



4 November 2008

Allan B. Polunsky  
Chairman Public Safety Commission  
Texas Department of Public Safety  
5805 North Lamar Blvd.  
Austin, Texas 78752

Engagement: 222068231  
Re: Final Report for IT Optimization Assistance in the Development of an IT Strategy and Implementation Road Map

Chairman Polunsky:

This is the Final Report for the "IT Optimization Assistance in the Development of an IT Strategy and Implementation Road Map" engagement performed by Gartner for the Texas Department of Public Safety. This project was performed over a 10 week period, and involved input from workshops and interviews conducted with each of the DPS Division Chiefs and members of IMS management. The goal of this project was to understand the business direction of the Agency, create an IT strategy aligned with the business direction, and to develop a prioritized strategic road map outlining governance, organizational, and technical initiatives necessary to execute the Texas Department of Public Safety's IT strategy.

During the assessment, the team identified several problems with the Agency's IT program, putting the Department of Public Safety at risk. Some of the key recommendations to address these problems include initiatives such as: optimizing and enabling the IMS organization, establishing improved governance processes and organizations, creating a strategic planning and demand management process, and developing an Enterprise Architecture.

The Gartner team would like to thank the Commissioners, Division chiefs, IMS leadership and management for their invaluable collaboration and partnership during this study. It is our belief that through their leadership, the critical initiatives outlined in this report can be implemented, putting the Texas Department of Public Safety's IT program on a strong competitive footing for the future.

Best Regards,

Carlos Hernandez  
Director, Gartner Consulting

■ ■ ■ ■ A Report for  
**Texas Department of Public Safety**



IT Optimization Assistance in the Development of  
an IT Strategy and Implementation Road Map

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■ ■ ■ ■ **Executive Summary**

## Overview

With locations throughout the state of Texas, the Texas Department of Public Safety (TX DPS) is deeply integrated within the lives of Texas constituents. Furthermore, the Agency's critical public safety mission magnifies the importance of IT as an element of service to the citizens of Texas.

Historically, the Texas Department of Public Safety has struggled to retain employees and tried to upgrade systems within the existing budget. To address these challenges, TXDPS would like to convert IT into a strategic differentiator for the Agency, by refocusing IT from being mainly focused on operational maintenance and system up-keep to becoming more strategic and forward-thinking. TX DPS has realized that the first step in this process is to have IT become strategically aligned with its business objectives. In an effort to ensure continued success for the agency, TX DPS has initiated this project to develop a comprehensive IT strategy, identifying areas where technology could increase the ability of the Agency to do business.

