



K A N S A S

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DEPARTMENT OF ADMINISTRATION
KANSAS INFORMATION TECHNOLOGY OFFICE

15 May 2008

From: Kansas Information Technology Office

To: All State Agencies
Chief Information Technology Officers

Instructions for FY 2009-2011 IT Management and Budget Plans

Agencies with IT Expenditures in FY 2007 of less than \$100,000 are only required to complete Section I, IV, and VII of the following Plan Template.

Agencies with IT Expenditures in FY 2007 of more than \$100,000 are required to complete Sections I – VIII of the following Plan Template. Special attention in this plan should be given to aligning IT applications and objectives to current agency business goals. In addition, instructions for Section IX are included for agencies and it is encouraged they complete them.

Please submit **one digital copy and one hard copy** of your agency's plan by **Friday, August 29, 2008** and any questions to:

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Topeka, KS 66512-1275
785-296-2809
Email: bryan.dreiling@da.ks.gov

[AGENCY NAME]

INFORMATION TECHNOLOGY MANAGEMENT AND BUDGET PLAN

Plan Date: [Date approved]

Approved By: [Agency head: name and title]

Contact: [Agency staff member to contact with questions about this plan; name, title, organization, address, telephone number, fax number and e-mail address]

Website: [Agency URL: http://]

SECTION I ~ AGENCY PROFILE

Mission

[Agency mission as reported on budget form DA-400.]

Business Programs

Program #: [Identify and provide brief description of each program established to assist with the agency mission, as contained on budget form DA-400; separate title and paragraph for each; number sequentially for reference, no priority implied.]

Technology Assets

[Please indicate quantities in appropriate cells in the table below.]

PLATFORMS			
	FY2007	FY2009	FY2011 (est.)
Mainframes ¹			
Physical Servers ²			
Virtual Servers ³			
Desktops			
Desktops Replaced			
Mobile Devices			

¹ A mainframe should only be recorded here if the mainframe is owned and operated by your agency. Do not record a mainframe here if you are using a mainframe application that is hosted on another agencies mainframe. Mainframes are distinct from midrange servers. Midrange servers should be listed with the other servers in your agency.

² Physical Servers are defined as unique physical "boxes" that are running a server operating system.

³ Virtual Servers are defined as unique physical "boxes" that are running a virtual operation system. This number should not include the number of virtualized servers, but rather the hardware that is running the virtualized servers.

IT STAFFING

Functions: Agency IT staff allocations by function (approximate):

[Example: Someone who spends half their time modifying existing software, one-third testing new applications, and the remainder doing database administration would have 0.5, 0.3 and 0.2, respectively, in the Application Maintenance, Application Development and Data Administration blocks.]

Include the following:

- All **classified and unclassified** IT positions
- Any positions that may be designated within SHaRP as non-IT classification, but which perform IT functions.

IT FUNCTIONAL AREA	SFY 2009 ACTUAL FTE		SFY 2010 PROJECTED FTE		SFY 2011 PROPOSED FTE	
	Class.	Uncl.	Class.	Uncl.	Class.	Uncl.
General Management & Administration (includes training and cross-agency coordination)						
Application Maintenance and Enhancement (in-production systems)						
Application Development (includes general and tactical plans, business area analysis, process reengineering, prototyping, application design, coding, integration and testing)						
Data Administration, Data Analysis/Validation and Database Administration						
Network Engineering, Technical Management and Support						
Computer Operations, Management and Technical Support						
Web application development and maintenance						
IT Security						
Other IT Functions (please identify)						
TOTAL FTEs						

AGENCY IT ACCOMPLISHMENTS

Provide a brief summary of IT accomplishments for SFY 2008.

Summary: [Please include any cross-agency collaboration or joint application development efforts. This summary will be included in the agency’s section in the Annual Summary.]

AGENCY IT STRATEGIC DIRECTION

This section summarizes agency direction in several key areas of information technology and business system management.

