



San Bernardino Community College IT Services Assessment

May 12, 2008



Agenda

Project Background & Methodology

Observations and Findings

Recommendations

Implementation Roadmap

Q & A



Project Background & Methodology

- PlanNet was engaged in March, 2008 to assess SBCC district –wide IT services
- Assessment focused on the DCS delivery model, core services and overall IT governance
- Process included interviews and surveys of district and college administration, management, faculty, classified staff, vendors review and assessment polices, process and high-level architecture
- Detail findings and recommendation details were published in report format





Observations and Findings



- **Current IT Services**

The District IT services have evolved over time to address certain economies or efficiencies of scale or allowing for autonomy and localization of certain categories of support.

- Services are not uniformly delivered throughout the district
- Colleges and the district lack a well articulated catalog of services
- DCS is regarded by the district as a sort-of “catch all” for anything IT-related
- DCS operations are outsourced with specific and discreet services contracted to SunGard with very little room for discretionary latitude

- **Localized Services**

Localized IT support is generally drawn at the boundary between administrative and academic computing.

- Includes deployment and support of computer labs and faculty desktops
- Involves other instructional technology support, such as training and the administration of Blackboard CMS
- Media and audio-visual support are at the college level
- Valley College has dedicated technicians for each of four academic divisions, Crafton Hills College pools IT resources
- Some administrative support has overflowed to local campus support teams
- Some network administration tasks are performed at Crafton Hills but jurisdiction has not been ceded by district



Observations and Findings

- **District Services (DCS)**

District services generally relate to administrative and enterprise systems, IT strategy and infrastructure.

- Support of district-wide administrative desktop systems
- Support of enterprise-level administrative systems, such as Datatel, Financial 2000, Exchange, card systems, library systems
- Responsible for operation of enterprise-level academic system hardware but not application administration and support
- Architecture and engineering support of the district-wide network and telecommunications and WAN circuits
- IT budgeting and procurement
- Operation of a centralized service desk (Help Desk Online)
- Web presence design and content management

- **Representative Issues:**

- purchase of equipment not backed by a comprehensive rollout strategy that takes into account all points of integration
- some systems many releases behind current causing functional incapacities
- campuses not included in central design concepts and funding discussions allowing independent and duplicate efforts



Observations and Findings

- **District IT Delivery Model**

The District has contracted the management and operation of DCS through a comprehensive outsource service contract with Sungard Collegis Inc. (SungardHE). The current SunGard contract provides for the following services:

- IT management, leadership - CIO
- Administrative computing
- IT operations and administration
- Technical and Network engineering
- IT help desk services
- Database system administration
- Web management & development services
- Telephony support
- Media support – SBCCD streaming media initiative

The district has had a 19 year outsource relationship with SunGard/Collegis with the current 3 year agreement extending through June of 2009.