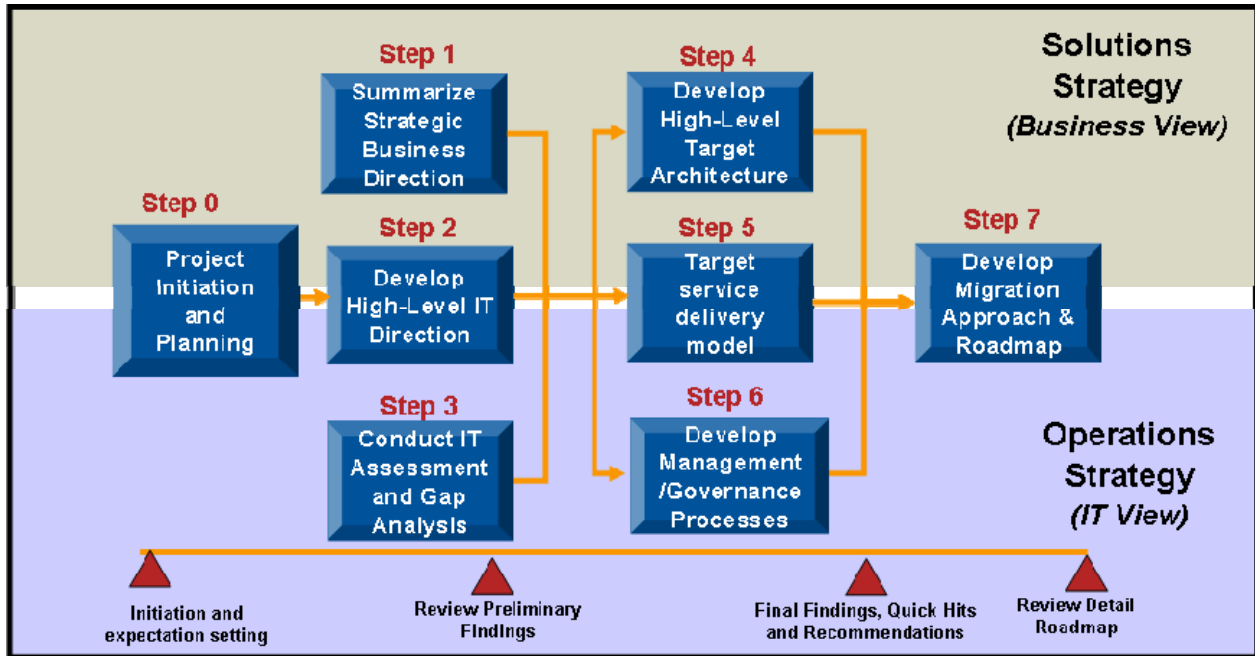
## Project Objectives

The Texas Department of Public Safety engaged Gartner to perform a 10 week project with the following objectives:

- Conduct a comprehensive evaluation of TXDPS' current IT environment to understand the details of:
  - The composition of the IT environment
  - Technology risks associated with the existing IT operating environment
  - The next steps necessary to take the TXDPS' IT environment to the next level
- Create a comprehensive Technology Strategy and Plan for TXDPS that is appropriate for the future IT environment. The technology strategy will consider the requirements for infrastructure, architecture, applications portfolio, governance, organization and overall IT support
- Develop an implementation road map that is realistic and executable that outlines the key initiatives needed to move TXDPS' IT organization from its current state to the desired state as defined by the IT strategy

## Project Approach

Figure 1. Project Approach Steps



The project team began by interviewing the TX DPS Division chiefs to understand and document the Agency’s business direction. Next, the project team worked with Information Management Services (IMS) to develop IT strategies aligned with the Agency’s business direction. Interviews were then conducted with IMS leadership and managers to understand the current state of IT within DPS. Once the current state of IT was assessed, Gartner worked with IMS to develop a list of technical, service delivery, and management and governance recommendations to enable the IMS mission. These recommendations were compiled into initiatives which were defined, prioritized, and broken down into detailed road maps.

## Project Results

The following sections describe some of the key results that were developed over the course of this project.

### Current IT Environment Summary

The current state assessment of the Texas Department of Public Safety’s IT was developed so that the project team could understand what areas TX DPS would need to focus on most to enable a new IT strategy. This assessment also helped with the prioritization of strategic IT initiatives.

While several technical issues were identified, the bulk of the serious issues discovered were related to organizational and governance problems. It was determined that IMS is struggling significantly due to the proliferation of IT infrastructure and projects that are hosted by the Divisions outside of its control. These pockets of IT are being managed inconsistently across the Agency, and are being collectively funded by a budget much larger than the one given to IMS. Many times, IMS has had to manage portions of Agency IT infrastructure handed over to it

from the Divisions, without also receiving the budget to do so or having been previously involved with its design.

