# Quick Reference Guide

# Attracting, Retaining, and Developing the Transportation Workforce: Transportation Planners

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The Quick Reference Guide (QRG) to the Talent Profile Tool is designed to be a stand-alone guide to address your agency's talent management process and for using the Tools that were developed for this research. It relies on the material described in *NCHRP Research Report 980: Attracting, Retaining, and Developing the Transportation Workforce: Transportation Planners.*

The Talent Profile and Job Description Tools are configured to work in modern browsers and will display best on a PC or tablet. Below are recommended browsers for optimal tool performance.

*Chrome version 85+*

*Firefox version 81+*

*Edge version 85+*

*Safari 13+* (Mac Users only)

## Introduction

This Quick Reference Guide (QRG) provides transportation officials with a step-by-step process for assessing current planning staff capabilities and for identifying strategies to enhance these capabilities. In addition, the QRG includes an approach for assessing the overall effectiveness of the agency's talent management process and for identifying strategies to improve the process. As defined in the QRG, the talent management process relies on the use of talent profiles, which represent the combinations of KSAs needed for various planning functions or for individual planning staff positions. The QRG offers two downloadable tools that can help in conducting both planning unit-wide assessment of KSA needs as well as those associated with individual staff positions. The agency tool is available at Agency Talent Profile Tool and the employee and prospective employee tool is available at Employee Talent Profile Tool. Given that the Employee Talent Profile Tool uses much of the same material found in the Agency Talent Profile Tool, the rest of the QRG refers to the Tool when discussing how they can both be used.

The QRG is organized in two sections. The first section describes the Tool and how it can be used to develop talent profiles and job descriptions for individual positions, as well as for conducting an overall assessment of an agency's planning staff capability. The second section presents an approach for assessing the effectiveness an agency's entire talent management process and for identifying strategies that an agency can use to improve this effectiveness.

## Definitions

This is a list of some of the key definitions used in the QRG.

### Overarching Concepts

*Talent management process*: An organization's approach for developing a human resource strategy including recruiting, professionally developing, and retaining staff. This also includes understanding the constraints and opportunities for enhancing the capabilities of the planning staff.

*Talent profiles* (sometimes referred to as staff performance model): Position-related combinations of KSAs needed and/or desired for various planning functions. The talent profiles are used for workforce development, inventory of staff capabilities, KSA gap analysis, career management, recruiting, and training/professional development. They can also assist with staff retention.

### Supporting Concepts

*Abilities:* The employee and position capabilities inherent in an individual's personal and interpersonal interactions. Abilities can be enhanced through training and professional development actions. Examples include verbal communication, willingness to learn, and timeliness in accomplishing work efforts.

*Knowledge: The Topical/Subject Focus:* The underlying knowledge base for the full scope of a transportation planning position. The staff knowledge areas for a typical transportation agency planning function will vary depending on type of planning issue (e.g., transportation systems development, land-use, environmental, economic development, etc.), planning activity (e.g., analysis, forecasting, evaluation, etc.), scale and complexity of the planning issues (e.g., statewide, regional, or local), and the particular roles of a staff position (e.g., general planner, supervisor, manager, specialist, etc.).

*Professional Development*: Strategies to enhance the technical and interpersonal capabilities of existing staff, and of providing career paths for advancement in the agency hierarchy.

*Recruitment*: Strategies to attract new employees to the agency, usually consisting of messaging, marketing, and reaching out to prospective candidates.

*Retention*: Strategies aimed at motivating staff to remain in the agency. This includes salary incentives (if possible), recognition for achievement, and efforts to make the office environment more conducive to 21st century personal and interpersonal needs.

*Roles*: Responsibilities assigned to individual positions within a planning unit, often reflecting position level in the agency hierarchy, reporting relationships, authority, and span of control. Roles will differentiate among senior executives, managers, supervisors, specialists, and project staff.

*Skills*: The employee and position capabilities required to fulfill the purpose of a planning staff position that can be acquired through education, experience, or training. Examples include data collection and analysis, data visualization, technical modeling, and report preparation.

*Talent Strategy*: Combination of the actions that reflect the overall agency philosophy in managing talent, including recruitment, professional development, and retention. The talent strategy reflects how jobs are described; how the supervision and management structure is defined; what types of KSAs are desired by the agency; the assumptions on the motivation of agency employees; and the like.

## Developing Talent Profiles and Job Descriptions

Figure C-1 shows the approach toward talent management assessment (as represented in the Tool) that the research found to be critical for an agency's strategy in attracting, developing, and retaining qualified planning staff. The Tool allows users to select KSA options for the specific context or staff position they are examining. For the agency Tool users can also develop a job description by adding the requirements for education/certification and years of experience.

Note that the figure points to where both an agency manager and an employee (or prospective employee) should enter the assessment process.
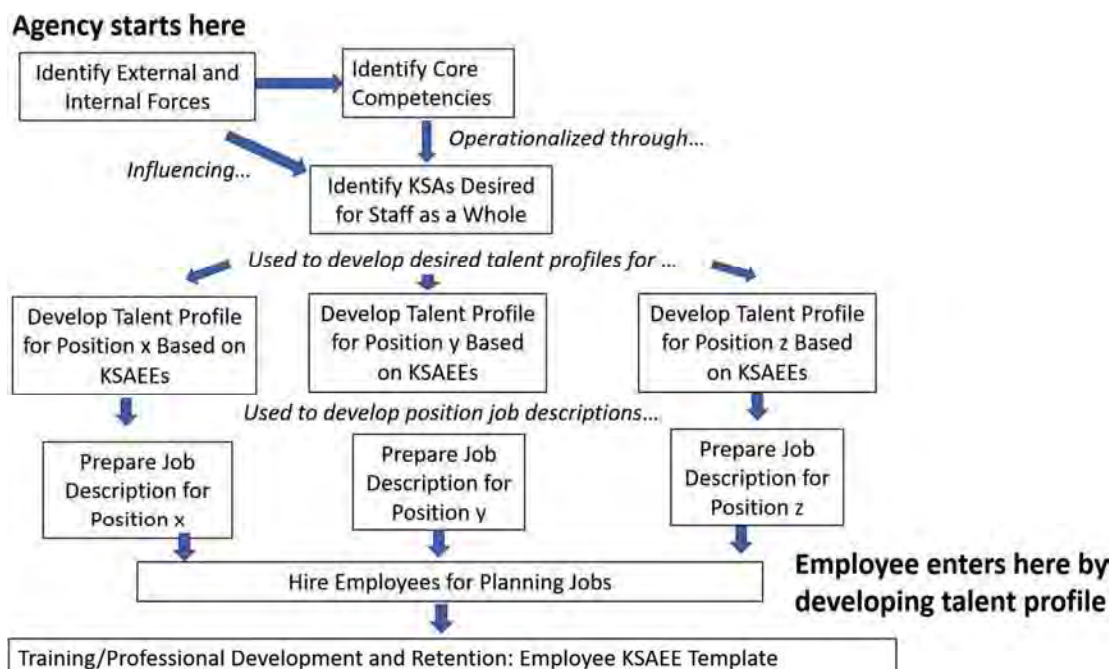


***Figure C-1.    Talent management assessment tool.***

## Step 1: Identify External and Internal Forces

A dropdown menu is provided that presents possible external and internal forces that could influence the desired types of KSAs for the planning unit. These forces were identified from the data collection tasks as part of this research. Table C-1 shows the list that is available in the agency Tool. As an example, if your state or metropolitan area is experiencing significant changes in population demographics that could affect how transportation systems are provided and/or operated, Table C-1 suggests the following KSAs that, at a minimum, might be appropriate for your planning staff or for a particular staff position.

### *Knowledge Areas*

- Cultural awareness
- Equity (especially as it relates to aging)
- Impacts and consequences of transportation projects and programs
- Planning data inputs
- Socioeconomic trends and behavioral relationships
- Travel behavior

### Skills

- Collaboration with external groups
- Cultural competency
- Data collection
- Data analysis
- Meeting facilitation
- Public engagement
- Understanding customer needs/desires
- Use of models

### Abilities

- Attend meetings in off-work hours
- Listening and public speaking

The Tool allows the user to include other external or internal forces that might be appropriate for a planning unit.