Summary: *[Highlight expected evolution or changes of agency IT resources & applications and summarize the **future** IT direction for your agency. Identify how your IT direction aligns with your business initiatives and objectives. Examples of information to be included – but not limited to -- are electronic agency services, business contingency and disaster recovery, data administration, executive information systems, and applications development. **Please indicate any cross-agency collaboration or joint application development efforts.**]*

Please also include the following areas when producing this summary:

- **Agency Architecture:** *[Brief statement about how your agency is moving toward the “target architecture” defined in the Kansas Information Technology Architecture (KITA).]*
- **Business Contingency Planning:** *[Does your agency have a published Business Contingency Plan? Also provide a brief statement regarding policies or plans to continue your business objectives in the event of a disaster.]*
- **Business Process and Workflow Management:** *[Brief statement regarding your agency’s current or planned future use of business process and workflow management software.]*
- **Collaboration Software:** *[Brief statement regarding the platforms used for intra-agency collaboration. Where applicable, information should be included about messaging, e-mail, web-portal systems, and video conferencing.]*
- **Data Storage and Administration:** *[Brief statement detailing how and what data is being stored in the agency and any plans to change this in the future. Please address how much data your agency has, what technologies are being used to store the data, and what type of data administration and management is being used in the agency.]*
- **Data Transfer:** *[Brief statement detailing how and what data is being shared intra-agency and inter-agency and future data sharing plan for your agency. Examples include: web services, batch, intranet (php, asp, ect), electronic, paper, data warehouses, business intelligence suites, ect.]*
- **Electronic Records Retention:** *[Brief statement outlining policies and plans your agency has regarding issues pertaining to electronic record retention.]*
- **E-Government:** *[Please provide in year order, a description of the new or revised systems, applications and/or services your agency expects to offer online to the citizens, businesses or other governments of Kansas. Please include for each designated application or service the number of citizens/businesses affected, preliminary cost to implement estimates if any, cost avoidance or cost elimination estimates if any, and anticipated revenue that will be generated if any.]*
- **End User IT Security Training:** *[Does your agency provide end user IT security training? If so, how often is that training given to each employee? If not, are there plans in the future to provide end user IT security training?]*

- **Identity Management:** *[Does your agency have any current or planned future usage of technology for verification of a users' digital identity? If so, describe the technology and tell how many users will be affected?]*
- **IT Disaster Recovery:** *[Does your agency have a published IT disaster recovery plan? Also provide a brief statement regarding policies or plans to continue your IT objectives in the event of a disaster.]*
- **IT Security Staff:** *[Does your agency have an individual with responsibility for IT Security? If so, is this individual dedicated exclusively to IT Security? If your agency does not have dedicated IT security staff, are there plans in the future to have a dedicated IT Security position?]*
- **Public Key Infrastructure:** *[Does your agency have any current or planned future usage of electronic signatures⁴ and/or digital signatures⁵ that will be used to sign a document? If so, how many digital certificates does your agency plan to use? If digital certificates could be used for data/email encryption and/or access would your agency be interested?]*
- **Service Oriented Architecture:** *[If your agency is moving towards a Service Oriented Architecture please provide brief statement outlining how your agency is moving forward with it.]*
- **Technology Infrastructure:** *[Brief statement detailing agency plans to upgrade technology infrastructure over the next three years. Where applicable, information should be included about storage, database, platform, and data network infrastructure.]*

[This summary will be included in the agency's section of the Annual Summary.]

⁴ Kansas Uniform Electronic Transactions Act (KUETA), KSA 16-1602 (i). "Electronic signature" means an electronic sound, symbol or process attached to or logically associated with a record and executed or adopted by a person with the intent to sign the record. (1) The transformation was created using the private key that corresponds to the signer's public key; and (2) the initial message has not been altered since the transformation was made.

