

## WA State Consolidated Technology Services State Data Center Projects

<b>Prepared By:</b>	Consolidated Technology Services
<b>Date:</b> 09/24/2012	<b>Period Covered:</b> September 3 – September 14

### Project Dashboard

Project Name	Scope	Schedule	Budget
SDC Program	Y	Y	G
OB2 Heat Reduction	G	G	G
SDC Facilities	G	Y	G
SDC Network	Y	G	G
SDC Firewall	G	G	G
SDC Storage Optimization	G	Y	G
SDC Cloud Utility Service	G	G	G
OB2/CTS Move Phase 1 (Pending)	G	G	G
Migrate WSP to SDC	G	G	G
Virtual Tape Library	G	G	G
OB2/CTS Move Phase 2	G	G	G
OB2 Data Center Optimization	G	G	G

**Scope Key:**

- G = No issues are impacting scope
- Y = Issues are being tightly managed, but may impact scope
- R = Unresolved issues are preventing progress of identified scope

**Schedule Key:**

- G = On schedule
- Y = Key milestones are more than 2 weeks late
- R = Key milestones are more than 8 weeks late

**Budget Key:**

- G = Planned spending is within 5% to 10% of agreed upon budget
- Y = Planned spending is within 11% to 20% of agreed upon budget
- R = Planned spending is greater than 20% of agreed upon budget

		Baseline Budget as of 3/6/2012 Revised with NWC, Storage, Firewall Approved Investment Plans		As of 6/30/2012
Phase #	Phase	Budget-Funded	Budget-Unfunded	Actuals
0	SDC Program	\$2,729,570		\$1,473,146
1	OB2 Reduce Heat	\$0		
2	Facilities Op Readiness	\$2,673,817		\$1,267,008
3	NW Core Op Readiness	\$8,592,141		\$6,322,279
4	Firewall	\$2,179,779	\$1,491,800	
5	Storage Optimization	\$4,294,613		\$782,641
6	Cloud Utility Service	\$1,000,000		
7	OB2 Move Phase 1	\$5,807,543	\$893,271	
8	Virtual Tape Library	\$1,950,000		
9	OB2 Move Phase 2		\$4,338,749	
10	OB2 Data Center Optimization		\$1,500,000	
11	Migrate WSP	\$800,000	\$1,200,000	
<b>Total</b>		<b>\$30,027,463</b>	<b>\$9,423,820</b>	<b>\$9,845,074</b>

This graphic shows the baseline budget for all SDC projects (includes both implementation costs and 5-yr maintenance commitments).