## Step 2: Select Position(s) Type

This step allows the user to define what staff position type or types are being assessed. Six planning position types are available in the Tool.

- *General Planner:* Staff positions requiring broad KSA that can be applied to a range of transportation planning topics. Little to no supervision of other staff members occurs. These positions can be defined with different levels of desired KSAs, e.g., Entry-level, Planner 1, Planner 2, etc.
- *Planning Supervisor:* In addition to the KSAs relating to various transportation planning topics, planning supervisors need skills and abilities relating to the supervision of other staff, project management, and agency representation at public and agency meetings.
- *Planning Manager:* In addition to the KSAs found in a planning supervisor position, a planning manager also has responsibilities for managing teams of planning staff and in preparing and monitoring agency budgets.
- *Planning Director:* These positions are part of an agency's executive leadership team, representing the agency at high-level meetings with executives from other agencies and political leaders. Usually includes responsibilities for the strategic planning of the planning unit.

**Table C-1.    External and internal forces affecting desired talent capabilities.**

**External Forces for Change (generally societal)**

| If you are concerned with this force for change….. | Then consider the following: Knowledge Areas | Skills | Abilities |
|---|---|---|---|
| Changing demographics | • Cultural awareness<br>• Equity<br>• Impacts and consequences of transportation projects and programs<br>• Planning data inputs<br>• Socioeconomic trends and behavioral relationships<br>• Travel behavior | • Collaboration with external groups<br>• Cultural competency<br>• Data collection<br>• Data analysis<br>• Meeting facilitation<br>• Public engagement<br>• Understanding customer needs/desires<br>• Use of models | • Attend meetings in off-work hours<br>• Listening and public speaking |
| Changing concept of the workplace | ▪ Impacts and consequences of transportation projects and programs<br>▪ Land-use/economic development<br>▪ Planning data inputs<br>▪ Socioeconomic trends and behavioral relationships<br>▪ Technology<br>▪ Travel behavior | ▪ Collaboration with external groups<br>▪ Data collection<br>▪ Data analysis<br>▪ Understanding customer needs/desires<br>▪ Use of models | ▪ Analytical and creative thinking<br>▪ Strategic thinking |
| Constrained finance and funding resources for public sector investment | ▪ Equity<br>▪ Finance/funding<br>▪ Governmental structure for transportation decision-making<br>▪ Policy/program practices<br>▪ Project programming<br>▪ Related regulations and legislation | ▪ Collaboration with external groups<br>▪ Grant administration and compliance<br>▪ Negotiation<br>▪ Prioritizing | ▪ Analytical and creative thinking<br>▪ Representing agency at meetings<br>▪ Strategic thinking |
| Continuing support for economic development goals | ▪ Community development/planning<br>▪ Economics<br>▪ Equity<br>▪ Impacts and consequences of transportation projects and programs<br>▪ Land-use and economic development<br>▪ Policy/program practices<br>▪ Sustainability | ▪ Collaboration with external groups<br>▪ Data collection<br>▪ Data analysis<br>▪ Data visualization & presentation<br>▪ Synthesis of information sources<br>▪ Understanding customer needs/desires<br>▪ Use of models | ▪ Analytical and creative thinking<br>▪ Attend meetings in off-work hours<br>▪ Representing agency at meetings<br>▪ Strategic thinking |
| Emphasis in equity concerns (e.g., mobility for disadvantaged populations, rural vs urban, race, gender, age, mobility, mode) | ▪ Alternative modes and multimodal plan development (e.g., Complete Streets)<br>▪ Equity<br>▪ Impacts and consequences of transportation projects and programs<br>▪ Planning data inputs<br>▪ Policy/program practices<br>▪ Socioeconomic trends and behavioral relationships<br>▪ Travel behavior | ▪ Collaboration with external groups<br>▪ Community impact assessment<br>▪ Cultural competency<br>▪ Data collection<br>▪ Data analysis<br>▪ Environmental justice analysis<br>▪ Meeting facilitation<br>▪ Public engagement<br>▪ Review of plans, policies and regulations<br>▪ Understanding customer needs/desires<br>▪ Use of models | ▪ Analytical and creative thinking<br>▪ Attend meetings in off-work hours<br>▪ Listening and public speaking<br>▪ Representing agency at meetings<br>▪ Strategic thinking |
| Emphasis on community livability (e.g., land-use, urban design, and the role of infrastructure) | ▪ Alternative modes and multimodal plan development<br>▪ Equity<br>▪ Impacts and consequences of transportation projects and programs<br>▪ Modal operational and infrastructure characteristics<br>▪ Planning data inputs<br>▪ Socioeconomic trends and behavioral relationships<br>▪ Sustainability<br>▪ Travel behavior | ▪ Collaboration with other agency staff<br>▪ Collaboration with external groups<br>▪ Data collection<br>▪ Data analysis<br>▪ Data visualization & presentation<br>▪ Meeting facilitation<br>▪ Performance metrics<br>▪ Public engagement<br>▪ Review of policies, plans, and regulations<br>▪ Understanding customer needs/desires | ▪ Analytical and creative thinking<br>▪ Attend meetings in off-work hours<br>▪ Representing agency at meetings<br>▪ Strategic thinking<br>▪ Working independently/taking initiative |

## Table C-1.   (Continued).

| If you are concerned with this force for change….. | Then consider the following: Knowledge Areas | Skills | Abilities |
|---|---|---|---|
| Emphasis on environmental quality | ▪ Environmental impacts<br>▪ Equity<br>▪ Impacts and consequences of transportation projects and programs<br>▪ Planning data inputs<br>▪ Policy/program practices<br>▪ Related regulations and legislation<br>▪ Sustainability | ▪ Collaboration with other agency staff<br>▪ Collaboration with external groups<br>▪ Data collection<br>▪ Data analysis<br>▪ Data visualization & presentation<br>▪ Meeting facilitation<br>▪ NEPA analysis and documentation<br>▪ Performance metrics<br>▪ Public engagement<br>▪ Review of policies, plans, and regulations<br>▪ Use of models | ▪ Analytical and creative thinking<br>▪ Representing agency at meetings<br>▪ Strategic thinking<br>▪ Working independently/taking initiative |
| Emphasis on public health and contributing factors | ▪ Community development/planning/social networks<br>▪ Environmental impacts<br>▪ Equity<br>▪ Impacts and consequences of transportation projects and programs<br>▪ Land-use/economic development<br>▪ Modal operational and infrastructure characteristics<br>▪ Planning data inputs<br>▪ Policy/program practices<br>▪ Socioeconomic trends and behavioral relationships<br>▪ Sustainability | ▪ Collaboration with other agency staff<br>▪ Collaboration with external groups<br>▪ Cultural competency<br>▪ Data collection<br>▪ Data analysis<br>▪ Data visualization & presentation<br>▪ Environmental justice analysis<br>▪ Meeting facilitation<br>▪ Performance metrics<br>▪ Public engagement<br>▪ Review of policies, plans, and regulations<br>▪ Understanding customer needs/desires | ▪ Analytical and creative thinking<br>▪ Attend meetings in off-work hours<br>▪ Representing agency at meetings<br>▪ Strategic thinking<br>▪ Working independently/taking initiative |
| Technological advancement | ▪ Modal operational and infrastructure characteristics<br>▪ Travel behavior<br>▪ Automated/connected vehicle technologies | ▪ Collaboration with other agency staff<br>▪ Collaboration with external partners and groups<br>▪ Synthesis of information sources | ▪ Effectively interacting with agency and other professional leaders/managers<br>▪ Multitasking<br>▪ Representing agency at meetings<br>▪ Strategic thinking |

