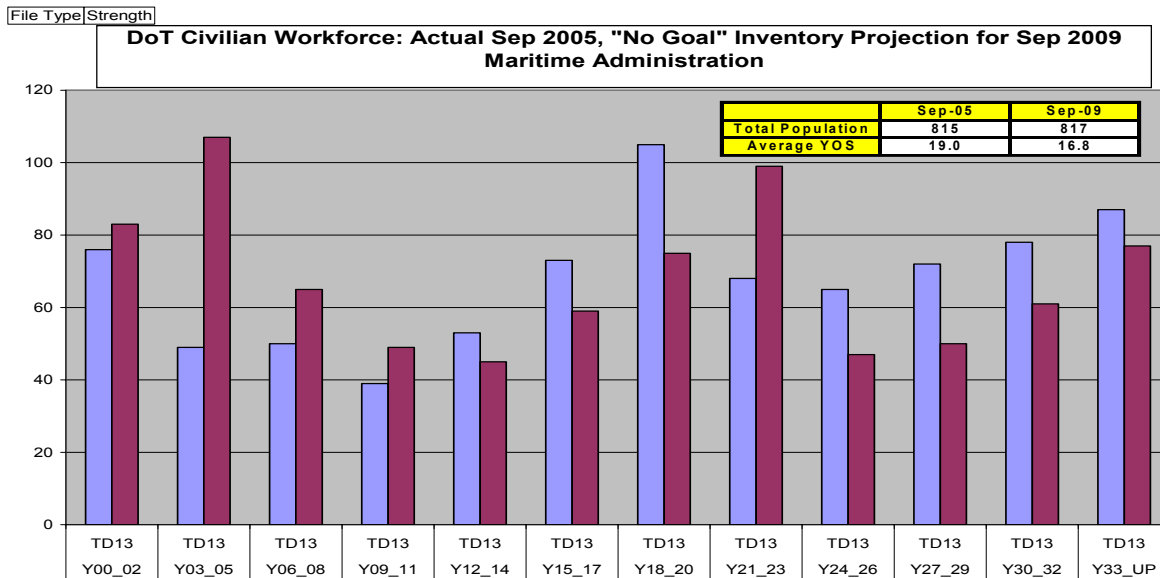- ORA/Math

OFFICE OF THE INSPECTOR GENERAL

Figure 3.19 Projected Workforce, OIG

File Type | Strength

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
Office of the Inspector General

	Sep-05	Sep-09
Total Population	417	557
Average YOS	14.7	14.2

Projecting recent gain/loss trends into the future indicates that the IG organization will grow by about 34% over the next four years. Significant growth is expected in YOS bands 3-11 and 18-23, so average experience levels should remain about the same.

U.S. Department of Transportation
MARITIME ADMINISTRATION

Figure 3.20 Projected Workforce, MARAD

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
Maritime Administration

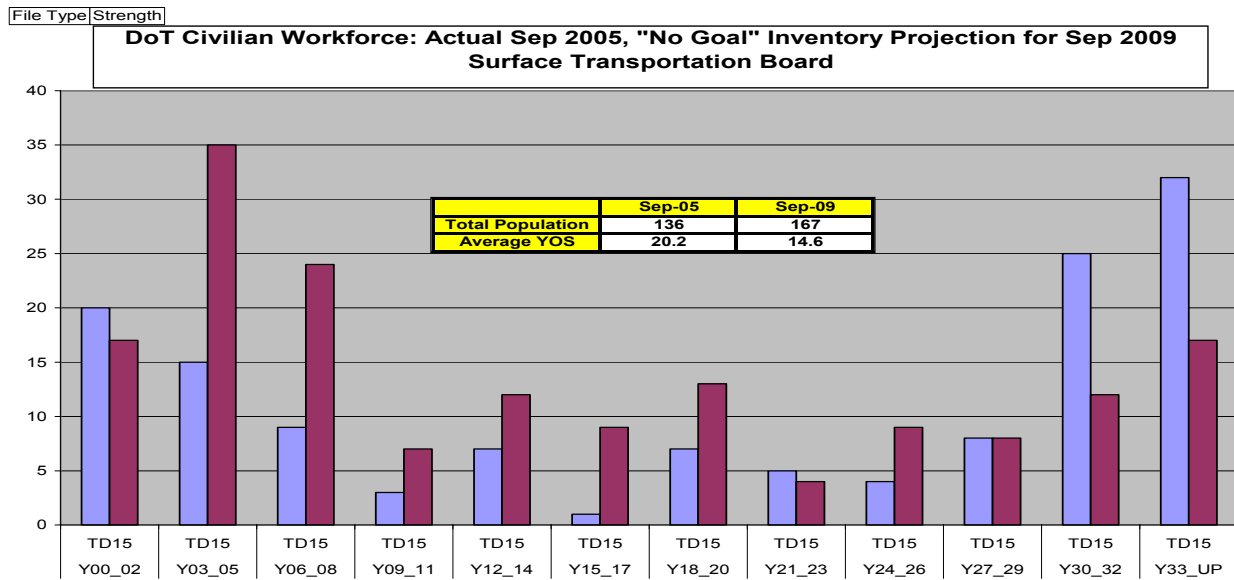|	Sep-05	Sep-09
Total Population	815	817
Average YOS	19.0	16.8

The Maritime Administration is projected to remain at the same overall strength level for the next four years if recent trends continue. However, average experience levels will decline significantly as older retiring employees are replaced with younger workers. Some of the experience loss can be attributed to the following:

- 45% of the current senior level workforce, GS (13-15), will be eligible to retire by FY 2008.

- Up to 73% of the executive workforce will also be eligible to retire by FY 2008. [50]

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[50] *Source:* 2006 – 2008 Human Capital Plan*, MARAD, p. 6*

Surface Transportation Board

Figure 3. 21 Projected Workforce, STB

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
Surface Transportation Board

|	Sep-05	Sep-09
Total Population	136	167
Average YOS	20.2	14.6

The STB will grow by about 23% if recent trends continue. Large increases in the number of newer-service employees (YOS 3-8) with corresponding losses of senior employees (YOS 30 and higher) will cause a dramatic drop in average experience levels.

DOT FEDERAL MOTOR SAFETY ADMINISTRATION

Figure 3.22 Projected Workforce, FMCSA

	Sep-05	Sep-09
Total Population	1,069	1,250
Average YOS	13.3	13.2
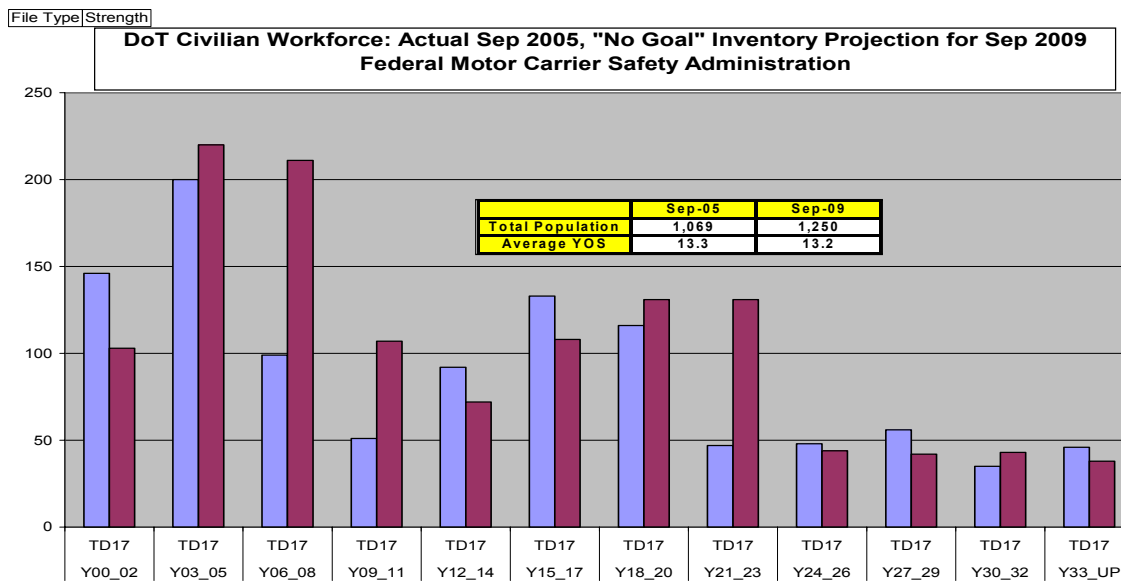
If recent trends continue, the FMCSA will grow by about 17% by the end of FY 2009. Growth will be balanced along the YOS dimension, so average experience levels will remain constant

PROJECTIONS BY MISSION CRITICAL OCCUPATION (MCO)

By Mission Critical Occupation

This section provides inventory projections for each of the MCOs for DOT. Each projection was done using the methodology previously described. Conclusions in the following section were reached by adding specific information from the OAs to the modeled projection of the entire MCO group. All "average age" references in the following section were provided by a WASS average query based on the assumptions in Appendix B.

DOT Mission Critical Occupations and Series include:

- Planning (0020)

- Program Management (0340)

- Financial Management (0501, 0505, 0510, 0511, 0525, 0540, 0544, 0560)

- Engineer (0801, 0802, 0803, 0806, 0807, 0808, 0809, 0810, 0817, 0818, 0819, 0830, 0850, 0855, 0856, 0861, 0871, 0873, 0896)

- Legal (0905, 0935, 0950, 0963, 0986)

- Physical Scientist (1301, 1306, 1310, 1320, 1340, 1350, 1361, 1370, 1371, 1373, 1384)

- Transportation Specialist (2101)

- Transportation Industry Analyst (2110)

- Transportation Safety (1825, 2121, 2123, 2125, 2152)

- Information Technology (2210, 0334, 0391, 1550, 0854)

Note: there are no projections for Community Planning or Transportation Industry Analysts because those MCO populations are too small to model. Projections were run only for DOT MCOs, not for Leaders or Human Capital professionals.

Program Management

Figure 3.23 Projected Program Management Workforce

File Type | Strength

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
MCO - Program Management Series

Data
☐ Sum of Sep-05 ☐ Sum of Sep-09

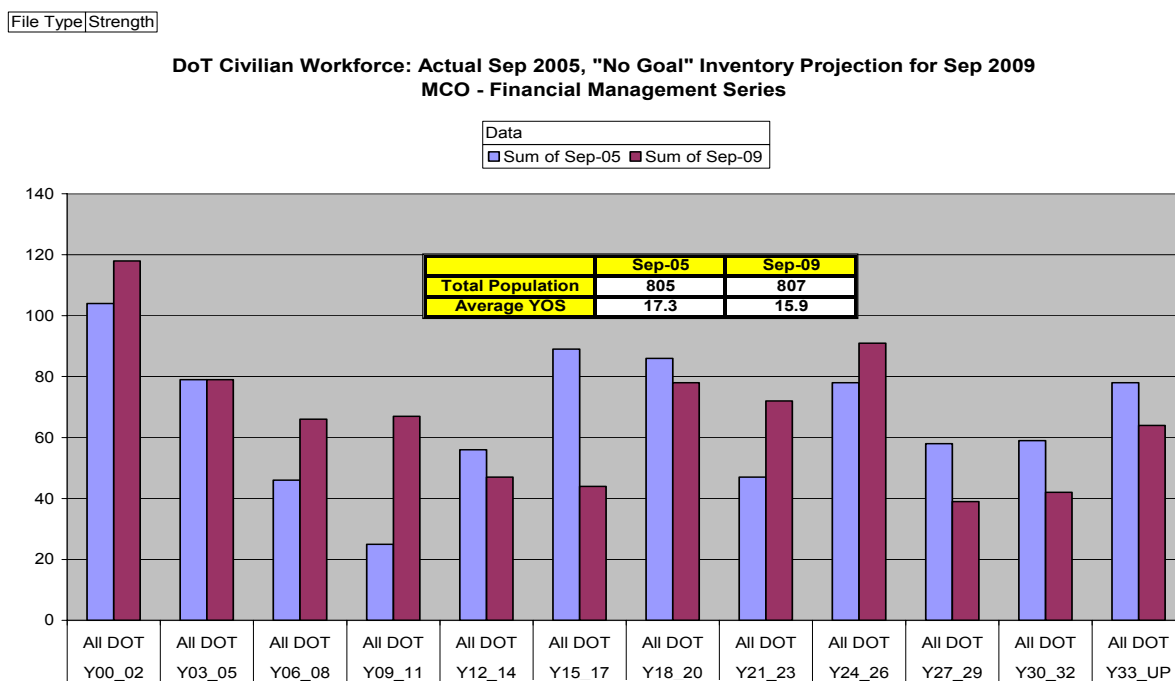|	Sep-05	Sep-09
Total Population	551	699
Average YOS	23.1	22.8
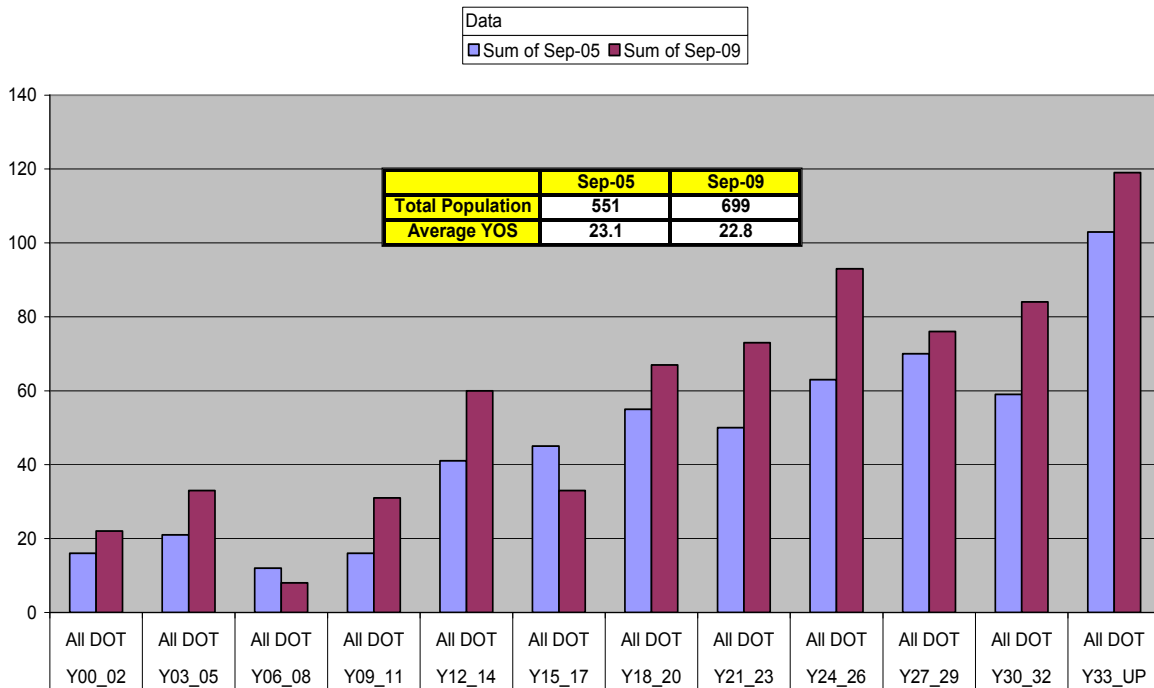
The overall Program Management family numbers are projected to grow by about 27% by the end of FY 2009, with growth across the entire YOS dimension. With the average age in 2005 already 51.4, the Program Management occupation family will continue to be very experience-heavy without focused efforts to replenish the talent pipeline with newer program managers and to transfer knowledge to them.

Two OAs already have Program Managers with an average age of four or more years older than the DOT average:

- RITA – average age of 56.7 years

- STB – average age of 57 years

Financial Management

Figure 3.24 Projected Financial Management Workforce

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
MCO - Financial Management Series

	Sep-05	Sep-09
Total Population	805	807
Average YOS	17.3	15.9

The Financial Management occupation family will remain about the same size within DOT over the next four years if recent patterns continue. However, the average experience levels will drop somewhat as newer employees are hired to replace retiring workers.
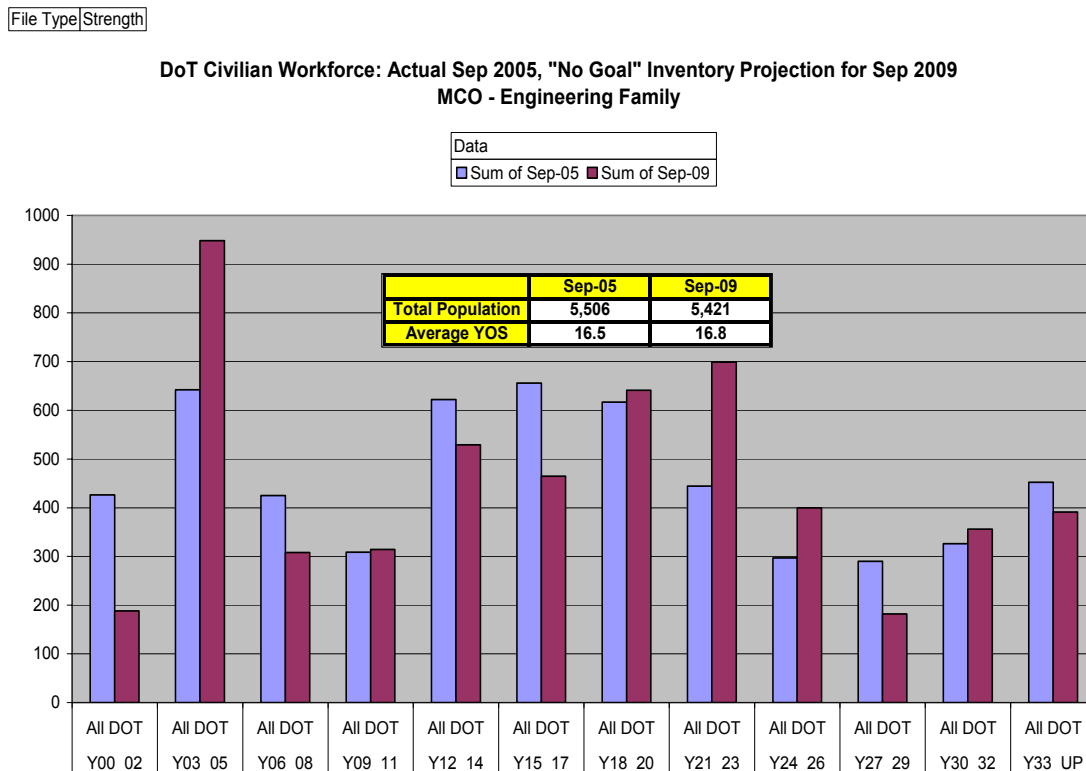
Note: financial management employees in two OAs are currently four or more years older than the average age of 47.6 years (see Chapter 2).

- MARAD – average age of 52.1 years

- STB – average age of 58.5 years

Engineering

Figure 3.25, Projected Engineering Workforce

File Type | Strength

**DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
MCO - Engineering Family**

Data
□ Sum of Sep-05 ■ Sum of Sep-09

	Sep-05	Sep-09
Total Population	5,506	5,421
Average YOS	16.5	16.8

The Engineering occupation family is projected to change very little over the next four years if recent gain/loss patterns continue. Overall strength will decline slightly while average experience will increase slightly.
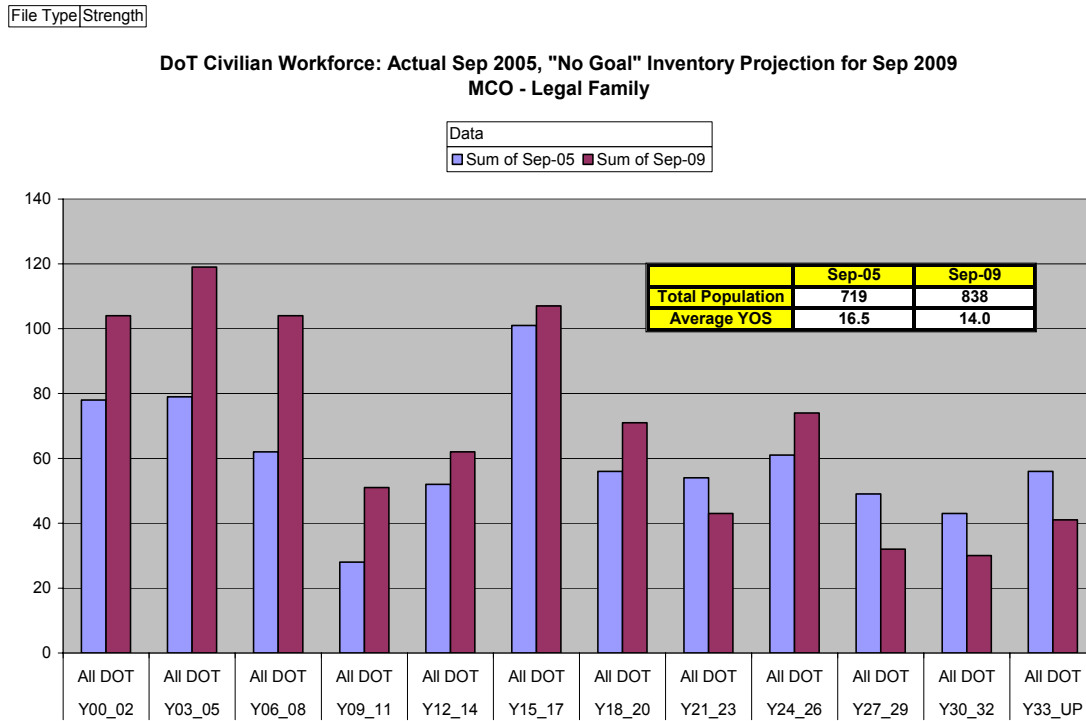
Three OAs have averages that are four or more years older than the DOT wide average (46.8).