## SDC Projects Status

Project	Planned for this Reporting Period (September 3 –September 14)	Status of Work Performed this Reporting Period (September 3 –September 14)	Planned for Next Reporting Period (September 17 - September 28)
<b>SDC Program</b>	<ul style="list-style-type: none"> <li>• Continue work on the following design decisions                             <ul style="list-style-type: none"> <li>○ Nexus 2k use &amp; design</li> <li>○ Converged Networking</li> <li>○ Cisco Storage Switching</li> <li>○ Document the SDC Out of Band Management design</li> <li>○ Continue work on SDC Security Connectivity</li> </ul> </li> <li>• Work on dependency mapping between divisions(roadmap).</li> <li>• Work on Cisco high level design</li> </ul>	<ul style="list-style-type: none"> <li>• Completed work on the following design decisions:                             <ul style="list-style-type: none"> <li>○ Nexus 2k use &amp; design (con't)</li> <li>○ Converged Networking (con't)</li> <li>○ Cisco Storage Switching (complete)</li> <li>○ OOB Strategy &amp; Design (complete)</li> <li>○ SDC Security Connectivity (con't)</li> </ul> </li> <li>• Continued work on SDC roadmap</li> <li>• Completed the Cisco High level design (storage centric)</li> </ul>	<ul style="list-style-type: none"> <li>• Complete the following:                             <ul style="list-style-type: none"> <li>○ Nexus 2k use &amp; design (con't)</li> <li>○ Converged Networking (con't)</li> <li>○ SDC Security Connectivity (con't)</li> <li>○ SDC-029 SDC Customer Connectivity Strategy (needs signature)</li> <li>○ SDC-021 DH1 Intra-Row cabling for Servers</li> </ul> </li> <li>• Presentation of the SDC Roapmap Strategy</li> </ul>
<b>OB2 Heat Reduction</b> Reduce the amount of heat being generated in the OB2 data center and provide an incident response plan.	<ul style="list-style-type: none"> <li>• Confirm contact information provided by agencies.</li> <li>• Finalize communication/outreach plan before September 30.</li> </ul>	<ul style="list-style-type: none"> <li>• Confirm contact information provided by agencies.</li> <li>• Finalize communication/outreach plan before September 30.</li> </ul>	<ul style="list-style-type: none"> <li>• Confirm contact information provided by agencies.</li> <li>• Finalize communication/outreach plan before September 30.</li> </ul>
<b>SDC Facilities</b> Prepare the SDC facility for customers. Includes preparing the critical environment (electrical/mechanical) , floor space and physical security for customers.	<p><u>Space Management:</u></p> <ul style="list-style-type: none"> <li>• Work on operating procedures</li> <li>• Post positions for two new data center technicians.</li> </ul> <p><u>Physical Security:</u></p> <ul style="list-style-type: none"> <li>• Security segregation work ongoing.</li> <li>• Security office installation work underway for phones and network.</li> </ul> <p><u>Critical Environment:</u></p> <ul style="list-style-type: none"> <li>• DC Power work underway; to be completed by end of October.</li> </ul>	<p><u>Space Management:</u></p> <ul style="list-style-type: none"> <li>• Work on operating procedures.</li> <li>• Posted positions for two new data center technicians. Posted internally first.</li> </ul> <p><u>Physical Security:</u></p> <ul style="list-style-type: none"> <li>• Security segregation work ongoing.</li> <li>• Security office installation work underway for phones and network.</li> </ul> <p><u>Critical Environment:</u></p> <ul style="list-style-type: none"> <li>• DC Power work underway; to be completed by October 5.</li> </ul>	<p><u>Space Management:</u></p> <ul style="list-style-type: none"> <li>• Continue work on operating procedures</li> <li>• Reviewing potential candidates within CTS to to fill open positions.</li> <li>• Confirm storage requirements for structured cabling</li> </ul> <p><u>Physical Security:</u></p> <ul style="list-style-type: none"> <li>• Security segregation work ongoing.</li> <li>• Approve purchase order for installation of Cat 6 cabling for network and phones.</li> </ul> <p><u>Critical Environment:</u></p> <ul style="list-style-type: none"> <li>• DC Power work underway; to be completed by October 5.</li> </ul>

