Schedule 4.8 – Service Levels

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COUNTY OF SAN DIEGO / PERATON ENTERPRISE SOLUTIONS LLC   568996: IT AND TELECOMMUNICATIONS SERVICES AGREEMENT
AMENDED AND RESTATED V3

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1 OVERVIEW

Each Service Level has been created to identify key performance measures that will be used to evaluate Contractor's delivery of Services. The overriding goal in developing Service Levels is to monitor and measure performance of the County's most significant business requirements. The expectation is that new Service Levels will be added, deleted or changed to reflect changing or new business requirements. The continuous improvement in effective and reliable provision of Services for Service Levels on yearly basis is expected.

2 HIGH LEVEL REQUIREMENTS

2.1.   Contractor shall post all Service Levels reports to the Service Portal.

2.2.   Contractor shall maintain a live and up-to-date dashboard of current, selected Service Levels on the Service Portal.

2.3.   Contractor shall immediately respond to requests for Services from the offices of the Chief Administrative Office (CAO) and Board of Supervisors (BOS) by dispatching personnel onsite. Site visits will be coordinated through the County Technology Office representative.

3 INCIDENT SERVICE LEVEL SEVERITIES

Severity	Description	Definition
1	Critical	Incidents that cause a complete and immediate work stoppage affecting a Priority 1 Application affecting multiple users. Any single-user Incident involving a Priority 1 Application will be handled operationally as a Severity 1 but will be reported as a Severity 4. In addition, any Incident related to life, health or safety Sites, including but not limited to, the following: • Polinsky Center (entire site data system) or Auto Attendant • Rosecrans Psych Hospital (entire site Data System) • Edgemoor Hospital (entire site data system)

Severity	Description	Definition
2	Urgent	Incidents that cause a complete and immediate work stoppage affecting a Priority 2 Application affecting multiple users. In addition, any Service Request meeting the following criteria: • All Data or Voice down at any County Site • Auto Attendants or ACDs • Video teleconferencing systems located at the Probation Department and Public Defender • Internet access (entire County) • Intranet access (entire County) • File Services (more than one (1) user) • Print Services (more than one (1) user) • E-mail Services (more than one (1) user) • Security violation • Identity management system (more than one (1) user) • Any Interactive Voice System (IVS) Application • Toll-free number • Remote access Service (more than one (1) user) • County badge reader system (entire system only)
3	Important	Incidents that cause a complete and immediate work stoppage affecting a Priority 3 Application affecting multiple users. In addition, any Service Request meeting the following criteria: • Jail Blue Phones • Voice mail system (more than one (1) user) • Audio systems • All other video teleconferencing systems • Alarm circuits • SCADA monitoring circuits • Any non-priority 1 or 2 multiple-user Incident
4	Low	An Incident that affects a single End-User's ability to perform his/her normal daily activities.

3.1 Incident Service Level Reporting Exclusions

Tickets pertaining to the following shall not be included in the calculations for the Incident Service Levels:

- Status Tickets

- Internal Contractor Tickets

  o The exclusion of internal contractor tickets will not result in the exclusion of any End-User generated tickets with the same root cause.
- Duplicate tickets directly related to a master ticket

- Power Outage time will be excluded unless the Contractor is responsible for directly or indirectly causing the power outage.
- Equipment and circuits funded through the E-Rate Program used for internet access by public visitors at the County to the San Diego County Branch Libraries.

4 OUTPUT DELIVERY SCHEDULES

The distribution of reports by Contractor for managed print Services (as set forth in the Data Center Services Framework) shall be in accordance with the following schedule:

Location Description	Trips / Day	Drop Points / Location	Delivery Days	Delivery Time(s) No Later Than
County Administration Center 1600 Pacific Coast Highway Mail Room 050	1	1	Monday – Friday	9:00 AM
County Operations Center 5560 Overland Dr Suite 180 & 5530 Overland Dr Suite 410	1	2	Monday - Friday	9:00 AM
San Diego County Jail 1173 Front St	1	1	Monday - Friday	9:00 AM
Downtown Courthouse Hall of Justice 220 West Broadway	1	1	Monday - Friday	7:30 AM
San Diego Superior Court-Kearny Mesa 8950 Clairemont Mesa Boulevard	1	1	Monday - Friday	7:30 AM
Vista Superior Court 325 South Melrose Dr	1	1	Monday - Friday	7:30 AM

5 SERVICE LEVEL SUMMARIZATION AND WEIGHTING FACTORS

The Service Levels are summarized in the table below. Service Level weighting factors apply as indicated in the table below. The County will adjust Weighting Factors in accordance with Schedule 16.8.