Observations and Findings

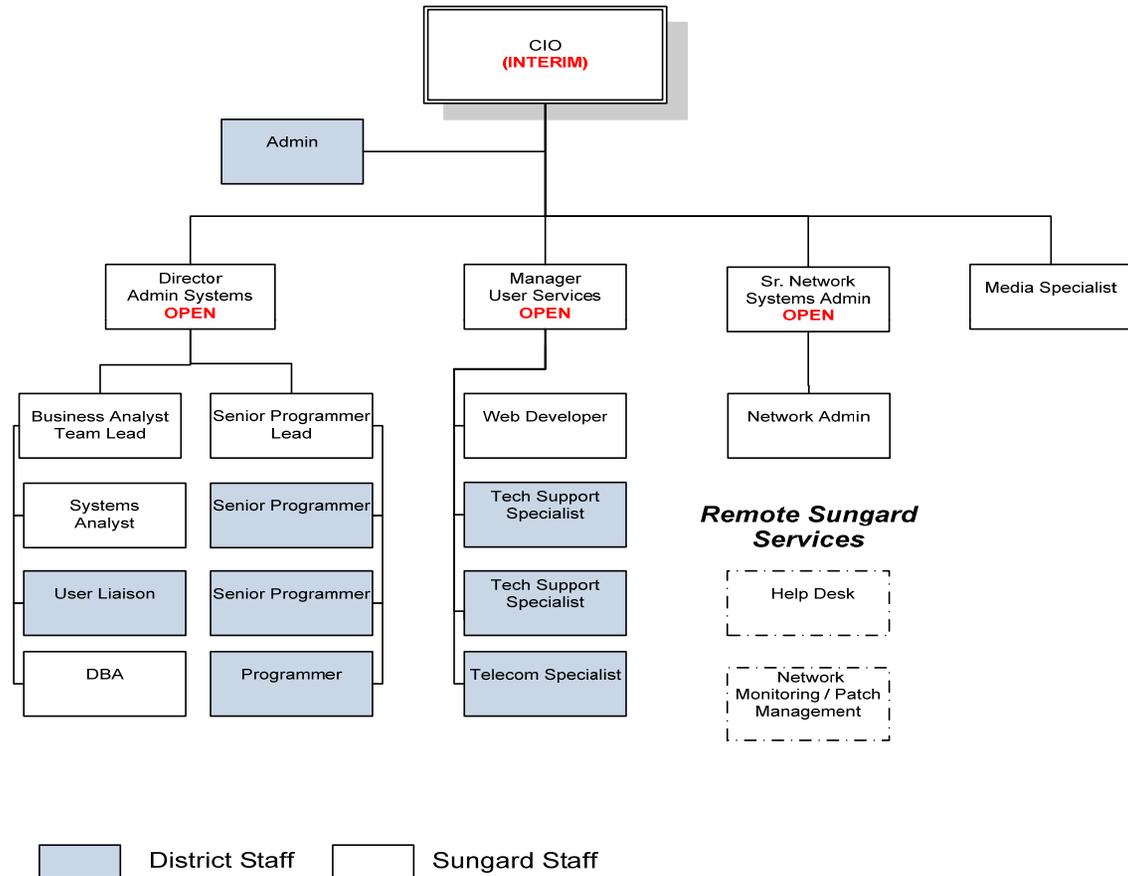


Figure 1 - Current DCS Organization



Observations and Findings

- **Shared Governance**

DCS resources are a blend of on-site and remote SunGard resources and district classified staff

- SunGard responsible for the direction and supervision of SunGard and classified associates.
- District management is responsible for personnel management and professional development of the District IT classified staff.
- From PlanNet's perspective, this model is problematic in that senior IT management (SunGard) does not have direct accountability for IT staff performance, which is a common practice even in an outsource governance model.

Staff Turnover and Continuity

- There are currently 4 senior SunGard management/technical positions that are open or filled with temporary staff.
- Turnover in critical college administration positions has also impacted IT effectiveness



Observations and Findings

Performance and Productivity

- In general, productivity of the DCS MIS function appears significantly lower than we would expect from a programming staff the size of its size.
- The district practice of allowing 'churn' of project priorities has impacted DCS productivity and the ability of the district to hold SunGard accountable for outcomes and contract performance.
- SunGard indicated that 80% of the on-site DCS development staff is focused on routine maintenance, DataTel code remediation and support of ad-hoc and standard reporting requests.
- Based on that assessment, the current MIS resource capacity is insufficient to address the project work defined in the 2008 IT Tactical Plan. Additional resources/delivery capabilities will be required to address this backlog
- As there are no specific estimates for effort or cost, or viable schedule that identifies project interdependencies for Tactical Plan as a whole, an additional study is warranted to evaluate IT resource loading, sourcing and scheduling to accomplish the Tactical Plan.



Observations and Findings

IT Governance

The district lacks effective governance, shared or otherwise; The Strategic Plan document (Sept. 2007) has an action item to “establish governance.” The absence of a strong central authority allows projects to languish without adequate sponsorship, scope and authority to execute.