Project	Planned for this Reporting Period (September 3 –September 14)	Status of Work Performed this Reporting Period (September 3 –September 14)	Planned for Next Reporting Period (September 17 - September 28)
<p><b>SDC Network Core</b> Establish the network core in the SDC and connect with the OB2 network.</p>	<ul style="list-style-type: none"> <li>Continue to work with CenturyLink and Cisco on remainder of missing (SFP) parts</li> <li>Finalize Cisco Engineering High Level Design (HLD) deliverable.</li> <li>Finalize Cisco Rack &amp; Stack equipment inventory and site survey deliverables.</li> <li>Continue OB2 Lab testing of 5K and 7K - MPLS and Fabric Path functionality required for SDC Network Core.</li> <li>Continue work on OOB/FOOB Design Decision for SDC.</li> <li>Continue provisioning work for SDC/OB2 fiber path o support (OB2) Cisco M6 and CRS equipment moves to SDC.</li> <li>Continue work on server installation to support Cisco Network Management.</li> <li>Begin work on Cisco Low Level Design (LLD).</li> </ul>	<ul style="list-style-type: none"> <li>Received shipment of missing Cisco SFP parts.</li> <li>Continue to finalize HLD</li> <li>Continue to finalize Cisco Rack &amp; Stack inventory and site survey</li> <li>Continue OB2 Lab testing of 5K and 7K - MPLS and Fabric Path functionality required for SDC Network Core.</li> <li>Received approval of OOB/FOOB Design Decision</li> <li>Continue provisioning work for SDC/OB2 fiber path o support (OB2) Cisco M6 and CRS equipment moves to SDC.</li> <li>Continue work on server installation to support Cisco Network Management.</li> <li>Continue to finalize LLD</li> </ul>	<ul style="list-style-type: none"> <li>Finalize Cisco Engineering High Level Design (HLD) deliverable.</li> <li>Finalize Cisco Rack &amp; Stack equipment inventory and site survey deliverables.</li> <li>Continue OB2 Lab testing of 5K and 7K - MPLS and Fabric Path functionality required for SDC Network Core.</li> <li>Continue provisioning work for SDC/OB2 fiber path o support (OB2) Cisco M6 and CRS equipment moves to SDC.</li> <li>Continue work on server installation to support Cisco Network Management.</li> <li>Continue work on Cisco Engineering Low Level Design (LLD).</li> <li>Prepare for installation of GPS Antenna and Server.</li> </ul>
<p><b>SDC Firewall Project</b> Replace aged and over-capacity firewalls and deliver enhanced data security services to both OB2 and SDC.</p>	<ul style="list-style-type: none"> <li>Validate the Low Level Design (LLD) with the vendor</li> </ul>	<ul style="list-style-type: none"> <li>Waiting for Fortinet engineer to come on site to finalize the LLD</li> <li>SOW signed</li> </ul>	<ul style="list-style-type: none"> <li>Vendor to come onsite</li> <li>Finalize Project charter</li> <li>Purchase lab gear</li> </ul>
<p><b>SDC Storage Optimization</b> Replace aged systems and optimize the environment to reduce rates.</p>	<ul style="list-style-type: none"> <li>Continue Contract Negotiations – OLS/Presidio</li> <li>Continue Developing Statement of Work</li> <li>Complete ESRS Software installation and configuration</li> <li>Schedule installation of 4 -48 port line cards in OB2 9513s</li> </ul>	<ul style="list-style-type: none"> <li>Continue Contract Negotiations – OLS/Presidio</li> <li>Continue Developing Statement of Work with Presidio</li> <li>Working ESRS Software installation and configuration with Cisco</li> <li>Scheduled the installation 4 -48 port line cards in OB2 9513s</li> </ul>	<ul style="list-style-type: none"> <li>Complete Contract Negotiations – OLS/Presidio</li> <li>Complete Developing Statement of Work with Presidio</li> <li>Complete ESRS Software installation and configuration</li> <li>Complete installation of 4 -48 port line cards in OB2 9513s</li> <li>Develop Final Bill Of Materials</li> </ul>
<p><b>CTS Cloud Utility Service</b> Provide a Cloud utility platform for CTS customers.</p>	<ul style="list-style-type: none"> <li>No activity planned during this reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned during this reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned during this reporting period.</li> </ul>