Service Level Weighting Table			
Service Level ID	**Framework**	**Service Level**	**Weighting**
	Cross Functional	Severity 1 (S1) Incidents	
1		1A – S1 Incidents Revolved in ≤ 4 hours	13%
2		1B – S1 Incidents Revolved in ≤ 8 hours	9%
3		1C – Average of 4% of total S1 Incidents with longest resolution times	3%
	Cross Functional	Severity 2 (S2) Incidents	
4		2A – S2 Incidents Revolved in ≤ 6 hours	12%
5		2B– S2 Incidents Revolved in ≤ 10 hours	8%
6		2C – Average of 4% of total S2 Incidents with longest resolution times	3%
	Cross Functional	Severity 3 (S3) Incidents	
7		3A – S3 Incidents Revolved in ≤ 8 hours	7%
8		3B – S3 Incidents Revolved in ≤ 12 hours	3%
9		3C – Average of 4% of total S3 Incidents with longest resolution times	1%
	Cross Functional	Severity 4 (S4) Incidents	
10		4A – S4 Incidents Revolved in ≤ 10 hours	11%
11		4B – S4 Incidents Revolved in ≤ 16 hours	5%
12		4C – Average of 4% of total S3 Incidents with longest resolution times	2%
13	Cross Functional	Add End-User Account	0%

Service Level Weighting Table			
Service Level ID	**Framework**	**Service Level**	**Weighting**
13-1	Cross Functional	Add End-User Account (Interim)	
		13-1a – 3 Business Days	3%
		13-1b – 5 Business Days	
		13-1c - Edgemoor NetSolutions application	n/a
14	Cross Functional	Terminate End-User	3%
15	Cross Functional	Budgetary Estimate Request	3%
16	Cross Functional	Project Estimate Request	3%
17	Cross Functional	Accuracy of Chargeback Billing	4%
18	Cross Functional	Annual Disaster Recovery (DR) Test	0%
19	Cross Functional	Application Recovery Post-Disaster	0%
20	Cross Functional	Asset Tracking	0%
21	Cross Functional	Root Cause Analysis	3%
22	Cross Functional	Filling Vacant Key Personnel Positions	3%
55	Cross Functional	Root Cause Analysis Corrective and Preventative Action Completion	6%
23	Service Desk	Incident Resolution Confirmation Notice	3%
24	Service Desk	Password Resets	
		24a – Password Resets within 30 minutes	3%
		24b – Password Resets within 60 minutes	
25	Service Desk	Response Time	
		A – Speed-to-Answer Time in 75 seconds	3%
		B – Speed-to-Answer Time in 90 seconds	

Service Level ID	Framework	Service Level	Weighting
Service Level Weighting Table		
		C – Call Abandonment Rate	
		D – Email Response Time	
		E – Voice Mail Response Time	
26	Service Desk	Service Repair Scheduling	3%
27	Service Desk	Customer Satisfaction	4%
28	Service Desk	First Call Resolution	0%
54	Service Desk	First Call Resolution – 2nd Generation	3%
29-1	End-User	Operating System (OS)/Microsoft Office Patches Involving Technical Issues and Security Vulnerabilities	3%
29-2	End-User	Operating System (OS) and Core Software Patching for Critical and Zero Day Vulnerabilities	
29-3	End-User	Core Software Patching Involving Technical Issues and Security Vulnerabilities	
30	End-User	Software IMAR	4%
		30a – Software License Available	
		30b – Software License Not Available	
		30c – Move/Remove	
31	End-User	Hardware IMAR	3%
		31a – Hardware License Available	
		31b – Hardware License Not Available	
		31c – Move/Remove	
32	End-User	OIC Additions and Removals	3%
33	Network	Transaction Response Time – Internet/Intranet Availability	