- STB – average age of 52 years

- MARAD – average age of 54.6 years

- FRA - average age of 52.2 years

Legal Family

Figure 3.26, Projected Legal Family Workforce

File Type | Strength

**DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
MCO - Legal Family**

Data
■ Sum of Sep-05 ■ Sum of Sep-09

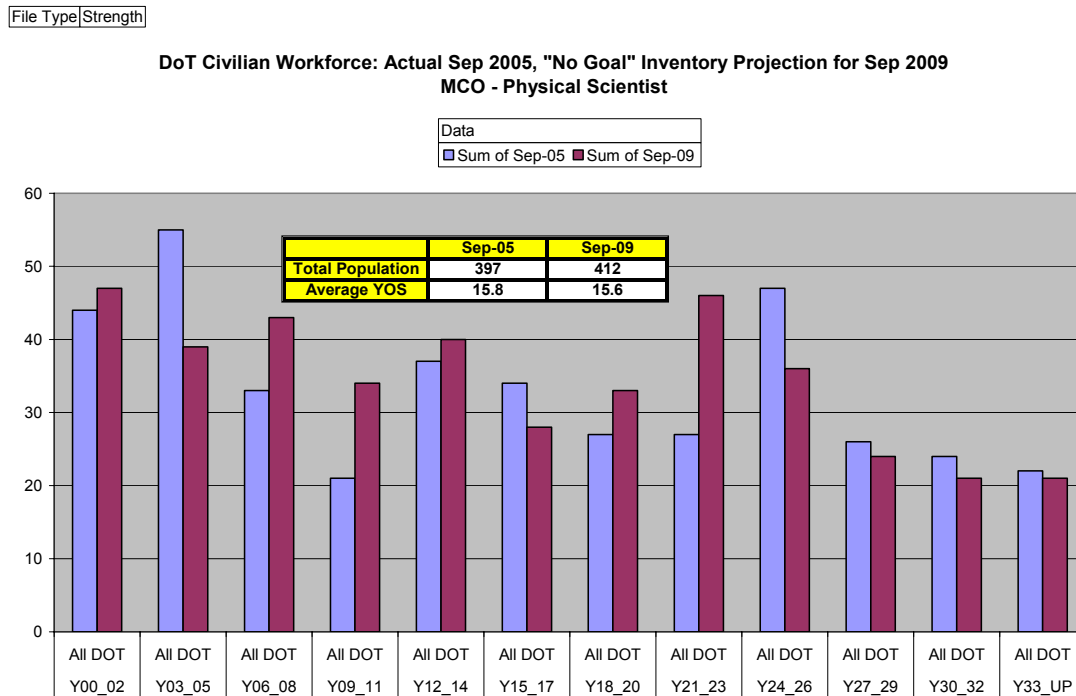|	Sep-05	Sep-09
Total Population	719	838
Average YOS	16.5	14.0

The Legal occupation family is projected to grow dramatically (about 17%) over the next four years if recent trends continue. Most of the growth will be in YOS 0-11, which will bring the average experience level down significantly.

Across the different OAs, the legal family average ages are all within four years or less of the overall average.

Physical Scientists

Figure 3.27, Projected Physical Scientist Workforce

File Type Strength

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
MCO - Physical Scientist

	Sep-05	Sep-09
Total Population	397	412
Average YOS	15.8	15.6

The Physical Scientist occupation group is projected to remain in a nearly steady state within DOT. The average experience level will not change significantly if recent gain/loss trends continue.
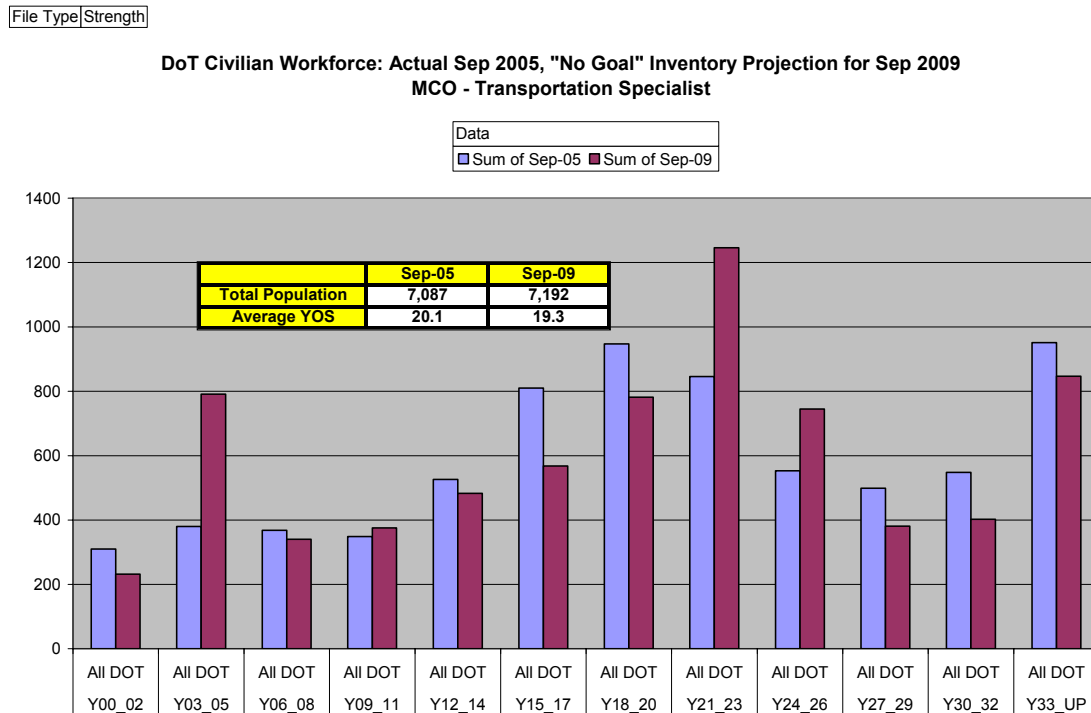
The large concentration (over 85%) of Physical Scientists in FAA has an average age of 47. This large concentration is the main driver for this MCO average age (47.9) at the DOT level. The following OA averages exceed DOT average age by four or more years.

- FHWA – average age of 55.7 years

- FMCSA – average age of 54 years

- NHTSA – average age of 54.7 years

- PHMSA – average age of 54.6 years

- RITA – average age of 51.3 years

Transportation Specialist

Figure 3.28, Projected Transportation Specialist Workforce

| File Type | Strength |

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
MCO - Transportation Specialist

	Sep-05	Sep-09
Total Population	7,087	7,192
Average YOS	20.1	19.3

The Transportation Specialist occupation family is projected to remain at about the same size and with about the same average experience level if recent gain/loss patterns continue through the end of FY 2009.
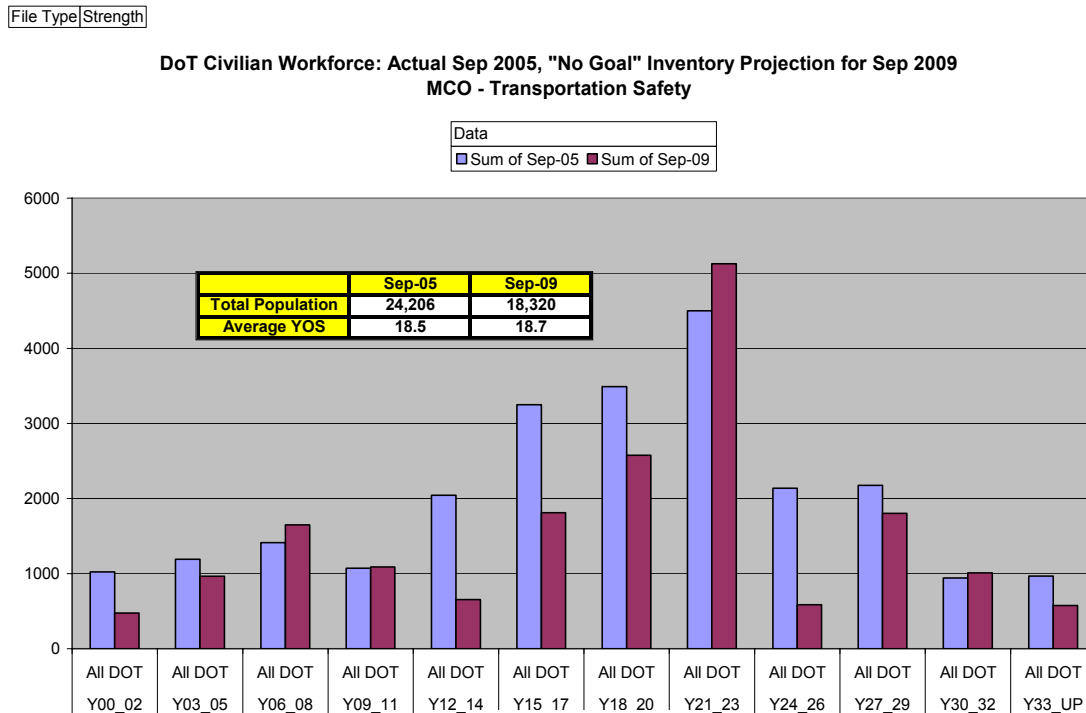
Three OAs have average ages that are four or more years over the overall average for this family (47.5).

- FRA – average age of 53.9 years

- FTA – average age of 52.1 years

- MARAD – average age of 52.6 years

Transportation Safety

Figure 3.29, Projected Transportation Safety Workforce

File Type | Strength

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
MCO - Transportation Safety

Data
☐ Sum of Sep-05 ☐ Sum of Sep-09

	Sep-05	Sep-09
Total Population	24,206	18,320
Average YOS	18.5	18.7

The Transportation Safety occupation family (which includes Air Traffic Controllers) is the largest within DOT. It is also the one projected to lose the most employees (nearly one-fourth) over the next four years if recent gain/loss trends continue. Without additional hiring, average experience levels will remain the same; however, if hiring is accelerated to maintain strength, average experience levels will drop significantly.
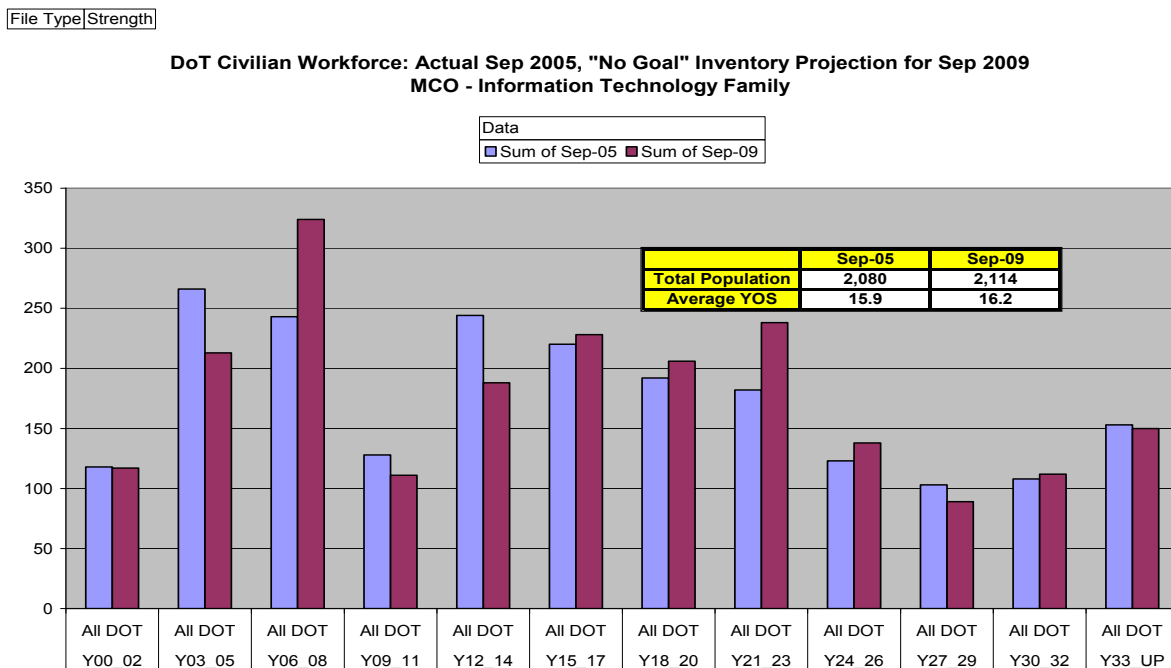
Information Technology

The DOT IT Workforce Capability Assessment, completed in August, 2005, provides the following picture. The "Typical "Transportation IT Worker.[51]

- Is classified as a GS-0334

- Is male and white (non-Hispanic)

- Has a grade level of GS-13/14

- Has little to no private sector experience

- Is eligible to retire in the next 11 to 20 years

- Holds a bachelors degree

- Is 45 – 50 years old

Figure 3.29 Projected IT Workforce

File Type | Strength

DoT Civilian Workforce: Actual Sep 2005, "No Goal" Inventory Projection for Sep 2009
MCO - Information Technology Family

Data
☐ Sum of Sep-05 ■ Sum of Sep-09

	Sep-05	Sep-09
Total Population	2,080	2,114
Average YOS	15.9	16.2

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[51] *US Department of Transportation "IT Workforce Gap Analysis and Skill Gap Closure Plan", August 30, 2005, p.3*

The Information Technology occupation family is projected to remain at relatively steady numbers. Applying recent gain/loss patterns causes very little change in the overall strength or in the average experience levels over the next four years. For this occupational series, roughly 70% of the projected 2009 workforce will still have less than 23 years of service.

REALTY SPECIALIST FAMILY

Attention will be focused on this occupational series during FY 2006. This series covers positions that participate in Realty Management (including a variety of real estate assignments); Contract Acquisition, (Leased, Owned, Outlease, DELPHI/PRISM, Contract or Agreement Amendment, Transfer Agreement, Special MOA, Interagency Agreements); Land Acquisition, (Purchase, Lease off- and on-airport, Lease renewal, Condemnation); Real Property Asset Management (Real property inventory, REMS, Capitalization, Disposal) Space Acquisition (GSA and FAA space acquisition, planning, consolidation); and Utility Contracting (Acquisition, Management, Termination).

ACQUISITION WORKFORCE

The Federal Register notes, "The acquisition function continues to become more integrated in to Agency core business processes, and the developmental needs of [this] workforce are changing. This progress is reflected in the Service Acquisition Reform Act of 2003 (SARA)… SARA requires agency Chief Acquisition Officers to develop and maintain an acquisition career management program and ensure the development of an adequate, professional workforce."

DOT will examine the competencies and representation of the Acquisition Workforce in FY 2006. In 2005, there were 16 employees in Occupational Series 1105 (Purchasing) and 342 employees in Occupations Series 1102 (Contracting).

**Figure 3.30 Acquisition Specialist Occupational Series
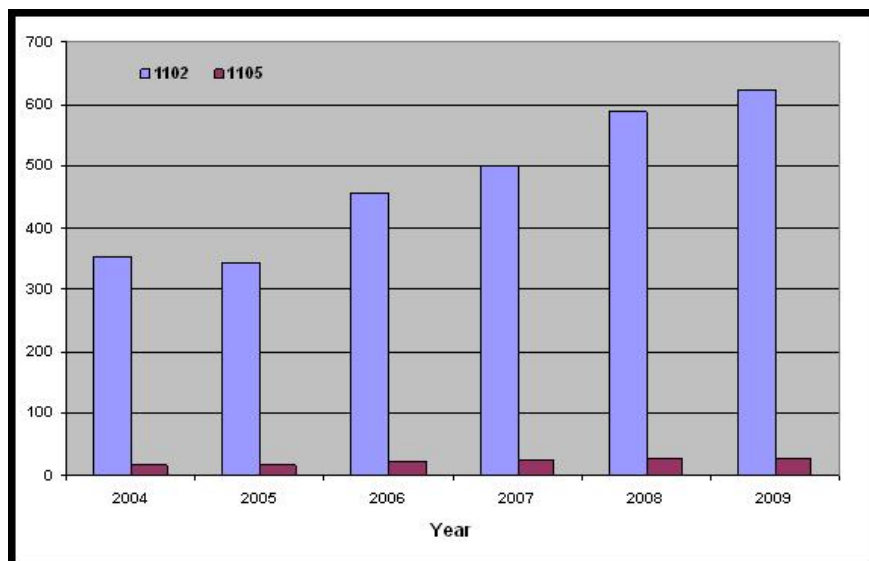Total Strength (by total gains and loses)**

Figure 3.31 Projected Future Strength of Acquisition Specialist Occupational Series

	Occ Series	2004	2005	2006	2007	2008	2009
ALLGAINS	1102	386	367	*374*	*393*	*373*	*390*
ALL LOSS	1102	397	379	*352*	*352*	*332*	*351*
Strength	**1102**	353	342	*456*	*500*	*587*	*624*
ALL GAINS	1105	15	15	*15*	*14*	*19*	*18*
ALL LOSS	1105	14	18	*12*	*14*	*14*	*14*
Strength	**1105**	16	16	*23*	*24*	*29*	*28*

Based in the workforce forecasting model (see forecast assumptions Chapter 3) the number of positions in occupational series 1102 (Contracting) is expected to increase to 624 by FY 2009. That increase is attributed to expected decreases in losses during the projected years (FY 2006 – FY 2009) combined with a steady state of gains during the same period.

For occupational series 1105 (Purchasing) total strength is projected to increase due to a declining rate of total losses in the forecasted period combined with a slight increase in hires over that same period.

CHAPTER 4. STRATEGIC INITIATIVES: RESULTS DURING FY 2005

Chapter 4 reviews progress made on the strategic initiatives as outlined in the 2005 Workforce Plan. During FY 2005, DOT continued the steps it initiated in 2004 to meet the challenges of maintaining its talented workforce and mitigating the risks of potential competency and capacity gaps relative to projected needs.

GAO cites five key principles for effective workforce planning, including, as the first factor, "Involving top management and stakeholders in the creation of [a] human capital plan."

During 2005, DOT dedicated a position, *Manager of PMA/Human Capital Programs,* to maintain a steady focus on implementing, enhancing, and assessing human capital programs and other requirements of the President's Management Agenda. In addition to this senior manager, the senior managers from all Operating Administrations sit on working teams that coordinate the goals and initiatives for the Department's talent management systems. A list of these teams appears at the end of this chapter (Figure 4.5).

At the end of FY 2005, DOT can report measurable, quantifiable progress in many areas of challenge identified in last year's *Workforce Plan*:

- Increase hiring at entry levels

- Progress in outreach to women and minorities

- Increase representation of people with targeted disabilities

- Progress in managing mission critical occupations

- Progress in cross-cutting skills

- Pulse check on diversity

- Manage succession planning

INCREASE HIRING AT ENTRY LEVELS

The Challenge

DOT has a high proportion of incumbents in pay grades 12–15 or equivalent, due in part to seniority—the average DOT employee has 18.5 years of service—and in part to the professional credentials required for many scientist and engineering positions.

As the FAA notes, "Hiring practices for some of our Mission Critical Occupations result in employees being hired at full-performance levels from industry, consultant staffs, or the military. The average age of FAA new hires is approximately 40 years old."[52] At FHWA, entry-level employees are hired from the transportation industry into "second careers" at GS-11 and GS-12 positions.

Figure 4.1 shows the distribution of DOT Employees, highlighting the median grade, GS 13.

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[52] *FAA Workforce Plan, February 2006*

Figure 4.1 Distribution of DOT Employees by Grade, FY 2005

GRADE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	SES	Wage
INCUMBENTS	2	1	4	459	1030	427	706	365	1581	237	3265	10429	10346	14335	8543	438	516

While DOT works to move the median employee grade downward through hiring, the Department faces multiple challenges in recruiting individuals to careers in the transportation industry in the Federal Government.

First, the available pool of younger workers may be shrinking. "An interesting trend in the U.S. labor force is that labor participation rate for age 35-44 is projected to decrease[53]. This age group is a prime labor pool for us given our current hiring practice of selecting experienced employees at the mid- to full-performance level. Thus, the employees we have traditionally hired may not be available in required numbers in future applicant selection pools…."[54]

Second, the Department competes with other higher profile Federal Agencies like the National Aeronautics and Space Administration (NASA) and DHS for employees with background and interest in areas like aeronautics and safety engineering.

Finally, while DOT's mission is key to national prosperity and security, the image of the transportation industry may not automatically appeal to young people considering career fields. As one Human Resources Director put it, "The romance of the railroads is gone."

For these reasons, Secretary Mineta has made the goal, "**increase hiring at entry levels**" part of his focus on renewing the talent pool in DOT[55].

The Approach

As suggested in OPM's new Strategic Plan, DOT is already developing outreach that appeals to different market segments of potential employee populations. "[DOT]…will need to consider the differing generational expectations of the future workforce, in areas such as career development, job and organizational loyalties, lifestyle values, communication, and problem solving styles. The future employers of choice will likely be those who offer flexible benefits and working arrangements, as well as training and professional development opportunities."[56]

DOT has deployed a variety of information, marketing, and outreach activities to attract students majoring in relevant fields and related disciplines, and employees early in their careers. These approaches include the following.

Careers in Motion: DOT continues to market its talent brand and slogan "Careers in Motion" and to showcase DOT as an employer-of-choice. "Careers in Motion" is featured on the home page of the Department's website and provides, along with information, easy links to student opportunities and internships with the Department.

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[53] *U.S. Department of Labor, Bureau of Labor Statistics.* Tomorrow's Jobs, *Occupational Outlook Handbook, 2006-07 Edition*

[54] *FAA Workforce Plan, February 2006*

[55] *See Appendix, Secretary Mineta's letter, April 2003*

[56] *FTA Workforce Plan, February 2006*

Career Residency Program: DOT is piloting its new Transportation Career Residency Program. This program is designed to hire entry-level employees into mission-critical occupations (Engineering, Transportation Specialties, and Business/Information Technology). The program also provides training in subjects that correspond to DOT skills gaps such as Information Technology, Systems Thinking, Program/Project Management, and Analytical Thinking.