Project	Planned for this Reporting Period (September 3 –September 14)	Status of Work Performed this Reporting Period (September 3 –September 14)	Planned for Next Reporting Period (September 17 - September 28)
<p><b>OB2 Risk Mitigation (CTS Move Phase 1)</b> Move selected CTS equipment that best alleviates the heat issue in OB2.</p>	<ul style="list-style-type: none"> <li>• Complete a final draft of the investment plan for management review.</li> <li>• Finalize the project change request.</li> <li>• Initiate detail planning for system moves and supporting facilities and infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>• Completed a final draft of the investment plan and incorporated initial management feedback.</li> <li>• Updated the Project Change Request (PCR). The request cannot be finalized until the investment plan is final.</li> <li>• Hardware planning sessions for all areas have been initiated. Information is being loaded into the Data Center Infrastructure Management (DCIM) tool to design the enclosures.</li> <li>• Established routine meetings with each service owner to facilitate communication, answer questions and resolve issues. These will become project control meetings to monitor and manage progress.</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitate approval of the investment plan.</li> <li>• Continue work sessions to plan hardware enclosures and cabling needed for each group.</li> <li>• Continue development of dependency mapping and project definitions for Move Phase 1 projects.</li> <li>• Begin refining the task plan for Security projects.</li> </ul>
<p><b>Migrate WSP to SDC</b> Plan and execute the first phase of migrating the WSP data center to the SDC.</p>	<ul style="list-style-type: none"> <li>• WSP to obtain feedback from the FBI on the need to cage WSP equipment.</li> <li>• Begin development of an inter-agency agreement (IAA).</li> <li>• Conduct work sessions to develop the Phase 1 network design (these are ongoing).</li> <li>• Continue to gather hardware requirements for equipment enclosure/space planning.</li> <li>• Continue development of SDC chargeback rates and WSP cost model.</li> </ul>	<ul style="list-style-type: none"> <li>• Obtained feedback from the FBI on the need to cage WSP equipment enclosures. The FBI agrees that the enclosures act as a cage and meets CJIS security requirements.</li> <li>• Started drafting the inter-agency agreement (IAA). This agreement will initially cover only Phase 1.</li> <li>• Conducted work sessions to develop the detailed design for the Phase 1 network. Sessions included Cisco and RSI. One session remains to finalize the design and bill of materials.</li> <li>• Obtained a list of hardware needed for Phase 1. The bill of materials for the network hardware may still have some tweaks pending the final network design meeting. Phase 2 hardware will be addressed after Phase 1 equipment is installed.</li> <li>• CTS continues to work with OFM on establishing the rates for the SDC. This is an ongoing effort.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue work on the IIA.</li> <li>• Develop final design and bill of materials for the Phase 1 network.</li> <li>• Draft the enclosure design for Phase 1 equipment.</li> <li>• Continue efforts to establish SDC rates.</li> </ul>
<p><b>Virtual Tape Library Disaster Recovery (VTL)</b> Procure additional VTL equipment to eliminate</p>	<ul style="list-style-type: none"> <li>• Hold a meeting to discuss VTL scope of work and dependencies.</li> </ul>	<ul style="list-style-type: none"> <li>• No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>• Hold meeting to discuss scope and inter-dependencies for the VTL project.</li> </ul>

<b>Project</b>	<b>Planned for this Reporting Period (September 3 –September 14)</b>	<b>Status of Work Performed this Reporting Period (September 3 –September 14)</b>	<b>Planned for Next Reporting Period (September 17 - September 28)</b>
the tape backup system and support mainframe disaster recovery.			
<b>OB2 Risk Mitigation (CTS Move Phase 2)</b> Continue the progress of Phase 1 by moving additional CTS equipment to the SDC.	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>
<b>OB2 Data Center Optimization</b> Reconfigure remaining equipment in OB2 to optimize airflow and cooling.	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>	<ul style="list-style-type: none"> <li>No activity planned for next reporting period.</li> </ul>