Service Level Weighting Table			
Service Level ID	**Framework**	**Service Level**	**Weighting**
		33a – Transaction Response Time – Intranet within 0.5 seconds	3%
		33b – Transaction Response Time – Intranet within 0.75 seconds	
34	Network	Transaction Response Time – Data Center	
		34a – Transaction Response Time – Data Center within 1 second	3%
		34b – Transaction Response Time – Data Center within 3 seconds	
35	Network	Voice System Call Blocking	3%
36	Network	Data Network Availability	
		36a – Average Availability	3%
		36b – Individual Site via Fiber	
		36c – Individual Site via Copper	
37	Network	Internet Availability	3%
38	Network	Voice Network Availability	3%
39	Data Center	Output Delivery	3%
40	Data Center	Daily Backup	3%
41	Data Center	Quarterly Backup/Restore Test	0%
42	Data Center	Data Restore	
		42a – Data 30 days old or less	1%
		42b – Data 31 days old or more	
43	Data Center	Server Decommission	3%
44	Data Center	[Reserved]	0%
44-1	Data Center	Server Provisioning – Physical (Excludes Oracle)	0%

Service Level Weighting Table			
Service Level ID	Framework	Service Level	Weighting
44-2	Data Center	Server Provisioning – Virtual	2%
44-3	Data Center	Server Provisioning – Oracle	2%
45	Data Center	[Reserved]	
46	Data Center	Server Software Update	
		46-1 – Server Software Update - Operating system patching and updates for Windows and Linux servers	2%
		46-2 – Server Software Update - Operating system patching for Solaris and AIX servers	
		46-3 – Server Software Update - Operating System Patching for Critical and Zero Day Vulnerabilities	1%
		46-4 – Server Software Update - Middleware patching for Production PAIDs	1.5%
		46-5 – Server Software Update - Application Patching for Production PAIDs	1.5%
47	Data Center	Server Availability	3%
48	Applications	Project Management Plan Rework	2%
49	Applications	Service Request Schedule Performance	6%
50	Applications	Variance to Application Budget	6%
51	Applications	Application Availability	
	Applications	51-1 – Application Availability (P1)	1.7%
	Applications	51-2 – Application Availability (P2)	1.7%
	Applications	51-3 – Application Availability (P3)	1.6%
52	Applications	Documentation Update Accuracy	3%

Service Level Weighting Table			
Service Level ID	**Framework**	**Service Level**	**Weighting**
53	Applications	Application Response Time	0%
		53a – Application Response Time – Priority 1 Applications	
		53b – Application Response Time – Priority 2 Applications	
		53c – Application Response Time – Priority 3 Applications	

6 CROSS FUNCTIONAL SERVICE LEVELS

6.1 Severity 1 Incidents

Service Level	Severity 1 Incidents		
Service Level ID	1, 2, 3		
Definition	Time to restore service from time of Incident report to Service Desk Note: Any S1 incident whose duration > 4 or 8 hours, and time exclusions were taken by Contractor, are subject to review/approval by the County. Any exceptions taken shall be reported with the monthly SL reports and maintained by Contractor.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Percent of incidents resolved for D1, D2 and D3 designation	**1A:** D1 = S1 incidents resolved ≤ 4 hours **1B:** D2 = S1 incidents resolved ≤ 8 hours **1C:** D3 = average of 4% of the total S1 incidents with longest resolution times	D1 ≥ 91% of total S1 incidents for Month D2 ≥ 96% of total S1 incidents for Month D3 ≤ 16 hours	D1 ≥ 95.5% D2 ≥ 98% Same formula but modified to 2% of the total S1 incidents with longest resolution times
Formula	**1A:** (Total S1 incidents per Month resolved ≤ 4 hours / total S1 incidents) **1B:** (Total S1 incidents per Month resolved ≤ 8 hours / total S1 incidents) **1C:** Average of 4% of S1 Incidents per Month with longest restore time		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Ticket Duration: Service Desk receipt through service restoration		

