

*Manual*

# Workforce Toolkit 2.0

*User's Guide*

***Prepared for***

American Association of State and Highway Transportation  
Officials

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# Table of Contents

- 1.0 Preface..... 3
  - 1.1 About You..... 3
  - 1.2 About This User’s Guide ..... 3
  - 1.3 Additional Resources..... 3
  - 1.4 Project Background..... 4
- 2.0 Introducing the Workforce Toolkit User’s Site ..... 5
  - 2.1 Overview..... 5
  - 2.2 Workforce Toolkit Basics..... 5
  - 2.3 Hardware and Software Requirements ..... 7
- 3.0 Site Guide..... 7
  - 3.1 Using Top Ten DOT Workforce Needs..... 8
    - 3.1.1 Top Ten DOT Workforce Needs ..... 8
    - 3.1.2 Performing a Search in Top Ten DOT Needs View ..... 8
  - 3.2 Using Frequently Asked Questions (FAQ) View ..... 9
    - 3.2.1 Frequently Asked Questions..... 9
    - 3.2.1 Performing a Search in FAQ..... 10
  - 3.3 Using Functional View ..... 11
    - 3.3.1 Functions..... 11
    - 3.3.2 Performing a Search in Functional View..... 12
  - 3.4 Using Faceted Search..... 12
    - 3.4.1 Facets ..... 12
    - 3.4.2 Performing a Search in Faceted Search View..... 14
  - 3.5 Geographic View ..... 15
    - 3.5.1 Performing a Search in Geographic View ..... 15
  - 3.6 Using Text Search..... 16
    - 3.6.1 Performing a Search in Text Search ..... 16
  - 3.7 Using Add a Resource ..... 17
  - 3.8 Using State Practices View..... 17
    - 3.8.1 State Practices ..... 17
    - 3.8.2 Accessing Data in State Practices View ..... 20
  - 3.9 Home..... 20
  - 3.10 Forum..... 21
  - 3.11 Video..... 21
  - 3.12 User Guide ..... 21
  - 3.13 Wrapping up the Site Guide..... 21
- 4.0 Working With Scenarios..... 22
  - 4.1 Problem 1: Planning for Loss of Experienced Staff ..... 22
  - 4.2 Problem 2 – Attracting Skilled Engineers to Public Sector Jobs..... 24

# 1.0 Preface

The Workforce Toolkit User's Guide is designed to help you use the Workforce Toolkit to locate resources that can help you address workforce-related needs.

## 1.1 About You

We assume you are a human resources professional within a department of transportation (DOT) or other transportation professional seeking to find resources to help you with workforce-related issues such as recruitment, retirement, downsizing, training and development, etc.

We also assume that you are busy, that you want to find these resources quickly and easily, and that you would like to know how to use the Workforce Toolkit as quickly as possible.

## 1.2 About This User's Guide

This User's Guide will teach you how to use the Workforce Toolkit site and will also serve as a reference when you have questions about how to perform certain activities.

Chapter 2, *Introducing the Workforce Toolkit*, provides an overview of the site to help you understand how you can use this tool to find the resources you need to address workforce-related issues.

Chapter 3, *Site Guide*, describes and documents the various Workforce Toolkit views in which you can search for workforce-related resources or information on other state's practices, participate in virtual transportation communities, view educational videos, or produce a report of your search findings.

Finally, Chapter 4, *Working with Scenarios* shows you how to use the Workforce Toolkit to address issues you might encounter in your daily work life.

## 1.3 Additional Resources

The Workforce Toolkit User's Guide is available on the Workforce Toolkit site. Technical questions regarding the site should be directed to your information technology help desk.

If you have any other questions about the site, you may use the "contact us" button that appears at the top of each page of the Workforce Toolkit. Use this button to report an invalid resource or non-functioning URL.

## 1.4 Project Background

This Workforce Toolkit User's Guide was developed as part of NCHRP 20-72: Tools to Aid State DOTs in Responding to Workforce Challenges. The objective of this project was to produce a guide to selection and application of practical management tools that DOT leadership, managers, and human resources (HR) staff can use to address workforce challenges in several key areas:

- Characterizing and assessing core competencies of the agency's personnel, which are likely to be influenced by changing demographics, staff turnover, attrition, and competition from other employers.
- Characterizing and assessing the need to preserve institutional history and other mission-critical knowledge held by current personnel.
- Recruiting diverse staff to ensure needed competencies are in place to meet future demands.
- Educating, training, and developing staff to attain needed competencies, institutional history, and other mission-critical knowledge.
- Succession planning to ensure availability of highly competent and qualified personnel to fill key management and leadership roles at all levels of the organization.
- Retaining staff to maintain productivity.
- Ensuring an adequate and diverse supply of qualified entry-level personnel to meet mission-critical requirements in the future.

The tool developed for this project is the Workforce Toolkit. This tool has a companion tool, the Workforce Toolkit Administrative Site, which is used to add, delete, or edit the site itself and resources within the site, as well as to review, edit, accept, or delete resources submitted by Toolkit users. This guide is for the Workforce Toolkit User's Site.

The two sites are complementary; both are required to ensure lasting value of this tool for transportation professionals. However, the primary function of the User Site is for transportation professionals to obtain resources that will assist them in addressing HR challenges; the site contains a "add resource" option which will be available, with login access, to some Workforce Toolkit users. This option is the only aspect of the User Site that requires a login.

The primary function of the Administrative Site is to keep the search views and resources current and of interest to the users. Access to any part of this site requires login.

## 2.0 Introducing the Workforce Toolkit User's Site

### 2.1 Overview

The Workforce Toolkit contains tools and methods that can be used by DOTs to deal with the key workforce challenges cited above. These resources, which include websites, books, publications, state DOT practices, and other educational resources, have been pre-screened to assess their relevancy and value to DOT managers both now and 5 to 10 years into the future.