⁵ Kansas Uniform Electronic Transactions Act (KUETA), KSA 16-1602 (e). "Digital signature" means a type of electronic signature consisting of a transformation of an electronic message using an asymmetric crypto system such that a person having the initial message and the signer's public key can accurately determine whether:

SECTION II ~ AGENCY IT OBJECTIVES AND GOALS

Details of Objectives: The following information should be supporting documentation to your summary of Strategic IT Direction, and should include how your strategic direction supports agency goals and enterprise wide collaboration efforts.

Part One: IT Objectives and Business Goal(s) Alignment

IT Objective # __: *[Title and brief description of objective; include target data to complete; number sequentially for reference, no priority implied.]*

Business Goal(s) Supported: *[Brief statement identifying how the IT objective aligns with agency's strategic plan.]*

Part Two: Strategic Information Management Plan Goal(s) and IT Objective(s) Alignment

[Brief statement identifying how your agency's IT direction matches overall direction established for the state government by the Strategic Information Management Plan. This is a summary for the agency as a whole, not for each specific IT objective.]

[Example] IT Objective #4: Data Management and Integration.

- Create and maintain standard data dictionaries, repositories, tools, and data models for the agency in the larger agency and State contexts.
- Develop a decision support environment that provides data integration across the agency and customized web-enabled information delivery to administrative, educational, and research areas.
- Develop a comprehensive understanding of the organization's information base and information needs.
- Plan, develop and manage a data warehouse environment that supports those information needs.

[Example] Business Goal(s) Supported: Promote a culture of shared access to information to support the agency's strategic goals.

[Repeat Part one for each agency IT objective. Part Two only needs to be answered a single time.]

SECTION III ~ MAJOR IT APPLICATIONS

This section identifies the agency's principal software applications or systems now in production. This list is limited to mission-critical batch or multi-user applications, which directly perform business functions for the agency. This list should not include standard third-party software products, such as word processors and spreadsheets. Projects still in planning, design or development (pre-production) should be listed in IT Project Budget Proposals.

This section is broken down into three different areas. Each area requires a different amount of information to be submitted.

- **Part One (Unmodified Applications)** is dedicated to IT applications that have not been modified since the agencies last submission of the Three-Year IT Management and Budget Plan. The information required for these applications is much less than in past years.
- **Part Two (New / Modified Applications)** is dedicated to IT applications that are new or have changed over the past year. Please fill out the information required for Part One IT applications, plus any of the additional Part Two questions that have been modified in the past year. Modifications include enhancements to the system. Changes made due to maintenance of the application are not considered a modification. For new applications please complete all of Part Two.
- **Part Three (Retired Applications)** includes applications that had information submitted last year, but are no longer used in the agency. Please list these applications and the reason for it no longer being in use.

Additionally, if your agency would rather compile and submit all the information asked for in the "New / Modified Applications" sections, like in previous years, feel free to do so. If you decide to do this, please put an asterisk (*) next to every area that has been changed for each specific application. If you have any other ways that would make this section easier to fill out, while still maintaining the necessary information, please contact Bryan Dreiling and talk to him about your method.

Unmodified Applications *[Fill out this section in its entirety for every application that has not been modified since the last IT management and budget plan submission.]*

Application #: *[Title and acronym; repeat this section for each major business application; number sequentially for reference, no priority implied.]*

Purpose: *[Describe how this application supports your agency's business processes.]*

Planned Initiatives: *[Brief list of any changes, upgrades, additions, or development planned for the application.]*

New / Modified Applications *[For every applications that has been modified since the last IT management and budget plan submission, fill out the Application, Purpose, and Planned Initiatives questions, in addition to any other questions that has changed. Fill out this section in its entirety for every new application. Modifications include enhancements to the system. Changes made due to maintenance of the application are not considered a modification.]*

Application #: *[REQUIRED - Title and acronym; repeat this section for each major business application; number sequentially for reference, no priority implied.]*