6.2 Severity 2 Incidents

Service Level	Severity 2 Incidents		
Service Level ID	4, 5, 6		
Definition	Time to restore service from time of Incident report to Service Desk Note: Any S2 incident whose duration > 6 or 10 hours, and time exclusions were taken by Contractor, are subject to review/approval by the County. Any exceptions taken shall be reported with the monthly SL reports and maintained by Contractor.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Percent of incidents resolved for D1, D2 and D3 designation	2A: D1 = S2 incidents resolved ≤ 6 hours 2B: D2 = S2 incidents resolved ≤ 10 hours 2C: D3 = average of 4% of the total S2 incidents with longest resolution times	D1 ≥ 91% of total S2 incidents for Month D2 ≥ 96% of total S2 incidents for Month D3 ≤ 20 hours	D1 ≥ 95.5% D2 ≥ 98% Same formula but modified to 2% of the total S2 incidents with longest resolution times
Formula	2A: (Total S2 incidents per Month resolved ≤ 6 hours / total S2 incidents) 2B: (Total S2 incidents per Month resolved ≤ 10 hours / total S2 incidents) 2C: Average of 4% of S2 Incidents per Month with longest restore time		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Ticket Duration: Service Desk receipt through service restoration		

6.3   Severity 3 Incidents

Service Level	Severity 3 Incidents		
Service Level ID	7, 8, 9		
Definition	Time to restore service from time of Incident report to Service Desk		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Percent of incidents resolved for D1, D2 and D3 designation	**3A:** D1 = S3 incidents resolved ≤ 8 hours **3B:** D2 = S3 incidents resolved ≤ 12 hours **3C:** D3 = average of 4% of the total S3 incidents with longest resolution times	D1 ≥ 92% of total S3 incidents for Month D2 ≥ 96% of total S3 incidents for Month D3 ≤ 24 hours	D1 ≥ 96% D2 ≥ 98% Same formula but modified to 2% of the total S3 incidents with longest resolution times
Formula	**3A:** (Total S3 incidents per Month resolved ≤ 8 hours / Total S3 incidents) **3B:** (Total S3 incidents per Month resolved ≤ 12 hours / Total S3 incidents) **3C:** Average of 4% of S3 Incidents per Month with longest restore time		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Ticket Duration: Service Desk receipt through service restoration		

6.4 Severity 4 Incidents

Service Level	Severity 4 Incidents		
Service Level ID	10, 11, 12		
Definition	Time to restore service from time of Incident report to Service Desk		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Percent of incidents resolved for D1, D2 and D3 designation	**4A:** D1 = S4 incidents resolved ≤ 10 hours	D1 ≥ 92% of Total S4 incidents for Month	D1 ≥ 96%
	4B: D2 = S4 incidents resolved ≤ 16 hours	D2 ≥ 96% of Total S4 incidents for Month	D2 ≥ 98%
	4C: D3 = average of 4% of the total S4 incidents with longest resolution times	D3 ≤ 32 hours	Same formula but modified to 2% of the total S4 incidents with longest resolution times
	6 AM to 6 PM Monday-Friday, excluding the County's holidays		
Formula	**4A:** (Total S4 incidents per Month resolved ≤ 10 hours / total S4 incidents) **4B:** (Total S4 incidents per Month resolved ≤ 16 hours / total S4 incidents) **4C:** Average of 4% of S4 Incidents per Month with longest restore time		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Ticket Duration: Service Desk receipt through service restoration		

