

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

Why Worry About the Planning Capability of Your Agency?

We live in a world that changes rapidly, seemingly in rather dramatic ways every year. New technologies, new applications of old technologies, changing concepts of the office and of the home-work balance, increasing numbers of transportation system disruptions from natural and human-caused sources, and a restructuring of traditional business and trade patterns each have a significant impact on how transportation systems are provided, operated, and used. From the very earliest transportation agencies, the need to anticipate and prepare for future mobility needs was at the very core of the planning function.

Today, attracting qualified, technically competent, culturally sensitive, and motivated planning staff is facing notable challenges. Other agencies and private firms can often compete with public agencies in ways (such as higher salaries) that are not available to public agencies. Many transportation agencies report that they often lose mid-level supervisors and managers, perhaps the most valuable staff members with respect to experience, to such competition because their agency does not have a career path or incentives to rise above this level. There is also a sense among many that the staff in many transportation planning units do not reflect the diversity of the communities they serve.

Research Products

The purpose of this research was to examine a different way of looking at the planning talent in a transportation agency. In particular, the research examined the use of talent profiles in an overall talent management process to overcome some of the personnel challenges transportation agencies are facing.

Of note, different generations of transportation planners exhibit different values and desires with respect to the work environment. Gen Z planners are very different in terms of attitudes, skills, and values compared to baby boomers (Figure S-1). And yet many of today's transportation agency human resource structures were designed and are still oriented to a typical baby boomer employee.

Some of the key findings of this report include (Figure S-2):

- **Bring on the Challenge.** Working on problems of interest and of societal importance was the most noted factor by transportation agency staff respondents in attracting a transportation planner to a planning position. Job location, working with first-rate professionals, and salary/benefits were rated as second motivators.

- The most racially diverse entry-level employee pool of all generations
- The most educated entry-level employee pool of all generations
- Technology savvy
- Often seeking more personal interaction especially with authority
- More socially, culturally, and environmentally aware and concerned
- Prioritizing job security as the most important factor in job satisfaction
- Expecting opportunities for recognition and professional/career growth
- More comfortable with and often expecting flexible work arrangements

Figure S-1. Characteristics of Gen Z workers (those born between mid-1990s and 2010).

- **Work-life Balance.** Young planners placed great importance on a balance between work and home life. They identified a flexible work schedule to be the most important strategy an organization can adopt to retain employees. Tied for second were having defined career paths and providing financial support in pursuit of professional development opportunities.
- **Influences Defining the Future (for Planning).** When asked to identify the most impactful changes or driving forces for defining what transportation planners will need to know five years in the future, transportation agency staff identified the top three driving forces: (1) changes in transportation technologies, (2) increasing concern for changing environmental conditions and impacts including climate change, and (3) increasing public/policy focus on transportation's linkage to livability and community quality of life.
- **What this Means for Desired Abilities.** Interpersonal communication abilities and an ability to work in teams were considered by both planners and agency managers as the most important abilities for success in today's and in the future work environment. This was especially the case for conveying technical information to the general public (e.g., public meetings).
- **What this Means for Desired Skills.** State transportation agency managers chose the following top four skills that were considered important for successful planning in the future: (1) planning for transportation system resilience (adapting to new environmental conditions as well as mitigating impacts), (2) planning for new transportation technologies, (3) including diverse groups in the planning process, and (4) public engagement.



Figure S-2. Most important planning skills and topics in the coming 5 years according to state DOT planners.

- **Competing for Staff with Others.** Agency managers identified the following top three challenges in attracting and motivating transportation planners: (1) competition from other organizations, (2) poor salary, and (3) inadequate career paths for transportation planners in the organization.

The report presents a talent management process that consists of actions an agency can take to recruit, professionally develop, and retain staff (see Figure S-3). A downloadable tool is available that can be used to assess the planning unit's overall capabilities with respect to desired knowledge, skills, and abilities (KSAs) for both the staff in general as well for individual staff positions. The tool was based on the inputs from the various groups that participated the research.

The tool can be used to define a training/professional development plan for individual employees, and help in the screening of potential employees for joining the planning unit. The primary product of the tool is a talent profile that emphasizes the KSAs desired or required for each position in the planning unit.