### 2.2 Workforce Toolkit Basics

This website provides the ability to connect to articles, methodologies, case studies, and information on software applications, consulting services and other resources that have been selected to help you resolve transportation workforce issues. Using this website you can:

- Find resources to address the ten most common DOT workforce needs
- Find resources to help answer the questions most frequently asked by DOT executives, managers, and HR professionals.
- Find resources based on the function you need to perform
- Find resources based on your type of need, intended audience, source of information, by your role within the DOT, and by the type of resource or by any combination of these parameters.
- Search for resources based on keywords of your choosing
- Retrieve at-a-glance information about other DOTs, including number of employees and contact details
- Easily access reports and studies of state practices
- Add a resource to the site (requires login access)
- Connect to useful external resources, such as the Federal Highway Administration's online Communities of Practice and AASHTO videos.
- Export and print the results of your searches

This section outlines some terms and concepts you need to understand to be effective and efficient at managing the Workforce Toolkit Administrative User Site.

#### Resources

Resources are the books, articles, software applications, policies, procedures, methodologies, etc. contained in the Workforce Toolkit. The Toolkit already has over 200 resources. As a general user you may add new resources, but each resource must be reviewed and accepted by an Administrative User before it becomes active on the site. Each resource has room to add a title, short

description, long description, author, reference (e.g. where and when the resource was published), organization generating the resource, contact information, website, cost, other known users, format, resource application, and other information.

It is not necessary for you to find all of this information to enter a resource on the site; a title and description are sufficient. However, the more information you can include, the more information the site's users will have to address their needs.

## **Functions**

The functions referred to in the Functional View are the specific duties HR professional are required to perform, such as managing employee performance or compensating and rewarding employees. You can find explanations of the functions on the User Site by selecting any of the functions listed on the Functional View of Workforce Needs page.

## **Views**

The site provides nine options or views for finding resources relating to issues impacting state DOT workforces. Five of the views access a database containing the selected resources mentioned above. These views are:

- Top Ten DOT Needs
- Frequently Asked Questions (FAQ)
- Functional View (which searches for resources based on the function the user is trying to accomplish)
- Faceted Search (which searches based on “facets” or identifiers that have been associated with the resources)
- Text Search
- Geographic View, which contains information by state
- State Practices, which summarizes, by state, findings from NCHRP studies on recruitment, retention, succession planning, training, and change management
- Forum, which connects the users to the Federal Highway Administration (FHWA) Knowledge Sharing site
- Video, which connects to AASHTO YouTube videos

Options to return to the site's Home page, Add a Resource, and view the User Guide, are also provided.

## **Facets**

Facets are simply aspects or characteristics of the resources. All resources have facets attached to them, and these facets are what the program uses to

search for and retrieve resources that are relevant to the user's needs. There are facet types, which are the categories or groups of facets, and facets, which are more specific identifiers within the category. For example, "audience" is a facet type, and "transportation professional" is a facet.

## 2.3 Hardware and Software Requirements

The Workforce Toolkit is a Web site that you can access with Internet Explorer, Firefox or other browsers. If you wish to use the "Export to Excel" feature in the Toolkit, you must have a version of Microsoft Excel installed on your computer.

The site has been designed for ease of use; basic understanding of Toolkit terminology and of the terms and challenges of human resources are all that are needed to successfully use this tool.

## 3.0 Site Guide

This section will introduce you to the Workforce Toolkit views. Each of the following subsections details how to use the different views. All view options, including the option to return to the home page, are accessible from every page within the site with the exception of Faceted Search and Geographic View, which have a more limited set of options due to space constraints. A Contact Us button is available in the top right corner of every page. You can use this button to notify the site administrator about an invalid resource, non-functioning URL, or to ask questions about the Workforce Toolkit.

You can search for resources that will help you address transportation-related workforce issues in the Top Ten DOTs, FAQ, Functional, Faceted, and Text views. You can download and print two types of reports of individual resources located by your search. The first shows title and short description for the selected resource. The second includes all data for the selected resource. These reports can be downloaded to Excel, from which they can be modified or printed. Note that when you export reports to Excel you may see an error message from Excel which you can safely ignore. This is a known Microsoft issue with no reasonable resolution. Reports of individual resources are available from the following views:

- Top Ten DOT Workforce Needs
- Frequently Asked Questions
- Functional View
- Faceted Search
- Text Search

The remaining options on the Workforce Toolkit menu will connect you to other information about transportation human resources or to a user guide for the Toolkit.

## 3.1 Using Top Ten DOT Workforce Needs

This view accesses resources relevant to priority issues facing DOT workforce managers. The view is organized in a grid in which the rows define the topic your organization seeks to address and the columns define your goal. Resources are retrieved by clicking [Resource list](#) within the appropriate grid cell. The needs are updated periodically by the site administrator to ensure they remain relevant.

### 3.1.1 Top Ten DOT Workforce Needs

The Top Ten DOT Workforce Needs topics identified for Workforce Toolkit 2.0 are:

- Strategic workforce planning
- Attracting and retaining talent
- Retooling the workforce to meet evolving business needs
- Developing the next generation of leaders
- Downsizing
- Preserving institutional knowledge
- Employee conflicts and performance issues
- Outsourcing
- Organizational change – reengineering and reorganizing
- Improving HR efficiency and effectiveness

The goals are:

- Understand issues and trends
- Learn about peer agencies
- Assess our situation
- Implement programs, policies, procedures

### 3.1.2 Performing a Search in Top Ten DOT Needs View

► **Step 1:** Click on Top Ten DOT Needs, located at the top of the menu on the left side of the page. A grid displays showing topics and goals for the top ten DOT workforce needs.



► **Step 2:** Click [Resource list](#) within the grid cell that defines both the topic (row) and column (goal) you want to learn about. This retrieves an overview of the subject and a list of titles and short descriptions of pertinent resources.

► **Step 3:** To export the titles and short descriptions retrieved by your search, click [Export to Excel](#) located at the bottom of the page. This exports all resources retrieved, even if they continue onto additional pages.

**TIP:** Ten resources are listed per page. Click on the numbers at the bottom left of the resource listing to open other pages. Click on the Title and Short Description headers to sort the resources by title or short description.