Current Governance Process

- DCS conducts occasional strategic planning exercises, attended by representatives from the college campuses
- The colleges conduct their own annual program reviews and accreditation cycles and bring technology-based initiatives to their own local technology committees
- Local technology committees function as advisory bodies, recommending project prioritization to local administration for approval and funding
- Local committees look to get projects funded locally because they may not get championed at the district level or will be added to massive backlog
- Projects brought to the District Technology Committee are added to the Tactical Plan; tactical plan includes projects submitted through other channels
- Tactical Plan is taken to college presidents for prioritization but rationale behind the prioritization is not communicated back down to the committees



Observations and Findings



DCS Current Operating Principles

DCS functions under a set of operating principles that shape the outcomes and perception of the services delivered. These operating principles are based upon a blend of formal and informal policies, procedures and departmental culture.

- **Operational**
 - Access to IT services is based upon relationships and proximity
 - Services are delivered on a best-effort basis
 - IT communication plan is focused on district executive leadership
 - IT Help Desk provides Level 1 technical support
- **Organizational**
 - Focus is on engineering, not on value and customer management
 - Delegate implementation and communication to project sponsors
 - SunGard management focus is on SunGard resources
- **Cost Management**
 - Project priority is determined based upon perceived benefits with little visibility to cost and effort
 - IT purchasing is de-centralized based upon sponsor location, preferences and funding sources
 - Technology is budgeted without a full accounting of total cost of ownership (TCO)
 - Project management and delivery methods are determined by the project team
- **Performance and Quality**
 - Performance is measured by effort rather than outcomes
 - Quality is measured by opt-in surveys and district executive leadership reviews



Recommendations

Operating Principles



PlanNet recommends that the DCS move to a new set of operating principles.

- **Operational**
 - Manage the customer according to service guidelines
 - Services are defined in a published IT Service Catalog
 - IT Service Desk utilized for all DCS service requests
 - IT communication plan is directed to include all DCS customers, stakeholders and management
 - Manage projects using a well defined process built upon an industry accepted methodology
- **Organizational**
 - In-source office of CIO and elevate position to Chancellor's cabinet
 - Administrative and academic desk-side services are provided by local IT resources
 - DCS responsible for all technology implementation planning, execution and communication
 - Management responsible and accountable for all DCS resources
- **Cost Management**
 - Project priorities are established by evaluation of business value and project costs
 - IT purchases are centralized based upon established technology standards
 - Technology budgets will include a full accounting of total cost of ownership (TCO)
- **Performance and Quality**
 - Performance is measured by meeting agreed upon service commitments
 - Measure quality through continuous collection of data, objective reporting and collaborative evaluation and remediation with DCS customers. This should include regular District-wide customer satisfaction surveys
 - DCS is transparent in accounting of IT productivity that includes completed service requests and staff resource utilization



Recommendations

IT Governance

IT Governance

Fundamental to shared governance is collaborative decision-making. Many constituent groups need to be represented and a process is needed for enrolling those sometimes disparate voices and arriving at sound decisions that have been properly challenged, vetted and prioritized against competing interests and the central mission of the district.