**Internal Forces for Change (generally affecting internal staffing and other resources)**

| If you are concerned with this force for change…..<br>Internal (to the Agency) Force for Change | Then consider the following: Knowledge Areas | Skills | Abilities |
|---|---|---|---|
| Aging staff | • Diversity, equity, and inclusion | • Cultural competency | ▪ Commitment to learning<br>▪ Knowledge transfer<br>▪ Mentoring<br>▪ Motivating staff<br>▪ Multitasking<br>▪ Working within team/collaboration<br>▪ Working independently/taking initiative |
| Changing data and analysis capabilities (and the technologies thereof) | ▪ Planning data inputs<br>▪ Technology | ▪ Data collection<br>▪ Data analysis<br>▪ Data visualization & presentation<br>▪ Performance metrics<br>▪ Quality assurance/quality control<br>▪ Research<br>▪ Synthesis of information sources<br>▪ Use of models | ▪ Analytical and creative thinking<br>▪ Commitment to learning<br>▪ Multitasking<br>▪ Preparing reports, memoranda, and presentations<br>▪ Working independently/taking initiative |
| Changing institutional relationships among levels of government and the private sector | ▪ Community development/planning/social networks<br>▪ Economics<br>▪ Equity<br>▪ Finance/funding<br>▪ Governmental structure for transportation decision-making<br>▪ Policy/program practices | ▪ Collaboration with other agency staff<br>▪ Collaboration with external partners and groups<br>▪ Cultural competency<br>▪ Meeting facilitation<br>▪ Negotiation<br>▪ Public engagement<br>▪ Team-building<br>▪ Understanding customer needs/desires | ▪ Analytical and creative thinking<br>▪ Commitment to learning<br>▪ Multitasking<br>▪ Preparing reports, memoranda, and presentations<br>▪ Representing agency at meetings<br>▪ Working independently/taking initiative |

**Table C-1.    (Continued).**

| If you are concerned with this force for change….. | Then consider the following: | | |
|---|---|---|---|
| **Internal (to the Agency) Force for Change** | **Knowledge Areas** | **Skills** | **Abilities** |
| Diverse staffing that reflects community characteristics | ▪ Equity | ▪ Collaboration with other agency staff<br>▪ Collaboration with external partners and groups<br>▪ Cultural competency<br>▪ Mentoring of team members<br>▪ Team-building | ▪ Commitment to learning<br>▪ Motivating staff<br>▪ Working within teams |
| Emphasis on managing the current transportation system (e.g., systems operations) | ▪ Alternative modes and multimodal plan development<br>▪ Impacts and consequences of transportation projects and programs<br>▪ Modal operational and infrastructure characteristics<br>▪ Technology | ▪ Collaboration with other agency staff<br>▪ Collaboration with external partners and groups<br>▪ Performance metrics<br>▪ Understanding customer needs/desires | ▪ Analytical and creative thinking<br>▪ Commitment to learning<br>▪ Multitasking<br>▪ Representing agency at meetings<br>▪ Working within team/collaboration |
| Expanding planning linkages to other planning efforts and policy areas (e.g., transportation system resilience/climate change and freight planning) | ▪ Principles of planning, plan development, and other planning products<br>▪ Economics<br>▪ Environmental impacts<br>▪ Equity<br>▪ Governmental structure for transportation decision-making<br>▪ Land-use/economic development<br>▪ Policy/program practices<br>▪ Sustainability | ▪ Collaboration with other agency staff<br>▪ Collaboration with external partners and groups<br>▪ Cultural competency<br>▪ Meeting facilitation<br>▪ Negotiation<br>▪ Public engagement<br>▪ Synthesis of information sources<br>▪ Team-building<br>▪ Understanding customer needs/desires | ▪ Analytical and creative thinking<br>▪ Commitment to learning<br>▪ Multitasking<br>▪ Preparing reports, memoranda, and presentations<br>▪ Representing agency at meetings<br>▪ Working independently/taking initiative |
| Focus on stakeholder engagement | ▪ Community development/planning/ social networks<br>▪ Equity<br>▪ Governmental structure for transportation decision-making | ▪ Collaboration with other agency staff<br>▪ Collaboration with external partners and groups<br>▪ Cultural competency<br>▪ Meeting facilitation<br>▪ Negotiation<br>▪ Public engagement<br>▪ Synthesis of information sources<br>▪ Team-building<br>▪ Understanding customer needs/desires | ▪ Analytical and creative thinking<br>▪ Attending meetings in off-work hours<br>▪ Commitment to learning<br>▪ Multitasking<br>▪ Representing agency at meetings<br>▪ Working within teams<br>▪ Working independently/taking initiative |
| Increased interest in system preservation and asset management (including system resilience) | ▪ Alternative modes and multimodal plan development<br>▪ Finance/funding<br>▪ Modal operational and infrastructure characteristics<br>▪ Policy/program practices<br>▪ Project development process | ▪ Collaboration with other agency staff<br>▪ Data collection<br>▪ Data analysis<br>▪ Data visualization & presentation<br>▪ Performance metrics<br>▪ Preparation of reports, memoranda & presentations<br>▪ Quality assurance/quality control procedures<br>▪ Research | ▪ Multitasking<br>▪ Strategic thinking<br>▪ Working within teams |
| New land-use and travel demand forecasting theory and methods | ▪ Community development/planning/social networks<br>▪ Economics<br>▪ Equity<br>▪ Impacts and consequences of transportation projects and programs<br>▪ Land-use/economic development<br>▪ Planning data inputs<br>▪ Travel behavior | ▪ Collaboration with external partners and groups<br>▪ Cultural competency<br>▪ Data collection<br>▪ Data analysis<br>▪ Data visualization & presentation<br>▪ Performance metrics<br>▪ Research<br>▪ Synthesis of information sources<br>▪ Use of models | ▪ Analytical & creative thinking<br>▪ Multitasking<br>▪ Preparing reports, memoranda & presentations<br>▪ Representing agency at meetings<br>▪ Working within teams<br>▪ Working independently/taking initiative |

**Table C-1.  (Continued).**

| If you are concerned with this force for change….. | | | |
|---|---|---|---|
| **Internal (to the Agency) Force for Change** | **Then consider the following:** | | |
| | **Knowledge Areas** | **Skills** | **Abilities** |
| Performance-oriented planning and program management | ▪ Community development/planning/ social networks<br>▪ Economics<br>▪ Environmental impacts<br>▪ Equity<br>▪ Governmental structure for transportation decision-making<br>▪ Modal operational and infrastructure characteristics<br>▪ Planning data inputs<br>▪ Sustainability | ▪ Collaboration with agency staff<br>▪ Cultural competency<br>▪ Data collection<br>▪ Data analysis<br>▪ Data visualization & presentation<br>▪ Performance metrics<br>▪ Project management<br>▪ Review of policies, plans, & regulations<br>▪ Understanding customer needs/ desires | ▪ Analytical & creative thinking<br>▪ Commitment to learning<br>▪ Multitasking<br>▪ Representing agency at meetings<br>▪ Strategic thinking<br>▪ Working within teams<br>▪ Working independently/taking initiative |
| Policy emphasis on integrated mobility, e.g., MaaS and Complete Streets | ▪ Alternative modes and multimodal plan development<br>▪ Equity<br>▪ Governmental structure for transportation decision-making<br>▪ Marketing<br>▪ Modal operational and infrastructure characteristics<br>▪ Technology<br>▪ Travel behavior | ▪ Collaboration with external partners and groups<br>▪ Cultural competency<br>▪ Meeting facilitation<br>▪ Negotiation<br>▪ Problem-solving<br>▪ Public engagement<br>▪ Understanding customer needs/desires | ▪ Analytical & creative thinking<br>▪ Attend meetings in off-hours<br>▪ Commitment to learning<br>▪ Multitasking<br>▪ Representing agency at meetings<br>▪ Strategic thinking<br>▪ Working within teams<br>▪ Working independently/taking initiative |

- *Senior Director:* These positions are part of an agency's senior executive leadership team, representing the agency at high-level meetings with executives from other agencies and political leaders, including responsibilities for the strategic planning for the entire agency. They are often responsible for functional areas in addition to planning.
- *Specialist*: Specialists exhibit specialized KSAs that relate to a targeted planning applications area. They often require educational degrees or certifications in such specialty areas.