Increase the Student Pipeline:[57]

The OAs utilize a variety of hiring authorities and programs to engage student interest and bring students into the Department. These include:

- **Student Educational Employment Career Experience Program** (SCEP)

- **Presidential Management Fellows Program** (PMF)

- **Volunteer Program** (service by non-employees in exchange for experience)

- **Career Intern Programs**: FMCSA runs a Career Intern Program. FAA uses student internship programs and cooperative education arrangements with high schools and colleges. NHTSA plans on hiring 12 persons under the Federal Career Intern Program during FY 2006, and is exploring partnering with the Federal Transit Administration's internship program with the Virginia Department of Rehabilitative Services.

- **Excepted Service appointing authorities**

- **Student Transportation Intern Program for Diverse Groups**

- **Minority Serving Institutions Student Internship Program**

- **Student Temporary Employment Program**

  Example: Employee "Ambassadors": To increase the public's awareness of careers in the aviation/aerospace fields, FAA has an initiative through its Aviation Education Program to develop a cadre of aviation education counselors to be ambassadors for the Department, speaking with future job candidates about aviation career opportunities. These are volunteer FAA employees in scientific and non-scientific occupations that will brief interested groups at schools (K-12), colleges/universities, professional organizations, and career fairs about a career in aviation. Results from FAA's New Hire Survey show that employees are a major recruitment source.

Student Loan Repayments: The FRA has authorized the use of Student Loan Repayments as another recruitment/retention incentive available to attract the best-qualified candidates to fill position vacancies, and retain highly qualified employees who, in the absence of a student loan repayment, are likely to separate from the Federal Government.

Develop Recruitment Strategy Committees: FMCSA has developed a College Interest Group Recruitment Plan and a committee that works to identify high schools and universities that offer curricula that most closely align with FMCSA mission goals and objectives and will be of benefit in helping to recruit for diverse and underrepresented groups.

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[57] *Referenced in OA Workforce Plans, February 2006, including: MARAD, FTA, NHTSA, FRA and FMCSA*

The Results

The Department made a significant number of new hires into entry grades during FY 2005. Figure 4.2 shows that 16.3% of new hires were made at Grade 9. Six entry-level individuals with Master's Degrees were hired into key positions through the Transportation Career Residency Program.

Figure 4.2 New Hires by Grade in FY 2005

Grade	100 Career	101 Career-Conditional	130 Transfer – In	140 Reinstatement-Career	141 Reinstatement-Car/Cond	170 Excepted	TOTAL by Grade:	% NEW HIRES
2						2	2	0.1%
3						7	7	0.5%
4		6	1			48	55	4.0%
5	2	16	3	3		75	99	7.2%
6	2	7	5	4		5	23	1.7%
7	1	22	4	5		43	75	5.4%
8		2	2			53	57	4.1%
9		29	6	2	▶	188	225	16.3%
10		1				22	23	1.7%
11	1	32	12	4		249	298	21.5%
12	2	78	20	5	1	53	159	11.5%
13	8	42	30	5	1	51	137	9.9%
14	8	17	42	6		38	111	8.0%
15	1	5	16			56	78	5.6%
SES				1		4	5	0.4%
Wage	1	14	1	2		12	30	2.2%
Total	26	271	142	37	2	906	1384	

However, these hires do not translate into significant gains in younger employees (under 30), because although 26.8% of new hires were below age 29, another 30.5% of new hires were between ages 40-49.

PROGRESS IN OUTREACH TO WOMEN AND MINORITIES

The Challenge

Historically, women and minorities have been under-represented at DOT (see Chapter 1, Figures 1.9 and 1.10, *Representation by Race and National Origin*). This is in part due to the relatively high proportion of white men who have traditionally worked in transportation careers. In a list of recruiting imperatives issued in April, 2003, Secretary Mineta set out a goal for DOT: "**The Department must increase its overall workforce diversity**." DOT's goal as outlined in *2005 Workforce Plan* was to "make progress in outreach to women and minorities," paying particular attention to Hispanics.

The Approach

The Department stepped up its participation in recruiting events, and continued to develop its reputation as an employer, with minority and professional organizations. In its annual report on Hispanic Employment in the Federal Government, OPM recognized DOT for organizing a national Hispanic outreach forum, involving Hispanic organizations in recommending recruitment strategies for the Department. OPM calls having recruitment materials and other information widely available "a key component to making such outreach successful."[58] This same report cites the National Transportation Safety Board (NTSB) for "effective practices" such as working to enhance opportunities for Hispanic Americans in the fields of engineering, science, and mathematics. OPM also recognized NTSB for its development of a Spanish version of its website. Finally, DOT was recognized in the category of "effective accountability practices" for establishment of a Hispanic Leadership Council. In addition to these efforts, other outreach approaches from DOT included:

- Implementing strategies to increase the rate of participation in the Hispanic Scholarship Fund Institute (HSFI)'s Next Generation of Public Servants Scholarship Program, which is a vehicle for DOT to build its pipeline of talented and diverse employees.

- DOT conducted outreach to engineers, one of its mission-critical occupations, through active participation in national career fairs sponsored by the Society of Hispanic Professional Engineers and the National Society of Black Engineers.

- Broadening the pool of applicants for air traffic control positions by providing the Air Traffic Selection and Training (AT-SAT) exam. This exam facilitates "off the street" local hiring of applicants who can become entry-level controllers. Broadening the applicant pool is designed in part to enable more women and minorities to enter the air traffic controller occupation.

- Participating in at least 40 strategic outreach/recruitment events, based on identified long- and short-term hiring needs. This included nationally-recognized career fairs and university career events.

- Multiple DOT OAs collaborated across traditional organizational boundaries, resulting in a unified DOT presence at almost half of those events. DOT's participation was designed to attract a broad range of individuals, including those interested in DOT's mission-critical occupations, students, veterans, people with disabilities, minorities, and other individuals under-represented at DOT. For example, DOT was able to reach and advise a number of veterans, including recently disabled veterans, through a "Hiring Heroes" career fair in Texas and a Military Officer's Association career fair in Washington, DC.

- Summer Transportation Intern Program for Diverse Groups (STIPDG) – The FHWA manages a 10-week summer program for college and university students. This is a program to promote entry of women, persons with disabilities, and members of diverse groups into transportation careers where these groups are underrepresented.

To complement these outreach activities, the DOT Diversity Advisory Council hosted an informational forum which provided the Department's senior leaders with specific tips for conducting recruitment and outreach.

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[58] *Fifth Annual Report on Hispanic employment in the Federal Government, December 2005*

The Results

The Department is attracting a diverse applicant pool.

In FY 2005, demographics collected by QuickHire reflect a diverse applicant pool. QuickHire is the automated system used by all OAs, except FAA, for vacancies up to GS-15. FAA's Automated Staffing Application Process (ASAP) is now collecting applicant pool data for internal (non-bargaining) and external hiring actions. In FY 2005 applications were submitted by individuals self-identifying in the categories below, rounded to the nearest percent.

Figure 4.3 Applicants for Positions at DOT[59]

Race/National Origin	
American Indian	01%
Asian/Pacific Islander	06%
African American	46%
Multi-Racial	03%
White	44%
Hispanic	7%
Gender	
Women	53%
Men	47%

However, only Hispanics were hired in the proportions represented in the applicant pool. In 2005, a re-energized focus on Hispanics resulted in a 3.8% increase in the representation of Hispanics in the DOT workforce. Except for Hispanic employees, the representation of minorities, and women of all races, at DOT remained stable.

Figure 4.4 New Hires by Race, 2003 - 2005

	FY-03 [60] New Hires	FY-04 New Hires	FY-05[61]
All Minorities	25%	29.9%	28.8%
African Americans	10%	17.1%	15.7%
Asian/Pacific Islanders	5.3%	5.4%	4.8%
Hispanics	Not available	5.8%	7.4%

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[59] Source: DOT Employment Report

[60] Source for FY-03 and FY-04 figures: 2005 Workforce Plan

[61] Source: WASS

INCREASE REPRESENTATION OF PEOPLE WITH TARGETED DISABILITIES

The Challenge

In his recruitment strategy memo of April, 2003 (see Appendix), Secretary Mineta stated, "The Department must increase its overall workforce diversity, with special emphasis on … people with disabilities."

For FY 2006, the Departmental Office of Civil Rights has set a first-ever goal that 3% of new hires be people with targeted disabilities.

Approach

The Disability Resource Center (DRC) is actively engaged with Department managers to facilitate hiring people with disabilities. The DRC does outreach to Department managers to provide information and educate managers about types of disabilities and to ensure that hiring managers are aware of assistance the DRC can provide, including disability-compliant computer systems and other workplace accommodations. These DRC efforts support both hiring and retention.

DOT delivered awareness sessions to 100 supervisors on hiring and recruitment flexibilities related to hiring people with disabilities.

The Department continues to cultivate relationships and partnerships with organizations that assist the public in seeking employment. These include, for example:

- Providing internship opportunities for wounded military service members to enhance their transition to the civilian workforce. The Department coordinates with DOD and Department of Veterans Affairs on a DOD demonstration project titled "Transportation American Heroes Program."

- FAA is partnering and collaborating with the Department of Veterans Affairs (VA), Vocational Rehabilitation and Employment (VR&E) Service, to implement a cooperative education partnership that would permit veterans receiving education benefits through VA the opportunity to merge their academic studies with work experience at FAA. They are also seeking VA certification of the FAA Academy as part of the VR&E program. This could result in establishing a special appointing authority for disabled veterans who meet the age and qualification requirements for air traffic controller occupations.

The Results

The representation of people with disabilities in the DOT population increased from 5.1% in FY 2004 to 5/2% in FY 2005. The representation of people with targeted disabilities did not increase appreciably.

PROGRESS IN MANAGING MISSION CRITICAL OCCUPATIONS

The Challenge

As the size of the Department decreases and the magnitude of its mission increases, the Department must continually review all Mission Critical Occupations, updating them to insure that identified MCOs are aligned with Department priorities, and that they utilize and share selection and development resources to develop and renew the populations in MCOs.

The Approach

A fuller discussion of the approach to managing MCOs can be found in Chapter 2. Some of the shared approaches include:

- Department-wide study of four key engineering job groups (General Engineers, 801; Civil Engineers, 810; Mechanical Engineers, 830: Electronics Engineers 855.)

- Continuation of Government-wide work to close skill gaps in the IT workforce

- Continued shared programs and resources to close Leadership competency gaps

The Results

As highlighted in Chapter 2, DOT has assessed competencies of employees in DOT Leadership and IT occupations. DOT is implementing strategies to close competency gaps in Leadership and IT workforces. A study of the competencies for the four key Engineering job groups across DOT is under way in FY 2006.

PROGRESS IN CROSS-CUTTING SKILLS:

The Challenge

The magnitude of DOT's mission requires more inter-modal cooperation to tackle goals like reducing congestion in the nation's transportation system. Strategic decisions to utilize more contractors, the need for cross-modal partnership and communication, and increased technology require the development of a suite of Department-wide skills across MCOs and OAs. As mentioned in Chapter 2, these cross-cutting skills include communication, conflict management and technical skills like project and contract management.

In addition, the Department needs to exercise vision with respect to how management initiatives such as e-Government and competitive sourcing will affect the general, technical, and leadership competencies that will be needed to carry out DOT's mission prospectively.

The Approach

DOT is actively managing its skill mix to emphasize cross-cutting skills including conflict management, project management, performance coaching, communication and other competencies required for successful mission delivery across the MCOs.

OAs are sharing resources to address key skills such as conflict management; and OST has contracted for training in performance management. Courses like, "*So you Want to be a Leader?*" bring employees together in developmental settings where they can learn from the challenges and environments of multiple modes.

The increasing use of planning councils within the Operating Administrations keeps a focus on cross-cutting skills, not only in recruiting but also in development and placement.

The Result

FAA: A key strategy for sustaining workforce planning in FAA organizations is the FAA Human Capital Planning Council. The Council is comprised of workforce planners across the Agency that meet quarterly to discuss cross cutting strategic workforce planning issues. The Council is supporting FAA as it responds to mission critical issues in a collaborative manner, such as competency identification and talent management in furtherance of the Agency's mission and goal achievement.

RITA: The Volpe Center has a highly leveraged workforce, where fewer Federal employees manage more contractors. This has made program and project management competencies increasingly important, and required across all occupations. Employee training, development, and recruitment strategies are being used to increase Volpe's expertise in program and project management.

PULSE CHECK ON DIVERSITY

Challenge

An important element of being an "employer of choice" is creating an environment where all employees are encouraged to contribute fully and are able to develop their careers to their maximum potential. As discussed previously, minorities and white women are under-represented in the Department in relation to the rest of the Federal workforce and the civilian labor force.

Approach

In addition to expanding outreach to diverse candidate populations, the Department has taken internal steps to increase the emphasis on welcoming diversity:

- **Raising Awareness**: The Diversity Council continues to sponsor seminars to raise managers' awareness of diversity management.

- **Increasing Accountability**: The Office of Civil Rights is now meeting quarterly with OA Administrators on diversity goals and issues.

Results

The Federal Human Capital Survey (FHCS) provides an opportunity to take an employee "pulse check." The 2004 results show overall positive ratings for items concerning "managers' support for diversity." The percentage of survey respondents in DOT who rated these items positive remained stable or increased over the DOT responses to the 2002 FHCS.

Figure 4.5: Results on 2004 FHCS: Diversity Items

36. Supervisors/ team-leaders in my work unit are committed to a workforce representative of all segments of society											
SA		A		Neutral		D		SD		Don't Know	
2002	2004	2002	2004	2202	2004	2002	2004	2002	2004	2002	2004
13.3	**13.3**	37.6	**43.2**	27.4	22.5	6.8	7.6	7.8	5.0	7.1	8.3
Total % positive increased from 47.9% to 58.5%											

37. Policies and programs promote diversity in the workplace (for example, recruiting minorities and women, training in awareness of diversity issues, mentoring)											
SA		A		Neutral		D		SD		Don't Know	
2002	2004	2002	2004	2202	2004	2002	2004	2002	2004	2002	2004
14.5	**17.8**	40.8	**45.4**	27.0	214	46	6.4	6.2	3.9	7.0	5.1
Total % positive increased from 55.3% to 63.1%											

38. Managers/supervisors/team leaders work well with employees of different backgrounds											
SA		A		Neutral		D		SD		Don't Know	
2002	2004	2002	2004	2202	2004	2002	2004	2002	2004	2002	2004
14.8	**15.1**	51.1	**49.9**	18.8	20.2	6.2	5.9	6.7	4.7	2.3	4.2
Total % positive remained stable.											

Note, however, that the majority of all respondents are white and male, which may skew the results. For 2006, the "pulse check" may include an examination of whether there are significant differences between the opinions of whites/non-whites, or among different "minority" groups (if the data sets are large enough to enable analysis), on key issues relating not only to diversity *per se* but also to opportunities for career advancement.

MANAGE SUCCESSION PLANNING

Challenge

As the DOT workforce contracts, retaining and developing people to fill key positions and sustain knowledge management is a key objective in every Operating Administration. A full discussion of DOT's succession planning program can be found in Chapter 5.

Approach

At the beginning of the Fiscal Year, a Department-wide succession planning model was already in place. During FY 2005 the OAs continued to develop cadres of identified high potentials

The Human Resource Council includes senior-level management from all major divisions and offices, the chair's office, the executive director and the Office of Human Resources. The HCRB developed an enhanced and regular process for reviewing and approving human capital decisions and keeping a focus on managed succession.

Results

DOT's succession planning system includes some of the best practices highlighted by the GAO in its recent review of succession planning at the Census Bureau, Department of Labor (DOL), the Environmental Protection Agency (EPA), and the Veterans Health Administration (VHA). [62]

Like the agencies reviewed by GAO, DOT has linked its succession efforts to strategic planning, and is including critical mission-driven skill sets in the profiles for executives. As in VHA, the OAs have established subcommittees that are directly responsible for succession efforts. In addition, along with DOL, EPA, and VHA, DOT is monitoring mission-critical workforce needs, supply and gaps in its MCOs. The Operating Administrations have implemented the first stages of OPM's Succession Planning system (see Chapter 5). As OAs graduate employees from development rotations, they face challenges in timing the supply "pipeline" to meet anticipated and unanticipated leadership turnover, and measure results.

During FY 2006, the Department will begin to look at how to measure the effectiveness of leadership succession planning in terms of retention, satisfaction, and productivity. This is a relatively new measurement effort in the field of human capital management in general.

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[62] www.gao.gov/cgi-bin/getrpt? GAO-05-585

Department of Transportation
Department-Wide Workgroups

|	
Human Resource Council - This council comprised of OA HR Directors meets monthly to discuss new programs, regulations, requirements, and other issues in the human resource arena.	**Executive Agent Partners -** This group meets as needed to discuss updates and concerns relating to the QuickHire system and/or process and share recruitment successes and lessons learned to improve recruitment initiatives throughout the Department.
Alternative Dispute Resolution Council - Meets monthly to discuss Conflict Resolution concepts within the Department and other Federal agencies, as well as training opportunities for managers and employees in the area of mediation.	**Executive Resources Review Committee -** Meetings are held as a needed basis to discuss major changes in regulations that affect the career and non-career SES members as it pertains to their pay, performance, recruitment efforts, bonuses, presidential rank awards, pay adjustments, and leave.
Corporate Recruitment Workgroup - This group meets monthly to discuss DOT's recruitment activities (i.e., internship programs, career fairs, attendance/support for career fairs, recruitment strategies, recruitment plans, recruitment materials, involvement with schools and universities, outreach, training opportunities, funding requirements, workforce developmental needs) and share best practices, hiring goals, recruitment tools and methods that are aimed towards recruiting a talented and diverse pool of applicants.	**Federal Personnel Processing System (FPPS) Operational Readiness Taskforce -** Monthly meetings are held to discuss Department- wide issues as it related to the FPPS Payroll System.
DOT Benefits Workgroup - This group meets monthly to share resources, keep the DOT-wide benefits web page updated, and strive to come up with new ways of improving various marketing techniques of the benefit programs within the Department.	**Human Capital Planning Council** - The Council meets monthly and is charged with major responsibilities for workforce and human capital planning, monitoring Department initiatives, and advising the Secretary on appropriate human capital innovations, through the Human Resource Council.
DOT Tele-work Coordinators Workgroup - This group holds quarterly meetings to provide feedback from the quarterly GSA meetings, discuss the status of tele-work in each of the modal administrations, and conduct brainstorming sessions on any issues or problems that may have arisen within the various modes.	**Human Resource Management Measurement Action Team (HRMAT) -** Meets on a quarterly basis to identify innovative approaches to measuring performance and develop strategies and recommendations for the health of each modal administration's Human Resources Program.
Employee Assistance and Work/life Wellness Program - This group meets monthly to discuss employee assistance program issues and coordinates and plans the yearly wellness week fair.	**Information Technology Workforce** - Meets monthly to compare the current capabilities of their Department's information technology workforce to their designated target capabilities, identify specific competency gaps, and develop options to mitigate the gaps using strategies such as recruitment, training, developmental assignments, and contracting.
Labor and Employee Relations Committee - This group meets on a monthly basis to discuss new and current employee relations developments such as conduct, performance, union issues, appeal processes and precedent setting case law.	**Learning and Development Council** - Meets on a monthly basis to discuss Learning and Development as well as training opportunities.

Source: DOT EMPLOYMENT REPORT MARCH 2005

CHAPTER 5: TALENT MANAGEMENT PROGRAMS

As originally detailed in the Introduction to this **Update**, the direction and initiatives outlined in a workforce plan must be implemented through HR operating systems including Staffing, Development, and Retention Programs.

The purpose of this section is to demonstrate, through a representative sampling, the multiple operating programs in use at DOT to manage and develop employee talent:

- Position Management

- Recruiting

- Succession Planning

- Development and Training

- Retention

- Knowledge Management

- Competitive Sourcing

Figure 5-1: Role of Workforce Plan In The Strategic Management Of Human Capital
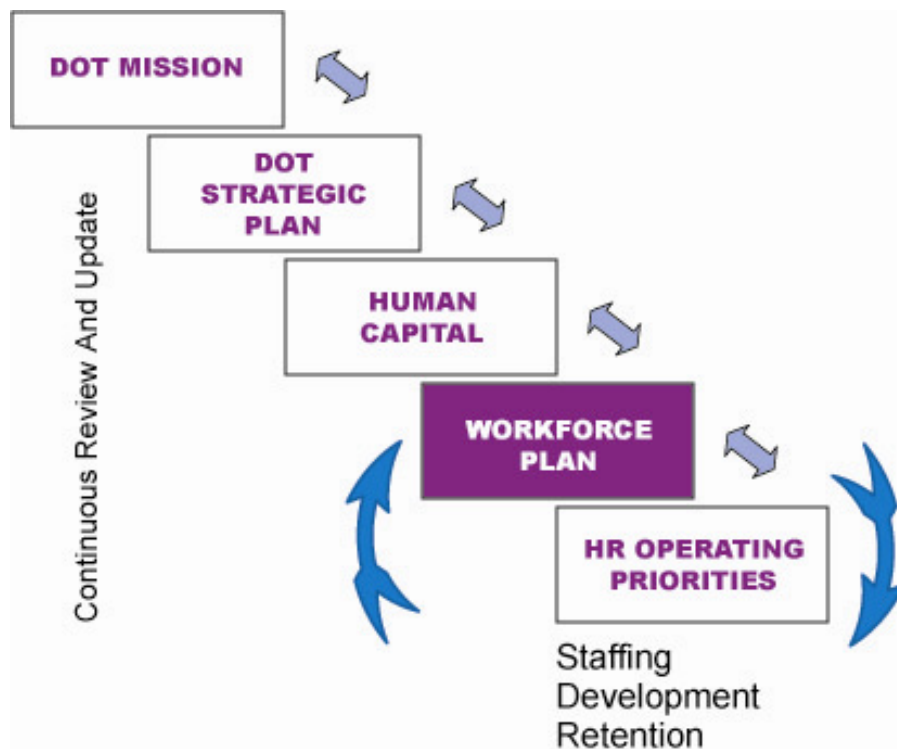
Through a collaborative effort among OAs, the Department has developed inventories of succession planning tools being used successfully within the DOT; learning opportunities related to all leadership competencies and behaviors available to the leadership pipeline; best practice research; and a bibliography of helpful information sources.