6.5 Add/Modify End-User Account

Service Level	Time duration for creation of and/or changes to End-User account from time of Service Request		
Service Level ID	13		
Definition	Measures the time to add and/or modify new End-User account		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
End-User account addition or modification Service Request completed	3 business days or by the date described in the Service Request or scheduled due date	90%	95%
Formula	Number of End-User Account creation requests completed within Performance Target/total number End-User Account creations requested Algorithm: 100 x ((A – E) / (B – D)) >= 90% where A – # of requests for account and/or access creation and/or change completed within 3 business days or by date described in the service request or by scheduled due date (# Traditional + # Automated CSRF + # Peoplesoft) B – Total # of requests for account and/or access creation and/or change (# Traditional + # Automated CSRF + # Peoplesoft) D – # of requests for account and/or access creation and/or change for non-County employees (i.e. external agencies, Contractor staff, Contractor managed vendors) (# Traditional + # Automated CSRF) E – For non-County employees (i.e. external agencies, Contractor staff, Contractor managed vendors) (# Traditional + # Automated CSRF), # of requests for account and/or access creation and/or change completed within 3 business days or by date described in the service request or by scheduled due date. Clock starts when: • Parent ticket and line items created by Help Desk or Automated CSRF Workflow for account creation and/or		

	access requests to be processed via manual provisioning and any incomplete items or items open to interpretation resolved • Request approved and released by Automated CSRF Workflow for account creation and/or access requests to be processed via automated provisioning • Request released by Peoplesoft for account creation and default access defined per the PeopleSoft business rules to be processed via automated provisioning
	Requests for User IDs received from the same County department on the same day, in excess of twenty (20) or more, an Contractor team member will contact the requestor to determine the required delivery date for some or all of the User IDs requested, and/or solicit approval for an exception from the CIO or designee.
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Contractor-provided

6.6 Add/Modify End-User Account (Interim)

Service Level	Time duration for creation of and/or changes to End-User account from time of Service Request (SR)		
Service Level ID	13-1		
Definition	Measures the time to add and/or modify new End-User account		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
End-User account addition or modification SR completion	13-1a. 3 business days or by the date described in the SR or scheduled due date	13-1a. 60%	13-1a. 80%
	13-1b. 5 business days or by the date described in the SR or scheduled due date	13-1b. 95%	13-1b. 97.5%
	13-1c. Edgemoor NetSolutions application - 1 hour from the receipt of the SR from the receipt of the SR during business hours (8:00am - 5:00pm Mon-Fri)	N/A	N/A

Formula	13-1a. Total # of requests for account and/or access creation and/or change completed within 3 business days or by date described in the service request or by scheduled due date divided by number of requests >= 60% **Algorithm:** 100 x ((A – E) / (B – D)) >= 60% where A – # of requests for account and/or access creation and/or change completed within 3 business days or by date described in the service request or by scheduled due date B – Total # of requests for account and/or access creation and/or change D – # of requests for account and/or access creation and/or change for non-County employees (i.e. external agencies, Contractor staff, Contractor managed vendors) E – For non-County employees (i.e. external agencies, Contractor staff, Contractor managed vendors), # of requests for account and/or access creation and/or change completed within 3 business days or by date described in the service request or by scheduled due date. 13-1b. Total # of requests for account and/or access creation and/or change completed within 5 business days or by date described in the service request or by scheduled due date divided by number of requests >= 95% **Algorithm:** 100 x ((A – E) / (B – D)) >= 95% where

	A – # of requests for account and/or access creation and/or change completed within 5 business days or by date described in the service request or by scheduled due date B – Total # of requests for account and/or access creation and/or change D – # of requests for account and/or access creation and/or change for non-County employees (i.e. external agencies, Contractor staff, Contractor managed vendors) E – For non-County employees (i.e. external agencies, Contractor staff, Contractor managed vendors), # of requests for account and/or access creation and/or change completed within 5 business days or by date described in the service request or by scheduled due date. For clarity, only 13-1a and 13-1b must be met for this Service Level. 13-1c will not be measured for SL purposes. Clock starts when parent ticket and line items created by Service for account creation and/or access requests to be processed via manual provisioning and any incomplete items or items open to interpretation resolved. Requests for User IDs received from the same County department on the same day, in excess of twenty (20) or more, Contractor team member will contact the requestor to determine the required delivery date for some or all of the User IDs requested, and/or solicit approval for an exception from the CIO or designee.
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Contractor-provided