If the specialist category is selected, the following dropdown menu offers options for different types of specialists.

| **Mode** | **Other, Check to enter other planning context** |
|---|---|
| • Active Transportation (Bike/Ped)<br>• Aviation<br>• Highway<br>• Multimodal<br>• Rail<br>• Transit<br>• Other | • Air Quality<br>• Aviation<br>• Cultural Resources<br>• Environmental Analysis<br>• Equity Analysis<br>• GIS<br>• Modeling<br>• Statistics<br>• Technology<br>• Other |

## Step 3: Select Planning Context

In this step, the user defines the organizational context or area of responsibility a position will experience or be responsible for. Five such contexts are provided with an option to add another. For example, if a state DOT is assessing a position for its planning unit, the user would select

"state agency," or likewise an MPO would select "MPO." Note that an agency could incorporate its own name for the planning context. For example, one could add "xxxx Department of <u>Transportation</u>" in the "Other" option.

- MPO
- State Agency
- City Agency
- County Agency
- Municipality
- Other

## Step 4: Identify Key Knowledge Areas

Ranking desired knowledge areas allows the planning manager to think about what is really desired for a staff capability or for a particular position. The user selects the desired knowledge areas and ranks each in terms of importance to the position. The rankings for each knowledge area (and those for skills and abilities in the next steps as well) are:

0 = Not important or relevant

1 = Somewhat important; desirable

2 = Very important

3 = Required

The Tool only uses the knowledge areas (or skills and abilities) ranked as a '2' or '3' when developing the overall talent profile. The inclusion of '0' or '1' permits the use of the Tool to compare different positions at the same classification level in a planning unit. For example, if the Tool user is assessing all General Planner positions in a staff it is likely that certain roles would require knowledge areas considered not important or irrelevant for other general planning positions. Note that once the assessment is done for the staff and for a particular position, the rankings will stay the same for subsequent uses of the Tool for that position unless the user changes them.

The knowledge areas available in the Tool are shown in Table C-2. A link is available to review the suggested knowledge areas for external and internal forces shown in Table C-1 that will likely affect the planning function over the next 5–10 years. Notice also that five 'other' options are available for the Tool user to add other desired knowledge areas (and skills and abilities in the next steps).

## Step 5: Identify Key Skills

Similar to Step 4, the user selects the desired skills and ranks each in terms of importance to the position. The skill areas included in the Tool are shown in Table C-3. As in Step 4, a link is available to review the suggested skills for external and internal forces that will likely affect the planning function over the next 5–10 years.

## Step 6: Identify Key Abilities

Similar to Step 5, this Step ranks desired abilities. The user selects the desired abilities and ranks each in terms of importance to the position. The abilities included in the Tool are shown in Table C-4. As in Steps 4 and 5, a link is available to review the suggested abilities for external and internal forces that will likely affect the planning function over the next 5–10 years.

**Table C-2.** **Candidate knowledge areas.**

| Basic Knowledge | Targeted Planning Knowledge | Targeted Planning Application Knowledge | Executive |
|---|---|---|---|
| • Principles of planning, plan development, and other typical products<br>• Alternative modes and multimodal plan development<br>• Community development/planning/social networks<br>• Cultural awareness<br>• Finance/funding<br>• Governmental structure for transportation decision-making<br>• Land-use/economic development<br>• Socioeconomic trends and behavioral relationships<br>• Travel behavior<br>• Other<br>• Other<br>• Other<br>• Other<br>• Other | • Economics<br>• Environmental impacts<br>• Equity<br>• Impacts and consequences of transportation projects and programs<br>• Marketing<br>• Modal operational and infrastructure characteristics<br>• Sustainability<br>• Other<br>• Other<br>• Other<br>• Other<br>• Other | • Automated/connected vehicle technologies<br>• Data collection/analysis technologies<br>• GIS<br>• Policy/program practices<br>• Planning data inputs<br>• Project development process<br>• Project programming<br>• Related regulations and legislation<br>• Safety<br>• Social determinants of health<br>• Other<br>• Other<br>• Other<br>• Other<br>• Other | • Legislation<br>• Policymaking<br>• Decision-making<br>• Risk management<br>• Budgeting<br>• Personnel management<br>• Strategic visioning<br>• Governmental relations<br>• Other<br>• Other<br>• Other<br>• Other<br>• Other |

**Table C-3.** **Candidate skills areas.**

| Administrative/Project Development | Targeted Planning Application | Interpersonal Skills |
|---|---|---|
| • Budget preparation and monitoring<br>• Collaboration with other agency staff<br>• Collaboration with external partners and groups<br>• Consultant administration<br>• Cultural competency<br>• Grant administration and compliance<br>• Preparation of reports, memoranda, and presentations<br>• Process development<br>• Quality assurance/quality control procedures<br>• Team-building<br>• Other<br>• Other<br>• Other<br>• Other<br>• Other | • Data collection<br>• Data analysis<br>• Data visualization & presentation<br>• Performance metrics<br>• Problem resolution<br>• Review of policies, plans, and regulations<br>• Synthesis of information sources<br>• Understanding customer needs/desires<br>• Other<br>• Other<br>• Other<br>• Other<br>• Other | • Direction setting<br>• Meeting facilitation<br>• Mentoring of team members<br>• Negotiation<br>• Public engagement<br>• Other<br>• Other<br>• Other<br>• Other<br>• Other |

**Table C-4.    Candidate abilities areas.**

| Administrative/Project Development | Targeted Planning Application | Interpersonal Skills |
|---|---|---|
| • Analytical & creative thinking | • Motivating staff | • Strategic thinking |
| • Willingness to attend meetings in off-work hours | • Multitasking | • Working within team/collaboration |
| • Commitment to learning | • Participating in staff hiring | • Working independently/taking initiative |
| • Effectively interacting with agency and other professional leaders/managers | • Preparing and monitoring agency unit budgets | • Other |
| • Effectively interacting with elected officials | • Public speaking and presentations | • Other |
| • Listening | • Punctual and timely in response | • Other |
| • Other | • Representing agency at meetings | • Other |
| • Other | • Satisfying agency and Human Resources reporting requirements | • Other |
| • Other | • Other | |
| • Other | • Other | |
| • Other | • Other | |
| | • Other | |
| | • Other | |

## Step 7: Create Job Description

Three additional types of information can be added to create a job description (only available in the agency Tool).

### Education

- Community/technical college
- Associate's degree
- Undergraduate degree
- Graduate degree
- Professional certification
- Other

### Professional Certifications

- AICP
- CP
- EIT
- PE
- PTP
- Other
- None

### Experience

- < 5 years
- 5–7 Years
- 8–10 Years
- 11–15 years
- >15 Years

## Example of a Talent Profile and Related Job Description

As an example, assume a planning manager is developing a General Planner talent profile for an entry-level position. She selected the following options in the Tool:

*Position:* General Planner
*Context:* State agency
*Knowledge areas rated '3' or '2':*

| Required Knowledge (rated 3) | Desired Knowledge (rated 2) |
|---|---|
| • Modal operational and infrastructure characteristics<br>• Principles of planning, plan development, and other typical products<br>• Alternative modes and multimodal plan development<br>• Impacts and consequences of transportation projects and programs<br>• Data collection/analysis technologies<br>• Planning data inputs | • Socioeconomic trends and behavioral relationships<br>• Travel behavior<br>• Equity<br>• Sustainability<br>• GIS<br>• Project development process |

*Skills areas rated '3' or '2':*

| Required Skills (rated 3) | Desired Skills (rated 2) |
|---|---|
| • Collaboration with other agency staff<br>• Cultural competency<br>• Preparation of reports, memoranda, and presentations<br>• Data collection<br>• Data analysis<br>• Data visualization & presentation<br>• Synthesis of information sources<br>• Public engagement | • Performance metrics<br>• Review of policies, plans, and regulations<br>• Understanding customer needs/desires |

*Abilities areas rated '3' or '2':*

| Required Abilities (rated 3) | Desired Abilities (rated 2) |
|---|---|
| • Analytical & creative thinking<br>• Commitment to learning<br>• Listening<br>• Punctual and timely in response<br>• Working within team/collaboration<br>• Working independently/taking initiative | • Effectively interacting with agency and other professional leaders/managers<br>• Public speaking and presentations<br>• Multitasking |

The resulting talent profile from the Tool is shown in Figure C-2.