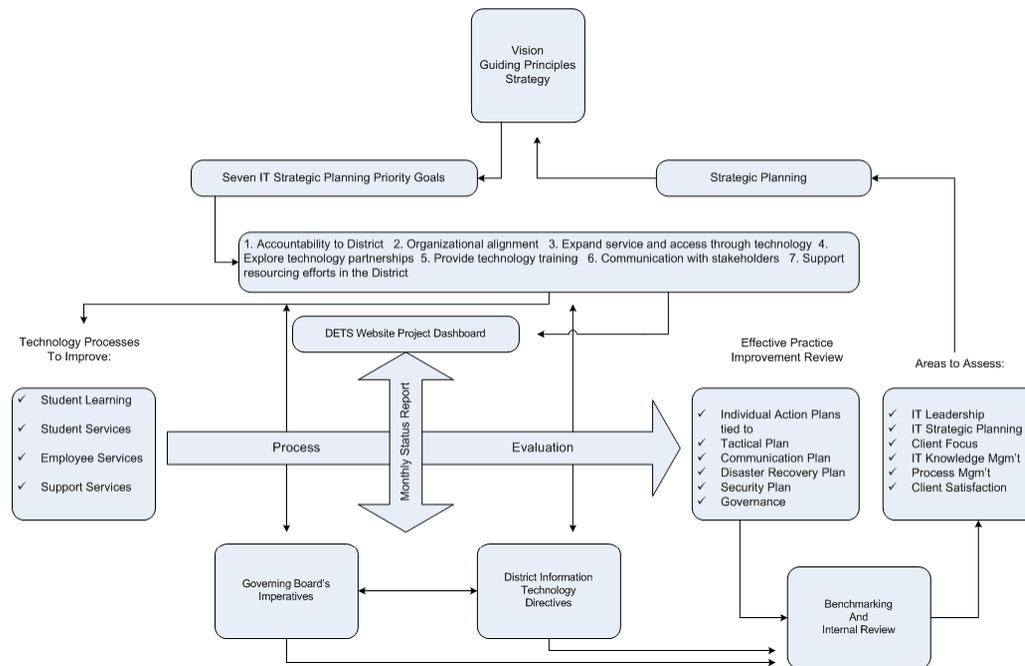
- Existing committees need to be placed into hierarchical structure
- Committees need to be established based on function, not geography
- Steering committee needs to have executive membership
- Committees need charter, mission statement, process for chair and member appointments and a communication plan
- Committees need to be empowered beyond function as advisory bodies. This includes budgetary authority and say in annual discretionary spending
- The Tactical Plan needs to be a fully socialized list of projects that regards the competing interests of the other constituencies and campuses
- DCS management needs to view itself in the role of administrating the process of obtaining sign-off from the appropriate governance committee rather than from a top-level executive



Recommendations

IT Governance (continued)

The IT strategic plan document of September 2007 has the following representation of a performance model that could be used by a governance structure to produce intended outcomes:



In our opinion, the essential components of this decision matrix are sound and achievable. But the execution of this workflow requires specific committee structure and executive responsibility for the communication.



Recommendations

IT Governance (continued)



Committee hierarchy and accountability

- There should be four district-wide governing bodies:
 - Executive Technology Strategy Council (ETSC)
 - Academic Technology Committee (ATC)
 - Infrastructure Technology Committee (ITC)
 - Enterprise Technology Committee (ETC)
- Additional subcommittees can be formed to shadow IT management and serve as advisory boards. Examples of these are:
 - *Information Assurance Subcommittee*
 - *Web Design and Planning Subcommittee*
 - *HRS Task Force*
 - *One-card Task Force*
- Additionally, colleges should retain existing or charter new committees to formulate constituent-specific initiatives and priorities. Chairs of these committees would be expected to participate in relevant district-wide committees.



Recommendations

IT Governance (continued)



Committee hierarchy and accountability (continued)