6.7 Terminate End-User Account

Service Level	Time duration for termination of End-User account from time of authorized request by County.		
Service Level ID	14		
Definition	Time duration from the County authorized request to the termination of End-User authorized access for the organization or Contractor.		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
End-User deletion Service Request completed	1 business day or by requested due date*	98%	99%
Formula	End-User account termination requests completed within Performance Target / Total End-User account deletion requests. **Algorithm:** 100 x ((A – C – D – E – F) / (B – C – D – E – F)) >= 98% where **Inclusions:** A – # of requests for account termination completed within 1 business day or by requested due date B – Total # of requests for account terminations **Exclusions:** C – # of requests without request for account termination, i.e., those requests with only access removal D – # of requests for non-County employees (i.e., external agencies, Contractor staff, Contractor managed vendors) E – # of requests for bulk user terminations (over 20 users on one request) F – * # of requests for which the requested due date is prior to request approval, or less than 1 business day Clock starts when ticketing system termination tasks are created by the Service Desk or as a part of a Ticketing system workflow.		

	a) For End-User account terminations, County business rules dictate the Active Directory account be disabled and retained for 2 years prior to deletion. For SL purposes, the disabling of the Active Directory account is counted. b) Request for access deletions that are not a termination are not included
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	The ticketing tool supplied by Contractor automatically records date and time stamps for each activity within a process.

6.8 Budgetary Estimate Request

Service Level	Time Duration to complete a Budgetary Estimate		
Service Level ID	15		
Definition	Length of time to provide budget estimate in response to Service Requests, including schedule and cost estimates or make contact with Requester to negotiate a Budgetary Estimate delivery date for Service Requests.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Request Completion	Proposal for Development completed within 5 business days	95%	97.5%
Formula	**Proposal for Development = 100 x (C/D)** (C) = Total Proposal for Development Completed within 5 business days (D) = Total Proposal for Development requested		
Measurement Interval	Daily		
Reporting Period	Monthly		
Measurement Tool/Source Data	Proposal for Development completed within 5 business days or as negotiated with requestor		

6.9   Project Estimate Request

Service Level	Time Duration to complete a Project Estimate		
Service Level ID	16		
Definition	Length of time to provide a Project Estimate in response to a Project Estimate Service Request, including schedule and costs estimates or make contact with Requester to negotiate a Project Estimate delivery date for Service Requests. Time excludes any County incurred time needed to update/define requirements needed to complete the estimate.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Request Completion	10 business days or as negotiated	95%	97.5%
Formula	Number of Project Estimate requests submitted within target/Total number of Project Estimate requests		
Measurement Interval	Daily		
Reporting Period	Monthly		
Measurement Tool/Source Data	Project Estimates completed within 10 business days or as negotiated with requestor		

6.10 Accuracy of Chargeback Billing

Service Level	Accuracy of billing: chargeback billing accuracy		
Service Level ID	17		
Definition	Measures the accuracy of chargeback billing		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Accuracy	Valid charges and credits	98%	99%
Formula	(Total number of charges – Number of disputed charges resolved in County favor – Low Org change requests not executed) / Total number of charges A rate error impacting more than one chargeback item is counted as a single error. Low Org requests not executed are counted as individual errors.		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	ITrack Chargeback Data and Change Requests • Disputed Charges are those submitted via ITrack as Delete requests. • Low Org Change Requests are those submitted via ITrack Move requests.		

6.11 Annual Disaster Recovery (DR) Test

Service Level	Annual test of DR plan		
Service Level ID	18		
Definition	Once per year activity to test DR preparedness		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Test Completion	Annual test of the DR plan completed and accepted by County in accordance with the criteria agreed upon by County and Contractor prior to execution of each annual test	100%	No earnback provision
Formula	Number of instances within Performance Target/Total number of instances during Measurement Period		
Measurement Period	Once		
Reporting Period	Annual		
Measurement Tool/Source Data	Contractor DR Test Report		