Assume that the agency wants to turn the talent profile into a position description. One does this by clicking on a 'Create job description' tab. For this particular position, a graduate degree and less than five years' experience are required, and there is no certification requirement. The job description is then produced as shown in Figure C-3.

The process for creating a talent profile and corresponding job description described above included the steps for an agency/planning manager, or as was referred to in Figure 1, the part of the process labeled 'Agency starts here.' The Employee Tool has also been designed to allow existing and prospective employees to have their own talent profile template that can be used as part of a career advancement strategy (e.g., identifying training opportunities) or for screening candidates

## Talent Profile:

Position Type:          General Planner
Planning Context:       State Agency

Start Over | Create Job Description | Print

### Knowledge

**Required Knowledge**
- Modal operational and infrastructure characteristics
- Principles of planning, plan development, and other typical products
- Alternative modes and multimodal plan development
- Impacts and consequences of transportation projects and programs
- Data collection/analysis techniques
- Planning data inputs

**Desired Knowledge**
- Socioeconomic trends and behavioral relationships
- Travel behavior
- Equity
- Sustainability
- Geographic information systems (GIS)
- Project development process

### Skills

**Required Skills**
- Collaboration with other agency staff
- Cultural competency
- Preparation of reports, memoranda, and presentations
- Data collection
- Data analysis
- Data visualization
- Synthesis of information sources
- Public engagement

**Desired Skills**
- Performance metrics
- Review of policies, plans, and regulations
- Understanding customer needs/desires

### Abilities

**Required Abilities**
- Analytical & creative thinking
- Commitment to learning
- Listening
- Punctual and timely in response
- Working within team/collaboration
- Working independently/taking initiative

**Desired Abilities**
- Effectively interacting with agency and other professional leaders/managers
- Public speaking and presentations
- Multitasking

*Figure C-2.    Example general planner talent profile.*

for a position. The employee template simply uses the KSA screens from the Employer Tool to allow the employees to self-identify the KSAs they consider as part of their competencies.

## Use of the Tool for Recruitment, Professional Development, and Retention

The Tool can be used for three interrelated purposes. First, planning managers can use the Tool to assess the desired KSAs of the planning staff as a whole. This is done by using Steps 1 and 2. By undertaking this assessment, a manager can identify gaps in current position capabilities in the planning unit (an example is provided below). Second, planning managers can assess individual positions in terms of the unit-wide assessment by comparing talent profiles prepared by current employees to the unit-wide assessment. By doing so, managers can determine any gaps in position capabilities, leading to strategies for filling these gaps. Third, the Tool can be used in the hiring process by comparing prospective employee talent profiles with those defined by the planning manager for the position. This comparison should be considered a screening process; there will still be a need to interview prospective employees.

## Job Posting:

Position Type:              General Planner
Planning Context:           State Agency
Professional Certification: None
Experience:                 < 5 years

**Start Over**     **Print**

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### Knowledge

**Required Knowledge**
- Modal operational and infrastructure characteristics
- Principles of planning, plan development, and other typical products
- Alternative modes and multimodal plan development
- Impacts and consequences of transportation projects and programs
- Data collection/analysis techniques
- Planning data inputs

**Desired Knowledge**
- Socioeconomic trends and behavioral relationships
- Travel behavior
- Equity
- Sustainability
- Geographic information systems (GIS)
- Project development process

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### Skills

**Required Skills**
- Collaboration with other agency staff
- Cultural competency
- Preparation of reports, memoranda, and presentations
- Data collection
- Data analysis
- Data visualization
- Synthesis of information sources
- Public engagement

**Desired Skills**
- Performance metrics
- Review of policies, plans, and regulations
- Understanding customer needs/desires

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### Abilities

**Required Abilities**
- Analytical & creative thinking
- Commitment to learning
- Listening
- Punctual and timely in response
- Working within team/collaboration
- Working independently/taking initiative

**Desired Abilities**
- Effectively interacting with agency and other professional leaders/managers
- Public speaking and presentations
- Multitasking

*Figure C-3.   Example general planner position description.*

### Conducting a Unit-wide Capability Assessment

The first use for the Tool is as a unit-wide assessment of desired staff capabilities as compared to what currently exists. This is done by choosing any position type in the Tool and identifying desired KSAs for the entire planning unit (for the unit-wide assessment it makes no difference which position type is used in that the KSA options are the same for every position type). Employees are also asked to fill out a talent profile. The planning manager can compare the unit-level assessment to the cumulative KSAs of the existing employees as indicated in their talent profiles. Gaps in desired KSAs can be identified along with strategies for addressing them as part of the effort to enhance planning unit capabilities.

*Example:* A planning manager wants to assess her planning unit's capabilities and competencies given both current and likely future planning needs (the external and internal influences and suggested KSAs found in Table C-1). She selected the General Planner position in the Tool and

filled out the KSAs that she felt were necessary in order for the planning unit to be effective given policy and planning concerns. The planning staff in the unit filled out talent profiles indicating which KSAs best described their capabilities. The planning manager can now compare the unit-level competencies with the sum of those currently held by the staff.

This comparison is shown in Figure C-4. The KSAs indicated in the left side of this figure are those desired by the planning manager for the planning unit. The KSAs on the right are all of those the current planning staff have identified as being part of their capabilities. As seen in this example, the knowledge areas missing from the planning unit capabilities include automated/connected vehicle technologies, equity, policy/program practices, risk management, and sustainability. The missing skill is collaboration with external partners, and the missing ability is cultural competency.

The planning manager can then decide which strategy she will pursue to add such capabilities in her planning unit. Three options might include training current staff, hire new staff members, or hiring a consultant to act as an extension of her staff in these areas.

## Comparing Desired Position KSAs with Those of Current Employees

The second use of the Tool is to assess the KSAs for individual positions by comparing the desired KSAs as determined by the planning manager with those identified by the employee. Note that the primary purpose of doing this is to identify training and professional development needs. Over the long term of an employee's tenure in the planning unit, the assessment of career advancement based on an employee's talent profile can serve as a professional development plan that leads to higher levels of responsibility, rewards, and recognition.

*Example:* The planning manager is assessing one of the positions in her planning unit. It is a planning supervisory position that the manager considers a critical part of her strategy for making the agency a leader in addressing many of the external forces affecting planning in the 21st century. Figure C-5 shows the process for conducting this assessment. The desired KSAs missing from this current position include automated/connected vehicle technologies, cultural competency, data collection/analysis techniques, equity, land-use/economic development, risk management, and sustainability.

A primary strategy to address the missing desired KSAs (assuming the manager does not want to hire a new person) is to develop a training/professional development plan for the person currently in this position. The seven gaps in the desired KSAs for this position as shown in Figure 5 could be the focus of such a multi-year training program.

As the planning manager conducts an assessment for the positions in her unit, she might notice a trend with respect to desired KSAs that are missing from the staff as a whole. For example, cultural competency, which was desired by the manager for all staff members, could be lacking from the majority of the employee-defined talent profiles. This would suggest the need for a unit-wide training offering on this topic.

## Hiring a New Employee

The third use of the Tool is in the hiring of a new employee. This application of the Tool is similar to the second application described in the previous section, except in this case the comparison is between the desired talent profile as defined by the planning manager and the applicants' talent profiles that have made it past the initial HR screening.