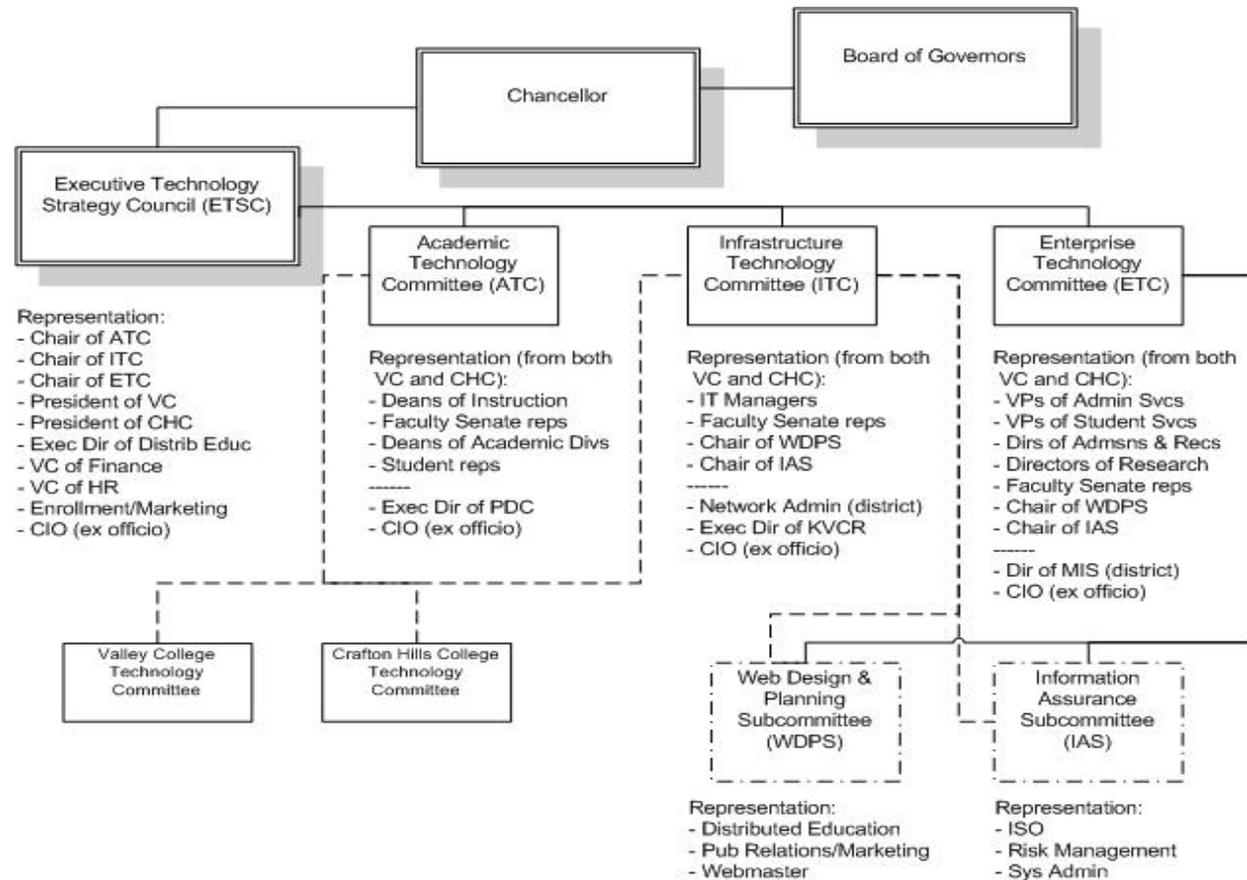
- Committees meet bimonthly, subcommittee and task forces more frequently as needed. Responsibilities include:
 - Determine project viability; request scope and lifecycle from DCS
 - Propose project priority and funding source (grant/local/district/capex/opex)
 - Re-adjust project priorities from ETSC (iterative process)
 - Review and recommend policies
 - Review and recommend SLAs
 - Review and recommend standards
- The Executive Technology Strategy Council (ETSC) meets quarterly to:
 - Call for updates to strategic plan (annually)
 - Dictate initiatives from strategic plan
 - Rationalize tactical plan to strategic plan
 - Determine priority and funding for committee-vetted projects
 - Recommend policy to board of governors
 - Approve and enforce SLAs
 - Ratify standards
- DCS's role is to staff the process of getting projects through committee. IT managers act as liaison and committee clerk, publish agenda and minutes, research committee directives, delegate and follow up on action items. Committee directives could include: cost/benefit, project initiation, funding sources.



Recommendations

IT Governance (continued)

Figure 3 – Proposed SBCCD Governance Structure





Recommendations

IT Governance (continued)



Committee structure, process, communication plan

- For all committees, a clear committee charter needs to be drafted, decision-making and budgetary authority granted, and mandated communication plan implemented.
 - committee charters
 - chair appointments
 - agenda/minutes
 - staff support from DCS
 - specific project initiation process
 - communication plan – committee chair is responsible to its constituency group for communication and closing the feedback loop
- Successful implementation of the above governance recommendations will enable:
 - unification across academic and administrative silos
 - success potential in budgeting/funding (executive representation)
 - systematic approach to project initiation and prioritization
 - an informed community



Recommendations

IT Governance (continued)

Chief Information Officer

- A success criterion for effective governance is consistent technology leadership that reaches across the governance committees.
- PlanNet recommends the creation of a cabinet-level CIO, whose office which would address such functions as strategic and operational planning, ex officio standing on governance committees, and management of the tactical plan.