6.12 Application Recovery Post-Disaster

Service Level	Recovery of Applications following disaster		
Service Level ID	19		
Definition	Recovery of applications after a disaster		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Application Recovery	P1 Apps — 48 hours with ≤28 hours of data loss P2 Apps — 72 hours with ≤28 hours of data loss	100%	No earnback provision
Formula	Number of instances within Performance Target/total number of instances during Measurement Interval		
Measurement Interval	Designated recovery period following a disaster		
Reporting Period	Periodically throughout the recovery period		
Measurement Tool/Source Data	Contractor-provided		

6.13 Asset Tracking

Service Level	Management of Assets		
Service Level ID	20		
Definition	Effective management of Assets		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Accurate tracking of Asset components	Accuracy of serial numbers, assigned Location/Person, Hardware/Software configuration	99%	99.5%

Formula	This SL is a comparison of 8 fields as discovered via SCCM (EUS assets), DDMi (Datacenter Assets), scripts (Storage assets) and Spectrum (AT&T Network assets) in a given month versus the data for those assets as found in Asset Manager 9 (AM9). Asset types measured will be all Desktop, Workstation, Laptop, Windows Tablet, Server, Storage, and Network.
	
	Attributes that will used to measure this SL:
	   1. Device Name
	   2. Serial Number
	   3. Brand
	   4. Model
	   5. Location (CoSD Site Level)
	   6. Status (Deployed)
	   7. OS (EUS and Servers)
	   8. Owner Login ID (EUS)
	
	The denominator will be the (number of assets auto-discovered in a given month) * (number of fields), with location only gathered for Desktops, Workstations, Laptops, and Windows Tablets. The numerator will be the (number of fields that matched between AssetManager and autodiscovery)
	
	Example Calculation:
	15,000 Assets discovered in month. Of those, there were 200 fields that failed.
	(15000*8)-200 / (15000*8) = 99.83%
	
	Matching will be done based on Computer Name. Location (not a discoverable field) will be scored based on County issued ITrack location disputes which are deemed valid, after confirming an IMAR or ITrack CR had been submitted and not properly executed. Owner Login ID will be scored based on County issued ITrack Owner Login ID disputes which are		

	deemed valid, after confirming an IMAR or ITrack CR had been submitted and not properly executed.
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	System provided by the Contractor to track and report out-of-compliance activities

6.14 Root Cause Analysis

Service Level	Root Cause Analysis conducted on critical incidents		
Service Level ID	21		
Definition	Assessment of Problems and their causes, with resolutions		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Elapsed Time to produce RCA report	7 business days from S1 and S2 Incidents or other Incidents as requested by County starting at Incident Resolution	99%	99.5%
Formula	Number of instances within Performance Target/total number of instances during Measurement Interval Note – completion criteria for publication of RCA shall be per the identified process in the Standards and Procedures manual		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Measured by the Ticket management system		

6.15 Key Personnel Vacant Position

Service Level	Filling vacant Key Personnel positions		
Service Level ID	22		
Definition	Duration a Key Position is vacant beyond required timeframe to fill		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Number of days position is vacant	2 business day after Key Position becomes vacant	100%	No earnback provision
Formula	Vacant Key Positions filled within the target/all vacant Key Positions filled		
Measurement Interval	Daily		
Reporting Period	Monthly		
Measurement Tool/Source Data	Formal notification in writing of the individual filling the position. If the individual is an interim, a target date for the permanent assignment shall be provided.		

7 SERVICE DESK SERVICE LEVELS

7.1 Incident Resolution Confirmation Notice

Service Level	Providing a Resolution Confirmation notice for all Incident tickets and Service Requests		
Service Level ID	23		
Definition	Total time elapsed to provide all resolution confirmation notices via automated email notification and/or telephone call to the End-User. Service Desk may leave a message with a phone number to call back with any questions. For Incident Tickets, if a message is left, the Incident Ticket shall remain open in a pending closure status for 24 hours to allow the End-User the opportunity to confirm the incident is Resolved.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Schedule	Confirmation Notice within 30 minutes of Incident resolution	99%	99.5%
Formula	Number of instances within Performance Target/Total number of instances during Measurement Interval		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Recording the confirmation notice received in the Ticket management system		