► **Step 4:** Click on the title of a resource to view additional details, including Long Description, Author, Reference, Contact Information, Website, etc.

► **Step 5:** To export the full information on the resource, click [Export to Excel](#) located at the bottom of the page.

► **Step 6:** Use the breadcrumb navigation at the top of your screen to return to the resource list, the Top Ten Workforce Needs page, or the home page. You can also perform a search in a different view by using the menu on the left side of the screen.

## 3.2 Using Frequently Asked Questions (FAQ) View

The Frequently Asked Questions (FAQ) view lists questions about priority issues for state DOTs. These questions are updated periodically by the site administrator to ensure they remain relevant.

### 3.2.1 Frequently Asked Questions

The questions included in Workforce Toolkit 2.0 are:

- What resources are available to help me with reductions in force?
- A large percentage of our organization's workforce is due to retire over the next five years. How can we address this situation?
- We are having a tough time filling open positions for engineers, and can't match consultant salaries. How can we find and attract good engineers?
- There is a large gap in experience between our senior managers and engineers and the next tier of staff. How do we fill that gap before the senior folks all retire?
- Our turnover rates are increasing, especially in our urban districts. How can we deal with this?
- We have a key career manager planning to retire in two years. How can we make sure there is a smooth transition to a new person?
- We are about to go through downsizing of our field units. How do we make this transition as smooth as possible?

- We have several "problem" managers who need to build their supervisory skills. What resources are available for us to draw upon?
- After many years of stability, we have undergone several reorganizations in the past two years. Morale is low and there is confusion about roles and responsibilities. How do we get on a better track?
- Our mission has shifted and we are relying more on outsourced services. Our staff capabilities do not match our needs for good collaboration, oversight and negotiation skills. What is the most efficient way to address this mismatch?
- We need to improve our ability to measure the performance of our HR function and benchmark it against other agencies. What resources are there to help us get started?
- We need to replace our ancient HRIS. How can we learn about new products and their capabilities? How do we have influence when a statewide decision is being made by the state HR group? How do we implement a new HRIS and still have access to legacy data?
- Our HR function does not currently play any significant role in strategic planning for our agency, yet everyone realizes how important workforce issues are to our ability to achieve our mission. Are there examples of agencies that perform good strategic HR planning?

### 3.2.1 Performing a Search in FAQ

- ▶ **Step 1:** Click on FAQ on the menu on the left side of your screen. A list of questions appears.
- ▶ **Step 2:** Click on the question for which you want to find resources. This retrieves an overview of the subject and a list of titles and short descriptions of pertinent resources.
- ▶ **Step 3:** To export the titles and short descriptions retrieved by your search, click [Export to Excel](#) located at the bottom of the page.

**TIP:** Ten resources are listed per page. Click on the numbers at the bottom left of the resource listing to open other pages. Click on the Title and Short Description headers to sort the resources by title or short description.

- ▶ **Step 4:** Click on the title of a resource to view additional details, including Long Description, Author, Reference, Contact Information, Website, etc.
- ▶ **Step 5:** To export the full information on the resource, click [Export to Excel](#) located at the bottom of the page.
- ▶ **Step 6:** Use the breadcrumb navigation at the top of your screen or the menu on the left side of the screen to return to the resource list, the FAQ page, or the home page. You can also perform a search in a different view by using the menu on the left side of the screen.

## 3.3 Using Functional View

The Functional View lists functions of the Human Resources department. These functions are grouped by category, and different levels within a category are indicated by the numbering system and the indentation. The more specific the function, the more targeted the retrieved resources will be. These functions are periodically updated by the site administrator to keep them relevant.

### 3.3.1 Functions

Functions included in Workforce Toolkit 2.0 are:

1. Strategic Workforce Planning Definition
  - 1.1 Human Capital Planning
  - 1.2 Workforce Planning
    - 1.2.1 Succession Planning
2. Operational Human Resources
  - 2.1 Organizing Work
    - 2.1.1 Tasks and Positions
    - 2.1.2 Career Ladders and Paths
    - 2.1.3 Position Prioritization
  - 2.2 Recruiting and Retaining Talent
    - 2.2.1 Needs Identification
    - 2.2.2 Competencies and Education
    - 2.2.3 Recruitment Planning and Process
  - 2.3 Compensation and Rewarding Employees
    - 2.3.1 Compensation Philosophies
    - 2.3.2 Compensation Systems
    - 2.3.3 Reward Programs
    - 2.3.4 Benefits Administration
    - 2.3.5 Benefits Planning
    - 2.3.6 Workman's Compensation
  - 2.4 Managing Employee Performance
    - 2.4.1 Performance Appraisal
    - 2.4.2 Performance Metrics
    - 2.4.3 Career Development
    - 2.4.4 Mentoring
    - 2.4.5 Coaching
    - 2.4.6 Employee and Labor Relations
    - 2.4.7 Discipline
  - 2.5 Human Resources Services
    - 2.5.1 Processing Personnel Actions
    - 2.5.2 Processing Pay Actions

### 2.5.3 Other Backroom Operations

#### 3.3.2 Performing a Search in Functional View

► **Step 1:** Click on Functional View, located on the menu on the left side of your screen. A list of workforce functions appears.

► **Step 2:** Click on your choice of functional need. This retrieves an overview of the subject and a list of titles and short descriptions of pertinent resources.

► **Step 3:** To export the titles and short descriptions retrieved by your search, click [Export to Excel](#) located at the bottom of the page.

**TIP:** Ten resources are listed per page. Click on the numbers at the bottom left of the resource listing to open other pages. Click on the Title and Short Description headers to sort the resources by title or short description.

► **Step 4:** Click on the title of a resource to view additional details, including Long Description, Author, Reference, Contact Information, Website, etc.

► **Step 5:** To export the full information on the resource, click [Export to Excel](#) located at the bottom of the page.

► **Step 6:** Use the breadcrumb navigation at the top of your screen to return to the resource list, the Functional View page, or the home page. You can also perform a search in a different view by using the menu on the left side of the screen.