Future-state Delivery Model

Summary of IT Delivery Options

- Out-task some technology functions while in-sourcing management. This model is PlanNet's recommendation.
- In-source all technology functions and management. This model is espoused by many stakeholders in the district
- Outsource all of IT, including academic support and executive oversight. This is SunGard's best-practice.

PlanNet has developed risks and costs associated options 1 and 2. PlanNet does not regard option 3 as viable for the district; therefore risks and costs associated with that option are not included in our assessment.



Future-state Delivery Model

Recommended Model



Recommended IT Delivery Model (Out-task)

The out-task delivery model provides for the continuity of existing commitments/investments in SunGard proprietary applications and IT systems management infrastructure and for the adaptability to plan, source, staff and implement technology through district, SunGard or third-party service providers over time as needed.

- Key attributes of Out-task delivery model:
 - The district CIO office will plan, direct and administer delivery of all DCS service commitments.
 - SunGard and classified staff provide technical domain expertise and support for DCS operation
 - Model moves SunGard and district resources to their area of core competency:
 - SunGard providing technical engineering, IT operation and application delivery and support for enterprise systems
 - District technical staff providing localized desk-side support
 - IT policy, architecture, program management and governance through the district CIO office
 - Direct district management of classified IT staff



Future-state Delivery Model

Recommended Model (continued)

- **In-source Office of CIO**
 - Information Technology requires a seat at the table. The chancellor and board should elevate the chief information officer to a cabinet-level position and give visibility to the importance of technology in the district.
 - CIO needs to be part of the culture and SBCCD community, not a third party who is required to manage conflicting interests. A fundamental IT best-practice is to maintain IT governance in-house as a core competency.
 - By committing to the creation of a cabinet-level CIO position, the district improves its chances of enjoying a long-term relationship with a qualified leader, stemming the revolving door effect that has crippled the effectiveness of DCS in recent years.
 - Office of CIO responsibilities include:
 - Strategic and Operational planning
 - Contract/vendor management
 - Program Management Office
 - Technical Architecture
 - Information Security



Future-state Delivery Model

Recommended Model (continued)

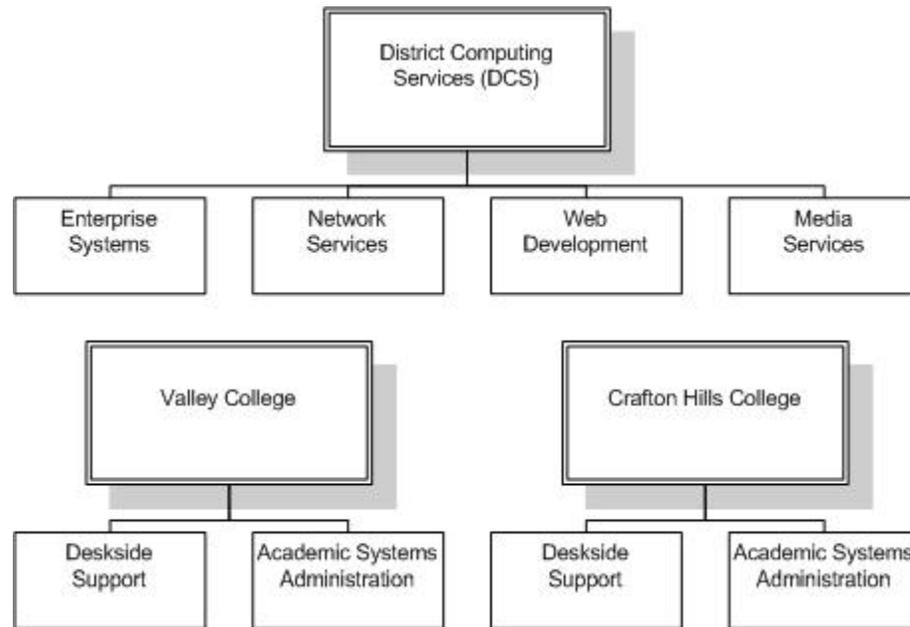
- **Consolidate and localize academic/admin desktop support**
 - Each college should have an IT manager that oversees a staff of technicians who support break/fix duties, desktop deployments, server administration and telecom moves/adds/changes
 - The district CIO should promote and foster a truly collegial environment where specializations are allowed to flourish and resource-sharing is encouraged
 - Operate as a pool of technical resources servicing all college departments and divisions (Crafton Hills model)
- **Continued use of outsource services for MIS support**
 - BSA, User Liaison, DBA, Webmaster and Programming
 - SunGard as intermediate provider
- **District owns and supports the network to the wall plate**
 - DCS provides for the design, engineering and support of district-wide network
 - Local IT will maintain limited admin rights