Purpose: *[REQUIRED - Describe how this application supports your agency's business processes.]*

Planned Initiatives: *[REQUIRED - Brief list of any changes, upgrades, additions, or development planned for the application.]*

Modified Applications (continued)

Functions: *[Brief list of business functions performed; example: driver records, agency general ledger, student academic records.]*

Interaction: *[Customer groups deriving benefit through this application; examples: agency-internal, other state agencies, private sector, and general public.]*

Technical Environment:

Hardware: *[Hardware platform(s).]*

Network Protocols: *[e.g., TCP/IP]*

System s/w: *[Operating system.]*

DBMS: *[Database Management System, if any.]*

Client: *[web-based, thin client, thick client, terminal pc.]*

Special s/w: *[Other special software required for this application.]*

Language: *[Developmental language(s); what maintainers must know.]*

Implemented: *[Date first put into production.]*

Revision: *[Date current revision put into production; version number.]*

Maintenance: *[Organization which performs software maintenance.]*

Retired Applications *[Fill out this section in its entirety for every application that has been retired or phased out since the last IT Management and Budget plan submission.]*

Application #: *[Title and acronym; repeat this section for each major business application; number sequentially for reference, no priority implied.]*

Retirement Reason: *[Brief statement outlining why the application was retired.]*

SECTION IV ~ IT PLANNED PROJECTS

Provide information below for all planned projects with an estimated total cost of \$250,000 or more from any source of funds, in which the agency is proposing new state funding or has spending authority. Agencies are required to provide this information pursuant to [KSA 75-7209](#). Planned projects identify new projects by agencies that are in planning stages only and the IT Project Plan may or may not have been submitted for CITO approval.

An information technology project is defined in [KSA 75-7201](#) as "a project for a major computer, telecommunications or other information technology improvement with an estimated cumulative cost of \$250,000 or more and includes any such project that has proposed expenditures for: (1) New or replacement equipment or software; (2) upgrade improvements to existing equipment and any computer systems, programs or software upgrades therefor; or (3) data or consulting or other professional services for such a project."

To: [Chief Information Technology Officer, of Appropriate Branch]

From: [Name of person who prepared report, include email and phone number]

Agency Name:

Date Submitted:

Project Name: [Full project name or title]

Project Acronym: [Short name, acronym or code, if any]

Estimated Project Cost: [Total estimated cost, or estimated range (i.e. \$2 – 6M) over the life of the project from any source of funds, over all fiscal years. **Include** internal direct costs of state government staff and external project costs.]

Internal Costs: \$ _____

External Costs: \$ _____

Estimated Ongoing Cost: [Total estimated operational cost from any source of funds, for three ensuing state fiscal years **after** project implementation.]

SFY _____ \$ _____

SFY _____ \$ _____

SFY _____ \$ _____

Estimated total project cost and three ensuing years of ongoing cost: \$ _____

Estimated Start Date: [Date the project is estimated to begin.]

Estimated Completion Date: [Date the project is estimated to be completed.]

Project Business Objective(s) or Motivator(s): [Situation prompting development of the proposed project; programs, activities and other needs and intended uses of the proposed technology. Please include opportunities for cross-agency collaboration, if appropriate.]

E-Government: [Brief description outlining how the project utilizes electronic government to provide citizens, businesses, and governments with equal, efficient, electronic access and interaction with government information. Include level of functionality from forms, which can be downloaded, printed and sent through conventional means to advanced electronic forms where the entire process can be completed and submitted online along with the payment.]

Technical Architecture: [Brief description about any known technical architecture parameters or requirements, i.e., work flow, document system, Oracle 9i, Windows platform, web based, GIS, data warehouse, special security needs, storage needs, recovery needs.] Will this project move the state forward in a specific technology area? Is there any technology modules being implemented that other agencies could utilize?]

Project Description and Scope: [Includes identification of the organizations and individuals to be affected, and a definition of the functionality to result.]