## 3.4 Using Faceted Search

The Faceted Search view allows you to define the search specifics based on facet types and facets instead of relying on the facets that have been preprogrammed into the Top Ten DOT Needs, FAQ, and Functional Views. These facets are periodically updated by the site administrator to keep them relevant.

### 3.4.1 Facets

The facets included in Workforce Toolkit 2.0 are:

#### Audience

- General Private Sector
- General Public Sector
- Human Resources
- State DOT
- Training and Development
- Transportation Professionals
- Other Industry

- Other

DOT role

- Human Resources
- Line managers/workgroup supervisors
- Senior managers (division chiefs and district administrators)
- Top agency executives (CEOs)
- Other

Resource type

- Case
- Consulting Services
- General Resource
- Measurement/Assessment Tool
- Methodology/Guide/Model
- Organization
- Policy/Procedure
- Software Application
- Other

Source

- Journal/publisher
- National Academy of Public Administration (NAPA)
- National Association – human resources
- National Association – public administration
- National Association – transportation
- State Department of Transportation
- Transportation Research Board/National Highway Cooperative Research Program/Transit Cooperative Research Program
- United States Department of Transportation
- University Research Center
- Other State Agency
- Other

Workforce challenge or need type

- Compensation and Benefits

- Competencies
- Downsizing
- Employee Conflict
- HR Function
- HR Information Systems
- HR Planning
- Knowledge management
- Leadership Development
- Organizational Change
- Organizational Development
- Organizational Performance
- Outsourcing/Contract Management
- Performance Management
- Recruitment
- Reductions in Staff
- Retention
- Retirement
- Strategic Planning
- Succession Planning
- Training and Development
- Workforce Planning/Development
- Other

### **3.4.2 Performing a Search in Faceted Search View**

► **Step 1:** Click on Faceted Search, located on the menu on the left side of your screen. A new screen appears with instructions for conducting a faceted search and with a list of facet types (e.g. Need Type, Audience, Source, DOT Role, Resource Type). This screen is displayed only when first accessing this page.

► **Step 2:** Click on the arrow immediately to the left of each facet type to display the menu of all available facets.

► **Step 3:** Check the desired facets. You can check as many facets as you would like. A list of titles and short descriptions of pertinent resources is automatically retrieved.

► **Step 4:** To export the titles and short descriptions retrieved by your search, click [Export Page to Excel](#) located at the bottom of the page.

**TIP:** Unlike all other Web pages in the site and due to the complexity of this page, only the resources visible on this page (10 or fewer) are exported to Excel. If the list of resources extends over multiple pages, you must export each page to Excel. The hyperlink name is “Export Page to Excel”, not “Export to Excel”, to serve as a reminder.

**TIP:** Use the scroll bar on the right side of your screen to view all facets simultaneously if you have many facet groups open.

**TIP:** Ten resources are listed per page. Click on the numbers at the bottom left of the resource listing to open other pages. Unlike all other Web pages in the site, you cannot sort the resource list on the Faceted Search page.

► **Step 5:** Click on the title of a resource to view additional details, including Long Description, Author, Reference, Contact Information, Website, etc.

► **Step 6:** To export and print the full information on the resource, click [Export to Excel](#) located at the bottom of the page.

► **Step 7:** Use the breadcrumb navigation at the top of your screen to return home or to the Faceted Search page.

**TIP:** Uncheck facets no longer desired. Click the double arrow key to the left of the facet type to collapse the facet list.

**TIP:** To clear all facets that have been checked, navigate to the Home page and then back to the Faceted Search page.

## 3.5 Geographic View

The Geographic View provides a visual representation of the United States and allows users to locate information from peer agencies. This view is linked to tables that contain information from state DOTs regarding knowledge systems and human resources information systems, contact information, links to state DOT websites, statistics on number of state DOT employees, and information on which states outsource human resources functions and which have labor unions. Contact and labor union data is not yet available. There is no feature to export table data to Excel in this view.

### 3.5.1 Performing a Search in Geographic View

► **Step 1:** Click on Geographic View located on the menu on the left side of your screen. This opens a graphic representation of the United States and a menu of information options. The options included in Workforce Toolkit 2.0 are:

- Knowledge management
- HR information systems
- Contacts/Web pages

- Number of employees
- Time HR sourced
- Labor unions

► **Step 2:** Select the option for which you want more information. Blue boxes appear on the states for which there is information on that subject.

► **Step 3:** Click on the state for which you want information. Your cursor will change from an arrow to a hand symbol to indicate you have selected a state. (If you are connecting to the Web site over a slow communications link, you may need to wait a few seconds until the cursor changes shape.) A table appears, displaying available information.

► **Step 4:** Use the breadcrumb navigation to return to the Geographic View or to the home page. Using your browser's back button will clear your search.

**NOTE:** The “Number of employees” option automatically displays the number of employees for each state's DOT (when available). When you click on state, additional detail on the employees is displayed.

## 3.6 Using Text Search

Full Text Search allows you to search by keyword(s) of your own choosing. The program searches all resource data fields.

### 3.6.1 Performing a Search in Text Search

► **Step 1:** Click on Text Search located on the menu on the left side of your screen.

► **Step 2:** Enter keywords in the text box. You may enter any number of keywords.

► **Step 3:** Click Search. A list of titles and short descriptions of pertinent resources is retrieved.

► **Step 4:** To export the titles and short descriptions retrieved by your search, click [Export to Excel](#) located at the bottom of the page.

**TIP:** Ten resources are listed per page. Click on the numbers at the bottom left of the resource listing to open other pages. Click on the Title and Short Description headers to sort the resources by title or short description.

► **Step 5:** Click on the title of a resource to view additional details, including Long Description, Author, Reference, Contact Information, Website, etc.

► **Step 6:** To export the full information on the resource, click [Export to Excel](#) located at the bottom of the page.

► **Step 7:** Use the breadcrumb navigation at the top of your screen to return home or to the Full Text Search page. You can also perform a search in a different view by using the menu on the left side of the screen.