A Quick Reference Guide (QRG) was developed for planning managers to use as part of the KSA assessment process, but also to identify actions an agency can take to improve its recruitment, professional development, and retaining of planning staff. The QRG provides a step-by-step description of how the tool is used in the talent management process, in particular identifying strategies for enhancing staff capabilities. The QRG, found as Appendix C in this report, has also been published as a separate document.

Five overarching observations that result from this research portend potentially dramatic challenges to transportation agencies as they seek to enhance their planning capabilities.

1. The characteristics of the more recent employee cohorts are dramatically different than previous cohorts. Their expectations on job structure, work environment, supervision, and interactions influence how they perform in their jobs. They tend not to enjoy or respond favorably to rigid structures, non-transparent communications, and structured interactions. Over time these characteristics will likely run up against many of the office and work structures that are common in many transportation agencies.

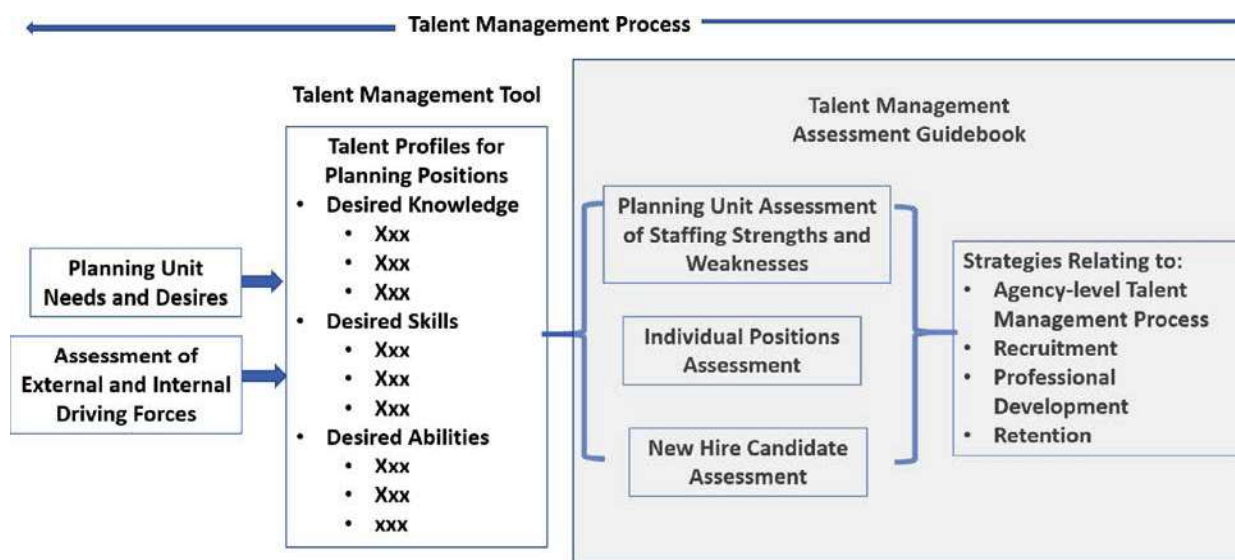


Figure S-3. Talent management process.

2. Every group that was part of this study emphasized the importance of diversity, equity, and inclusion in the workforce and in the work planners do. This is especially true in communities where a large portion if not the majority of the population is diverse. Many respondents to surveys, interviews, and a focus group used as part of this research made it clear that transportation planning staffs serving such communities should look like the communities they serve.
3. The importance of an agency having well-defined planning career paths cannot be understated. Both senior and young respondents to the surveys and interviews emphasized the need to see a clear path forward for career advancement. This was especially strongly stated by young planners.
4. The work–life balance is a very real desire for young planners. With COVID-19 restrictions acting as a catalyst to working from home, it seems likely that young planners in particular will be looking for more flexible work environments in the future.
5. The environment for transportation planning will likely change dramatically over the next 5 to 10 years. The rapid change in technology, environmental concerns, and societal issues will influence much of what interest young planners. Agencies that do not provide planners exposure to such changes and the corresponding issues will likely have more challenges in attracting and retaining planners.