The planning manager could establish threshold scores for the position to help determine a candidate's suitability for further consideration. For example, the manager might choose a

## Desired KSAs for this Position

**Knowledge Areas**
Alternative modes and multimodal plan development
**Automated/Connected vehicle technologies**
Community development/planning/social networks
**Equity**
Impacts and consequences of transportation projects and programs
**Policy/Program practices**
Principles of planning, plan development, and other typical products
**Risk management**
Socio-economic trends and behavioral relationships
**Sustainability**
Travel behavior

**Skills**
Collaboration with other agency staff
**Collaboration with external partners and groups**
**Cultural competency**
Consultant administration
Problem-solving
Synthesis of information sources

**Abilities**
Analytical & creative thinking
Effectively interacting with elected officials
Public speaking and presentations

## KSAs Identified by Staff Holding this Position

**Knowledge Areas**
Alternative modes and multimodal plan development
Community development/planning/social networks
Impacts and consequences of transportation projects and programs
Modal operational and infrastructure characteristics
Principles of planning, plan development, and other typical products
Socio-economic trends and behavioral relationships
Travel behavior

**Skills**
Collaboration with other agency staff
Consultant administration
Problem-solving
Synthesis of information sources

**Abilities**
Analytical & creative thinking
Effectively interacting with elected officials
Public speaking and presentations

## Missing KSAs

Automated/Connected vehicle technologies
Collaboration with external partners and groups
**Cultural competency**
**Equity**
**Policy/Program practices**
**Risk management**
**Sustainability**

*Figure C-4.   Comparison of planning unit knowledge areas and those of current staff.*

## Desired KSAs for this Position

**Knowledge Areas**
Alternative modes and multimodal plan development
**Automated/Connected vehicle technologies**
Community development/planning/social networks
**Data collection/Analysis techniques**
**Equity**
Governmental structure for transportation decision making
Impacts and consequences of transportation projects and programs
**Land use/Economic development**
Modal operational and infrastructure characteristics
Policy/Program practices
Principles of planning, plan development, and other typical products
**Risk management**
Socio-economic trends and behavioral relationships
**Sustainability**
Travel behavior

**Skills**
Collaboration with other agency staff
Collaboration with external partners and groups
**Cultural competency**
Consultant administration
Problem-solving

**Abilities**
Analytical & creative thinking
Effectively interacting with elected officials
Public speaking and presentations

## KSAs Identified by Staff Holding this Position

**Knowledge Areas**
Alternative modes and multimodal plan development
Community development/planning/social networks
Governmental structure for transportation decision making
Impacts and consequences of transportation projects and programs
Modal operational and infrastructure characteristics
Policy/Program practices
Principles of planning, plan development, and other typical products
Socio-economic trends and behavioral relationships
Travel behavior

**Skills**
Collaboration with other agency staff
Collaboration with external partners and groups
Consultant administration
Problem-solving

**Abilities**
Analytical & creative thinking
Effectively interacting with elected officials
Public speaking and presentations

## Missing KSAs

Automated/Connected vehicle technologies
Cultural competency
Data collection/Analysis techniques
Equity
Land use/Economic development
Risk management
Sustainability

*Figure C-5.   Assessment of Individual Position KSAs.*

*Figure C-6.  Use of tool for hiring.*

75 percent match with the desired knowledge areas as the minimum threshold for candidate consideration. Note that entry-level planners are not likely to have highly developed skills or abilities that are desired for this position, so the initial assessment might focus just on knowledge areas.

Figure C-6 shows the use of the Tool in the hiring process.

## Assessing Institutional Factors in Developing and Administering a Talent Management Process

The Tool also provides an assessment capability for looking at more fundamental issues with an agency's talent management process. There are often systemic constraints or institution-specific standard operating procedures that could present challenges to an agency's talent management process. For example, an agency might desire to hire a more culturally diverse staff, but its recruitment efforts might not have targeted schools, programs, and communities that would yield a diverse group of applicants. Or its recruiting team might not be culturally diverse, thus presenting the wrong image for attracting a diverse set of applicants. Another example could be an agency experiencing a large turnover in staff after only a few years of employment. Exit interviews suggest this turnover is linked to a disconnect between the mindset of veteran employees and newer employees and, as a result, newer employees feel less committed to the position.

Figure C-7 shows how this assessment process is structured. The assessment is organized around the four phases of the talent management process identified in this research: the overall talent management strategy, recruitment, professional development, and retention. Each of these phases is further defined with specific actions or factors. The assessment presents questions for each factor, and how these questions are answered then leads to the identification of potential improvement strategies.

*Figure C-7.    Assessment process for examining an agency's talent management process.*

The steps in this assessment process include the following:

## Step 1: Identify Key Factors for Critical Areas of the Talent Management Process

The key factors for the four major functional areas associated with a talent management process are indicated in Table C-5. Those using this assessment approach should select the factors that are most important to their talent management process.

## Step 2: For those Factors Selected, Consider Strategies to Improve this Phase of Talent Management Process

For those factors selected from Table C-5, identify strategies/actions that can be considered to enhance the talent management process. Table C-6 shows the types of strategies that were identified in this research.

*Example*: Assume that your transportation agency has been having difficulty attracted top quality transportation planners for entry-level positions, while at the same time facing early resignations of mid-level managers who have been attracted to other job opportunities outside of the transportation field. The transportation planning manager started the assessment process by checking those factors deemed most important as shown in Table C-7.

The selected factors were linked to the potential strategies identified in Table C-6, which resulted in the possible actions shown in Table C-8.

This assessment would have to reflect any civil service and union requirements that could influence the type of actions that ultimately result from the assessment.

An overall strategy for implementing these recommendations would need to be developed, including assigning staff responsibilities, developing an overall schedule including target benchmarks, and identifying performance metrics for monitoring progress. Table C-8 suggests there are

**Table C-5.   Factors defining talent management process.**

| Phase | Factors | Check if Important |
|---|---|---|
| **Talent Management Strategy** | Does your agency have culturally diverse leadership? If not, does it have a measurable plan for achieving this? | |
| | Have you Identified emerging knowledge area needs? | |
| | Have you identified staff limitations in determining staff expertise? | |
| | Have you identified levels of needed talent access/availability given expected needs? | |
| | Have you identified or examined the credentials required for different positions? | |
| | Have you identified S&A needed? | |
| | Have you incorporated cultural awareness factors into KSAs? | |
| | Has the agency implement DEI policies? | |
| | Does your talent management process recognize that new employees often do not view the agency as a life-long employer? | |
| | Does your talent management process accommodate desires/ characteristics of current and emerging employees? | |
| **Recruitment** | Do planning staff have input into the recruitment process? | |
| | Does your agency have a culturally diverse recruiting team and culturally diverse marketing materials? | |
| | Has your agency made efforts to improve visibility of employment opportunities? | |
| | Has your agency made efforts to expand the recruitment pool? | |
| | Has your agency clarified or defined agency mission focus to appeal to potential recruits? | |
| | Does your agency have a specific recruiting strategy for attracting minority applicants (e.g., minority-serving institutions and organizations)? | |
| | Does your agency conduct recruiting efforts at smaller schools (or just large, flagship universities)? | |
| | Does your agency offer reimbursement of travel expenses for applicants coming from underserved areas, rural areas (if an urban agency)? | |
| | Has your agency reexamined marketing material to improve clarity of career opportunities offered? | |
| | Has your agency developed opportunities for flexible and continual relationships with employee "source" organizations such as universities? | |
| | To the extent feasible under civil service and union requirements, has your agency examined ways to improve and make relevant/attractive the conditions of employment? | |
| | Has your agency identified and described benefits package tailored to recruits? | |
| | Has the talent management strategy implemented ways to improve the attractiveness of career opportunities to diverse candidates? | |
| | Has your agency developed effective and recruit-friendly onboarding (initial introduction of the position and explanations of roles)? | |
| **Professional Development** | Does your agency require that Transportation Directors and unit leaders be Professional Engineers? | |
| | Has your agency assessed the effectiveness of its training programs in light of emerging and likely predominant concerns over the next 10 years? | |
| | Does your agency support professional development opportunities for staff? | |
| | Does your agency offer reimbursement for AICP  or other training, testing and maintenance? | |
| | Does your agency offer reimbursement for planning conferences, workshops and other professional development opportunities? | |
| | Has your agency defined and explained career paths for transportation planners? | |
| | Has your agency developed and implemented a career management process that provides feedback to staff and pinpoints key career points in an employee's career? | |
| | Do planning supervisors provide employee guidance and feedback in real time? | |
| | Are performance measurement processes specific to transportation planning? | |
| | Does your agency utilize performance measurement for employee progress? | |
| **Retention** | Does your agency have a competitive compensation structure for planning positions? | |
| | Does your agency have a strategy for recognizing contributions of planning staff to the agency and to the community more broadly? | |
| | Does your agency have diversity in leadership? | |
| | Does your agency have a culturally diverse staff? | |
| | Does your agency have a mentoring program for planners? Is there a culturally diverse group of mentors? | |
| | Does your agency have a recurring process for improving the work context/environment? | |
| | Is your agency involved in the community? Are employees given time to volunteer in the community? | |