Project Status: [Brief description of the current status of the planned project.]

SECTION V ~ BUSINESS AND TECHNOLOGY RADAR CHARTS

This section displays, in a graphical model, the current and future alignment of business projects with application development, maintenance, and infrastructure initiatives. Ideally, IT initiatives should help fuel business initiative's success. In order to do this, the radar chart process is broken down into three components:

- Agency Business Program Initiatives,
- Technology Infrastructure,
- IT Business System Initiatives.

Agency Business Program Initiatives charts the high level business goals set by your agency. Technology Infrastructure looks at agency platforms, storage, network, and databases and the plans to enhance those components in the future. IT Business System Initiatives looks at planned application development, upgrade, and maintenance. Completion of this section will allow an agency to distinguish points in which their IT and business initiatives are not in alignment.

This section's intention is to illustrate the agencies strategic IT direction. The initiatives listed in this section do not have to exclusively be projects that have budgets requiring CITO approval, but rather any initiative that will change the landscape of IT in your agency.

Instructions: *[A template to aid in the design of this document is available at <http://da.ks.gov/kito/ITMBP.htm>.]*

Business Program Initiatives: The strategic direction component of the FY2007 Budget Document should provide documented goals and objectives for your agency and goals specifically for each business program. Once this list is compiled, the different initiatives can be mapped to the radar chart in their corresponding year(s).

Technology Infrastructure: This information should be the same as the information given in Section I of this document under "IT Strategic Direction – Technology Infrastructure". This is not limited to projects only in Section IV. All planned changes should be included. Include this information on the radar chart in the proper timeframe.

IT Business System Initiative: This information should be the same as the information given in Section III of this document under "Major IT Applications – Planned Initiatives". This is not limited to projects only in Section IV. All planned changes should be included. Include this information on the radar chart in the proper timeframe.

Example: *[Examples to help aid in the development of this section will be available at <http://da.ks.gov/kito/ITMBP.htm>.]*

SECTION VI ~ ENTERPRISE BUSINESS PARTNERS MODEL

This section identifies the different organizations, groups, and individuals that your agency interfaces with during normal business operations. Moreover, it articulates the different inputs that each agency receives from each business partner, and the outputs that each business partner receives from the agency. Completion of this section will allow agencies to have a better understanding of who they are in contact with during normal business operation and what information is important to each group(s). Moreover, this section will create opportunities for other state agencies to look at different models of communication and information delivery. A template for this section will be provided on <http://da.ks.gov/kito/ITMBP.htm>.

Instructions: Agencies that have done this before have found different ways to successfully complete this document. The most common method is to do a survey of the different business programs in the agency. Ask the necessary people for everyone they interface with outside of the agency while working, and also the inputs and outputs supplied to each business partner.

This is intended to be a high level model. In the example provided below, there was no need for KDOT to list every different public transit authority they interface with, because on a high level they all virtually require the same outputs and give the same inputs. It is more important to recognize the macro-level communication chain than to drill down on the nuances of specific organizations, agencies, and individuals.

Example:

Business Partner	<--	INPUT OUTPUT	-->	AGENCY
Consultants, Design	<--	Design Plans, Weekly Accomplishments, Invoices, Collaboration	-->	KDOT
Contractors	<--	Contracts, Payments and Schedules	-->	
Cities	<--	Bids, Invoices, Status Reports	-->	
Counties	<--	Requests for Bids, Contracts, Plans, Change Orders	-->	
Public Transit Authorities	<--	Five Year Plans, TIP Plan Invoices, Local Payments	-->	
Law Enforcement	<--	Project Plans, Invoices, Contracts Funding Limits	-->	
Other State Agencies	<--	Five Year Plans, TIP Plan Invoices, Local Payments	-->	
Universities and Colleges	<--	Project Plans, Invoices, Contracts Funding Limits	-->	
Public	<--	Vehicle Reports, Applications, Ridership Information	-->	
Utilities	<--	Grants, Loans, Vehicle Information, Inspection Information	-->	
	<--	Road Conditions, Traffic Status, Vehicle Accident Analysis	-->	
	<--	Accident Reports, Traffic Impact Incidents	-->	
	<--	Invoices, Transportation Statistics, GIS Views	-->	
	<--	"Drug Testing"/Driver License Checks, Project Plans, Vehicle Usage, Payment Information	-->	
	<--	Research Information	-->	
	<--	511 responses, KANROAD responses, Project Information	-->	
	<--	Incidents, Problems, Permit Applications	-->	
	<--	Project Plans, Project Schedules	-->	
	<--	Invoices, Permit Applications, Contract Status, Utility GIS Information	-->	