**TIP:** If you view the full information on a resource and then return to the full text search page using the breadcrumb navigation, the search term box and resource list will be blank. You may use the browser 'back' button to return to the previous search terms and resource list.

## 3.7 Using Add a Resource

The Add a Resource view allows Workforce Toolkit users with login access to contribute new resources to the site.

► **Step 1:** Click on Add Resource located in the menu on the left side of your screen. You will be prompted to enter your username and login. Use the 'Contact Us' link at the top of the page to request a username and login if you do not have one, or if you have forgotten it.

► **Step 2:** Enter title and description (required), and author, organization, and website for the organization (if available).

► **Step 3:** Click [Insert](#). The page refreshes, and displays a summary of the information you have just entered, and it now gives you the option to add facets to your resource.

**TIP:** The resource you just entered will not be visible to you or other users in any resource lists until it is reviewed and accepted by the administrator.

**TIP:** Facets are used to associate resources with views. If you do not add facets to your submitted resource, the site administrator will do it.

► **Step 4:** Click [Add Facet](#). A drop-down menu containing available facets appears.

► **Step 5:** Select desired facet by clicking on it and clicking [Insert](#).

► **Step 6:** Repeat steps 4 and 5 to add additional facets.

► **Step 7:** Use the breadcrumb navigation at the top of your screen to return home or click on Add Resource in the menu on the left side of the screen to add another resource. You can also perform a search in a different view by using the menu on the left side of the screen.

## 3.8 Using State Practices View

The State Practices view summarizes, by state, findings from National Cooperative Highway Research Program (NCHRP) studies on workforce-related issues in transportation. Exports to Excel are not available from this view.

### 3.8.1 State Practices

The NCHRP studies included in Workforce Toolkit 2.0 are:

- NCHRP 20-24(40): ANALYSIS AND BENCHMARKING OF RECRUITMENT AND HIRING PRACTICES OF STATE DEPARTMENTS OF TRANSPORTATION
- NCHRP 20-24(48): ANALYSIS AND BENCHMARKING OF STATE DEPARTMENTS OF TRANSPORTATION HUMAN RESOURCE ACTIVITIES
- NCHRP SYNTHESIS 323: RECRUITING AND RETAINING INDIVIDUALS IN STATE TRANSPORTATION AGENCIES
- NCHRP SYNTHESIS 349: DEVELOPING TRANSPORTATION AGENCY LEADERS
- NCHRP SYNTHESIS 362: TRAINING PROGRAMS, POLICIES, AND PRACTICES

The survey tables accessed by Workforce Toolkit 2.0 are:

Competencies

- HR Competencies
- Education Level of Professionals (%)
- HR Core Competencies

HR Function

- Crisis Management
- Human Resources
- Rate the Importance of the Following HR Functions to your DOT
- Crisis Management

HR Information Systems

- HR Software
- Means to Share and Integrate Information
- What Communication Tools Do You Use?

HR Planning

- Professionals by Classification (%)
- Professionals by Classification (2002)

Knowledge Management

- Knowledge Management

Leadership/Development

- Agency Leaders
- Developing Transportation Agency Leaders
- Education Level of Professionals (%)

Outsourcing/Contract Management

- For Any of the Following HR Functions Outsourced in Your DOT, Please Select How Many Years They Have Been Outsourced
- HR Outsource
- HR Outsource Considered
- If HR Functions are Outsourced, Rate Your Satisfaction
- Which Department Manages the Outsourced HR Service? How Satisfied Are You With Their Management?
- HR Outsourcing

#### Performance Management

- Effective Employees Get Higher Pay Raises (%)
- Effective Employees Get Promoted (%)

#### Recruitment

- Impact of Recruiting Strategies
- Effectiveness of Recruiting
- Measuring the Effectiveness of Recruiting Entry Level Employees
- Measuring the Effectiveness of Recruiting Mid-Career Level Employees
- Most Successful Practices for Recruiting Employees
- Relevant Issues Regarding the Demographics of the Agency
- Significant Recruitment Factors (%)
- Strategies for Recruiting Engineers, Technicians, IT, Other Professionals

#### Retention

- Employee Turnover Rates (by Year)
- Factors Influencing Retention (%)
- Factors Influencing the Decision to Leave State Service (%)
- I am Proud to be a State Employee (%)
- I Make a Positive Contribution to My Agency (Ranking 1-10) (%)
- I Make a Positive Contribution to My Community (Ranking 1-10) (%)
- Impact of Retention Strategies
- Likelihood of Leaving for Private Sector (%)
- Morale is High in My Agency (%)
- Morale is Higher in My Agency than it was 5 Years Ago (%)
- My Work is Valued by my Agency, Customers, Supervisors (%)
- Retention Impacts
- Who Influences Employees to Stay (%)?

#### Retirement

- Likelihood of Retiring from State Service (%)
- Years to Retirement

#### Succession Planning

- Succession Plan

### Training and Development

- Funding Sources and Methods
- Opportunities, Challenges, Constraints
- Partnerships with Other Agencies, Private Sector Organizations, Non-Profit Entities, Public Sector Agencies, Universities
- Professional Certification, Registration, Continuing Education and Certification Programs
- Structure for Accomplishing Training and Development
- Training
- Training Delivery Mechanism
- Training Evaluation Methods
- Training Needs Assessment

### Workforce Planning/Development

- Critical Skills Identification
- Strategic Plan

### Other

- # of DOT Employees by Division (2002)
- Average Hours Worked per Week (%)
- Employees Taking Work Home
- Frequency of Taking Work Home (%)
- Professionals by Age (%)
- Professionals by Gender (%)
- Years in Current Position
- Years in State Employment`

## **3.8.2 Accessing Data in State Practices View**

► **Step 1:** Click on State Practices, located in the menu on the left side of your screen. A list of available studies opens.

► **Step 2:** Click on the study you want. A list of topics covered by the study appears.

► **Step 3:** Click on the topic that interests you. The information is displayed in table form. The default sort is by state; however, tables can be sorted by column heading by clicking on the column heading.