**Table C-6.    Strategies to enhance the talent management process.**

| Phase | Process Actions | Strategies to Consider |
|---|---|---|
| **Talent Management Strategy** | Enable diverse leadership | • Provide leadership training and professional development opportunities for all employees but with diversity a major consideration |
| | Identify emerging knowledge area needs | • Consider emerging issues (perhaps as defined in the tool) as guide to identifying desired KSAs |
| | Recognize staff number limitations in determining staff expertise | • Seek multidisciplinary capabilities (reducing staffing needs), anticipate changes in emphasis |
| | Identify level of needed talent access/availability | • Define "core" talent needed in-house vs use of external (consultant) to maintain talent availability flexibility<br>• Assess availability/competitiveness of talent (can agency get access to specialized talent via consultant). Note: "management of consultants" is a special skill needed.<br>• Consider part-time staffing for specialists |
| | Identify credentials required | • Emphasize issue-specific relevant experience<br>• Establish when some certifications are really needed. The requirement of a professional certification can be a barrier to some qualified planners because of cost or other factors. Consider  supporting obtaining (and maintaining the credential) if it is important to the agency.<br>• Eliminate certain irrelevant requirements that establish ceiling on career opportunities (i.e., PEs required for advancement) |
| | Incorporate cultural awareness into all aspects of the talent management process | • Consider special skills: client communications, cultural competency<br>• Recognize explicitly the need for experienced/relevant senior managers (may not need precise knowledge background) |
| | Incorporate cultural awareness into all aspects of the talent management process | • Recognize need to develop talent that reflects culture related to specific planning issues/clients. This needs to be a part of onboarding and a continuous part of training and development |
| | Implement DEI policies | • Implement a stated policy with ongoing training and measurable goals and objectives that emphasize diversity and inclusiveness at ALL levels.<br>• Accommodate background differences in day-to-day work environment<br>• Develop staffing profile that reflects community |
| | Recognize that recruitment is not often for a life-long career in the agency | • Various generational characteristics differ from traditional values, e.g., turnover is "normal" for millennial and Gen Z generations. Talent career management might need to be adjusted appropriately |
| | Accommodate desires/ characteristics of current and emerging employees | • Recognize staff orientation toward technology, flexibility, social commitment, while at the same time recognizing the need for training and professional development opportunities for senior staff |
| **Recruitment** | Insure planning input to overall recruitment process | • Involve planning champion in recruitment process…involving younger staff could also be appealing to staff candidates |
| | Improve visibility of opportunities | • Consider millennials and Gen Z practices<br>• Utilize social media<br>• Utilize job boards<br>• Partner with Historically Black Colleges and Universities (HBCUs), HACU, and Tribal Colleges and Universities (TCUs)<br>• Partner with minority-serving organizations<br>• Events in the community such as sponsored events – festivals, races, community fairs, charity events. Let potential employees see the agency other than when explicitly recruiting for a job.<br>• Better public information about projects, especially those that would appeal to millennials and Gen Z, e.g., Complete streets, public transportation, integrated mobility, etc. |
| | Expand recruitment pool | • Reach out to other entities: industry, military, academia<br>• Consider part-time retirees for access to experience |
| | Clarify mission focus to appeal to recruit pool | • Emphasize social relevance; changing issue orientation<br>• Clarify mission to respond to recruit pool values/interests<br>• Show agency addressing social issues |
| | Improve clarity of career opportunities offered | • Develop issue-related job descriptions emphasizing flexibility<br>• Clarify career ladder, both within planning and within agency (outside planning)<br>• Provide rotational assignments |

**Table C-6. (Continued).**

| Phase | Process Actions | Strategies to Consider |
|---|---|---|
| | Develop opportunities for flexible and continual relationships with employee "source" organizations | • Establish internships and offer potential career track<br>• Utilize temporary hires<br>• Build on relationships with staff from supporting university research entities |
| | Improve and make relevant/attractive conditions of employment | • Recognize priorities/values of staff including millennials/Gen Z<br>• Improve home-work life balance<br>• Expand opportunities to working from home, virtual comms<br>• Increase working hours flexibility<br>• Provide latest technology for remote working |
| | Identify benefits package tailored to recruits | • Provide support for student loan payoffs, maternity/paternity leave Medical insurance<br>• Provide tuition reimbursement<br>• Financial support for professional development and credentials |
| | Improve attractiveness of career opportunities to diverse candidates | • Insure diversity in recruitment staff and interview panel |
| | Develop effective and recruit-friendly onboarding | • Organize introduction to agency, unit, and programs<br>• Incorporate DEI training into initial professional exposure |
| **Professional Development** | Provide relevant training | • Provide guidance to knowledge area-specific external sources and granting of time and funds to support<br>• Utilize cross-training to improve professional competency and staffing flexibility<br>• Support external training<br>• Establish mentoring program with peer agencies |
| | Support professional development | • Support external professional participation/interaction (committees, associations)<br>• Provide financial support for professional association membership<br>• Provide time-off for academic advancement |
| | Provide expanded career tracks | • Orient training explicitly or improve planners' opportunities to rise in the agency to non-planning positions – such as rotation to other units<br>• Remove credential constraints in career tracks (vertical and diagonal)<br>• Conduct explicit succession planning – (considering civil service constraints)<br>• Provide rotation opportunities to other business units to improve potential upward mobility<br>• Develop opportunities for staff sharing as between DOTs, MPOs, private sector |
| | Develop career management process | • Ensure managers are knowledgeable and transparent about employee development process<br>• Develop specific individual development plans |
| | Provide guidance in real time | • Provide staff member mentorship<br>• Provide staff member sponsorship<br>• Provide regular coaching<br>• Insure regular feedback |
| | Promise/utilize performance measurement | • Develop employee-specific explicit goals and tracking<br>• Provide counseling re performance<br>• Measure and report progress<br>• Hold managers responsible for staff performance management |
| **Retention** | Develop competitive compensation | • Conduct industry-related compensation studies<br>• Emphasize unique opportunities for leadership, contribution, community involvement |
| | Recognize contributions | • Establish individual achievement awards<br>• Recognition for special achievements immediately on ad hoc basis<br>• Institutionalize team/agency milestone (e.g., project completion) recognition/achievement awards |
| | Improve work context/environment | • Accommodate flexible work habits<br>• Recognize post-Covid-19 habits/values change from pre-Covid-19<br>• Provide flexibility for working at home<br>• Establish virtual team/management mechanisms<br>• Reorganize office space for use needs in new virtual work context |