**External Project Collaboration**

<b>External Project</b>	<b>Planned for this Reporting Period (September 3 –September 14)</b>	<b>Status of Work Performed this Reporting Period (September 3 –September 14)</b>	<b>Planned for Next Reporting Period (September 17 - September 28)</b>
<b>Server Virtualization</b> Virtualize 60% of CTS physical servers by 7/1/12.	<ul style="list-style-type: none"> <li>Complete TSD OSS Server virtualization, bringing the total % of servers virtualized to 62%.</li> <li>Determine next steps for project.</li> </ul>	<ul style="list-style-type: none"> <li>OSS servers successfully virtualized on 9/7</li> </ul>	<ul style="list-style-type: none"> <li>Determine next steps for project.</li> </ul>
<b>Command Center</b> Establish command center support for the SDC.	<ul style="list-style-type: none"> <li>Waiting on a decision to determine the location of Command Center in the SDC or 1500 Jefferson Building before additional planning can be completed.</li> </ul>	<ul style="list-style-type: none"> <li>No action planned.</li> </ul>	<ul style="list-style-type: none"> <li>No action planned.</li> </ul>
<b>Replace Cisco MDS 9509 SAN Fabric Switches</b> Replace SAN fabric switches in OB2 that are at end of vendor support.	<ul style="list-style-type: none"> <li>Complete the High Level Design</li> <li>Finalize the Project Charter</li> <li>Schedule a Facility Consultation</li> </ul>	<ul style="list-style-type: none"> <li>Continue to work on the High Level Design</li> <li>Continue to work on the Project Charter</li> <li>Meeting on 9/24 to discuss facility consultation</li> </ul>	<ul style="list-style-type: none"> <li>Get Charter Approval</li> </ul>
<b>VLAN Renumbering</b> Optimize VLAN numbering	<ul style="list-style-type: none"> <li>Project planning meeting scheduled for 9/13.</li> <li>High level schedule should be completed by the end of September.</li> </ul>	<ul style="list-style-type: none"> <li>Held kick-off Meeting with Project Team.</li> <li>Updated Project Charter and sent out for review to Project Team and Sponsor.</li> <li>Completed High-Level Schedule.</li> </ul>	<ul style="list-style-type: none"> <li>Finalize Project Charter.</li> <li>Begin work on WBS and Project Schedule.</li> </ul>

External Project	Planned for this Reporting Period (September 3 –September 14)	Status of Work Performed this Reporting Period (September 3 –September 14)	Planned for Next Reporting Period (September 17 - September 28)
<b>PBX</b> Implement new PBX system	<ul style="list-style-type: none"> <li>Nothing Planned -- Waiting for Cabinets, Power, and Structured Cabling to be ready before moving forward with project.</li> </ul>	<ul style="list-style-type: none"> <li>No action planned.</li> </ul>	<ul style="list-style-type: none"> <li>Nothing Planned -- Waiting for Cabinets, Power, and Structured Cabling to be ready before moving forward with project.</li> </ul>

**Top Issues \***

**Issue Key:** *Green* = Issue does not require action within 30 days, *Yellow* = Issue requires action within 30 days, *Red* = Issue requires action within 10 days or less

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
132	Roles & Responsibilities for the Storage Switches and converged network need to be defined. This includes who manages the SDC fiber channel switches and the roles and responsibilities for troubleshooting fiber channel over Ethernet (FCoE) across the converged network.	SDC	Y	11/3/2011	08/15/2012	9/28/2012	<b>9/19/12 HB:</b> Gordon provided the annual maintenance/support cost for the SAN switch gear. Gordon provided current FTE count. Mike Lilly to meet with Gordon to discuss requirements. A meeting next week will cover roles and responsibilities,	Open
145	Potential SDC Customers will need to know the billing rates for SDC products and services before they move into the SDC. Both DSHS and WSP have stated that they will not move into the SDC until they know what ongoing operations will cost.	Finance	Y	3/16/21	7/19/12	9/28/12	The CTS Finance group continues to work this.	Open
199	Need to determine the scope and inter-dependencies for VTL	Storage	Y	7/22/12	9/27/12	9/28/12	Meeting scheduled on 9/27 to discuss resolution.	Open

**Issues Closed this Period**

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
134	Will agencies be allowed to bring their corporate networks into the SDC? This impacts network routing, top-of-rack switches and firewalls as these components would come with an agency corporate network.	TSD	G	11/4/11	7/19/12	9/5/12	This was presented at the 9/5/2012 steering committee and members were give two weeks for review. Anticipated approval at 9/19/2012 steering committee meeting.	Closed
204	A decision is pending from the FBI if the SDC physical security requirements meet CJIS compliance. This decision will determine if a cage is necessary for WSP (and other agencies) equipment. The decision is taking	SDC/WSP	Y	9/4/2012	9/19/2012	9/10/2012	We have verbal approval from the FBI and WSP that the SDC physical security model negates the need for caging. We are	Open

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
	longer than expected and is impacting the schedule.						waiting for written confirmation from the FBI/WSP the week of 9/17/2012.	