Future-state Delivery Model

Recommended Model (continued)

Figure 4 - Proposed IT Functional Organization





Future-state Delivery Model

Recommended Model (continued)



- **Continue/expand outsourced Service Desk**
 - Outsourced Tier 1 help desk is a cost-effective solution compared to an internally staffed function
 - Effectiveness of help desk is tied to process, not geography
 - Assess and revise current SLAs and escalation procedures
 - Continue intermediate use of SunGard Help Desk Online services while exploring other sourcing options for FY09/10
 - All IT service requests, including MIS, need to be fully incorporated to complete the value proposition of a centralized “service” desk
 - Specifically, new user requests should be initiated through the service desk
- **Centralize IT procurement**
 - Leverage volume pricing
 - Maintain standards
 - Enhance service levels by stocking inventory
- **District owns Security operations**
 - DCS is accountable for standards compliance
 - Local IT will maintain local server admin rights in accordance with district standards



Future-state Delivery Model

Recommended Model (continued)



- **Publish a clearly defined catalog of IT services**
 - Catalog to include the following information:
 - Clear description of IT service
 - Cost of service
 - Process to request the service
 - Service level objective/agreement for service
 - Information required from the requestor to fulfill the request
 - Process and timeframe that requestor will receive status update on service fulfillment
- **Establish Service Level Objectives for DCS services**
 - Security/user administration
 - New user boarding
 - Desktop, voice systems moves/adds/changes (MAC)
 - Break/fix response and resolution
 - Help Desk response time and escalation commitments
- **Enhance MIS service request process**
 - Pre-negotiated classes of service for ad-hoc reporting, routine maintenance
 - New/significant project work



Future-state Delivery Model

Risks and Costs

Out-task Delivery Model (recommended)

- **Resources**
 - DCS, SunGard and classified engineering staff will continue in the basic roles and responsibilities that exist today
 - Additional resources include the district CIO position and a local IT desk-side support manager and technical specialist at Valley College.
- **Training/Development**
 - Professional and technical training and development of district classified staff is required to elevate the existing staff performance to predictable levels. SunGard staff development is planned and budgeted as part of the SunGard service agreement.



Future-state Delivery Model

Risks and Costs (continued)

Out-task Delivery Model (continued)

- **Out-task model risks / critical success factors**
 - SunGard ability to staff and retain high-quality resources
 - District visibility to SunGard resource allocation, utilization and cost
 - District ability to implement district-wide governance as described in the PlanNet recommendations
- The district should anticipate that SunGard services expenses will continue as-is through the current contract period (June '09).
- Out-tasked IT services expenses will likely remain at the existing level through the next negotiated contract period as the district will substitute current outsourced CIO expenses for increased help desk and programming / engineering capabilities.



Future-state Delivery Model

Risks and Costs (continued)



In-source Delivery Model (not recommended)

- **Resources**
 - All existing DCS local and remote functions will be filled with district management and classified staff. The model accounts for the addition of necessary skills resulting in a net increase of 1 senior-level technical resource.
- **Outside consulting/contracting**
 - One of the distinct benefits of using an outsourcer is the draw on additional backend resources for additional expertise beyond that of the locally placed staff. SBCCD needs to right-size its core development team and infrastructure and plan to contract for specialized domain expertise for projects with well-defined boundaries.
- **Tools and Systems**
 - One of the functions currently performed by SunGard via Remote Services is network management. Other systems include help desk and asset management. These functions require specialized software tools. Replacing should cost approximately \$205,000, including integration costs.
- **Training/Development**
 - In-source model will require significant one-time training and development costs in support of SunGard management tools and application replacement.
- **Migration of custom applications**
 - A significant undertaking in moving away from SunGard services is the implementation of and migration to replacement applications that would perform the function of existing SunGard -provided or customized applications. Estimated costs are \$1,170,000.