POSITION MANAGEMENT

> DOT can not overemphasize that a simple replacement strategy will not suffice. Strategic initiatives must continue to be integrated with Human Capital Plans, Workforce Plans, and diversity initiatives to ensure that the Department is attracting and hiring the people it needs to accomplish its mission effectively.[63]

In a climate of change and constrained resources, rather than simply backfilling each position as it is vacated, many of the Operating Administrations are re-evaluating each open position to ensure that job descriptions adequately describe the competencies needed to further the mission at an appropriate level and department within the organization.

Some examples include:

- **MARAD**: The Human Capital Council meets on a regular basis to discuss resource allocation (both Federal and contractor resources) to ensure that the resources are in the appropriate place to meet the needs of the organization. "This Council has been successful because for the first time in MARAD history, we are taking a corporate, organizational view of our requirements and resources and making decisions for the good of the organization as a whole."[64]

- **FHWA**: as the Agency moves toward a multidisciplinary workforce FHWA is assessing the FTEs for all the Mission Critical Occupations. Although the Highway Engineer series (0810) has been critical to the mission, with the need for a more multidisciplinary workforce the Transportation Specialist series (2101) provides an opportunity to incorporate a wider array of disciplines.[65]

RECRUITING

> Regardless of the *rate* at which new employees are hired in FY 2005, DOT's approach to recruitment must remain strategic. DOT can not afford a simple replacement strategy. DOT must focus on its mission-critical occupations, anticipated skills gaps, and outreach to people with disabilities, Hispanics, and other minorities.[66]

In FY 2005, the total number of new hires at every grade failed to replace all the employee losses due only to retirement. Continued aging of the DOT workforce and retaining talent and expertise will be a challenge for every OA in FY 2006 and future years.

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[63] *DOT Recruitment Progress Report, March 2005*

[64] *MARAD 2006 Workforce Plan*

[65] *FHWA 2006 Workforce Plan*

[66] *DOT Recruitment Progress Report, March 2005*

Although recruiting remains largely decentralized in the OAs, the Office of the Secretary manages department-wide outreach and recruiting programs, and the OAs meet regularly to discuss mutual approaches to positioning the Department as an Employer of Choice.

The Department as a whole has entered into an agreement with a marketing firm to design and place general employment ads and specific vacancy information on appropriate websites. This shift towards a greater online presence will maximize exposure to talented and diverse candidates while also leveraging limited recruitment and outreach resources. The ads are being produced and placed during FY 2006.

The Department is also measuring the impact of an expanded presence in the labor market. DOT has expanded the functionality of the database for applicant tracking. Most of the applications DOT received in the QuickHire system were generated as a result of the Department's online presence/outreach. According to FY 2005 QuickHire applicant data, the three most common ways applicants heard about DOT vacancies were: USAJOBS (OPM) website (51%); email notification (11%); and Agency website (9%). All OAs except FAA now utilize QuickHire, which provides better data on candidate pools, acceptance ratios, and time-to-fill progress.

FAA uses an Automated Staffing Application Process (ASAP) for internal-non-bargaining and external hiring to collect applicant pool demographic data to gain an understanding of persons seeking employment with the FAA. Through better understanding of its applicant pool, FAA can target its outreach and recruitment efforts to internal-non-bargaining and external populations that it is not currently reaching. FAA also has a suite of talent performance measures to collect, track, and report on timeliness of filling positions, quality of selections, and feedback from new hires on the hiring process.

The OAs are also using a variety of authorities and innovative approaches to expand their recruiting success.

FHWA: The Professional Development Program (PDP) provides the Agency an opportunity to hire recent college graduates in specific fields that have been identified as critical. The majority of the PDP candidates will become tomorrow's leaders in the Agency. The PDP has set a goal of four financial hires for FY 2006. One Financial Specialist accepted a position in December, 2005.

MARAD: The Career Opportunity Training Agreement (COTA) is a career development and staffing tool that MARAD uses to help fully utilize employees while continuing to meet organizational needs. COTA allows employees who do not presently meet all qualification requirements for a specific vacancy, but who demonstrate the potential to perform successfully in the position, to be placed in the position in a trainee capacity utilizing an individual training plan. Upon successful completion of the individual training plan requirements, the employee will meet all qualification requirements for the target position.

SUCCESSION PLANNING

Organizations need to go beyond a succession planning approach that focuses on replacing individuals to a more strategic and integrated leadership succession management system that focuses on strengthening current and future organizational leadership capacity.[67]

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[67] OPM: Overview of Succession Management, Oct.31, 2005

Based on the DOT-wide workforce analysis, leadership succession has been identified as a key human capital challenge due to the projected attrition of individuals in leadership positions. To ensure qualified leadership at all levels, DOT established a systematic succession planning model as a subset of its overall Workforce Planning and Key Human Capital Challenges Initiative. As a first step, all OAs are following a consistent model, sharing sources of training opportunities, and other tools to assist them in developing and implementing their succession planning systems. The systems include common standard components:

- Organized Sponsorship
- Cultural Values Identification and Assessment
- Identification of the Talent Pool
- Competency Assessment
- Developmental Experiences
- Knowledge Sharing
- Executive and Supervisory Support
- Selection and Placement
- Continual Reassessment

The DOT succession planning model includes all five phases of the OPM Strategic Leadership Succession Model, shown in Figure 5.1. Phases 1-4 are ongoing in DOT. During FY 2006, the Operating Administrations are moving into Phase 5 – Evaluate Succession Strategies. As the plans yield results, key openings occur in the SES ranks, and the Agency moves into a more robust management of accountability for all its Human Capital Management Systems.

Figure 5.1 OPM Strategic Leadership Succession Model

The following pages provide a "walk-through" of OPM's criteria for a Leadership Succession system, as outlined in OPM's "Job Aid: Assessment of Agency Succession Management System." The walk-through demonstrates that DOT has already achieved or is building the required elements for every phase of a successful system.

Strategic Leadership Succession Model

- Establish Strategic Alignment

As emphasized in the HCAAF, DOT has a human capital planning system that promotes alignment of human capital strategies with Agency mission, goals, and objectives. Succession planning is a key operating element of the workforce plan, as outlined in the Introduction to this **Update**.

Establishing Strategic Alignment	Achieved
The Agency's strategic requirements for leadership succession management have been articulated	☑
The business case for succession management, including accountabilities and resources, has been described	☑

★**Example**: The FAA's Flight Plan, Organizational Excellence goal articulates a corporate strategy to build stronger leadership to achieve strategic goals, manage people, and resources effectively, and drive continuous improvement. The FAA's Succession Planning and Managerial Workforce Planning initiatives are aligned with the Flight Plan and address expected turnover and development needs of the Agency's leadership cadre. On a monthly basis, the Administrator's senior management team meets to discuss the progress of these initiatives in support of Organizational Excellence goal accomplishment.

- Identify Succession Targets and Analyze Talent Pool

The HCAAF suggests that an Agency's succession plan identify competency gaps and deficiencies and an analysis of competencies in mission critical occupations. As reviewed in Chapter 2 of this **Update**, competency analysis for Leaders and IT professionals has been completed, and development and use of competency models for other MCOs is ongoing throughout the Operating Administrations.

Identify Succession targets and Analyze Talent Pool	Achieved
Succession management targets (i.e., numbers of leaders needed for critical leadership roles) have been set	☑
General, high-level objectives for succession management have been established	☑
Bench Strength Analysis has been accomplished, describing the readiness gap	☑
Potential sources of talent for meeting targets have been identified	☑

⭐**Example:** For example, FHWA has determined the strategic importance of maintaining its cadre of skilled leaders and managers. Nearly 74% of the Senior Executives and 66% of the GS-15 leaders and managers will become retirement eligible within the next five years. At the beginning of FY2005, FHWA had 52 SES positions and they determined that on average, five SES positions will become vacant annually. FHWA is taking steps to ensure that a pool of qualified employees is available from which to select the successors of current leaders and managers. They understand education, training, and developmental work experiences are needed and are using the Leadership Development Program to address these required qualifications and experiences.

The Office of the Inspector General (OIG) also recognizes that almost half of its Senior Executives and over a quarter of its GS-15 workforce will be eligible to retire within five years. OIG developed a succession plan that identifies key positions, the skills desired in those positions, and plans for ensuring a pipeline stocked with candidates capable of filling those positions. This succession plan will provide a road map for ensuring continuity in the OIG's effort to maintain a cadre of key managers skilled in both the technical aspects of the Agency's operations and in workforce management.

Finally, in 2004, SLSDC encountered an unanticipated retirement by one of their two SES employees. SLSDC used this as an opportunity to review the senior level management of the Corporation. Since the vacated position only marginally met the SES management requirements, that position was restructured at the GS-15 level. SLSDC is using external recruiting to fill both positions.

- Develop Succession Management Plan

The HCAAF outlines the need for both investment in the development of management talent, and accountability for support, sponsorship, and evaluation of the investment in relation to Agency mission and goals.

Develop Succession Management Plan	Achieved
A succession management plan includes: ▸ Strategic Requirements ▸ Succession Management Targets and Talent Pool Analysis ▸ Strategies for Recruiting, Developing and Retaining Leadership Capacity	☑ In some OAs
Plan includes an implementation plan	☑ In some OAs
Plan includes an evaluation/accountability plan	*To come*

⭐**Example:** **NHTSAA**: In recognition of the potential loss of senior level personnel and other long-term employees through retirement and other attrition, NHTSA has developed a plan that identifies projected professional skills that would be needed over a five-year time frame. As part of this process NHTSA has committed to selecting and placing three Presidential Management Fellows (PMFs) during FY 2006. This will provide NHTSA with another mechanism for addressing and assessing future senior personnel needs and the potential of the people within an agency to move (via reassignment or promotion) into senior positions in the future. Lastly, NHTSA now has a policy governing the Student Loan Repayment Program, and anticipates using it in the near future for its entry level recruits, funding permitting.

- Implement Succession Management Plan

⭐ The Operating Administrations are in the process of managing their succession management plans. As senior level positions become available through retirement the OAs will be better able to evaluate the strategies in place and the performance data generated by the plans.

Implement Succession Management Plan	Achieved
Policies and practices support succession management initiatives	
Succession management initiatives and policies are clearly communicated	
Expectations and leadership buy-in…are clearly communicated	
Succession strategies are in place for targeted groups	
Process and performance data and compliance data are being collected and disseminated	

- Evaluate Succession Strategies

Evaluate Succession Strategies	Achieved
A report of results, including key findings on how well targets have been met, has been distributed	
Promising practices have been documented and shared	
Recommendations and an action plan have been presented	
Lessons learned have been identified	

⭐ DOT has established measures of success for its succession planning model.

There are three primary measures of success for the approach to leadership succession planning portrayed by this model:

- The existence of diverse, qualified internal applicants for all vacancies that occur in the leadership pipeline. External applicants who are equally- or better-qualified or meet specific needs may be selected for positions, but an internal talent pool of qualified applicants, consisting of women, minorities, people with disabilities, and young people, should exist to ensure against potential leadership gaps.

- Follow-up evaluations and employee feedback through Government-wide and OA surveys attest to the quality of leaders developed and selected through succession planning processes.

- Succession planning is an integral part of the OAs and the Department's ongoing, continual workforce planning processes.

DEVELOPMENT AND TRAINING

The first step that DOT has taken in support of the PMA was to procure and integrate eLMS, which also serves as the Department's Competency Management System (CMS). All DOT employees now have access to eLMS, are able to view their learning history through eLMS, and can engage in training through access to nearly 2,000 web-based courses. Most non-FAA Modes have been scheduling and recording learning events in eLMS since April 2004. In September 2005, FAA, FHWA, and OIG began the management of classroom-based instruction through eLMS.[68]

DOT is focusing limited training resources on the highest impact area, that is, the executive and leadership cadre. DOT has directed each OA within the Department to take action to close gaps in the "conflict management" area of competency within the executive ranks by June 2006.

Each OA developed a plan of action to achieve the desired results. The following is a summary of the actions planned, by OA, to reduce their leadership competency gaps. Those OAs with small numbers of SES positions have expanded their focus to leaders and supervisors in the SES "pipeline."

Surface Transportation Board (STB). The STB has adopted two DOT mentorship programs—Leaders for Tomorrow Mentoring Program and So You Want to be a Leader Program—to develop GS 12 and GS 13 level employees who are interested in becoming supervisors and managers.

Federal Transit Administration (FTA). FTA is focusing on closing the gap in the area of conflict management. All executives, managers and supervisors are required to attend a seminar on "Managing the Federal Employee Discipline and Performance Process," either onsite or at the Brookings Institution. In support of closing gaps in other competency areas, FTA has mandated Equal Employment Opportunity training for all employees, developed an online Alternative Dispute Resolution (ADR) course, and is offering conflict management training to those interested. FTA is also focusing its efforts on providing training and development to its GS 13-15 population through the USDA Executive Potential Program.

Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA has set goals for its supervisors as well as its executives for improvement in conflict management and is also focusing on improvement in human resources competencies of its leaders. It is issuing a new Agency policy on the recruitment, selection, development, appraisal, and probation of its supervisors. PHMSA is also focusing on preparing GS 13-15 personnel for executive positions by using the U.S. Department of Agriculture (USDA) Executive Potential Program and the Council for Excellence in Government Fellows Program. They are also supporting attendance at Federal Executive Institute (FEI's) Leadership for a Democratic Society course, courses at OPM's Management Development Center, FAA's Center for Management and Executive Leadership's Strategic Planning through the Power of Vision course.

National Highway Traffic Safety Administration (NHTSA). SES and GS 15 competitive development program candidates attend a Capital Hill Workshop and the Federal Executive Institute. GS 13-15 personnel may take individual courses through the OPM Management Development Center and the FAA Center for Management and Executive Leadership.

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[68] *DOT Leadership Competency Assessment Final*

Maritime Administration (MARAD). MARAD has identified two competencies on which to focus in the second and third quarters of 2006: (1) conflict management, and (2) Team Building. Its intention is to design classroom training to enhance both of these competencies. In addition, GS 15s may attend the Federal Executive Institute; GS 13-14s may participate in the Transportation Leadership Program; GS 13 and below may participate in the mentoring program; and, GS 12 and below may attend OPM Management and Development seminars.

Federal Motor Carrier Safety Administration (FMCSA). FMCSA conducted three leadership skills classes in FY 2005, training 112 students.

Federal Aviation Administration (FAA). FAA focused its attention on training those aspiring to managerial jobs through two programs – Making Opportunities to Develop Employees (MODEL) and Leadership Evaluation and Development (LEAD) (also open to current managers and supervisors up to and including executives). MODEL is designed to allow participants to develop and practice leadership skills based on 17 defined leadership success characteristics in four main areas – achieving operational results, leading people, leading strategic change, and building relationships. In addition, FAA offers a Technical Woman's Organization Mentoring Program to provide a mentee-mentor relationship to women in support of their career management.

In addition to these programs, each OA manages training and development for its wider workforce.

RETENTION

Employee retention is a key issue for all Federal agencies. Because the cost of replacement is estimated to be 1.5 times the annual salary of a departing employee[69] (Saratoga institute), investment in knowledge management and retention is increasingly a priority.

DOT employees' "intent to stay," as measured by the 2004 Federal Human Capital Survey, mirrors the government-wide averages.
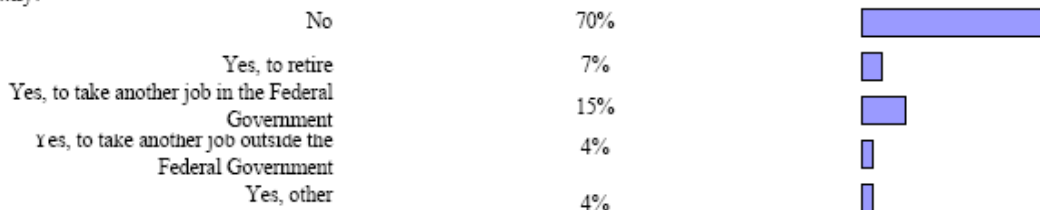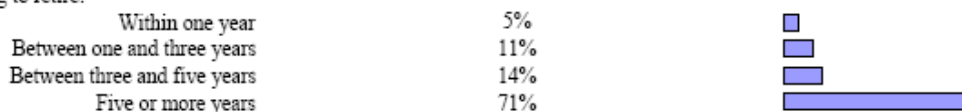
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[69] *Saratoga Institute*

Figure 5. 2 2004 Federal Human Capital Survey: Employee "intent to stay"

Agency			Leaving				
		# of Respondents*	No	Yes, to retire	Yes, to other job in Govt	Yes, to other job outside Govt	Yes, other
All Responses	2002	100,656	N/A	N/A	N/A	N/A	N/A
	2004	147,914	70.4%	6.6%	15.7%	3.5%	3.8%

87 Are you considering leaving your organization within the next year, and if so, why?

No	70%	
Yes, to retire	7%	
Yes, to take another job in the Federal Government	15%	
Yes, to take another job outside the Federal Government	4%	
Yes, other	4%	

88 I am planning to retire:

Within one year	5%	
Between one and three years	11%	
Between three and five years	14%	
Five or more years	71%	

Roughly the same percentage of DOT employees and all Federal employees said they intended to stay for at least one year (70%). The same percentage (15%) said they intended to leave their agency to take another job in federal government, indicating a certain amount of steady "churn" in each agency.

Federal agencies that can identify the drivers of the intent to move among agencies, and can reduce that churn by even a small percent, would have a large impact on their cost of turnover.

The FAA currently administers a new employee survey and an exit survey to track drivers of employee satisfaction. The OST Office of HR Policy will introduce a DOT-wide exit survey in early FY 2006.

KNOWLEDGE MANAGEMENT

The Office of Strategic Initiatives has set up a working group, comprised of representatives from the OAs that have ongoing activities. Some examples of the group's efforts include:

- FHWA has a Chief Knowledge Officer, Mike Burk, responsible for overseeing the Agency's knowledge management initiatives, which are many. FHWA has two documents that it regularly distributes – FHWA Knowledge Sharing Initiative and FHWA Knowledge Application (paper copy).

- The FTA has created the Bus Rapid Transit Exchange (BRTE), which is used by experts nationwide to provide information and share practices on Bus Rapid Transit systems worldwide. Information can be accessed at www.fta.dot.gov/brt.

- The FAA has built a Knowledge Sharing network that has the capacity to support 80,000 users. Currently, there are approximately 18,000 users on the system with hundreds of communities of interest.

- The Knowledge Sharing Working Group has convened on three occasions to discuss collaborative opportunities, and define strategies for to 'promote' Knowledge Sharing throughout the Department. The group identified that by hosting a Forum to educate the OAs by building awareness about the functions and capabilities of this exciting resource. The plans for a Forum have not been finalized.

COMPETITIVE SOURCING

The Department utilized competitive sourcing as a human capital management strategy during 2005.

FHWA is integrating competitive sourcing into workforce planning as a tool to fill vacancies for competencies where a benefit to the Agency is identified. This can be a short-term or long-term benefit. The FHWA has a competitive source team that formulated this approach and coordinates with the DOT Office of Acquisition.

In FY 2005, as a result of a streamlined competitive sourcing competition held in FY 2004, PHMSA implemented a "most efficient organization" (MEO) which restructured the performance and management of certain administrative functions in the organization. A manager was hired to oversee the operations, which involve primarily non-mission critical functions. VERA/VSIPs were offered to all directly affected employees before the reorganization was implemented, and other strategies were employed to help minimize any negative impact. All MEO positions were filled by the beginning of FY 2006. Technical/functional leads in various program offices are relieved of the day to day administrative supervision of the MEO employees while still overseeing the technical work. In FY 2006 and beyond, the success of the program will be audited both internally and externally, not only financially but from a management perspective.

During 2005, FAA used the competitive sourcing opportunity outlined in the President's Management Agenda, more commonly referred to as the A-76 process, to reduce operating costs, at the same time modernize operations, and continue to provide high quality service in a cost effective manner.

The FAA Automated Flight Service Station (AFSS) Competitive Sourcing competition included 58 facilities in the continental United States, Puerto Rico, and Hawaii operated by the FAA. On February 1, 2005, the FAA awarded a 10-year contract (five-year base, with five option years) to Lockheed Martin, up from the usual five years. The FAA competition included infrastructure at 58 flight service stations in the competition, which allowed bidders to propose solutions that close or consolidate services. Under Lockheed Martin, gradual consolidation of the 58 current flight service stations will result in 20 sites over an 18-month period. The FAA competition is one of the largest at a non-defense agency and from the inception of the study, the FAA estimates cost-savings of $2.2 billion.

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CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

ADDITIONAL CONSIDERATIONS: E-GOVERNMENT/TECHNOLOGY CONSIDERATIONS

The mandate for E–Government (e-Gov) and growth of the web has spawned an increase in agency sponsored websites and fueled citizen's expectations for quality services and information. E-Gov is one of the five main goals of the President's Management Agenda and mandates the use of "best IT management practices." As part of this goal, DOT will continue to ensure that data and information that are used to conduct critical Agency business or disseminated outside the Agency are timely, accurate, accessible, understandable, and secure. This will be accomplished through continued improvement of service delivery capabilities and development of project portfolios aimed at the key customer groups of citizens, businesses, other government agencies, and employees, as well as projects dedicated to improving internal efficiency and effectiveness. DOT will continue to assess the human capital implications as web deployment and technical skills are needed to support development, implementation, and maintenance of e-Gov initiatives.