### Conclusions from Current State Assessment

- DPS' IT capability is unsustainable due to the inability to hire and retain IT personnel
- IT expenditures outside of IMS (within the Divisions) far exceeds the total IMS budget
- Decentralized IT decision-making has led to investment inconsistency, initiative oversight challenges and ongoing support gaps — key imperatives of IMS' charter
- Resources are unnecessarily expensive because they are procured externally without Agency-wide buying power leverage
- No IT strategic planning, architecture, or common standards are used, leading to an expensive, difficult to support and error prone infrastructure
- There is no process in place to manage demand, causing IMS to work on all requests and potentially expending funding, time and effort in projects that may not be providing appropriate Agency value
- Data is not centrally managed, with varying levels of security, duplication, and recoverability
- In case of a “disaster scenario,” DPS is highly exposed due to insufficient planning, infrastructure and preparedness for recovery
- The absence of documented, repeatable, and standardized processes has produced an IT environment that is inefficient and inconsistently administered

### Current Agency Strategy

DPS' business imperatives are the elements that the Agency and its Divisions must perform to be successful in the execution. The development of these imperatives is a prerequisite to producing an IT strategy because the IT strategy will be completely ineffective if it does not align with the needs of the business.

Business imperatives are frequently articulated as a response to external and internal forces:

- External Forces including:
  - Budget
  - Regulatory compliance
  - Legislative mandates
  - Public
  - Technology
- Internal Forces including:
  - Change in Agency strategy
  - Organizational changes

The following table lists the Agency imperatives developed for TX DPS during the course of this project:

Agency Imperatives
<ul style="list-style-type: none"> <li>■ Provide public safety and support with integrity and diligence</li> <li>■ Prevent and detect crime</li> <li>■ Protect the officers</li> <li>■ Enforce criminal, traffic and safety laws</li> <li>■ Provide effective management of public funding and allocations</li> <li>■ Serve and educate the public</li> </ul>

### Proposed IMS Direction and Strategy

IT strategies are the key elements that IMS must do to enable the DPS' business imperatives. They articulate the requirement regarding "What IT must provide/enable" (information, access, linkage). They do not answer the question: "How IT will provide it?" The "how" is articulated in the overall IT road map and is decided in the context of the Mission Statement and the IT Principles

The following tables show the IMS vision, mission, and IT strategies developed through workshops and interviews throughout the course of the project.

IT Mission	IT Vision
To enable the Texas Department of Public Safety to ensure public and officer safety by providing reliable, effective, timely and cost efficient information technology services	Provide effective IT services and solutions, anywhere and anytime on demand, that enable the Texas Department of Public Safety to serve its many customers and missions

IT Strategies
<ul style="list-style-type: none"> <li>■ Centralize all IT services and resources</li> <li>■ Enable IMS to be a strategic partner of the Agency</li> <li>■ Enhance business acumen to support the strategic partner role of IMS</li> <li>■ Acquire IT skills required to support the Agency's IT needs</li> <li>■ Support critical Division functions with a highly available and reliable IT infrastructure and by using easily accessible, consistently defined, consolidated, and secure data</li> <li>■ Optimize the use of technology to minimize costs, provide efficient use, and to develop proactive management capabilities</li> <li>■ Rapidly and flexibly respond to DPS Divisions' needs by automating, simplifying, and consolidating technologies</li> <li>■ Provide consistent and superior service to the Agency and the public by leveraging mature processes, standards, and effective governance</li> <li>■ Enhance IMS' productivity and effectiveness through the implementation of innovative solutions that are aligned with the Agency's and individual Division's needs</li> </ul>



## Recommendations

Gartner made the following recommendations (from highest priority to lowest) to assist TX DPS in its journey from the current state toward the effective execution of its IT strategy.