**Change Requests \***

No.	Description	Requestor	Request Date	Assigned	Cost Impact	Schedule Impact	Status
	None for this reporting period						

Status (Submitted, Proposal, Approved, Opened, Resolved, Verified, Closed)

**Top 5 Risks \***

ID	Risk Description	Risk Category	Level of Impact	Likelihood	Schedule	Ability to Meet Deadline	Risk Mitigation Comment	Due Date & Action	Assigned To
1	Customers that were expecting to come into the SDC right away must now wait longer, which has end of life/investment implications	Man	3	R	G	G	Communicate with customers the new plan and schedule.	Ongoing	Program Manager
2	Timing may force a need to place hardware in OB2, which has an adverse impact on the heat reduction effort.	Cap	2	Y	G	G	<ul style="list-style-type: none"> <li>• Work with customers to identify solutions that minimize additional heat in OB2.</li> <li>• Institute OB2 heat reduction initiatives to turn off unused servers</li> <li>• Delay implementation of new hardware in OB2 as late as possible</li> </ul>	Ongoing	Facilities

ID	Risk Description	Risk Category	Level of Impact	Likelihood	Schedule	Ability to Meet Deadline	Risk Mitigation Comment	Due Date & Action	Assigned To
3	Because the project is large and includes substantial logistical challenges involving multiple projects/agencies, interdependencies will be complex and could be overlooked.	Man	1	R	G	G	<ul style="list-style-type: none"> <li>Apply project management practices to manage the effort.</li> <li>Break the work down into small and logical units.</li> <li>Use tools to track tasks, dependencies, issues, risks, etc. and automate the planning and communications as much as possible.</li> <li>Implement migration approaches that minimize impacts of system dependencies, such as spanning the network between the OB2 and SDC data centers.</li> <li>Use development and test platforms to verify system dependencies.</li> </ul>	Ongoing	Sr. Project Manager
4	Even though the scope has been reduced to better match the budget, it may be insufficient. Several items remain unfunded.	Res	1	R	G	G	<ul style="list-style-type: none"> <li>Request funding for unfunded projects</li> <li>Identify other funding sources (if possible)</li> <li>Reduce project scope</li> <li>Back-log unfunded projects</li> </ul>	Ongoing	Program Manager
5	Resource Conflict – Program relies on functional staff with competing priorities.	Res	1	R	G	Y	<ul style="list-style-type: none"> <li>Provide clear management guidance on priorities and carefully manage functional staff to minimize conflicts in priorities and work tasks.</li> <li>Expand resource management and track task assignments to the resource level. Identify areas in the plan where resource loading indicates a problem and take appropriate action.</li> </ul>	Ongoing	Sr. Project Manager

**Risk Category** = (Res)ources; (Man)agement; (Tec)hnology; (Fun)ctional; (Dev)elopment; (Int)erfaces; (Sec)urity; (Usa)bility; (Ava)ilability; (Per)formance; (Cap)acity; (Sca)lability; (Ext)ernal.

**Level of Impact Key:**

- 1=major impact
- 2=significant impact
- 3=minor impact
- 0=no impact

**Likelihood Key:**

- G = Low.
- Y = Moderate
- R = High

**Schedule Key:**

- G = on schedule
- Y = Less than 30 days behind schedule (caution)
- R = More than 30 days behind schedule (warning)

**Ability to Meet Deadline Key:**

- G = based on current information, it appears manageable
- Y = there are significant obstacles or areas of uncertainty or concerns
- R = there are clearly identifiable threats or deterioration of ability to manage and control

### Steering Committee Action Items

Item #	Item Description	Assigned	Date Assigned	Date Due
1	No pending action items			