DOT is committed to integrating the principles of the President's Management Agenda with the e-Gov initiatives. For example, the DOT Federal Personnel and Payroll System (FPPS) is an e-Gov initiative to standardize personnel, payroll, and financial services (FAA migrated to FPPS in October 2006). The DOT eLMS is an e-Gov electronic learning management system initiative that will serve as DOT's system to track training records, manage competencies, and enable employees to realize developmental goals. This system was released in 2005, for all OAs.

Operating Administrations have further implemented IT and e-Gov initiatives to advance the Department's overall commitment to technology initiatives. A major e-Gov initiative in FY 2006 for the FAA is the transitioning to e-OPF.

Other Operating Administrations are using e-Gov initiatives to share information and improve communication. Still others have implemented various e-Gov initiatives to improve internal technology considerations for employees. Operating Administrations are also using e-Gov and technology initiatives to more effectively perform their mission by automating procedures and tasks.

It is important to note that the utilization of these new technologies will change the landscape of DOT's workforce in the future. Not only will new employees be required to have a stronger IT skill set than in previous years, but the Agency will also try to streamline functions and processes that are no longer required, due in large part to technological advances.

ADDITIONAL CONSIDERATIONS: BUDGET FORMATION AND COORDINATION

While DOT believes that the human capital strategies including this workforce plan are critical, budget and time limitations are still significant factors in the implementation of these strategies, which, while critical, can be costly. DOT is committed to the human capital strategies outlined, however, these efforts will be balanced with mission priorities and the ability to sustain meaningful programs.

Implementation of human capital strategies requires significant people and budgetary resources. DOT is working towards better alignment of our human capital requirements with the strategic and budget planning processes to better justify investments in DOT human capital.

DOT realizes that costs associated with early retirements and buy-outs can be substantial. In addition to the buy-out payments of up to $25,000 per employee, there is an additional cash outlay required to pay departing employees for their accumulated annual leave. DOT OAs may be better able to afford early retirement and buy-outs through the following strategies:

- Strategically identifying the positions to be offered early retirements and buyouts.

- Converting many vacancies to lower grades (i.e., converting a vacant GS-14 position to a GS-7 entry level position).

- Completing the early retirements and buy-outs in the first quarter of the fiscal year.

For example, the Office of Personnel Management provided FAA the authority to VERA/VSIP to realign the workforce to meet budgetary constraints or mission needs; correct skill imbalances; and reduce high-grade, managerial, or supervisory positions. FAA is using VERA as a human capital tool and flexibility to optimize their organizational structures from service and cost-management perspectives and meet requirements for redeployment or revisions to the mix of the workforce resulting from work-function consolidations, demographic and skills mix shifts, and/or imbalances among position categories and better achieve FAA Flight Plan goals and objectives.

Operating Administrations are developing creative ways to initiate cost savings for the Agency. For example, savings from converting vacancies to lower grades will free up funding to address the costs of targeted student loan repayment and occasional recruitment and retention incentives.

Implementation of other workforce planning strategies such as workforce planning automation tools, recruitment advertisements in newspapers, and training and travel to attend college career fairs will require funding from the administrative budget.

ADDITIONAL CONSIDERATIONS: COMMUNICATION PLAN

The success of this plan and the associated initiatives is directly dependent on the support and ownership of the DOT executives, managers, and employees. It is all about the investments required in DOT people. Naturally, DOT employees are interested in their future development and growth opportunities and therefore, it is absolutely essential that we effectively communicate this plan with the human capital initiatives to ensure that the workforce fully understands the approach to meeting the challenges of the future.

Managers and executives have a key role in the communication process. Their support and buy-in is critical to effective communication in the workforce. The core messages that will be integrated throughout DOT's communication activities include:

- This is our vision and you play an important role in getting us there.

- We are focused on reenergizing our organization and bringing in fresh perspectives to take us into the future.

- We are committed to obtaining and investing in a workforce that will help us achieve our goals.

- We are all responsible for our own professional growth and development.

- Growth and development opportunities are available to you not only through development budgets but also via e-learning courses, rotational assignments, task forces, and other learning opportunities that employees may seek out.

ADDITIONAL CONSIDERATIONS: ACCOUNTABILITY STANDARDS

In alignment with the requirements of the HCAAF Accountability System, the Department has already accomplished the first component of the process of integrating human capital management with increased self-accountability:

- Develop Strategic Human Capital Goals and Objectives Aligned with Agency Strategic Plan[70].

As reviewed in Chapter 1, DOT's human capital policies and programs are aligned to support mission accomplishment, and systems such as succession planning are developed in accordance with OPM requirements.

During FY 2006, DOT human capital will increase its focus on measurable results by building the second and third components of the integration process:

- Integrate Accountability Planning with Human Capital Planning.

That is, the Department will review and add measurement objectives, metrics, and methods for collecting data, timeframes, and responsibilities for reporting on objective accomplishment wherever they do not fully exist at present.

Finally, the Department will implement the third step:

- Implement Human Capital and Accountability Plans and Summarize Results.

These summaries will track how results on the human capital goals have been achieved in accordance with each critical success factor of the relevant HCAAF systems.

CONCLUSIONS: AN "AGENCY IN MOTION"

DOT is at a challenging juncture of mission growth and a smaller departmental workforce. This presents implications for the strategic management of all Department assets, including what strategies and actions to pursue; where and in whom to invest; and how to capitalize on a seasoned and knowledgeable workforce while transferring knowledge to newer employees.

Mission

The nation's transportation infrastructure impacts every citizen every day: our mobility, our safety, our quality of life. In times of crisis or emergency, or when the national focus turns to our potential internal vulnerabilities, the Department's mission for a "simpler, safer" transportation network comes urgently into public focus.

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[70] OPM presentation: "Human Capital Accountability Systems", autumn 2005

Structure

The Department has been proactive in restructuring the modes for efficiency and cross-modal effectiveness. While each OA has a unique transportation mission, it is essential that the OAs remain connected by clear and unified communication and coordination with a minimum of redundancy.

Strengths

DOT is certified "green" in the Strategic Management of Human Capital, and has a strong workforce planning practice.

DOT recognizes the importance of managing and passing on the knowledge of its current senior workforce and of engaging new entrants into the field and the Federal Government. The Department is positioning itself to be an employer of choice and attract a wider, more diverse candidate pool.

Projections indicate that DOT has a period of approximately five years in which to prepare for and absorb the coming "retirement wave" – enough time to make the transition to a new generation of leaders and new management practices.

Finally, DOT strives to achieve the goals it sets. DOT is hiring more Hispanic employees and people with disabilities, a goal set forth by Secretary Mineta.

Vulnerabilities

The Department has historically been a stable and homogeneous organization. Although comprised of many modes, DOT modes have a common a history of hiring from the transportation industry, which has also been relatively homogeneous with a high concentration of white males. The science and engineering fields from which the Department draws have not in the past been heavily populated by women and minorities.

The Department also is relatively homogenous in age makeup. Employees are part of the "age wave" phenomena of Baby Boomers, and are slightly older on average than the overall Federal workforce. Every OA is vulnerable to pending retirements of its senior and mid-level staff, beginning with the age cohort 45-54.

However, precisely because of the nature of its industry, DOT employees may stay longer than other Federal employees who are retirement eligible. In some modes, like the FAA, employees rate themselves high on job satisfaction and the mission, contributing to career longevity. In other modes, the opinion has been expressed that, for transportation professionals, "This is the only game in town."

The Crossroads

As the Government turns to agency self-accountability and measurement of results, DOT has the opportunity to shift to fact-based decision making concerning human capital. While this is not new to the Department's scientists and technicians, it is a newer approach within the field of human capital management.

Some additions to this year's Workforce **Update** position the Department to move rapidly into the crossroads of quantitative and qualitative data. These include:

‣ A detailed look at turnover – both gains and losses.

‣ An initial integration of sources of data, using Federal Human Capital Survey responses to "cross check" competency findings. The DOT exit survey being implemented during 2006 will add a third data source for next year's analysis.

‣ A more detailed analysis of the demographics of the current workforce.

‣ A look at the aggregate impact of individual human resource transactions.

RECOMMENDATIONS

Against this background, several actions are recommended for 2006.

Streamline Committee Structure: The decentralized nature of the Department has resulted in a large number of Human Capital and Human Resource working councils at the OA and the Department-wide levels. A streamlined structure of fewer committees that are clear on each committee's responsibilities and interdependencies would deliver a better "big picture" to OST and more value to the OAs.

Focus on Metrics: The President's Management Agenda emphasizes quantifiable, auditable results in human capital management. As the Department is asked to take on more responsibility for self-accountability, the development of a "dashboard" of a few, key human capital metrics will provide a uniform focus on results.

This will also help the Department to focus on the aggregate impact of individual activities. For example, without a quarterly "rollup" of the demographics of new hires, it may not be evident that new employees under 30 and over 45 are keeping the average age stable; or that minority groups may not be progressing proportionately in their careers.

Continue to Close Competency Gaps: Continue the work that is already underway to close competency gaps in Mission Critical Occupations.

The Critical Few: The Department may wish to set a few shared goals for FY 2006, for example:

1. Develop a fact-based method to segment the employee "market" of both current and potential employees. Although the Department wishes to be an "employer of choice," very little information has been evaluated concerning what drives the job satisfaction of different demographic or psychographic groups of people. DOT can go much further with data already in hand to understand how different employee groups experience work life at DOT. Two examples are: analyzing Federal Human Capital Survey (FHCS) responses by race, gender, and level; and evaluating the new exit survey data against "intent to stay" data as reported in the FHCS.

2. Use the data to create a variety of workplace choices that will appeal to potential employees. The OAs have not yet taken full advantage of flexible work schedules, telecommuting, student tuition repayment, or other options that other Federal agencies may utilize to make their environments "workplaces of choice."

3. Concentrate on retention. Especially in a time of scarce resources, it is critical that new hires be positioned for success. Internal best practices like providing mentors, holding hiring managers accountable for the success of new employees, and "intake surveys" could be shared and encouraged throughout the Department.

4. Continue to focus on competencies. The OAs should continue competency model development, assessment, and closing of critical competency gaps in the onboard workforce. Once DOT has a complete understanding of its current workforce capabilities and desired future workforce capabilities, the Department could shift its emphasis to identifying those critical competency sets that distinguish superior employees from average or low performers.

Highlight Sponsorship for Human Capital Management Initiatives: Secretary Mineta's letter of 2003 (in the Appendix) is frequently referenced in this report. Administrators in all OAs should reinforce their sponsorship for human capital management initiatives, tied to mission, to provide clear messages to managers about how to frame their own daily decisions about managing people.

APPENDICIES TABLE OF CONTENTS

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APPENDIX: A

TOTAL POPULATION: 52,684

Gains by Type

Nature of Action	Total
100 Career	26
101 Career-Conditional	271
130 Transfer In	142
140 Reinstatement-Career	37
141 Reinstatement-Car/Con	2
170 Excepted	906

TOTAL GAINS:	1384

Losses by Type

Nature of Action	Total
300 Retirement-Mandatory	45
301 Retirement-Disability	97
302 Retirement-Voluntary	2060
303 Retirement-Early (VERA)	302
304 Retirement-Involuntary	39

TOTAL GAINS: 1,384

TOTAL RETIREMENTS: 2543

312 Position Change/CA	11
317 Resignation	394
330 Removal	61
350 Death	90
352 Transfer Out	319
355 Termination	1
356 RIF	2
357 Termination-Lack of Funds	2
385 Discharge	12
390 Separation	1

TOTAL OTHER LOSSES: 893

TOTAL LOSSES:	3416

TOTAL LOSSES: 3,436

Voluntary Losses (FY 2004-2005 Comparison)

FY	Resignations	% of Loss	Retirements	% of Loss	TOTAL/% of total losses
2004	427	18.2	1,920	81.8	2,347 (83.5%)
2005	394	13.4	2,543	86.6	2,937 (85.4%)

Total Losses by Age Category (2005)

Age Category	Retirement	Other Losses	Total
Less than 25	0	52	52
25-29	0	76	73
30-34	3	93	88
35-39	10	120	130
40-44	22	177	196
45-49	143	147	287
50-54	514	121	634
55-59	980	77	1055
60 and above	871	30	901
Total	2,543	893	3,416

Retirements by Age Category (2005)

	Retirements					
	Total	Mandatory	Disability	Voluntary	VERA/ special offer	Involuntary
Less than 25						
25 - 29						
30 - 34	3		3			
35 - 39	10		10			
40 - 44	22		21		1	
45 - 49	143		24	71	43	5
50 - 54	514		21	314	163	16
55 - 59	980	44	12	827	86	11
60 and Over	871	1	6	848	9	7
Total	2,543	45	97	2,060	302	39

Other Losses by Retirement by Age Category (2005)

	Position Change	Resignation	Removal	Death	Termination	RIF	Termination/ Lack of Funds	Discharge	Transfers	Separations - Other
Other Losses										
Less than 25		48							4	
25 - 29		48	3	1	1		1	2	20	
30 - 34		50	7	1				2	33	
35 - 39	1	65	9	4			1	1	39	
40 - 44	1	72	18	5		1		2	78	
45 - 49	3	50	13	19					61	1
50 - 54	3	28	5	24		1		3	57	
55 - 59	3	21	6	25					22	
60 and Over		12		11				2	5	
Total	11	394	61	90	1	2	2	12	319	1

Losses by grade (2005)

GRADE	Total #	300	301	302	303	304	312	317	330	350	352	355	356	357	385	390	TOTAL
1	2																0
2	1							2									2
3	4							4									4
4	459		3	18	1			40	2		2				2		68
5	1,030		1	25				26	2	2	14				1		71
6	427			20	1			12			13						46
7	706		2	41	10		1	28	6	3	10	1			1		103
8	365		1	16	1			10	4		7			1			40
9	1,581		2	36	7	1		32	5	4	26				1		114
10	237		3	15	1			6	1	1	3						30
11	3265	1	5	94	14			33	4	5	45				4		205
12	10,429	8	36	418	54	31	8	72	21	18	39		1	1	3		709
13	10,346	6	10	391	56	3	1	58	7	24	48		1				605
14	14,335	26	25	454	77	3	1	36	9	21	57						710
15	8,543	4	9	492	74			22		11	50					1	663
SES	438			40	6	1		13		1	5						66
Total	52,684	45	97	2,060	302	39	11	394	61	90	319	1	2	2	12	1	3,436

Losses By RNO

	300	301	302	303	304	312	317	330	350	352	355	356	357	385	390	TOTAL
American Indian/ Alaskan Native		3	39	1	2	2	10	3	5	3						68
Asian/ Pacific Islander		1	26	5			20	5	12	15						84
Black, not of Hispanic origin	2	10	209	29	10	1	63	14	8	74	1		2	3		426
Hispanic	2	4	82	13			25	4	64	15				1		210
White, not of Hispanic Origin	41	79	1,692	254	27	8	276	35	1	211		2		8	1	2,635
Not Specified			12							1						13
Total	45	97	2,060	302	39	11	394	61	90	319	1	2	2	12	1	3,436

Losses By Gender

	300	301	302	303	304	312	317	330	350	352	355	356	357	385	390	TOTAL
Females	6	40	490	143	8	5	192	27	16	165		1	1	3		1,097
Males	39	57	1,570	159	31	6	202	34	74	154	1	1	1	9	1	2,339
Total	45	97	2,060	302	39	11	394	61	90	319	1	2	2	12	1	3,436

Losses By persons with disabilities and by Veteran preference

	300	301	302	303	304	312	317	330	350	352	355	356	357	385	390	TOTAL
PWD	3	27	144	17	0	2	27	10	6	20				1		257
Veterans	37	27	1,144	113	23	2	54	13	47	77				5		1,542
Total	45	97	2,060	302	39	11	394	61	90	319	1	2	2	12	1	3,436

APPENDIX: B

Employee Population for Demographic Chapter only
- Full time, part-time, active, permanent appointment

Handicap
- PWTD = Handicap code (see attached)
- PWD = PWTD + all other codes (other than 1, 4 and 5)

Code	Meaning	Targeted Disability
	Handicap Code	
01	Handicap Not Identified	
02	Detail, Travel, Etc., Not Able to Obtain Info	
04	No Handicap (Prior to October, 1997)	
05	No Handicap	
06	Handicap Not Listed	
13	Sev Spch Malfunction or Inability to Spk, But Normal Hearing	
15	Hard of Hearing	
16	Total Deafness in Both Ears, with Understandable Speech	
17	Total Deafness in Both Ears, and Unable to Speak Clearly	
22	Ability To Read Ordinary Size Print W/Glasses, But With Loss of Peripheral(Side)	
23	Inability to Rd Ordnry Sz Print, Not Correctable By Glasses	X
24	Blind in One Eye	
25	Blind in Both Eyes	X
27	Absence of Extremity-Missing One Hand	
28	Absence of Extremity-Missing One Arm	X
29	Absence of Extremity-Missing One Foot	
32	Absence of Extremity-Missing One Leg	X
33	Absence of Extremity-Missing Both Hands or Arms	X
34	Absence of Extremity-Missing Both Feet or Legs	X
35	Absence of Extremity-Missing One Hand/Arm & One Foot/Leg	X
36	Absence of Extremity-Missing One Hand/Arm & Both Feet/Legs	X
37	Absence of Extremity-Missing Both Hands/Arms & One Foot/Leg	X
38	Absence of Extremity-Missing Both Hands/Arms & Both Feet/Legs	X
44	Chronic Pain, Stiffness or Weakness-One or Both Hands	
45	Chronic Pain, Stiffness or Weakness-One or Both Feet	
46	Chronic Pain, Stiffness or Weakness-One or Both Arms	
47	Chronic Pain, Stiffness or Weakness-One or Both Legs	
48	Chronic Pain, Stiffness or Weakness-Hip or Pelvis	
49	Chronic Pain, Stiffness or Weakness-Back	
57	Chronic Pain, Stiffness or Weakness-Any Combination of Two or More parts of the Bo	
61	Partial Paralysis - One Hand	
62	Partial Paralysis - One Arm, Any Part	
63	Partial Paralysis - One Leg, Any Part	

Handicap Code		
Code	**Meaning**	**Targeted Disability**
64	Partial Paralysis - Both Hands	X
65	Partial Paralysis - Both Legs, Any Part	X
66	Partial Paralysis - Both Arms, Any Part	X
67	Partial Paralysis - One Side of Body, Including One Arm & One Leg	X
68	Partial Paralysis - Three or More Major Parts of the Body	X
70	Complete Paralysis - One Hand	
71	Complete Paralysis - Both Hands	X
72	Complete Paralysis - One Arm	X
73	Complete Paralysis - Both Arms	X
74	Complete Paralysis - One Leg	X
75	Complete Paralysis - Both Legs	X
76	Complete Paralysis - Lower Half of Body, Including Legs	X
77	Complete Paralysis-One Side Body, Including One Arm & Leg	X
78	Complete Paralysis-3 or More Parts of Body(Arms/Legs)	X
80	Heart Disease-No Limit or Restriction of Activity	
81	Heart Disease - with Limitation or Restriction of Activity	
82	Convulsive Disorder	X
83	Blood Diseases	
84	Diabetes	
86	Pulmonary or Respiratory Disorders	
87	Kidney Dis-functioning	
88	Cancer - Complete Recovery	
89	Cancer (Undergoing Surgical and / or Medical Treatment)	
90	Mental Retardation	X
91	Mental or Emotional Illness	X
92	Severe Distortion of Limbs and / or Spine	X
93	Disfigurement of Face, Hands or Feet	
94	Learning Disability	

Veteran- preference = Veteran Status
- Veteran - Codes 2, 3, 4, 6
- Non Veteran - 1, 5, 7

Race and National Origin (RNO)
- A [American Indian or Alaskan Native]
- B [Asian or Pacific Islander]
- C [Black, Not of Hispanic Origin]
- D [Hispanic]
- E [White, Not of Hispanic Origin]
- F, G, H, J, K, L, M, N, P, Q, Y [Not Specified]

SES = Pay Plan [PAY_PLN]
- AD [Administratively Determined Rates, Not Elsewhere Specified]
- AL [Administrative Law Judges]

- CA [Board of Contract Appeals]
- ES [Senior Executive Service]
- EV [FAA Executive Compensation Plan]
- EX [Executive Pay]
- SL [Senior Level Positions]

Permanent = Type of appointment
- 15 [Career-Conditional (Comp Serv Perm)]
- 30 [Schedule A (Exc Serv Perm)]
- 32 [Schedule B (Exc Serv Perm)]
- 36 [Executive (Exc Serv Perm)]
- 38 [Other (Exc Serv Perm)]
- 50 [Career (SES Perm)]
- 55 [Non Career (SES Perm)]
- 10 [Career (Comp Serv Perm)]

FAA grade equivalents

CROSSWALK BETWEEN AT AND FG (GS,GM) GRADES														
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
LL	LI	LG	LF	LD			LC	GD	FD	ED	DD			
LK	LH	KG	KF	KD			KC	DF	CF		CD			
LJ	KI	JG	JF	IF	JD	ID	JC	AB		AA				
KL	KH	II	IG	GG	HF	GF	IC							
KK	JI	IH	HI	FI	FG	FF	HD							
KJ	JH	HJ	HH	FH	DI	EG	HC							
JL	IK	GK	HG	EI	DH	DG	GC							
JK	IJ	GJ	GI	EH	CI		FC							
JJ	HL	FL	GH	DK	CH		EF							
IL	HK	FK	FJ	DJ			EC							
	GL		EL	CK			DC							
			EK	CJ			CG							
			EJ				CC							
			DL											
			CL											
K	J	I	H		G	F		E		D		C	B	A