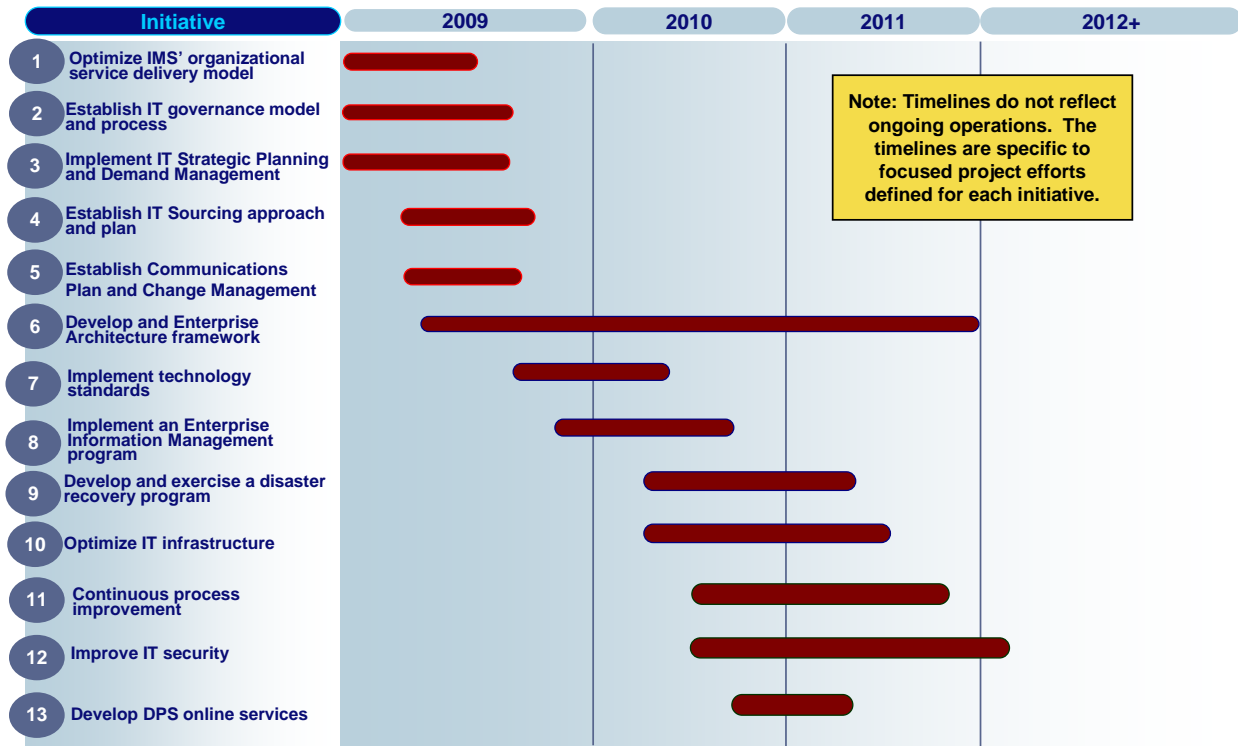
Recommendations	Benefits
<b>Optimize IMS' organizational service delivery model</b>	<ul style="list-style-type: none"> <li>■ Enhances support capabilities Agency-wide (timeliness, accuracy, etc.)</li> <li>■ Aligns accountability and responsibility with specific IMS roles</li> <li>■ Provides IMS alignment with each Division to optimize technology within the Division's business processes</li> </ul>
<b>Establish IT governance model and process</b>	<ul style="list-style-type: none"> <li>■ Provides a structured mechanism to prioritize IT initiatives and expenditures</li> <li>■ Establishes integrated linkage between IT capabilities and business direction</li> </ul>
<b>Implement IT strategic planning and demand management</b>	<ul style="list-style-type: none"> <li>■ Optimizes the Agency's overall IT direction and investments</li> <li>■ Enables IMS to develop and maintain critical skills for optimal support</li> <li>■ Ensures the Agency's ability to leverage technologies across Divisions</li> </ul>
<b>Establish IT sourcing approach and plan</b>	<ul style="list-style-type: none"> <li>■ Optimizes service delivery provided by IMS</li> <li>■ Establishes sourcing options and alternatives in support of key initiatives</li> <li>■ Maximizes funding strategies for Agency IT initiatives</li> </ul>
<b>Establish communications plan and change management</b>	<ul style="list-style-type: none"> <li>■ Ensures a clear organizational evolution and support from all areas of the Agency</li> <li>■ Clearly communicates new roles and responsibilities so that Division and IMS expectations can be aligned and met</li> </ul>
<b>Develop an Enterprise Architecture framework</b>	<ul style="list-style-type: none"> <li>■ Aligns IT with Agency needs</li> <li>■ Provides strategic and holistic planning discipline for IT environment</li> <li>■ Reduces costs by increasing design rigor and IT standardization</li> </ul>
<b>Implement technology standards</b>	<ul style="list-style-type: none"> <li>■ Reduces procurement costs by lowering vendor and licensing counts</li> <li>■ Reduces solution complexity</li> <li>■ Drops the number of employee product skill sets that must be maintained</li> </ul>
<b>Implement an Enterprise Information Management program</b>	<ul style="list-style-type: none"> <li>■ Reduces the duplicity of data scattered throughout the agency</li> <li>■ Manages data security and recovery consistently across the agency</li> <li>■ Improves data integrity</li> <li>■ Consolidates data technologies, which reduces costs</li> <li>■</li> </ul>
<b>Develop and exercise a disaster recovery program</b>	<ul style="list-style-type: none"> <li>■ Ensures that the Department of Public Safety can be recovered in the event of a disaster</li> <li>■ Enhances the Agency's ability to perform its mission during a disaster</li> </ul>