* This is only an example; it is not an agency approved model.

SECTION VII ~ ENTERPRISE VALUE CHAIN

The value chain is a systematic approach to examining the development of competitive advantage. It was created by M. E. Porter in his book, Competitive Advantage (1980). The chain consists of a series of activities that create and build value. They culminate in the total value delivered by an organization. The organization is split into 'primary activities' and 'support activities.' Completing a Value Chain will give your agency a better understanding of how different units function together. This will allow for agencies to find areas for improvement or places to gain added efficiencies in order to give your customers the best value added service possible.

Instructions: *[A template to aid in the design and additional information about value chains will be available at <http://da.ks.gov/kito/ITMBP.htm>.]*

There are two main areas of the value chain. They are the Primary Activities and Support Activities. Primary Activities are the links in the value chain that add value to the service or product you are providing. Examples of Primary Activities are construction, marketing, and development. Support Activities do not directly add value, but are still necessary in providing the services or products. Examples of Support Activities are Human Resources, Administration, and IT management.

Primary Activities: The first step in creating the value chain for primary activities is to develop a list of your agencies core business areas. For instance, KDOT's core business areas are in the highway system, public transportation, and safety. Once those core business areas are decided upon, the agency is able to look at the chain of events that happen in order to meet the goal of these core business areas.

Porter suggests that five main categories exist in this area of the value chain. His model does not present a direct one-to-one relationship to the services that state agencies provide, but it does give a helpful starting point to begin to think about the different links in the value chain. Porter's five categories are:

- Inbound logistics
- Operations
- Outbound logistics
- Marketing and Sales
- Service