Age ranges recode:
- Under 25
- 25 – 29
- 30 – 34
- 35 – 39
- 40 – 44
- 45 – 49
- 50 – 55
- 55 – 59
- 60 and over

HIRES: NOA codes, gains to the Agency—Permanent, COMPETITIVE SERVICE

- 85 – Unspecified gain (used in CIVFORS only)
- 100 – Career Appointment
- 101 – Career – Conditional Appointment
- 130 – Transfer in (from another Federal agency)
- 140 – Reinstatement – Career
- 141 – Reinstatement – Career Conditional
- 170 – This is the NOA for permanent (without time limitation) hires

LOSSES: NOA codes, losses to the Agency

Retirement:

- 300 – Mandatory
- 301 – Disability and for Health Reasons
- 302 – Retirement
- 303 – Voluntary Early Retirement (VERA) (or special offer)
- 304 – in lieu of involuntary separation

Other losses:

- 75 – Unspecified Loss (used in CIVFORS only)
- 317 – Resignation
- 312 – After notice of position change, contracting out, unsatisfactory performance – in lieu of involuntary separation
- 350 – Death
- 353 – Resignation/going into military service
- 355 – Termination
- 356 – Reduction in force (RIF)
- 357 – Termination/lack of work or funds
- 330 – Removal
- 385 – Discharge
- 352 – Termination-Appointment in (another agency) Transfer
- 390 – Separation-Appointment in (another agency) Transfer

APPENDIX C: LEADERSHIP COMPETENCIES

Accountability	*Assures that effective controls are developed and maintained to ensure the integrity of the organization. Holds self and others accountable for rules and responsibilities. Can be relied upon to ensure that projects within the areas of specific responsibility are completed in a timely manner and within budget. Monitors and evaluates plans. Focuses on results and measuring attainment of outcomes.*
Conflict Management	Identifies and takes steps to prevent potential situations that could result in unpleasant confrontations. Manages and resolved conflicts and disagreements in a positive and constructive manner to minimize negative impact.
Creative Thinking/ Innovation	Develops new insights into situations and applies innovative solutions to make organizational improvements. Creates a work environment that encourages creative thinking and innovation. Designs and implements new or cutting-edge programs/processes.
Entrepreneurship	Identifies opportunities to develop and market new products and services within or outside of the organization. Is willing to take risks. Initiates actions that involve a deliberate risk to achieve a recognized benefit or advantage.
External Awareness	Identifies and keeps up-to-date on key national and international policies and economic, political, and social trends that affect the organization. Understands near-term and long-range plans and determines how best to be positioned to achieve a competitive business advantage in a global economy.
Financial Management	Demonstrates broad understanding of principles of financial management and marketing expertise necessary to ensure appropriate funding levels. Prepares, justifies, and/or administers the budget for the program area. Uses cost-benefit thinking to set priorities. Monitors expenditures in support of programs and policies. Identifies cost-effective approaches. Manages procurement and contracting.
HR Management	Assesses current and future staffing needs based on organizational goals and budget realities. Using merit principles ensures staff are appropriately selected, developed, utilized, appraised, and rewarded. Takes corrective action.
Influencing/ Negotiating	Persuades others. Builds consensus through give and take. Gains cooperation from others to obtain information and accomplish goals. Facilitates "win-win" situations.
Leveraging Diversity	Recruits, develops, and retains a diverse high quality workforce in an equitable manner. Leads and manages an inclusive workplace that maximizes the talents of each person to achieve sound business results. Respects, understand, values, and seeks out individual differences to achieve the vision and mission of the organization. Develops and uses measures and rewards to hold self and others accountable for achieving results that embody the principles of diversity.
Political Savvy	Identifies the internal and external politics that impact the work of the organization. Approaches each problem situation with a clear perception of organizational and political reality. Recognizes the impact of alternative courses of action.
Resilience	Deals effectively with pressure. Maintains focus and intensity and remains optimistic and persistent, even under adversity. Recovers quickly from the setbacks. Effectively balances personal life and work.
Service Motivation	Creates and sustains an organizational culture which encourages others to provide the quality of service essential to high performance. Enables others to acquire the tools and support they need to perform well. Shows a commitment to public service. Influences others toward a spirit of service and meaningful contributions to mission accomplishment.

Strategic Thinking	Formulates effective strategies consistent with the business and competitive strategy of the organization in a global economy. Examines policy issues and strategic planning with a long-term perspective. Determines objectives and sets priorities. Anticipates potential threats or opportunities.
Team Building	Inspires, motivates, and guides others toward goal accomplishments. Consistently develops and sustains cooperative working relationships. Encourages and facilitates cooperation within the organization and with customer groups. Fosters commitment, team spirit, pride, and trust. Develops leadership in others through coaching, mentoring, rewarding, and guiding employees.
Technology Management	Uses efficient and cost-effective approaches to integrate technology into the workplace and improve program effectiveness. Develops strategies using new technology to enhance decision-making. Understands the impact of technological changes on the organization.
Vision	Takes a long-term view and acts as a catalyst for organizational change. Builds a shared vision with others. Influences others to translate vision into action.

DOT Leadership Competencies

SUPERVISORS

Critical Competencies
➢ Accountability

Important Competencies
➢ Team Building
➢ Human Resources Management
➢ Service Motivation
➢ Conflict Management
➢ Influencing/Negotiating
➢ Leveraging Diversity
➢ Resilience

MANAGERS

Critical Competencies
➢ Accountability
➢ Team Building
➢ Human Resources Management
➢ Service Motivation
➢ Influencing/Negotiating
➢ Leveraging Diversity
➢ Resilience

Important Competencies
➢ Conflict Management
➢ Financial Management
➢ Technology Management
➢ Creative Thinking/ Innovation
➢ Entrepreneurship

EXECUTIVES

Critical Competencies
➢ Accountability
➢ Team Building
➢ Human Resources Management
➢ Service Motivation
➢ Strategic Thinking
➢ Vision
➢ Political Savvy
➢ Influencing/Negotiating
➢ Leveraging Diversity
➢ Resilience
➢ Conflict Management
➢ Financial Management
➢ Technology Management
➢ Creative Thinking/ Innovation

Important Competencies
➢ Entrepreneurship
➢ External Awareness

APPENDIX D: POSITION MANAGEMENT

Workforce analysis validation –
DOT Human Capital Controls
At the Operating Administration Level

This includes a description of the way current and projected mission critical occupations and competency needs are identified, and the way current competency levels and gaps are assessed. It also describes how the initial analysis is validated and reconciled with sources of information such as stakeholder input, third party reports (e.g., IG, GAO), and other relevant sources of information about program performance.

OA	Control Strategy
OST (and RITA/BTS)	OST compiles data received from various OST/RITA organizations and uses this data in addition to data pulled from the automated data base to assess skill gaps. The Workforce Analysis Office is currently looking into acquiring additional automation software (WAS CIVPRO, etc) to further assist in reports and analysis of data.
OIG	The OIG conducts an annual review of hires, projected retirements, attrition, projected competency gaps, etc. This information is captured in the OIG Workforce Plan and then addressed in the annual updates to the OIG Succession and Recruitment Plans.
	The **Workforce Plan** identifies four strategies: Reduce mid-career loss of talent; acquire and enhance a high performing workforce; enhance leadership succession planning; and knowledge management. This plan identifies OIG key occupations; anticipates future attrition in those occupations; identifies critical new skills that must be possessed by the future workforce; analyzes gaps between the projected and desired workforces; and maps actions being taken to avoid them.
	The **Succession Plan** summarizes projected future vacancies in OIG leadership positions; identifies staff competencies needed to maintain high performance and meet mission requirements; and lists the actions OIG will take to enable its current and future employees to acquire these competencies, including strategies related to knowledge management and knowledge sharing.
	The **Recruitment Plan** identifies the OIG's projected recruitment needs, assesses current recruitment strategies, highlights recruitment practices used by other agencies, and lays out a set of initiatives the OIG will pursue to enhance the effectiveness of its recruitment program. The plan focuses on projected recruitment needs through FY 2009.
	The OIG solicits input from managers at all levels and from the workforce to identify trends, concerns, and develop a strategic plan to ensure the OIG remains a high performing organization. Additionally, the OIG receives ongoing contractor support to benchmark success stories and to tackle the issuance of reports and data collection.
FAA	The FAA Flight Plan institutionalizes annual workforce planning and analysis in FAA organizations with mission critical workforces as an ongoing, long-term strategic initiative. Mission critical occupations comprise about 82%of the FAA workforce. On an annual basis, lines of business/staff offices review and update business and human capital challenges to mission performance. This analysis includes an assessment of future staffing requirements, capabilities, or both for FAA mission critical workforces. Line of business/staff office workforce plans identify human capital solutions related to closing talent and skill gaps, restructuring, re-deployment, and succession planning among others to meet current and anticipated workforce challenges over the coming years. Line of business/staff office workforce plans complement organizational business plans aligned to the FAA Flight Plan.
	A key strategy for sustaining workforce planning in FAA organizations is the FAA Human Capital Planning Council. The Council is comprised of workforce planners across the agency that meets quarterly to discuss cross cutting strategic workforce planning issues. The Council is supporting the FAA as it responds to mission critical issues in a collaborative manner, such as the Office of Management and Budget requirements for Information Technology workforce planning and development of a Skill Gap Closure Plan for FAA IT-related occupations.

FHWA	FHWA employs a full time Workforce Planner, and has created a Workforce Planning Advisory Committee (WFPAC) composed of a representative sample of managers from various levels in the organization. This group is responsible for assisting the leadership of the Agency in recognizing external influences (such as from the Inspector General, General Accountability Office, and Congress), mission changes that would impact the workforce of the Agency, program performance, and other influences. These influences are integrated as part of management strategies and guidance in conducting workforce planning throughout FHWA. The FHWA has developed national and unit workforce planning models that explicitly allow for and require input from managers of various units in the Agency. The workforce planning process is circular in nature and is designed to both allow incorporation of needed changes and validation of previous workforce planning results at the Agency and/or unit level.
FRA	FRA engages all levels of the workforce in analysis of trends and competency needs through working groups, and additionally makes use of contractor support. In addition to identifying needed skills in its most significant MCO, it has distinguished the competencies possessed by the best performers, and is making strategic use of that information. Based on workforce analyses, FRA has engaged in workforce restructuring, using VERA and VSIP authorities.
NHTSA	In July 2004, the NHTSA Office of Traffic Injury Control (TIC) embarked on a comprehensive Workforce Development Initiative. Expected high retirement rates combined with limited resources demand more focus and attention to clear succession planning. The initial objective was the establishment of core competencies. A TIC Workforce Development Team was organized to establish this set of competencies. Strategic objectives to be achieved include: 1) enhanced ability to recruit qualified individuals with the knowledge, skills and abilities required for successful performance in TIC positions; 2) identified levels of proficiency (basic, intermediate, advanced, expert) needed to advance through an individual's career in these positions; 3) identification of staff development opportunities and resources (self study, formal training, periodic internal briefings, on-the-job/mentoring and shadowing, etc.) that will help the workforce achieve the competency; and 4) identification of resource gaps or deficiencies – areas where formal or informal resources to build the competency are currently unavailable.

To date, the process has resulted in the establishment of the core competencies for employees in technical positions (primarily Program Analyst and Highway Safety Specialist GS2125/ 9-14) individual and managerial assessments of staff to determine proficiency levels; identification of competency/proficiency gaps; identification of targeted learning opportunities; and a formal process for bridging competency gaps. Plans are ongoing to develop a similar process for other mission critical occupations in the other program areas of NHTSA. |
| **FTA** | FTA does its primary workforce analysis and planning at the office (Associate Administrator) level. Past plans have been accomplished with contractor support. The contractor meets with each office and collects information about current competency levels and needs and anticipated changes. Demographic information to support this analysis is provided by an HR staff person. The Associate Administrator for Administration and the Associate Administrator for Budget and Policy are responsible for ensuring that external information, such as reports, stakeholder or Congressional input, etc. are taken into account before the analysis is considered final. |
| **SLSDC** | Annually, workforce data is gathered and reviewed against the data provided for the initial workforce analysis to determine trends. Data includes current and projected staffing levels, attrition for the past year, and updated retirement projections. In addition, strategic goals and work unit functions are reviewed for any actual or projected changes. Performance standards are reviewed to ensure appropriate evaluation of work efforts toward meeting SLSDC mission and goals. Previously identified competency lists are reviewed for any needed revisions. Managers and supervisors are surveyed for any projected changes to the mission or functions of their work units. nd finally, the Human Capital Strategic Plan (HCSP) is reviewed for progress in meeting its milestones and goals.

Previously identified competency gaps are reviewed against the new staffing, mission, and work function projections. Charts are updated to reflect new data and statistics. The HCSP is revised to incorporate needed initiatives to eliminate competency gaps, or address other workforce weaknesses.

An updated Workforce Plan is developed incorporating the analysis and review in all the above areas. |

MARAD	MARAD reviews and analyzes demographic data from time to time as the Department's workforce planning model requires. Using that data and its own modeling tool, MARAD's Human Capital Council reassesses strategic workforce needs on an ad hoc basis as it reviews requests to fill vacancies. In addition, twice a year the Council engages in amore intensive review of workforce needs, including emerging or needed changes in grade structure and competency mix. Managers in MARAD who receive any form of feedback or report that may have a bearing on workforce planning, such as IG and GAO reports, forward copies to the Council for their use in these deliberations.
PHMSA	In 2003, then Research and Special Programs Administration (RSPA) created a Human Capital Steering Group to oversee human capital issues and more specifically to help develop the Agency's workforce plan. Membership included supervisory and non-supervisory employees in various disciplines, both headquarters and field, as well as key staff involved with competitive sourcing and other PMA initiatives. Competency needs were identified through a structured interview process with the leadership of the organization and the subject matter experts on the group. Projected gaps were largely based on Congressional mandate. Since that time, RSPA has been abolished and most of its functions transferred to either the Research and Innovative Technology Administration (RITA) or the Pipeline and Hazardous Materials Safety Administration (PHMSA). When a new Administrator is appointed, PHMSA intends to create a Human Capital Steering Group in the summer of 2005 with the expectation that the group will again oversee the workforce planning process. This group will revalidate the agency's mission critical occupations and mission critical support occupations, as well as competency gaps in non-leadership areas, in a manner similar to that of the RSPA group. In the process, the group will be asked to determine external validation of the competency gap that the organization believes exists or will exist (e.g., IG reports, industry reports, stakeholder comments, Congressional mandates and the like).
RITA (Volpe)	The Center's Workforce Planning program provides refined information on anticipated workforce changes, including skill losses from attrition; identification of key positions for which successors should be groomed; and sources from which the future workforce may be effectively recruited. This analysis provides a foundation for human capital decisions and the development of programs to recruit, develop and retain, or to procure, the future workforce. The analysis is grounded in project requirements and strategic plans which have incorporated recommendations from organizational reviews (OST, (former) RSPA HQ and IG), and is provided via: ❑ Workforce Analysis, to understand the nature of the current "whole" workforce (Federal and contractor), project future scenarios, identify actions to address current problems and recommendations to deal systematically with likely future problems, and identify management priorities for action. ❑ A competency model and associated tools, which provide a solid foundation for the assessment, selection, career development, and performance management of Center employees. The model also serves as a map for employees in charting their own career development. ❑ Identification of core capabilities, correlation of Federal staff to contractor staff within those core capabilities, identification of core capability and competency gaps and surpluses, and recommendation of plans for building the workforce. The underlying model used in the Center's workforce planning program provides information on the past, present and future status of the Center's work (projects) and people and is useful in generating resource projections, including multi-level HR plans (e.g. the Recruitment Plan) which are supplemented by integrated management information and metrics to assess progress and programs to bridge resource gaps/position the Center for a healthy future.
FMCSA	The current Human Capital Plan and Workforce Plan were developed to capture the state of the organization and to address barriers as well as strategies to achieve the objectives of the President Management Agenda, Departmental and Agency driven strategic goals. The Human Capital Plan was developed with the support of experienced employees in various occupations who represented a variety of headquarters and field offices. A Human Capital Working Group was appointed by senior leadership to provide organized sponsorship for Strategic human capital management in FMCSA, thus extending ownership for the initiative beyond the human resources community. The study was further supported by the participation by 69% of the workforce in completing a comprehensive workforce competency survey. The competency survey resulted in aggregate analyses for four categories of positions: Executives, Managers, Supervisors, and Team Leaders: Attorneys: Program related jobs (Most mission critical occupations, and Administrative Support Staff. Presently, the organization is making plans to update the Workforce Plan and the Human Capital Plan. This update will include an integrated process to validate and reconcile internal analysis with stakeholders' input.

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APPENDIX E: PROPOSED DOT EXIT SURVEY

The U.S. Department of Transportation has developed the following exit survey to study the reasons why employees leave the Department. The Department continuously seeks to improve its overall work environment for current and new employees and to become an employer of choice. Information collected from departing employees provides important data that is used to identify areas where the Department is doing well and to identify areas the Department must improve to become an employer of choice.

Therefore, we hope you will take the time to complete this questionnaire before you separate from the Department. It should take approximately five minutes to complete the survey. Your responses are completely confidential. In order to maintain this confidentiality, please do not put your name in any part of this survey. Your responses will be combined with those of other departing employees to examine general statistical trends in employee turnover.

1. **Select Your Operating Administration**
   a. Drop down box with list of OAs

2. **Select Your Job Series**
   a. Drop down box with list of Series

3. **Select Your Pay Plan**
   a. SES or equivalent
   b. GS
   c. WG
   d. FAA Pay Band

4. **Select Your Age Range**
   a. 25 and Under
   b. 26 to 35
   c. 36 to 45
   d. 46 to 55
   e. Over 55

5. **Select the type of separation**
   a. Retirement
   b. Disability Retirement
   c. Transfer to another agency
   d. Separation – non Federal job
   e. Separation – other
   f. Reduction in Force

6. **Select your race/national origin**
   a. Select One – Drop down box with list of race/national origin

7. **Do you have one of the following disabilities: deafness, blindness, missing limbs, partial paralysis, complete paralysis, distortion of limbs or spine, mental illness, mental retardation, or convulsive disorder?**

   ☐ Yes   or   ☐ No

8. Select your Sex

☐ Female   or   ☐ Male

9. Do you work at:
   a. A field location
   b. Headquarters location

10.Indicate the extent to which you agree or disagree wit each item listed below as a reason for your leaving DOT:

YOUR WORK	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does Not Apply
a. Current job duties and responsibilities	○	○	○	○	○	○
b. Opportunities to work on challenging assignments	○	○	○	○	○	○
c. Opportunities to apply your abilities to the job	○	○	○	○	○	○
d. Opportunities to participate in important decisions affecting your work	○	○	○	○	○	○
e. Staffing (the number and mix of people to handle the workload)	○	○	○	○	○	○
PEOPLE YOU DEAL WITH	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does Not Apply
f. Co-Workers in your unit	○	○	○	○	○	○
g. Your immediate supervisor	○	○	○	○	○	○
h. Higher-level managers in your immediate organization	○	○	○	○	○	○
i. Employees outside your immediate organization (e.g. workgroups, customers, etc.)	○	○	○	○	○	○
j. Your subordinates	○	○	○	○	○	○
ADVANCEMENT/RECOGNITION	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does Not Apply
k. Training Opportunities	○	○	○	○	○	○
l. Promotion Opportunities	○	○	○	○	○	○
m. Recognition/Awards for job performance	○	○	○	○	○	○
COMPENSATION & BENEFITS	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does Not Apply
n. Pay (excluding benefit)	○	○	○	○	○	○
o. Retirement Benefits	○	○	○	○	○	○
p. Health Insurance	○	○	○	○	○	○
q. Annual and Sick Leave Benefits	○	○	○	○	○	○

EEO	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does Not Apply
r. Lack of Accommodation for Disability	○	○	○	○	○	○
s. Discrimination	○	○	○	○	○	○
t. Sexual Harassment	○	○	○	○	○	○
u. Other Harassment	○	○	○	○	○	○
v. Retaliation in Connection with an EEO Matter	○	○	○	○	○	○
OTHER	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does Not Apply
w. Job ended (time limited appointment, term appointment)	○	○	○	○	○	○
x. Work Environment (e.g. noise, dust, space, etc.)	○	○	○	○	○	○
y. Location of Office	○	○	○	○	○	○
z. Availability of Public Transportation	○	○	○	○	○	○
aa. Alternative Work Schedules	○	○	○	○	○	○
bb. Telecommuting	○	○	○	○	○	○
cc. Family Related Responsibilities	○	○	○	○	○	○

11. Of the job-related factors listed above, identify the three factors which most influenced your decision to leave the Department of Transportation and insert the corresponding letters below:

Reason #1	
Reason #2	
Reason #3	

12. Is there anything that would have enticed you stay with the Department of Transportation?

13. Other comments:

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APPENDIX F: BROADCAST MESSAGE

From: Broadcast Messages
Sent: Tuesday, February 07, 2006 4:30 PM
Subject: Message from Deputy Secretary Maria Cino

BROADCAST MESSAGE

TO: **All U.S. Department of Transportation Employees**

RE: **Message from Deputy Secretary Maria Cino**

Last week, senior executives from DOT gathered together to discuss major issues our Department could address to change the lives of Americans. We spent two days discussing policy issues that included safety, security, the environment, and how the Nation's different modes of transportations were working. Both career and political staff reviewed data, listened to experts, and met with members of other agencies.

Our goal was to review how DOT was fulfilling its mission and to identify one or two agenda items that we could focus our energy on to show real results to the American people.

I wanted to report back to you that there was a unanimous consensus, led by Secretary Mineta, that the people working for the Department of Transportation are doing an extraordinary job. The Secretary said he believed our current organization is the best-performing Department of Transportation since the agency was created in 1967.

It was clear that this is the perfect group to tackle one of the Nation's most daunting transportation challenges – congestion. Traffic jams, freight tie ups, and airport delays waste energy, reduce air quality, and cause Americans to be less productive and spend less time with their families.