Future-state Delivery Model

Risks and Costs (continued)

In-source Delivery Model (continued)

- **In-source model Risks / Critical success factors**
 - District ability to recruit, train and retain qualified management and technical resources
 - District ability to manage SunGard during transition period
 - District ability to manage multiple, complex migration projects
 - IT delivery is not a district core competency
 - Transition funding
 - District ability to implement district-wide governance as described in the PlanNet recommendations
 - Transition to internal IT resources may restrict district's future IT sourcing options



Future-state Delivery Model

Risks and Costs (continued)

IT Delivery Costs Comparison

Expense Category	In Source IT Delivery		Out-task IT Delivery	
	Costs		Costs	
	One-time	Annual	One-time	Annual
Office of CIO	\$ 25,200	\$ 168,000	\$ 25,200	\$ 168,000
Resources	\$ 93,600	\$ 936,000	\$ 7,200	\$ 72,000
Services (includes transition)	\$ 1,679,782	\$ 308,880		\$ 1,988,662
Backlog	Requires further study		Requires further study	
Tools / Training	\$ 235,750	\$ 112,320	\$ 50,000	\$ 7,200
Migration from custom applications	\$ 1,170,000	\$ 84,600		
Contingency	\$ 234,000	\$ 397,732		
Total	\$ 3,438,332	\$ 2,007,532	\$ 82,400	\$ 2,235,862

Figure 5 – IT Delivery Model Cost Comparison



Implementation Roadmap



Implementation Roadmap

PlanNet recommends the following actions and schedule.

- **Phase I**
 1. Establish district Office of CIO
 - Secure board approval for CIO as cabinet-level position
 - Recruit an outstanding candidate with demonstrated leadership style, coalition-builder, roots in academia
 2. Establish new IT governance structure
 - Create procedures for IT governance committee appointments, chair selection
 - Charter committee and appoint and designate membership
 3. Reassess the IT 2008 Tactical Plan for alignment, cost and viability
 - Commission a study to evaluate IT resource loading, sourcing, costs and master schedule to accomplish the Tactical Plan
 - Consider canceling all backlog projects not deemed deliverable within 1 year
 4. Conduct a formal performance review of the current SunGard contract specifically as it relates to staffing obligations and resource allocations
 - District should insist on immediate resolution and commitment to staff continuity or seek appropriate contract relief
 - District should pursue direct participation in candidate selection process
 5. Assess and revise current Help Desk Online SLAs and escalation procedures



Implementation Roadmap (continued)



Implementation Roadmap

- **Phase II**
 1. Establish a district-wide IT communication plan
 2. Implement industry-accepted project management and IT delivery methodology
 3. Hire IT Manager and Tech Support Specialist for Valley College
 4. Localize desk-side support
 - Distribute existing DCS techs to specific campuses
 - Consolidate VC desk-side support resources into a single resource pool
 5. Create IT Service Catalog
 - Create desktop, software standards
 - Establish SLAs
 6. Integrate enterprise systems service requests into help desk
 7. Establish district-wide customer satisfaction survey
 8. Structure and negotiate new IT services contract(s) based upon out-task delivery model
 - Contract should be competitively bid
 - Services should be broken out for the option to source discreetly
 9. Create task force under ETC committee to address campus one-card system implementation



Implementation Roadmap (continued)

Implementation Roadmap

- **Phase III**
 1. Create a strategy for migrating from SunGard-provided applications where it makes sense
 2. Reconvene district IT Assessment Committee to review implementation of approved assessment recommendations. Recommend no longer than one year.



Q & A

QUESTIONS / OPEN DISCUSSION

