



## Chapter XII

# Managing IT Employee Retention: Challenges for State Governments

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## Abstract

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*IT employees are critical to the successful functioning of contemporary governmental agencies. Researchers and practitioners have long sought to identify workplace factors that influence employee retention. In this chapter we review the existing literature on factors that may reduce the voluntary turnover of public-sector IT professionals. Examples are presented that illustrate what states have been doing to improve their ability to retain their technology workforces. We conclude with an in-depth review of two studies addressing workplace factors that may influence state government IT personnel retention. The first is a study from a single state, designed to test factors potentially influencing affective commitment (a precursor of turnover intention) for state IT workforces. The second is a study from two states, designed to examine factors potentially influencing retention of state IT workforces. The message for decision makers is clear: When it comes to the retention of IT personnel, workplace and job characteristics matter. The insights from this chapter should aid public agencies in their ongoing efforts to retain quality IT professionals.*

## Introduction

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All levels of government face serious staffing challenges. These challenges are especially salient when it comes to IT employees who are critical to the successful functioning of contemporary governmental agencies. Estimates of unfilled public- and private-sector IT jobs range from 342,000 to 600,000 (Catlette & Hadden, 2000; Passori, 2000). Almost 87% of state governments lack the IT personnel they need (Newcombe, 2002) at a time when the federal government is devolving more responsibilities for public-policy implementation and quality service delivery to the state level, many current public-sector employees are contemplating retirement, and the public and private sectors of the economy are competing for a limited number of skilled IT employees. Unfilled public-sector IT positions present a significant threat to government's ability to serve the public, making it vital that governments identify ways to attract and retain IT personnel.

Researchers have long sought to identify workplace factors that influence employee retention and commitment. In the most comprehensive study to date on voluntary turnover in state governments, Selden and Moynihan (2000) found retention was more likely when state governments provided better pay, more internal mobility opportunities, and employee-friendly human-resource practices. In their study of state government personnel, Thatcher, Stepina, and Boyle (2002-2003) found employees expressed considerable willingness to quit when they perceived better opportunities elsewhere. Thus, turnover in IT environments is affected by the state of the economy, pay rates, and attractive opportunities in other organizations.

This chapter provides insights that may be utilized to influence the retention of IT personnel in the public sector. Initially, the chapter describes how public-sector managers face private-sector competition for qualified IT employees. Sometimes staffing shortages and budgetary concerns are managed through outsourcing or offshoring. For states that do not select those options, it becomes important to identify how to create attractive working environments. Therefore, the scholarly literature discussing issues related to voluntary turnover and affective organizational commitment is reviewed in order to identify what organizations can do to create more attractive working environments for IT employees. This is followed by a discussion of what a sample of states that have been recognized for their excellence in IT personnel initiatives have done. An in-depth review of two public-sector IT workforce studies follows. The first study identifies factors associated with affective commitment and job satisfaction, and the second identifies factors associated with turnover intention (retention). The chapter concludes with ideas on what public-sector managers can do to retain valued IT employees.

## Public-Sector Employers Face IT Staffing Issues

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Public-sector employers face two related staffing issues. First, they face recruitment and retention issues since private-sector business can offer IT employees better salaries and incentives. Second, in order to deal with labor shortages and/or control costs, many federal, state, and local agencies are considering outsourcing or offshoring some IT functions.

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