We can identify and help build projects that reduce congestion, and we have the ability to design a public policy that makes congestion-reducing infrastructure easier to build. So in addition to continuing our hard work on the strategic objectives announced in 2003 and other important transportation measures, we have determined that reducing major congestion chokepoints throughout America should be a major DOT priority moving forward.

Secretary Mineta then asked me to prepare a report in 45 days to outline how the Department could accomplish this goal. We have begun that effort. In the coming months all of us in the Department are going to be asked to contribute to this effort.

Over the days and weeks ahead, more information and modal involvement will be forthcoming. Please know all modes will have a role in this project. As always, I look forward to working with all of you as we accomplish what will be one of the Department's greatest achievements.

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APPENDIX G: MEMORANDUM-DEPARTMENTAL RECRUITMENT STRATEGIES FOR FY 2003-2005

Memorandum

U.S. Department of Transportation
Office of the Secretary
of Transportation

Subject:	**ACTION:** Departmental Recruitment Strategies for FY 2003-2005	Date:	April 10, 2003
From:	The Secretary	Reply to Attn. of:	
To:	Departmental Officers Heads of Operating Administrations Director, Bureau of Transportation Statistics Chairman, Surface Transportation Board		

The Department has submitted its Human Capital Plan to the Office of Management and Budget in response to the President's Management Agenda. That Plan addresses our most critical human capital issues and our plans for addressing them. I am personally concerned about our ability to recruit and develop a workforce that can fulfill the Department's critical mission needs over the next five to ten years.

I know that you and your staffs have been developing workforce plans to identify the changing critical skills you will need in the foreseeable future, while facing the looming increase in employees eligible for retirement. As those workforce plans are implemented, the traditional methods and sources used to recruit and backfill positions will not be sufficient to meet critical occupational needs. As a Department, we must enhance the way we recruit for new employees and the culture in which that recruitment is done. You must begin now to take a structured, strategic approach to your recruitment process. Consistent with merit system principles and veterans preference requirements, you must make additional efforts to incorporate workforce diversity initiatives into your overall recruitment strategy.

We need to revamp our traditional strategies for recruiting and filling positions. Typically we wait until a position is vacant before backfilling it. We try to fill vacancies at the middle-level or senior-level so that new employees can function in a position quickly. We have not recruited as aggressively as we could have from among all sources of qualified candidates, including minorities and people with disabilities. Three factors require a change in the way the Department fills positions. First, anticipated losses of the current workforce over the next five to ten years will accelerate the number and rate of our needs. Second, the general civilian labor pool

2

is shrinking, and competition will increase for qualified applicants for middle-level and senior-levels positions. Third, the Department must increase its overall workforce diversity, with special emphasis on two underrepresented groups – Hispanics and people with disabilities. In light of these factors, the Department must begin immediately to refocus and restructure its recruitment strategies.

Many vacancies will be filled from within the current workforce, and the Department's Human Capital Plan contains a number of initiatives aimed specifically at workforce development and succession planning. Those initiatives will prepare our employees to assume greater levels of responsibility. But the Department will also need to recruit and hire large numbers of new employees from the outside. We must take a fresh approach to how we recruit those new employees. We must make a careful assessment of our external recruitment needs over the next few years and prepare strategic recruitment plans now to address those needs.

I want you to begin immediately to develop comprehensive recruitment strategies that address your organization's external recruitment needs for professional and technical employees through FY 2005. Attached to this memorandum are requirements for preparing that comprehensive recruitment plan. Your plan must address your anticipated hiring needs for technical and professional employees at the GS-15 level (or equivalent) and below through FY 2005; your specific strategies for recruitment at every level; your plans for targeted recruitment of underrepresented groups, with emphasis on Hispanics and people with disabilities; and your plans to improve the use of students as a pipeline to entry-level employment.

We are emphasizing recruitment of people with disabilities and Hispanics because they are the largest underrepresented groups in the Department. We must also establish a pipeline of students and entry-level hires, as they will be a critical source for meeting our long-term skills needs. Additional background on these two programs can be found in Attachment 1.

The Department has not made significant progress in increasing the overall percentage of employees with disabilities in its workforce over the last several years, in spite of a governmentwide emphasis on the employment of people with disabilities. People with disabilities are an underutilized applicant pool of qualified candidates in the general population. They need to be more actively considered as a regular source of candidates when we recruit to fill positions. We must take action to increase the number and percentage of employees with disabilities hired from outside the Department.

We must also expand our entry-level pipeline. In general, operating administrations hiring results also show that we have not considered students in a systematic way as a pipeline for permanent entry-level positions. As a result, opportunities have been lost to

integrate these students into the DOT culture; provide them on-the-job training and experience that would prepare them to assume permanent responsibilities; and make DOT their "employer of choice" for permanent employment. It is critical that we begin now to bring students into the workforce, provide them a positive work experience, recruit them for permanent positions, and prepare them to fill behind our employees as they retire. We cannot afford to wait until those employees leave to recruit behind them. We must make the critical investment now to have a cadre of skilled employees "waiting in the wings" to move into critical positions as they become available.

Plan Requirements

Your external recruitment plan is due to me within 45 days after the date of this memorandum (see attachment 2). Your plan should be submitted to me through the Assistant Secretary for Administration, who will provide advice on its adequacy. Your first progress report will be due at the end of the first full quarter after the plan submission. Subsequent reports will be due at the end of each quarter. The Assistant Secretary for Administration will provide you with further details on the report format.

I will be holding each of you personally accountable for your organization's accomplishments in recruiting and hiring. I know I can count on you to become personally involved in your organization's efforts, to monitor your organization's activities, and to ensure its success in these initiatives. That success is critical to our ability to meet the Department's mission needs in the future. Thank you in advance for your assistance with this important matter.

Attachment

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APPENDIX H: DOT-WIDE IT GAP ANALYSIS AND SKILL GAP CLOSURE PLAN (08/30/05)

U.S. DEPARTMENT OF TRANSPORTATION

Response to the Office of Management and Budget
Clay Johnson's April 15, 2005 Memorandum
"Human Capital Planning for the IT Workforce"

**Gap Analysis and Skill Gap Closure Plan
Executive Summary**

August 30, 2005

**Sponsors:
DOT Chief Information Officer
DOT Chief Human Capital Officer**

TABLE OF CONTENTS

Attachment A: FY2004 DOT IT Workforce Skills Assessment[1] Executive Summary

Attachment B: DOT Information Technology Workforce Resource Guide

Attachment C: DOT e-Learning Courses Mapped to the Four Important IT job
                activities

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[1] The IT Workforce Capability Assessment, as it is known, is meant to help Federal agencies realize the inherent value of strategic human capital management while satisfying a number of regulatory requirements specific to the IT workforce, including the Clinger-Cohen Act and the E-Gov Act (Section 209). In addition, it helps Federal Agencies address a number of broader guidelines, requirements and mandates related to the strategic management of human capital, including the President's Management Agenda (PMA), OPM guidelines on human capital management (the Human Capital Assessment and Accountability Framework, or HCAAF), and Government Accountability Office (GAO) guidance and reports on strategic human capital management.

INTRODUCTION

The following Executive Summary serves as the Department of Transportation's (DOT) response to the Office of Management and Budget (OMB) Clay Johnson's April 15, 2005 request for all federal agencies to:

- Report the number of civil service staff on board in each of four important (specialized) IT job activities : IT Project Management, IT Security/Information Assurance, and IT Architecture (Enterprise and Solutions)

- Report the number of funded and unfunded vacancies in each IT specialized job activity

- Report the level of "risk" associated with identified competency and skill gaps for each IT specialized job activity

- Submit a Plan to address high-risk gaps identified, showing specific actions and dates for completion.

This document is organized into three sections:

- Section I provides DOT's IT resource requirement and summary of staffing, competency and skill gaps, across the four IT specialized job activities.

- Section II provides detail on the number of staff, vacancies, and competency and skill gaps for each IT specialized job activity.

- Section III provides actions DOT will take to mitigate staffing, competency and skill gaps identified. The plan also includes a summary of human capital measures to help achieve targets and desired outcomes. In conclusion, are key results and overall measures of success.

Data summarized and included in this document includes self-rated proficiencies for competency and skill "supply" data[2] for 740 DOT IT staff, out of an estimated 2192 IT workers from each of DOT's 13 Operating Administrations[3] that completed the 2004 Federal IT Workforce Assessment (Clinger-Cohen Survey).   Data also includes competency and skill "demand" data generated through the Federal IT Workforce Capability Planning and Analysis Tool (CPAT).

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[2] *Refer to attachment- FY2004 DOT IT Workforce Skills Assessment Executive Summary to view Demographic and "As-Is"/Supply data.*
[3] *DOT Operating Administrations: Federal Aviation Administration; Federal Highway Administration; Federal Transit Administration; Federal Railroad Administration; Federal Motor Carrier Safety Administration; National Highway Traffic Safety Administration, Maritime Administration, Pipeline and Hazardous Materials Safety Administration, Research and Innovative Technology Administration; Office of the Secretary, Saint Lawrence Seaway Development Corporation, Surface Transportation Board; and the Office of the Inspector General.*

SECTION I: DOT IT RESOURCE REQUIREMENTS

Table 1 below represents the U.S. Department of Transportation's (DOT) best estimates of civil service information technology staff, vacancies (funded and unfunded) and mission risk for the four specialized job activities (SJAs) identified in the OMB Clay Johnson's April 15, 2005 memorandum. Data are presented in aggregate at the Departmental level and are not focused on any of the thirteen individual DOT Operating Administrations (OAs). Unfunded vacancy data represent best estimates of FY2005 and FY2006 hiring profiles. Mission risk ratings represent consolidated ratings across DOT OAs.

DOT Staffing Gaps: As of August 30, 2005, DOT has a total of 835.3 IT workers in the four IT specialized job activities: IT Project Management; IT Security/Information Assurance; and Architecture (Enterprise and Solutions).   The number of civil service staff, vacancies (funded and unfunded) and risk to agency mission associated with each specialized job activity are shown in **Table 1**.

Table 1: Civil service IT staff, Vacancies (funded and unfunded) and Mission Risk

Job Activity (Positions)	Positions onboard[4]	Number of funded positions[5] to be filled (Funded vacancies)		Number of unfunded positions[6] needed (Unfunded vacancies)		Level of risk[7] of not meeting agency mission (high, medium, low)
		FY2005	FY2006	FY2005	FY2006	
IT Project Management	346.5	11	6	4	9	Medium
IT Security/ Information Assurance	360.8	6	3	2.2	18	Medium
Enterprise Architecture	22.15	7.5	4	6.2	8	HIGH
Solutions Architecture	105.85	6	10	2.6	7	Medium
Total	835.3	30.5	23	15	42	

Analysis of staffing data reveals that the highest staffing risks are in the area of Enterprise Architecture. More specific information on all four important job activities follows.

IT Project Management: DOT Operating Administrations report a gap of 15 positions for IT project management (11 funded and 4 unfunded positions needed) for FY05.   This represents a gap of 4.15%[8] in the number of project managers required to meet mission requirements[9] and represents a medium risk to the Department.

IT Security/Information Assurance: DOT Operating Administrations report a gap of 8.2 positions for IT security (6 funded and 2.2 unfunded) for FY05. This represents a gap of 2.2% in the number of IT security positions required to meet mission requirements and represents a medium risk to the Department.

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[4] *Civil Service IT staff*

[5] *Funded positions to be filled reflect official funded vacancies as aggregate across DOT Operating Administrations*

[6] *Unfunded positions needed are based upon the ideal hiring or staffing profile as aggregate across DOT Operating Administrations.*

[7] *Level of Risk refers to the impact to the Department of not meeting IT workforce resource requirements. In determining Department level risks, DOT Operating Administrations ratings were included.*

[8] *Percentage: positions needed divided by positions required*

[9] *Note: The impact of filling positions or receiving funds to fill positions varies from project to project, depending on the scope, complexity, and impact on DOT IT initiatives.*

Enterprise Architecture: DOT Operating Administrations report a gap of   13.7 positions for enterprise architecture (7.5 funded and 6.2 unfunded) for FY05. This represents a gap of 38.2% in the number of enterprise architects needed to meet mission requirements and represents a HIGH risk to the Department.

Solutions Architecture: DOT Operating Administrations report a gap of 8.6 positions for solutions architecture (6 funded and 2.6 unfunded) for FY05. This represents a gap of 7.5% in the number of solutions architects required to meet mission requirements and represents a medium risk to the Department.

SECTION II: IT COMPETENCY AND SKILL GAPS

Data in this section summarizes results of the FY2004 Department of Transportation IT Workforce Capability Assessment, completed in August 2005.

Methodology

DOT Operating Administrations used the 2004 Federal IT Workforce Capability Assessment Survey to evaluate competency and skill "as-is"/supply data for the four IT specialized job activities.   740 out of 2190 IT workers took the survey. The survey included questions relating to age, grade, years of government service, years of IT industry experience, planned retirement, and other factors. Based on the responses, a profile of the "Typical" Transportation IT Worker emerged.

The "Typical" Transportation IT Worker most often...

…is classified as a GS-0334
…is male and white (non-Hispanic)
…has a grade level of GS-13/14
…has over 21 years of public sector experience
…has little to no private sector experience
…is eligible to retire in the next 11 to 20 years
…holds a Bachelor's Degree
…is 46-50 years old

The "As-Is" Assessment

The survey asked DOT IT survey respondents to provide a self-assessment of current proficiency in a set of 53 technical and 16 general competencies, which are a subset of those developed by OPM for the GS-2210 occupational series. Respondents assessed their current proficiency using a six-point rating scale (with 0 lowest and 5 highest). Figures 1 and 2 depict the top 10 technical and 10 general competencies based on the combined percentage of responses in the Intermediate, Advanced and Expert proficiency levels.

Figure 1: Top 10 Technical Competencies

Technical Competencies (n = 740)		
Competency	**% Intermediate or Greater Proficiency**	**Rank**
Project Management	56.62%	1
Hardware	56.49%	2
Operating Systems	56.35%	3
Technology Awareness	54.19%	4
Technical Documentation	53.63%	5
Configuration Management	52.16%	5
Systems Life Cycle	52.03%	7
Requirements Analysis	51.89%	8
Standards	48.78%	9
Systems Testing and Evaluation	47.84%	10

Figure 2: Top 10 General Competencies

General Competencies (n = 740)		
Competency	**% Intermediate or Greater Proficiency**	**Rank**
Interpersonal Skills	89.32%	1
Problem Solving	87.43%	2
Oral Communication	81.49%	3
Decision Making	80.41%	4
Leadership	80.27%	5
Customer Service	77.97%	6
Planning and Evaluation	76.76%	7
Organizational Awareness	73.92%	8
Influencing/Negotiating	67.70%	9
Administration and Management	60.41%	10

The "To-Be" Demand

DOT competency and skill "future"/demand data was obtained by using the Federal Capability and Planning Analysis Tool (CPAT). Each DOT Operating Administration Human Capital and IT Workforce representative was provided access to the CPAT and created agency specific demand models. Most DOT Operating Administrations used the Federal Demand profile template. IT competency and skill proficiency gaps were categorized by relative size against the Federal template as being either a large, medium, or small gap or strength. Areas in which no gaps exist (i.e., where current proficiency equals or even exceeds target proficiency) were noted as Strength. For ease of reference, all gaps are color coded as follows:

| **Strength** Proficiency gap of 0.0 or less |
| **Large Gap** Proficiency gap of 2.0 or more |
| **Medium Gap** Proficiency gap of 0.6 to 1.9 |
| **Small Gap** Proficiency gap of 0.1 to 0.5 |

DOT IT and Human Capital staff answered questions such as:
- In what areas do we have strength in IT workforce competencies and skills?
- In what areas do we have significant gaps that need to be closed to achieve improved IT mission performance?
- What are the risks to accomplishment of our IT mission if skill gaps are not closed? and
- What are near-term strategies and actions for closing skill gaps?

The Gap Analysis

To identify gaps, DOT's supply and demand data were compared. Analysis reveals that the majority of proficiency gaps [competency (general/technical) and skill] are medium to small. There are twice as many competency gaps as skill gaps (58 vs. 25). However, there were twice as many strengths in competencies as in skill areas (15 vs. 9). Large skill gaps were identified in three of the four important job activities: IT Project Management, IT Security/Information Assurance, and Enterprise Architecture. A summary of competency and skill gaps across the important specialized IT is provided in **Table 2.**

Table 2: Number of competency and skill gaps across job activities

IMPORTANT/ SPECIALIZED JOB ACTIVITY	COMPETENCIES	SKILLS	COMPETENCY GAPS (out of 103)	SKILL GAPS (out of 34)
IT Project Management	27	8	Large: 0	Large: 1
			Medium: 15	Medium: 5
			Small: 9	Small: 0
			Strength: 3	Strength: 2
IT Security/ Information Assurance	12	11	Large: 0	Large: 1
			Medium: 5	Medium: 6
			Small: 3	Small: 2
			Strength: 4	Strength: 2
Enterprise Architecture	14	5	Large: 0	Large: 1
			Medium: 7	Medium: 2
			Small: 5	Small: 1
			Strength: 2	Strength: 1
Solutions Architecture	20	10	Large: 0	Large: 0
			Medium: 8	Medium: 4
			Small: 6	Small: 2
			Strength: 6	Strength: 4
Summary of competency and skill gap totals	103	34	0 large gaps 35 medium gaps 23 small gaps 15 strengths	3 large gaps 17 medium gaps 5 small gaps 9 strengths

DOT's mitigation efforts will focus on closing medium and large proficiency gaps. Medium to large proficiency gaps that exist among staffing, competencies and skills in the four specialized job activities are provided in **Table 3**. Large skill gaps identified include: Project Management Software (IT Project Management), Firewalls (IT Security), and Federal/OMB Enterprise Architecture (Enterprise Architecture).

SUMMARY OF STAFFING, COMPETENCY, AND SKILL (MEDIUM TO LARGE) GAPS

Table 3: Summary of Information Technology Gaps by Specialized Job Activity

SPECIALIZED JOB ACTIVITY (# of IT Staff)	Medium to Large Competency Gaps (Targeted for training)	Medium to Large Skill Gaps (Targeted for training)
IT Project Management As of August 30, 2005, there are 54 IT project managers assigned to major IT investments reported to OMB for FY06. 346.5 IT employees perform IT Project Management 11 funded and 4 unfunded positions exist for FY05. In FY06, funded positions decrease to 6 and unfunded increases to 9.	Capital Planning and Investment Assessment Project Management Risk Management Decision Making Financial Management Managing Human Resources Planning and Evaluation Cost-Benefit Analysis Influencing/ Negotiating Leadership Business Process Reengineering Information Resources Strategy and Planning Strategic Thinking Oral Communication Standards	**Project Management Software** Earned Value Management Federal/OMB Enterprise Architecture Process Design System Analysis and Design Enterprise Resource Planning (ERP)
IT Security/ Information Assurance 360.8 IT employees perform IT Security/Information Assurance 6 funded and 2.2 unfunded exist in FY05. In FY06, funded decreases to 3 and unfunded increases to 18.	Information Assurance Risk Management Information Systems Security Certification Encryption Information Systems/Network Security	**Firewalls** Public Key Infrastructure (PKI) Network Configuration and Implementation Wireless Technologies Systems Security Applications Biometrics Federal/OMB Enterprise Architecture
Enterprise Architecture 22.15 IT employees perform Enterprise Architecture 7.5 funded and 6.2 unfunded exist in FY05. In FY06, funded decreases to 4 and unfunded increases	Business Process Reengineering Standards Distributed Systems Infrastructure Design Legal, Government and Jurisprudence Organizational Awareness Information Assurance	**Federal/OMB Enterprise Architecture** Process Design Enterprise Resource Planning (ERP)

SPECIALIZED JOB ACTIVITY (# of IT Staff)	Medium to Large Competency Gaps (Targeted for training)	Medium to Large Skill Gaps (Targeted for training)
Solutions Architecture 105.85 IT employees perform Solutions Architecture 6 funded and 2.6 unfunded exist in FY05. In FY06, funded increases to 10 and unfunded increases to 7.	Requirements Analysis Infrastructure Design Logical Systems Design Risk Management Standards Accessibility Information Technology Architecture Information Resources Strategy and Planning	Federal/OMB Enterprise Architecture System Analysis and Design Enterprise Resource Planning (ERP) Network Architecture and Design

Strengths in proficiencies among the four specialized job activities are shown in **Table 4**.

Table 4: Proficiency Strengths

SPECIALIZED JOB ACTIVITY	STRENGTHS COMPETENCY	STRENGTHS SKILL
IT Project Management	Quality Assurance Legal, Government and Jurisprudence Product Evaluation	Data Analysis and Reporting Desktop Applications
IT Security/ Information Assurance	Problem Solving Technology Awareness Computer Forensics Legal, Government and Jurisprudence	Data Analysis and Reporting Testing
Enterprise Architecture	Information Technology Research & Development Data Management	Network Architecture and Design
Solutions Architecture	Problem Solving Human Factors Systems Life Cycle Cost-Benefit Analysis System Testing and Evaluation Data Management	Portfolio Management for IT Client-Server Data Modeling Testing

SECTION III: PLAN TO ADDRESS AND/OR MITIGATE GAPS

This section includes proposed actionable strategies, solutions and interventions to address and/or mitigate IT staffing, competency and skill gaps discussed in Section I and II.   DOT is addressing all medium and high risks gaps.

Action Plan

The following represents DOT's **Workforce Action Plan** to address gaps in the four IT specialized job activities. Strategies included will guide DOT Operating Administrations to mitigate their specific IT workforce staffing, competency and skill gaps.   The Action Plan includes performance measures that are aligned with DOT's 2004-2009 Information Resource Management (IRM) Plan strategy –"Assuring assimilation of a qualified IT workforce to improve IT product and service delivery, through the development, recruitment and retention of highly qualified project managers, solution architects, security specialists, and other personnel as identified.