Recommendations	Benefits
<b>Optimize IT infrastructure</b>	<ul style="list-style-type: none"> <li>■ Reduces single points of failure that can lead to critical Agency services' unavailability</li> <li>■ Improves application development quality</li> <li>■ Reduces IT infrastructure and management costs</li> </ul>
<b>Start a Continuous Process Improvement program</b>	<ul style="list-style-type: none"> <li>■ Creates a repeatable methodology for managing IT which reduces inconsistency and error across the Agency</li> <li>■ Allows activities to be performed quicker and with less skilled resources</li> </ul>
<b>Improve IT security</b>	<ul style="list-style-type: none"> <li>■ Increases the confidentiality, integrity, and availability of IT infrastructure</li> <li>■ Increases the safety of DPS personnel</li> <li>■ Limits the Agency's liability and increases the protection of state constituents and officers</li> </ul>
<b>Develop DPS online services</b>	<ul style="list-style-type: none"> <li>■ Creates more self-service opportunities for users, which reduces IT costs and allows IMS resources to be freed up for more complex activities</li> <li>■ Provides cost-effective training and skill development opportunities</li> </ul>

## Road Map

A detailed road map was created for each initiative. Then, each initiative was prioritized and placed in a comprehensive implementation road map. While some initiatives have the bulk of their work starting later in the overall timeline, it does not mean that ongoing operational activities should be ignored until the project is shown to begin. TX DPS should also take advantage of opportunities to identify 'quick wins' that can be accomplished early for the various initiatives when opportunities present themselves.