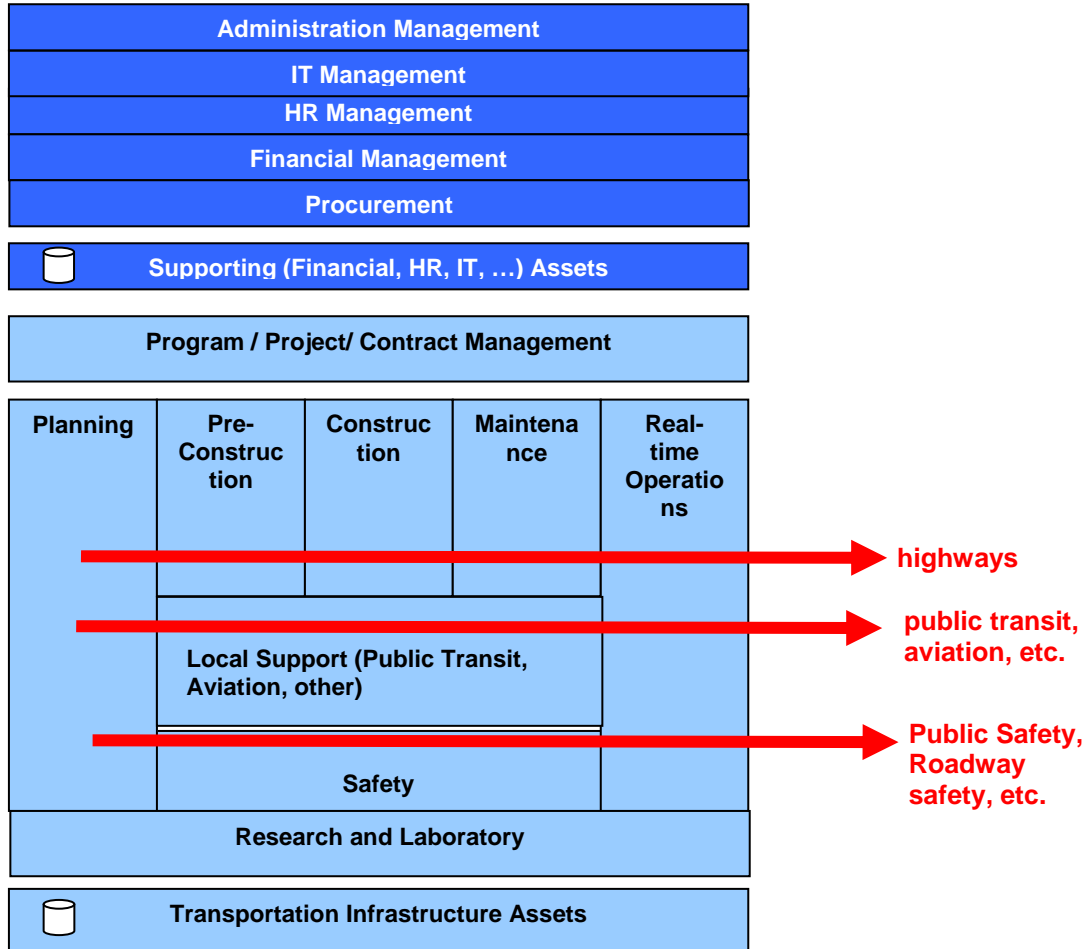
Agencies in the past have conducted information sessions with employees and asked questions in order to find different activities that occur under normal business operation. After this initial fact finding, they looked for areas in which the common goals were linked in order to feed the final core business area. At that point they are able to map out the primary activities of the organization.

Support Activities: Most of these activities are universal from agency to agency. They can be seen as more of the oversight and management areas of the agency. They do not have direct contact with the services provided by the agency or directly add value to them, but without these activities the core business goals could not be realized. For example, Human Resources staff ensures that employees get paid, without this function there would be no reason for employees to come to work, or at very least work productively. Without an efficient employee base, there would be no chance for success in agency's core business goals.

ENTERPRISE VALUE CHAIN (Continued)

Example: *[More examples to help aid in the development of this section will be available at <http://da.ks.gov/kito/ITMBP.htm>.]*

DEPARTMENT OF TRANSPORTATION VALUE CHAIN



* This is only an example; it is not an agency approved model.

SECTION VIII ~ ENTERPRISE APPLICATION MAP

An Enterprise Application Map is an extension of the value chain. The application map seeks to categorize the applications and systems in your agency with links on the value chain. Completion of this section will allow agencies to see where each specific application fits in relation to the high level business areas in the organization.

Instructions: After completing the Enterprise Value Chain, this section can be completed by overlaying your systems and applications on the appropriate section of the value chain.

Example: *[Examples to help aid in the development of this section will be available at <http://da.ks.gov/kito/ITMBP.htm>.]*

SECTION IX ~ ENTERPRISE DATA MAP

This section is not required. An Enterprise Data Map is a high level mapping of the data your agency currently stores at a logical level. Completing this section will give the agency a better understanding of the types of data that is being collected and the ability to see where redundant information is being stored in different agency databases.

Instructions: *[Instructions for the Enterprise Data map will be sent on a later date and also available at <http://da.ks.gov/kito/ITMBP.htm>.]*

Examples: *[Examples to help aid in the development of this section will be available at <http://da.ks.gov/kito/ITMBP.htm>.]*