► **Step 4:** Use the breadcrumb navigation at the top of your screen to return to other pages. You can also perform a search in a different view by using the menu on the left side of the screen.

## **3.9 Home**

The Home button, located in the menu on the left side of your screen, returns you to the Workforce Toolkit home page.

### **3.10 Forum**

The Forum view, accessed from the menu on the left side of your screen, connects you to user forums. The forum used to demonstrate this concept in Workforce Toolkit 2.0 is the Federal Highway Administration's Knowledge Sharing Website.

### **3.11 Video**

The Video view, accessed from the menu on the left side of the screen, connects you to transportation-related videos. The videos used to demonstrate this concept in Workforce Toolkit 2.0 are from the American Association of State Highway and Transportation Officials (AASHTO).

### **3.12 User Guide**

A PDF of this user guide can be accessed from the menu on the left side of the screen. If you right click on [User Guide](#), you can open the guide in a new tab or window in your browser.

### **3.13 Wrapping up the Site Guide**

In this section, you learned all the functions and features of the Workforce Toolkit. You accessed all of the views available on the site and learned how to search for resources within the Top Ten DOT Needs, FAQ, Functional, Faceted Search, and Text Search views. You also opened a resource to view the information available, including title, short and long description, author, reference, cost, website, contact information, etc. You have also added a resource to the database, and you have accessed state level data from a series of NCHRP reports.

The remainder of this Users Guide takes you through some scenarios familiar to a DOT human resources staff member. These exercises will allow you to apply what you have learned.

## 4.0 Working With Scenarios

This section provides hands-on experience in using the Workforce Toolkit by guiding you through a couple of sample projects. Stepping through these projects will help you become familiar with important features of the software.

### 4.1 Problem 1: Planning for Loss of Experienced Staff

*Problem:* The Legislature has passed a retirement incentive bill that gives a six-month window for eligible employees to retire. The state personnel office estimates that about 5 percent of the highest paid employees will be eligible. Based on employees' tenure, your DOT knows that up to 19 percent of experienced employees could retire. To complicate matters, a major layoff several years earlier due to budget cuts has left your DOT with few employees experienced enough to take the retirees' place if they leave. You have been tasked by management with ensuring the workforce remains sufficient to meet the agency's mission despite these factors.

*Solution #1:* Assuming that other DOTs must face a similar challenge, you select FAQ (Frequently Asked Questions) from the Home view of the Workforce Toolkit. Question #2, "A large percentage of our organization's workforce is due to retire over the next five years. How can we address this situation?" Clicking on the question retrieves titles and short descriptions of useful resources (Figure 4.1). Clicking on a resource title retrieves more detailed information (Figure 4.2).

Figure 4.1 Finding resources from FAQ view

The screenshot shows the NCHRP Workforce Toolkit interface. The top navigation bar includes "Home > Frequently Asked Questions > FAQ Resource List". A question is highlighted in a yellow box with a red dashed border: "A large percentage of our organization's workforce is due to retire over the next five years. How can we address this situation?". Below the question is a table with two columns: "Title" and "Short Description".

Title	Short Description
<a href="#">A Workforce Development Program for SCDOT</a>	This project involved the development of a workforce and succession management plan for the South Carolina Department of Transportation, focusing on the maintenance area of the department.
<a href="#">Advanced Succession Planning: Next Generation Practices for Ensuring Your Organization's Future</a>	This article offers methods and tools to integrate succession planning into workforce planning.
<a href="#">Analysis and Benchmarking of State DOT Human Resource</a>	This benchmarking study identifies gaps and best practices of state Department of Transportation human resources (HR) activities. It includes

Figure 4.2 Summary view of individual resource

NCHRP Workforce Toolkit	
<a href="#">Contact Us</a>	
<a href="#">Home</a> > <a href="#">Faceted Search</a> > Faceted Search Resource Detail	
<ul style="list-style-type: none"> <li>Top Ten DOT Needs</li> <li>FAQ</li> <li>Functional View</li> <li>Faceted Search</li> <li>Geographic View</li> <li>Text Search</li> <li>State Practices</li> <li>Home</li> <li>Forum</li> <li>Video</li> </ul>	<p><b>Title</b>      <b>A Workforce Development Program for SCDOT</b></p> <p><b>ShortDescription</b>      This project involved the development of a workforce and succession management plan for the South Carolina Department of Transportation, focusing on the maintenance area of the department.</p> <p><b>LongDescription</b>      Given the implementation of early retirement incentive programs, technological improvements, and the need to strategically determine which positions are necessary, workforce development and/or succession planning has become crucial in the current workplace. The focus of this project was to include the development of a workforce plan for the South Carolina Department of Transportation (SCDOT), specifically focusing on the maintenance area of the department. In order to provide a comprehensive study and proposal, the process incorporated a literature review, a comparison of other Departments of Transportation (DOTs), a study of DOTs with similar programs, career ladders for the classification series of Trades Specialists I-V, prototype position descriptions, and cost structure determination. The focus and significance of this project was based on the ability of SCDOT to be successful by accurately projecting future workforce needs and taking steps to assure that this workforce is in place. The research was a conceptual design that incorporated the potential for a progressive system of advancements based on acquisition of skills, abilities, and demonstration of competencies. The result was a Workforce Development Program that integrated the needs of the department with an opportunity for advancement for employees.</p> <p><b>SourceAuthor</b>      Nadim Mahmoud Aziz FHWA-SC-05-03, <a href="http://newfirstsearch.oclc.org/WebZ/FSFETCH?fetchtype=fullrecord;sessionid=fsapp9-48896-f5guumz7-6x66fu;entitypagenum=23;0:reco=3;resultset=6;format=FI;next=html">http://newfirstsearch.oclc.org/WebZ/FSFETCH?fetchtype=fullrecord;sessionid=fsapp9-48896-f5guumz7-6x66fu;entitypagenum=23;0:reco=3;resultset=6;format=FI;next=html</a></p> <p><b>Reference</b>      <a href="http://newfirstsearch.oclc.org/WebZ/FSFETCH?fetchtype=fullrecord;sessionid=fsapp9-48896-f5guumz7-6x66fu;entitypagenum=23;0:reco=3;resultset=6;format=FI;next=html">http://newfirstsearch.oclc.org/WebZ/FSFETCH?fetchtype=fullrecord;sessionid=fsapp9-48896-f5guumz7-6x66fu;entitypagenum=23;0:reco=3;resultset=6;format=FI;next=html</a></p>