**Table C-7.    Illustrative selection of important talent management factors.**

| Phase | Factors | Check if Important |
|---|---|---|
| **Talent Management Strategy** | Does your agency have culturally diverse leadership? If not, does it have a measurable plan for achieving this? | |
| | Have you identified emerging knowledge area needs? | X |
| | Have you identified staff limitations in determining staff expertise? | X |
| | Have you identified levels of needed talent access/availability given expected needs? | X |
| | Have you identified or examined the credentials required for different positions? | X |
| | Have you identified S&A needed? | X |
| | Have you incorporated cultural awareness factors into KSAs? | X |
| | Has the agency implement DEI policies? | X |
| | Does your talent management process recognize that new employees often do not view the agency as a life-long employer? | X |
| | Does your talent management process accommodate desires/characteristics of current and emerging employees? | |
| **Recruitment** | Do planning staff have input into the recruitment process? | |
| | Does your agency have a culturally diverse recruiting team and culturally diverse marketing materials? | |
| | Has your agency made efforts to improve visibility of employment opportunities? | X |
| | Has your agency made efforts to expand the recruitment pool? | X |
| | Has your agency clarified or defined agency mission focus to appeal to potential recruits? | X |
| | Does your agency have a specific recruiting strategy for attracting minority applicants (e.g., minority-serving institutions and organizations)? | |
| | Does your agency conduct recruiting efforts at smaller schools (or just large, flagship universities)? | |
| | Does your agency offer reimbursement of travel expenses for applicants coming from underserved areas, rural areas (if an urban agency)? | |
| | Has your agency reexamined marketing material to improve clarity of career opportunities offered? | X |
| | Has your agency developed opportunities for flexible and continual relationships with employee "source" organizations such as universities? | |
| | To the extent feasible under civil service and union requirements, has your agency examined ways to improve and make relevant/attractive the conditions of employment? | X |
| | Has your agency identified and described benefits package tailored to recruits? | X |
| | Has the talent management strategy implemented ways to improve the attractiveness of career opportunities to diverse candidates? | X |
| | Has your agency developed effective and recruit-friendly onboarding (initial introduction of the position and explanations of roles)? | |
| **Professional Development** | Does your agency require that Transportation Directors and unit leaders be Professional Engineers? | |
| | Has your agency assessed the effectiveness of its training programs in light of emerging and likely predominant concerns over the next 10 years? | |
| | Does your agency support professional development opportunities for staff? | |
| | Does your agency offer reimbursement for AICP or other training, testing and maintenance? | |
| | Does your agency offer reimbursement for planning conferences, workshops and other professional development opportunities? | |
| | Has your agency defined and explained career paths for transportation planners? | X |
| | Has your agency developed and implemented a career management process that provides feedback to staff and pinpoints key career points in an employee's career? | |
| | Do planning supervisors provide employee guidance and feedback in real time? | |
| | Are performance measurement processes specific to transportation planning? | |
| | Does your agency utilize performance measurement for employee progress? | |
| **Retention** | Does your agency have a competitive compensation structure for planning positions? | X |
| | Does your agency have a strategy for recognizing contributions of planning staff to the agency and to the community more broadly? | X |
| | Does your agency have diversity in leadership? | |
| | Does your agency have a culturally diverse staff? | |
| | Does your agency have a mentoring program for planners? Is there a culturally diverse group of mentors? | |
| | Does your agency have a recurring process for improving the work context/environment? | X |
| | Is your agency involved in the community? Are employees given time to volunteer in the community? | |

**Table C-8. Illustrative actions based on assessment.**

| PHASE | PROCESS ACTIONS | Strategies to Consider |
|---|---|---|
| **Talent Management Strategy** | Identify emerging knowledge area needs | • Consider emerging issues (perhaps as defined in the Tool) as guide to identifying desired KSAs |
| | Recognize staff limitations in determining staff expertise | • Seek multidisciplinary capabilities (reducing staffing needs), anticipate changes in emphasis |
| | Identify level of needed talent access/availability | • Define "core" talent needed in-house vs use of external (consultant) to maintain talent availability flexibility<br>• Assess availability/competitiveness of talent (can agency get access to specialized talent via consultant). Note: "management of consultants" is a special skill needed.<br>• Consider part-time staffing for specialists |
| | Identify S&A emphasis | • Consider special skills: client communications, cultural competency<br>• Recognize explicitly the need for experienced/relevant senior managers (may not need precise knowledge background) |
| | Incorporate cultural awareness into KSAs | • Recognize need to develop talent that reflects culture related to specific planning issues/clients. This needs to be a part of onboarding and a continuous part of training and development. |
| | Implement DEI policies | • Implement a stated policy with ongoing training and measurable goals and objectives that emphasize diversity and inclusiveness at ALL levels<br>• Accommodate background differences in day-to-day work environment<br>• Develop staffing profile that reflects community |
| | Recognize that recruitment is not for life career | • Recognize position may not be for career life – but for various roles in sector (millennial work orientation) and turnover is "normal" (adjust career management appropriately) |
| **Recruitment** | Improve visibility of opportunities | • Consider millennials and Gen Z communication and information exchange practices<br>• Utilize social media<br>• Utilize job boards<br>• Partner with HBCUs, HACU, and Tribal Colleges and Universities (TCUs)<br>• Partner with minority-serving organizations<br>• Events in the community such as sponsored events – festivals, races, community fairs, charity events. Let potential employees see the agency other than when explicitly recruiting for a job.<br>• Better public information about projects, especially those that would appeal to millennials and Gen Z, e.g., Complete Streets, public transportation, integrated mobility, etc. |
| | Expand recruitment pool | • Reach out to other entities, e.g., industry, military, and academia<br>• Consider part-time retirees for access to experience |
| | Clarify mission focus to appeal to recruit pool | • Emphasize social relevance; changing issue orientation<br>• Clarify mission to respond to recruit pool values/interests<br>• Portray agency in dealing with societal issues |
| | Improve clarity of career opportunities offered | • Develop issue-related job descriptions emphasizing flexibility<br>• Clarify career ladder, both within planning and within agency (outside planning)<br>• Provide rotational assignments |
| | Improve and make relevant/attractive conditions of employment | • Recognize priorities/values of staff including millennials/Gen Z<br>• Improve home-work life balance<br>• Expand opportunities to working from home, virtual comms<br>• Increase working hours flexibility<br>• Provide latest technology for remote working |
| | Identify benefits package tailored to recruits | • Provide support for student loan payoffs, maternity/paternity leave. Medical insurance<br>• Provide tuition reimbursement<br>• Financial support for professional development and credentials |
| | Improve attractiveness of career opportunities to diverse candidates | • Insure diversity in recruitment staff and interview panel |

**Table C-8.    (Continued).**

| PHASE | PROCESS ACTIONS | Strategies to Consider |
|---|---|---|
| Professional Development | Provide expanded career tracks | • Orient training explicitly or improve planners' opportunities to rise in the agency to non-planning positions, such as rotation to other units<br>• Remove credential constraints in career tracks (vertical and diagonal)<br>• Conduct explicit succession planning (considering civil service constraints)<br>• Provide rotation opportunities to other business units to improve potential upward mobility<br>• Develop opportunities for staff sharing as between DOTs, MPOs, private sector |
| Retention | Develop competitive compensation | • Conduct industry-related compensation studies<br>• Emphasize unique opportunities for leadership, contribution, community involvement |
| Retention | Recognize contributions | • Establish individual achievement awards<br>• Recognition for special achievements immediately on ad hoc basis<br>• Institutionalize team/agency milestone (e.g., project completion) recognition/achievement awards |
| Retention | Improve work context/environment | • Accommodate flexible work habits<br>• Recognize post-Covid-19 habits/values could change from pre-Covid-19<br>• Provide flexibility for working at home<br>• Establish virtual team/management mechanisms<br>• Reorganize office space for use needs in new virtual work context |

many possible actions that can be considered as part of a strategy. The planning manager, in coordination with the HR department, could identify some actions that would address short-term needs, as well as identify some taken in the mid-term. For example, if the manager's major concern is retention of mid-level supervisors, she could emphasize the following targeted set of actions (assuming that there is no flexibility in adjusting salary levels).

### Short-term

• Emphasize unique opportunities for leadership, contribution, and community involvement
• Establish individual achievement awards
• Recognize special achievements immediately on ad hoc basis
• Accommodate flexible work habits (in terms of time at work)
• Provide flexibility for working at home
• Establish virtual team/management mechanisms
• Reorganize office space for use needs in new virtual work contexts
• Conduct explicit succession planning (considering civil service constraints)

### Mid-term

• Conduct industry-related compensation studies (to lay the groundwork for compensation-based recognition)
• Conduct explicit succession planning (considering civil service constraints)
• Orient training explicitly or improve planners' opportunities to rise in the agency to non-planning positions, such as rotation to other units

These actions could have an important impact in terms of addressing the challenge of losing mid-level supervisors. It places the planning manager in a proactive position of establishing a strategy for the future capability of the planning unit.