**Figure 2. Comprehensive Implementation Road Map**

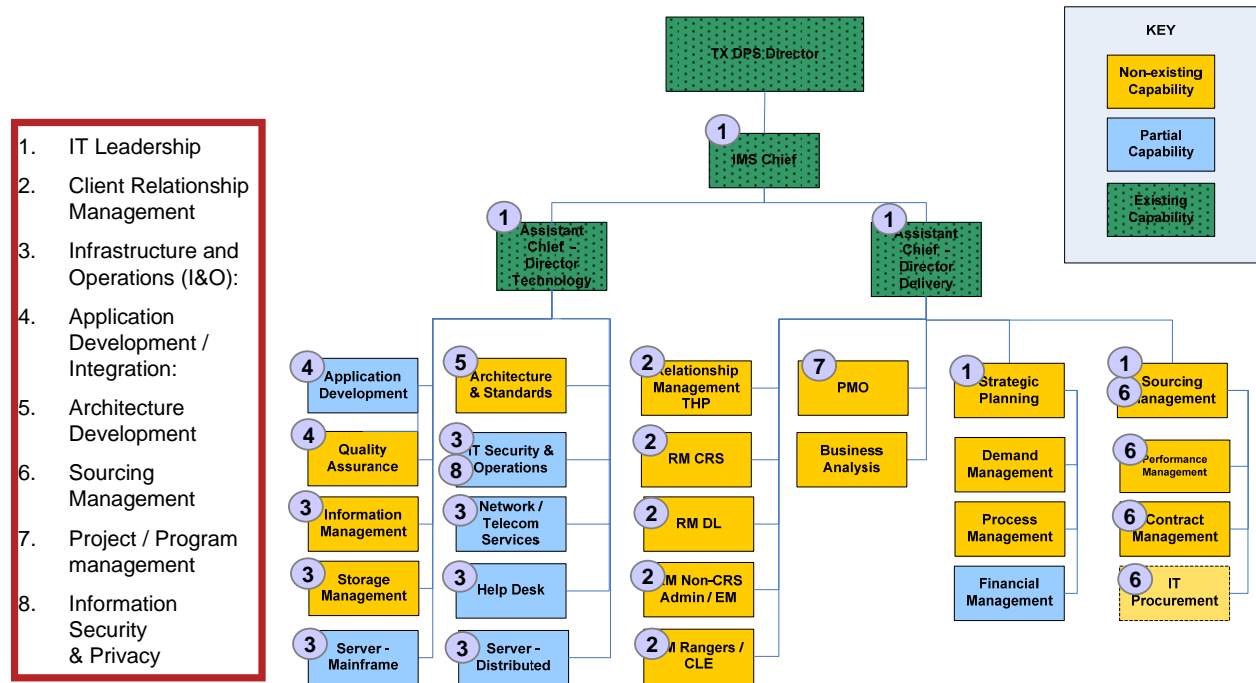


### Optimize IMS' Organizational Service Delivery Model

The highest priority initiative recommended focuses on optimizing the IMS organization. Without performing this initiative, IMS will not have the ability to successfully implement the other recommendations necessary to execute the IT strategy.

IMS will need to receive Agency support to fill their current vacancies, as well as staff new positions vital to increase the quality and business acumen of the organization. Key technical organizations will need to be created such as Architecture and Standards, Quality Assurance and Storage Management, and Enterprise Information Management, to maintain and improve the sustainability of the IT infrastructure. Groups such as Strategic Planning, Demand Management, and Relationship Management are vital to allow IMS to become a strategic partner with the other Agency Departments.

**Figure 3. Service Delivery Model**



**Consequences of Inaction**

All 13 initiatives that have been identified are critical to the success of IMS, and consequently the success of TX DPS. If TX DPS does not act quickly to enable IMS, the repercussions to the Department of Public Safety will be catastrophic. The following are just a few of the consequences of inaction:

**Organizationally**

- IMS’ inability to provide adequate IT services to the divisions (short and long term)
  - Not enough resources to adequately support the Divisions
  - Loss of credibility of the entire IMS organization
- Continued turnover to the point that basic IT operations are in jeopardy
- Low work quality as resources will continue to be stretched too thin
- Higher operating cost as more contractors are independently hired by Divisions to complete basic IT functions
- Loss of critical knowledge

**Operationally**

- Past inability of law enforcement and safety related systems such as CCH, TLETS, TCIC, etc will be unsustainable due to single points of failure in staffing expertise (hardware and software)
- High potential for theft, loss, or alteration of critical data, such as criminal records, sex offender lists, and constituents’ records

- Antiquated and failure prone infrastructure impacting the processing and communication of criminal data to officers in the field
- Inability to form an Agency-wide IT disaster recovery plan
- Poorly designed, redundant, and inflexible infrastructure which will considerably slow the implementation of new technical capabilities to support officers and the public
- Inability to allocate IT personnel to activities with the highest business priority

**Any questions regarding this proposal  
should be addressed to:**

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