*Solution #2:* Preferring a more focused search, you select Faceted Search from the Home view of the Workforce Toolkit (Figure 4.3). Using the double-down arrow, you open the “By need type” facet group and click on the boxes next to Retention, Retirement, Leadership Development, Recruitment, and Succession Planning. The numbers next to each need type indicate how many resources are available for that need. On the “By audience” drop-down menu, you select Human Resources; within “By DOT role” you select Human Resources; and under “By resource type” you select General Resource, Methodology/Guide/Model, Case, and Policy/Procedure. By not making any selection in “By source” you have included all sources. These actions automatically refine your search. If desired, you can read more about individual resources and print reports by following the instructions in solution #1.

Clicking on a square a second time will clear the filter from the search.

Figure 4.3 Finding Resources Using Faceted Search

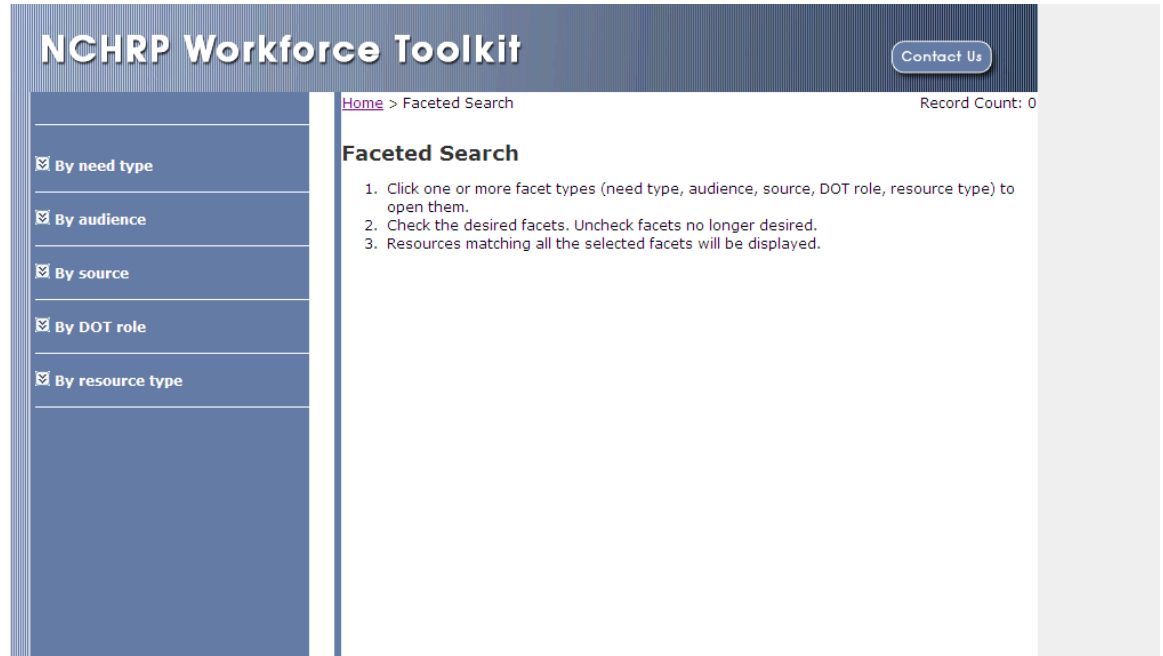


Figure 4.4 Faceted Search Summary Page

By need type			Faceted Search	
Facet	Count		Title	Short Description
Strategic Planning	12	<input type="checkbox"/>	<a href="#">2007 AASHTO Salary Survey</a>	This annual survey is administered by the American Association of State Highway and Transportation Officials (AASHTO) to collect wage and salary information from all state highway agencies. Input allows AASHTO to track salary changes and react quickly to downturns or benefit from new opportunities.
Other	22	<input type="checkbox"/>	<a href="#">A Workforce Development Program for SCDOT</a>	This project involved the development of a workforce and succession management plan for the South Carolina Department of Transportation, focusing on the maintenance area of the department.
Organizational Development	13	<input type="checkbox"/>	<a href="#">Advanced Succession Planning: Next Generation Practices for Ensuring Your Organization's Future</a>	This article offers methods and tools to integrate succession planning into workforce planning.
HR Information Systems	12	<input type="checkbox"/>	<a href="#">American Society for Training and Development (ASTD)</a>	The American Society for Training and Development is the most prominent of the professional organizations for continuous learning information. It is also a source of information about online or e-learning.
Retention	40	<input checked="" type="checkbox"/>	<a href="#">Analysis and Benchmarking of State DOT Human Resource Activities</a>	This benchmarking study identifies gaps and best practices of state Department of Transportation human resources (HR) activities. It includes an online survey and in depth interviews on this topic. The study also reports on states' experiences with outsourcing HR functions and the relationship of HR system functionality to meeting strategic human resources and workforce goals.
Compensation and Benefits	21	<input checked="" type="checkbox"/>		
Downsizing/Reduction in Force	13	<input type="checkbox"/>		
Retirement	8	<input checked="" type="checkbox"/>		
Workforce Planning/Development	50	<input type="checkbox"/>		
Organizational Change	19	<input type="checkbox"/>		
Leadership Development	21	<input type="checkbox"/>		
HR Planning	12	<input type="checkbox"/>		
Organizational Performance	17	<input type="checkbox"/>		
HR Function	20	<input type="checkbox"/>		
Employee Conflict	4	<input type="checkbox"/>		
Competencies	22	<input type="checkbox"/>		
Recruitment	61	<input checked="" type="checkbox"/>		
Succession Planning	12	<input checked="" type="checkbox"/>		

## 4.2 Problem 2 – Attracting Skilled Engineers to Public Sector Jobs

*Problem:* For this problem, we assume that higher salaries paid by private sector firms make it difficult to recruit engineering technicians. State salary



policies limit what your DOT can pay and traditional sources for new engineering technicians can't educate enough people to supply private sector firms and the DOT. You plan to launch initiatives designed to address this issue.