Table 5 provides key Departmental milestones and a timeline to implement gap mitigation strategies for DOT's IT workforce.

Table 5: DOT Gap Mitigation Timeline

FY2005 Fourth Quarter	FY 2006 First Quarter	FY 2006 Second Quarter	FY 2006 Third Quarter	FY 2006 Fourth Quarter and beyond
Complete IT Workforce GAP analysis and Action Plan	DOT Operating Administrations formulate and implement strategies guided by Departmental Action Plan.	Continue implementation	Report as part of Presidential Management Agenda Proud-To-Be III goals	Assess Departmental Action Plan's effectiveness over time and adjust the plan as needed to address new workforce and organizational issues.

The Department will leverage measures from the IT Workforce Capability Assessment data in addition to several other measures in managing IT human capital to help achieve targets and desired outcomes.   For example, DOT will leverage IT Workforce demographic measures (e.g., average age and tenure, retirement eligibility, attrition, etc.); IT Workforce Capability Assessment gap measures (competency, skill, and certification gaps); Trend measures (e.g., data on how competency proficiency levels change over time, data on how skill proficiency levels change over time, data on how the percentage of IT professionals certified changes over time, etc.); Training completions and IT certifications received and Time-to-Fill (hiring efficiency) metrics for information technology occupations. Other strategies include utilizing cross-functional training where and when feasible, retention and recruitment flexibilities. DOT will also leverage existing performance metrics in support of current Presidential Management Agenda reporting requirements.

Additional drivers include: IT program or missions demands as dictated by DOT's Enterprise Architecture and/or Technical Reference Model; changing customer requirements; budget changes; current versus future sourcing strategies IT organizational structure changes; existing infrastructure consolidation efforts; upcoming large-scale system deployments; technology investments that might affect the IT mission or programmatic focus;

increasing/decreasing workforce demands and demographic changes; labor market conditions (that might, for example, affect the agency's ability to recruit key positions); and current and potential regulations or legislation that might affect the nature or the emphasis of the IT work performed by the agency

Table 6: DOT's Departmental Plan to Mitigate IT Workforce Competency and Skill Gaps

DOT's Departmental Plan to Mitigate IT Workforce Competency and Skill Gaps September 2005 – September 2006			
Human Capital Management Strategy	**Target**	**Key Results to be Obtained**	**Linkage to IRM Plan**
Training[10] [includes e-Training[11] and Cross-functional training]	1. Project Management/PM Certification _____ 2. Cyber-Security/ specialized training _____ 3. Enterprise Architecture/ specialized training _____ 4. Solutions Architecture/ specialized training	*1a. Number of staff certified in Project Management* *1b. Competency and skill gaps* *1c. % of passing Exhibit 300's* _____ *2a. Number of staff receiving specialized training in IT Security* *2b. Competency and skill gaps* 2c. FISMA scores 2d. % IT systems properly secured _____ 3a. Number of staff receiving specialized training in EA. *3b. Competency and skill gaps* _____ 4a. Number of staff receiving specialized training in SA. 4b. Competency and skill gaps	**IRM Strategy**: Assure assimilation of a qualified IT workforce to improve IT product and service delivery, through the development, recruitment and retention of highly qualified project managers, enterprise and solution architects, security specialists, and other personnel as identified.
Recruitment, retention and selection (hiring)	1. Targeted to fill mission critical IT functions	1a. Number of critical funded/unfunded vacancies filled 1b. reduce hiring time 1c. reduce turnover in critical IT positions 1d. increase applicant pool 1e. hiring flexibilities used or implemented	
Public/Private Partnerships	1. exchange IT employees between federal and private sector to share best practices	1a. Participate in IT Exchange program	

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[10] *See attachment B: DOT Information Technology Workforce Resource Guide*
[11] *See attachment C: DOT e-Learning Courses Mapped to the four important IT job activities*

DOT's Departmental Plan to Mitigate IT Workforce Competency and Skill Gaps September 2005 – September 2006			
Human Capital Management Strategy	**Target**	**Key Results to be Obtained**	**Linkage to IRM Plan**
Competitive Sourcing[12]	1. Supplement existing workforce with private sector expertise	1a. skills/ certifications obtained per contractor sourced 1b. competency and skill gaps in targeted occupations	
IT Roadmap (itroadmap.uslearning.gov)	1. participate in IT Roadmap to assess individual competency gaps and identify training courses to mitigate competency gaps	1a. Number of self completed assessments 1b. Number of completed managerial assessments 1c. Number of courses identified and completed	

KEY RESULTS

In the chart below are long term strategic outcomes that not only support the DOT Information Resource Management Strategic Plan, the DOT Strategic Plan and President's Management Agenda but also serve as potential indicators of gap reduction. All are measures of success critical to DOT's IT workforce planning efforts.

Improved metrics to quantify competency and skill gaps in IT mission critical occupations
Percentage of DOT's IT budget allocated for IT development
Decrease in critical competency and skill gaps
Increased alignment of IT programs with DOT business needs and the DOT Strategic Plan by developing a more agile workforce by providing the "right" IT skills when and where needed
Retention of key IT staff
Improving oversight and investment decision-making for the entire department IT portfolio
Number of DOT certified Project Managers for each of our major projects who are full-time and are within 10% of the project cost, schedule, and performance requirements
Participation in the bi-annual Federal IT Workforce Assessment to determine where improvements have been made to critical needs
Mature DOT Enterprise Architecture informs IT investment decision-making
Continued progress in strengthening computer security department-wide and accomplishing certification/accreditation of all systems and having systems installed and maintained in accordance with security configurations
Improved management of its $2.6 billion IT program by continuing to institute a robust IT investment and capital planning process and ensuring acceptable business cases

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[12] *In recent years most of the commercial work related to IT has already been contracted out in DOT. The Federal employees currently involved with IT enterprise architecture, solutions architecture, project management and security are primarily performing inherently governmental functions or functions otherwise not suitable for competition. However, the "make or buy" decisions regarding Federal functions are made regularly. Should opportunities arise through consolidation, restructuring, newly acquired responsibilities due to legislation and the like, competitive sourcing will be considered as a solution to filling a skill gap if a business case indicates it is appropriate to conduct a competition. In addition, existing Federal IT positions will be critically reviewed each year as part of the FAIR Act Inventory process and the preparation of annual competitive sourcing plans.*

Leveraged the Federal and Departmental Enterprise Architecture to improve services to citizens.
Implementation of, and alignment to, various E-Government initiatives and the sunsetting of duplicative DOT systems
Completed consolidation into a Common Operating Environment (COE) for selected Operating Administrations and/or optimized DOT infrastructures to include providing for continuity of operations
Expanded use of IT to enable faster, simpler and more efficient ways for citizens, state and local government, industry and other stakeholders to transact business with DOT

Federal Motor Carrier Safety Administration

Program	Grade Level(s)	Objectives	Participation
Executive Leadership Potential (USDA)	GS-12s & GS-13s Field Staff Employees	Identify and providing training to employees as future leaders within FMCSA	Ongoing since
Executive Potential Program (USDA)	GS-13s & GS-14s Field & Headquarters Staff Employees	Identify and train employees deemed as potential SES candidates	Ongoing
Federal Executive Institute (FEI)	GS-15s & SES Headquarters Staff Employees	Provide training to new SES employees or anticipated SES candidates	Ongoing
AASHTO	GS-14s & GS-15s Headquarters Staff	Provide in-depth leadership training	Ongoing
Leaders for Tomorrow Mentoring Program (DOT Program)	GS-13 & 14s (protégés) GS-15 & SES (mentors)	Leadership development training for potential future leaders; information sharing	Ongoing
American University Leadership Program	GS-14s & GS-15s Headquarters Staff	Alternative to the FEI leadership program. Designed to develop high performing leaders	Ongoing
So You Want To Be A Leader (DOT Program)	GS-12s & GS-13s Field & Headquarters Staff Employees	Identify people that may have an interest in pursuing a leadership role with the agency.	Ongoing

We also have a rotational assignment program that has been active since September 2004. All Division Administrators from the field will do a one-month rotational assignment in headquarters to provide additional training and education in the operations of the various offices within headquarters. It is scheduled to run through 2006 at which time it will be evaluated and consideration will be given to expanding it to other employees in the field and even sending people from headquarters to a field or service center office.

Federal Aviation Administration

Program	Grade Level(s)	Objectives	Participation
Executive Workforce Planning	FAA Executives & aspiring executives HQ & Field Staff	Integrated process for executive resource planning & development that incorporates a common set of executive competencies known as an Executive Success Profile.	2000 2001 2002 2003 Temporarily Suspended
Managerial Workforce Planning Program	GS-12s - GS-15s Field & Headquarters Staff Managers & Supervisors	Mandatory training for all FAA supervisors and managers. Program will involve course training and developmental assignments	New program to be rolled out in FY 2005
Leadership Evaluation and Development Plan (LEAD)	GS-12s – GS-15s HQ and Field Managers & Supervisors	Program was initially an ATO-wide initiative to assess supervisors & managers against agency competencies to identify & develop areas for strengthening.	Ongoing
Flight Standards Supervisory Training	AVR Supervisors, Managers	Supervisory/managerial training for managers and supervisors within AVR	Ongoing
Incumbent Executives Development	FAA Executive Corps	Leadership development program for the FAA leadership team. Activities involve peer coaching, quarterly seminar, informal sessions with the Administrator, and a two day course at CMD.	Ongoing
FAA HQ Mentoring	Headquarters Staff all grade levels	Six month program to develop skills, abilities and a goal-oriented career plan for mentees with the help of mentors. Plans are underway to expand the program out to the regions.	Ongoing for the past seven years

FAA's Center for Management Development (CMD) offers supervisory and managerial courses for all DOT employees and conducts training program evaluations.

Federal Highway Administration

Program	Grade Level(s)	Objectives	Participation
FHWA Professional Development Program (PDP)	FHWA entry level hires to support Transportation Engineers, ITS Specialists., Planners, Finance Professionals, Pavement/Materials and other disciplines.	24-month entry level developmental program that includes three components – on-the-job-training, developmental assignments and training at the Professional Development Academy.	2000 2001 2002 2003 2004
Basic Management for Non-Supervisors	GS-11s - GS-14s Field & HQ Staff	Management skills development training.	Ongoing
Leadership Skills Seminar	GS-12s – GS-14s Supervisors, Managers & Team Leaders	Enhancing leadership skills development	Ongoing
AASHTO National Transportation Leadership Institute	GS-14 & GS-15 Managers or their equivalent	Leadership & Management Training	Ongoing
AASHTO National Transportation Management Conferences	GS-14 & GS-15 Managers or their equivalent	Leadership & Management Training	Ongoing
AASHTO Graduate Leadership and Management Institute	GS-14 & GS-15 Managers or their equivalent	Leadership & Management Training	Ongoing
Congressional Fellows Program (USDA)	GS-12 and above	Learn about and gain experience with handling Congressional issues	Ongoing

Federal Highway Administration

Program	Grade Level(s)	Objectives	Participation
Strategic Planning Through the Power of Vision (FAA CMD)	GS-14 & GS-15 Program and Division Managers	Strategic planning emphasis; visionary, big picture thinking	Ongoing
FHWA Executive Skills Seminar	GS-14s & GS-15s Field & HQ Staff	Enhancing executive skills	Ongoing
Leadership for a Democratic Society (FEI)	GS-15 Managers & SES Members	Advanced leadership training	Ongoing
Leadership for Results (FEI)	GS-15 Managers & SES Members	Results-oriented leadership training	Ongoing
Capital Hill/White House Workshops	GS-14 & GS-15 Managers & SES Members	Leadership & Public Policy	Ongoing
Industrial College of the Armed Forces Master's Program (ICAF)	GS-14 & GS-15 Managers, Supervisors & SES Members	Advanced education; Leadership & Management Training	Ongoing
Brookings Educational Programs for Senior Federal Executives	SES Members	Advanced level executive training	Ongoing

Research and Special Programs Administration/Volpe Center

Program	Grade Level(s)	Objectives	Participation
Succession Leadership Program	GS-13 & GS-14 Professionals	To develop management and technical skills to maximize employees' potential	18 month program will be implemented in December '04
Career Counseling/Executive Coaching	All employees GS-12s – GS-15s	Enhancing management, personal and executive communication skills	Ongoing program; 13 year existence
IDP Program	All non-managerial employees GS-12s – GS-15s	Career development program that utilizes self-assessments to develop competencies. The process entails and interactive, facilitated dialogue	Ongoing program; 4 year existence
Volpe Fellows Program	GS-12s – GS -15s 95% are technical managers	Encourages and promotes continuing professional development via graduate and post graduate programs of study that directly support Volpe's mission and long range goals	Ongoing program; 10 year existence

National Highway Traffic Safety Administration

Program	Grade Level(s)	Objectives	Participation
Aspiring Leader Program (USDA)	GS-5 - GS-7 Employees	Program builds basic competencies, teambuilding and managerial skills	Pending
Capital Hill/White House Workshop	GS-15s & SES and CDP Candidates	Public policy workshop designed to give participants a better understanding of the Legislative Branch and the institutional dynamics that help shape agency policies.	Ongoing
DOT Career Strategies Seminar)	GS-11s – GS-14	Residential program for mid-level employees who have demonstrated motivation and potential to assume a managerial or team leader position.	Pending
Congressional Fellows Program (USDA)	GS-13s – GS-15s	Allows senior level employees the opportunity to work in Congressional offices or with Committee staff to develop legislative issues.	Pending
Employee Conduct & Performance (USDA)	Supervisors & Managers	Equips managers and supervisors with the necessary knowledge and skills to confidently deal with the most common performance and conduct problems.	Ongoing
Executive Potential Program (USDA)	GS-13s & GS-14s	Competency-based leadership program designed to develop senior-level employees.	Pending
FEI Leadership for a Democratic Society	GS-15s and SES Members	Program expounds on the policy framework in which government leadership occurs.	Ongoing

National Highway Traffic Safety Administration

Program	Grade Level(s)	Objectives	Participation
Management Development Course (USDA)	GS-13s - GS-15s	Designed for new federal government managers interested in developing strong management skills.	Ongoing
New Leader Program (USDA)	GS-7s – GS-11s	Program is designed to develop future public service leaders.	Pending
OPM Management Development Center Program Series	GS-11s – GS-15s	Residential programs and seminars that present and explain Administration initiatives, the government's corporate culture and policy implementation strategies.	Ongoing
Power of Vision (FAA CMD)	GS-14s	Managerial leadership training that supports strategic planning, vision development and strategies for vision implementation.	Ongoing
So You Want To Be A Leader	GS-11s & GS-12s	Pre-supervisory training that enables participants to evaluate if they truly want to become supervisors.	Ongoing
Leaders for Tomorrow Mentoring Program	GS-13s & GS-14s	Leadership skills development, knowledge sharing, and career development guidance through the help of a GS-15 or SES mentor.	Ongoing

Department of Transportation (DOT-wide) Programs

Program	Grade Level(s)	Objectives	Participation
Leaders for Tomorrow Mentoring Program	GS-13s & GS-14s (protégés)	Leadership skills development, knowledge sharing, and career development guidance through the help of a GS-15 or SES mentor.	Ongoing
So You Want To Be A Leader	GS-11s – GS-12s	Pre-supervisory training that enables participants to evaluate if they truly want to become supervisors.	Ongoing
DOT Executive Coaching Pilot Program	Senior Executives; focus is on executives who are new to the SES ranks	To perpetuate a continuous learning culture and to strengthen DOT's succession planning efforts.	Program Launched in September '04
SES Executive Forum Series	Senior Executives and GS-15 employees enrolled in CDP programs	High-powered executive learning sessions for senior executives that provide development and reinforcement of skills and knowledge areas defined by OPM as executive core qualifications	Ongoing

Office of the Inspector General

Program	Grade Level(s)	Objectives	Participation
Who Wants to Be a Leader	GS-13s	Pre-supervisory training for aspiring supervisors	Ongoing
E-Government Fellows Program	GS-14s & GS-15s	Supervisory development, management training	Ongoing
Excellence in Government Fellows Program	GS-14s	Leadership training for future leaders	Ongoing
Seminar for New Managers (OPM)	GS-14s	Management development training for new managers	Ongoing
Management Development Seminar: Leading Organizations (OPM)	GS-14s	Leadership and management training	Ongoing
Federal Executive Institute (FEI) Programs	GS-15s	Executive leadership development	Ongoing
Leading Change Seminar	GS-15s	Executive Development	Ongoing
Supervisory Development Program	GS-14s	40-hour, intense, mandatory leadership development training for probationary supervisors	Ongoing

The OIG also offers other preferred and supplemental courses to develop and build competencies among its managerial and supervisory staff.

Maritime Administration

Program	Grade Level(s)	Objectives	Participation
Supervisory/Management Training	Provided to all supervisors and managers	2-day training provides necessary tools to help ensure future success as a manager or supervisor	Ongoing
Mentoring Program	Open to all grades levels, although high concentration has been seen at the GS 7 – 11 levels.	Knowledge and information sharing. Employees participate in assessments and receive career planning and enhancement advice	Ongoing
MARAD's Transportation Leadership Program	GS-13s – GS-15s	Intense 2-year structured program to support DOT succession planning efforts. Program objective is to train a cadre of future managers and leaders who are equipped to assume upcoming leadership roles	Program Launched in Fall '04

Federal Railroad Administration

Program	Grade Level(s)	Objectives	Participation
FRA Leadership Development Program	GS-12s – GS-14s FRA-wide	18 month training program that uses USDA's Executive Potential Program as its basis. Objective is to develop high performing employees for future supervisory and managerial positions within the agency	Ongoing
FRA Professional Development Program	Open to all grades up to the GS-11 level	Program objective is to develop high-performing employees for leadership positions within the agency	Pending –program is being revised

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APPENDIX I: GEOGRAPHIC LOCATION OF EMPLOYEES BY R/NO

ST	American Indian/ Native Alaskan	Asian/ Pacific Islander	Black, not of Hispanic origin	Hispanic	White, not of Hispanic Origin	Not Specified
AK	62	31	40	38	1179	
AL	5	4	26	1	236	
AR	8		8	4	195	
AZ	21	8	28	72	394	
CA	63	435	435	394	2947	
CO	4	31	29	86	1119	
CT		1	5	6	164	
DC	32	298	2215	234	3988	
DE	1		3		31	
FL	25	34	188	319	1880	
GA	22	33	491	90	1702	
HI	5		7	13	140	206
IA	4	1	2	8	191	
ID	1	1	1	3	115	
IL	16	69	223	102	1700	
IN	9	7	42	21	898	
KS	21	12	45	31	775	
KY	3	1	18	6	352	
LA	4	7	48	22	279	
MA	3	62	56	36	1031	
MD	3	19	117	16	385	
ME	1			2	154	
MI	6	5	44	28	617	
MN	14	4	9	15	900	
MO	17	14	101	34	841	
MS		2	17	2	144	
MT	7			3	146	
NC	6	3	35	13	400	
ND	3	3		1	127	
NE	1	2	4	5	149	
NH	7	13	7	10	672	
NJ	7	81	168	80	1239	
NM	16	16	19	117	470	
NV	7	15	18	20	279	
NY	14	78	205	159	2074	
OH	14	11	84	23	1138	
OK	196	82	232	102	2362	
OR	7	11	5	5	240	
PA	4	9	58	15	748	
RI	1	1	5	2	83	
SC	1	1	28	9	219	
SD	1			2	77	
TN	8	6	101	16	846	
TX	70	79	326	585	2862	
UT	8	10	6	25	632	
VA	19	50	246	57	1731	
VT	1			1	51	
WA	29	141	77	65	1571	
WI	1	3	3	7	239	
WV		1	3	1	143	
WY	3			3	65	
Outside US	5	32	7	179	77	30
Not specified					15	
Total	786	1727	5835	3088	41012	236

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APPENDIX J: DOT-WIDE IT IMPLEMENTATION CALENDAR

U.S. Department of Transportation

Job Area	Competency/Skill Gap ("C" denotes Competency; "S" denotes Skill)	Risk Level (H)	Gap Size (S, M, or L)	Milestone	Projected Completion Date (MM/DD/YYYY)	Actual Completion Date (MM/DD/YYYY)	Comments
IT Project Management	Earned Value Management (S)	H	L	Industry/Agency Training	6/30/2006	12/31/2005	Program Management Using Earned Value Management Training
	Financial Management	H	M	Establish PM Training program	12/31/2007		
	Leadership	H	M	Establish PM Training program	12/31/2007		
	Project Management Software	H	L	Establish PMO, PM Methodology, Metrics & Conduct organizational assessment	6/30/2007		
IT Security	Information Assurance (C)	H	M	Establish DOT-wide Computer Based Training (CBT) for Information Assurance program.	5/31/2006		Leverage other Federal Department's CBT offerings.
	Configuration Management (C)	H	L	IT Competency Program, In-House Training and Attend Seminars	10/31/2006		
	Network Configuration and Implementation (S)	H	L	IT Competency Program, In-House Training and Attend Seminars	10/31/2006		

U.S. Department of Transportation

U.S. Department of Transportation

Agency						
Job Area	Competency/Skill Gap ("C" denotes Competency; "S" denotes Skill)	Risk Level (H)	Gap Size (S, M, or L)	Milestone	Projected Completion Date (MM/DD/YYYY)	Actual Completion Date (MM/DD/YYYY)	Comments
IT Architecture (Enterprise Architecture)	Business Process Reengineering (C)	H	L	Attend industry training and/or seminars on managing Business Process design.	9/15/2006		
	Federal/OMB Enterprise Architecture (S)	H	L	Industry Training	6/30/2006	12/31/2005	Enterprise Architectures for Managers Training
	Process Design (S)	H	L	Attend industry training and/or seminars on managing Business Process design	9/15/2006		