*Solution #1:* Knowing this is an important issue in all state DOTs, you want to begin by learning what peer agencies are doing to attract and retain engineers and train current staff in the needed competencies. You use the Top Ten Workforce Needs View in the Workforce Toolkit (Figure 4.5) and begin by clicking on the Resource list located in grid cell 2B (“Attracting and retaining talent” and “Learn about peer agencies”). This retrieves an overview of the subject and a summary view of resources (Figure 4.6). You can repeat this step using grid cell 3B (“Retooling the workforce to meet evolving business needs” and “Learn about peer agencies”) to find information about training the current workforce.

**Figure 4.5 Finding Resources in Top Ten DOT Needs View**

Home > Top Ten DOT Needs

### Top Ten DOT Workforce Needs

I am seeking resources to help me:

My organization needs to address	A. Understand issues and trends	B. Learn about peer agencies	C. Assess our situation	D. Implement programs, policies, procedures
1. Strategic workforce planning	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>
2. Attracting and retaining talent	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>
3. Retooling the workforce to meet evolving business needs	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>
4. Grooming the next generation of leaders	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>
5. Downsizing	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>
6. Preserving institutional knowledge	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>
7. Employee conflicts and performance issues	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>
8. Outsourcing	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>	<a href="#">Resource list</a>

*Solution #2:* To narrow your search to more specifically address your needs, you go to the Full Text Search view of the Toolkit. Entering “engineers” as a search word retrieves titles and short descriptions that can help (Figure 4.7).

Figure 4.6 Finding resources using text search

The screenshot shows the NCHRP Workforce Toolkit website. On the left is a navigation menu with options: Top Ten DOT Needs, FAQ, Functional View, Faceted Search, Geographic View, Text Search, State Practices, Home, Forum, and Video. The main content area is titled 'Full text search' and shows a search input field containing 'engineers' and a 'Search' button. Below this, the 'Full text search result' section displays a table with two columns: 'Title' and 'Short Description'. The table lists several articles related to engineering and workforce development.

Title	Short Description
<a href="#">Filling the Pipeline: A milestone agreement for an urgent industry-wide partnership to attract and retain transportation workers</a>	An agreement emerged from the National Workforce Summit in May 2002, where all present transportation leaders signed 'A Partnership for Educating, Training, and Developing the Nation's Transportation Workforce'. The meeting's agenda was designed for sharing ideas and insights into the state of the transportation industry's workforce.
<a href="#">Guide to Hiring and Retaining Great Civil Engineers</a>	The American Society of Civil Engineers Committee on the Employment of Civil Engineers published this guide on finding and keeping the best civil engineers.
<a href="#">Home Depot Goes Old School The retailer's new talent gold mine? Retirees who know more, and sell more, than their younger counterparts</a>	This article reports on how Home Depot is partnering with the 35-million-member AARP to hire an army of tech-savvy retirees.
<a href="#">Human Capital: Selected Agencies' Experiences and Lessons Learned in Designing Training and Development Programs</a>	The U.S. General Accounting Office identified important lessons learned from five federal agencies' experiences in designing employee training and development programs that could be applied to other agencies facing similar challenges. The knowledge gained relates to the three areas of assessing agency skill requirements and identifying training needs, developing strategies and solutions for training needs, and determining

To learn more about using an engineering consulting firm, you search on “consultant (Figure 4.8).”

Figure 4.7 Modifying a text search

The screenshot shows the NCHRP Workforce Toolkit website with the search term changed to 'consultant'. The search results table is updated to show articles related to consulting and organizational change.

Title	Short Description
<a href="#">Building a Scalable Human Capital Infrastructure</a>	An increased need for knowledge workers and project professionals, combined with a shortage of in-house resources and/or tight development timeframes often leads to the need to supplement staff with experienced outside experts who can seamlessly integrate into an existing team to add value immediately. This article talks about the benefits of using project professionals and how to manage them.
<a href="#">Organizational Change: EMPOWER Kentucky</a>	EMPOWER Kentucky is a change initiative aimed at redesigning the organization's operations and streamlining its procedures. Amongst other progress, the initiative has affected organizational roles and responsibilities, and improved employee communication tools.
<a href="#">Project Lead The Way</a>	Project Lead The Way, Inc. (PLTW) is a national program forming partnerships among public schools, higher education institutions and the private sector to increase the quantity and quality of engineers and engineering technologists graduating from the country's education system. The PLTW website contains information on curriculum, implementation, school certification, college credit for teachers and students, and much more.
<a href="#">When to Call the Organization Doctor</a>	This article discusses the steps an organization should take toward first diagnosing the real problems in their organizations, before prescribing solutions for them.

To refine your search, you enter a combination of search words, “engineer training competency.”

**Figure 4.8 Using multiple search words in text search**

The screenshot shows the NCHRP Workforce Toolkit website. The header includes the site name and a 'Contact Us' button. A navigation menu on the left lists various sections. The main content area shows the search results for the query 'engineer training competency'.

**NCHRP Workforce Toolkit** Contact Us

Home > Full Text Search

**Full text search**

engineer training comp[erency]

**Full text search result**

<a href="#">Title</a>	<a href="#">Short Description</a>
<a href="#">Human Capital: Selected Agencies' Experiences and Lessons Learned in Designing Training and Development Programs</a>	The U.S. General Accounting Office identified important lessons learned from five federal agencies' experiences in designing employee training and development programs that could be applied to other agencies facing similar challenges. The knowledge gained relates to the three areas of assessing agency skill requirements and identifying training needs, developing strategies and solutions for training needs, and determining methods for evaluating training programs.