7.2 Password Reset Completion

Service Level	Length of time between password reset request and completion		
Service Level ID	24		
Definition	All requests		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Schedule	• 30 minutes • 60 minutes	• 95% within 30 minutes • 99% within 60 minutes	• 97.5% within 30 minutes • 99.5% within 60 minutes
Formula	Number of instances within Performance Target/total number of instances during Measurement Interval		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Recording the request completion in the Ticket Management System		

7.3   Response Time

Service Level	Response Time for: • Speed-to-answer • Call abandonment rate • Email Response Time • Voice Mail Response Time		
Service Level ID	25		
Definition	Response Time is the duration (measured in seconds) the End-User requires to connect with the Contractor's contact center representative. The Contractor will provide toll-free telephone lines in sufficient quantity to handle the call volume; ACD system(s) to record call date, time and duration information; and electronic interfaces to all systems for monitoring and reporting.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback

• A. Speed-to-answer Time	• ≤ 75 seconds beginning 1st full month of 1st year of measurement in effect; 65 seconds for 2nd year of measurement in effect; 55 seconds for 3rd year of measurement in effect; 45 seconds for 4th year + of measurement in effect	• 90%	• 95%
• B. Speed-to-answer Time	• ≤ 90seconds	• 99%	• 99.5%
• Call abandonment rate	• ≤5%	• 100%	• Same formula, but performance target modified to 2.5%
• Online Response Time	• ≤1 hour	• 95%	• 97.5%
• Voice Mail Response Time	• ≤30 minutes	• 95%	• 97.5%
Formula	Number of instances within Performance Target divided by Total number of instances during Measurement Interval All Respond Time metrics must be met for this Respond Time Service Level. However, if Call Abandonment rate is 4% or less then B. Speed-to-answer Time is considered met for the current month.		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Contractor-provided		

7.4   Service Repair Scheduling

Service Level	The amount of time necessary to schedule a Service Repair		
Service Level ID	26		
Definition	The elapsed time from the time the call is determined to be a desktop Incident Ticket until the End-User is contacted to schedule an onsite service appointment.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to complete scheduling	Within 90 minutes	98%	99%
Formula	Number of instances within Performance Target/Total number of instances during Measurement Interval		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Desktop Incident resolution Tickets only		

7.5 Customer Satisfaction

Service Level	Customer Satisfaction after Service performance		
Service Level ID	27		
Definition	Measures the performance of the Service provided to End-User		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Positive Evaluation Percentage	Percentage of Positive Survey Evaluations (Score 3 and 4)	▪ Year 1 (May 2022 - April 2023) ≥ 90.0% Year 2 and onward (May 2023 – onward) ≥ 91.0%	94%
Formula	Percentage of Positive Survey Evaluations = Total number of survey evaluations returned scoring 3 and 4 divided by Total number of surveys returned. Surveys will be rated on the following four (4) point scale: 1 – Highly Dissatisfied, 2 – Dissatisfied, 3 – Satisfied, 4 – Highly Satisfied. Internal Contractor tickets will be excluded from the survey population. Contractor shall calculate SL performance based on a statistically valid sample which is defined as a 95% confidence level with a 5% margin of error, .5% standard deviation, using a mutually agreed calculator found in the public domain: https://www.qualtrics.com/experience-management/research/determine-sample-size/. If there is insufficient number of surveys returned for a statistically valid sample for a given month, the low volume condition provision as per Section 2.10 – Low Volume Conditions, of Schedule 16.8 – Fee Reductions applies.		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Survey data, ServiceNow		

7.6 First Call Resolution

Service Level	Resolution on first call		
Service Level ID	28		
Definition	First call resolution applies when an end-user request or issue is resolved prior to the conclusion of the call or chat with the Service Desk.		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Percent completed	Call resolved	66%	75%
Formula	Number of tickets closed and resolved on first call or chat/total number of calls and chats during Measurement Interval.		
Measurement Interval	Daily		
Reporting Period	Monthly		
Measurement Tool/Source Data	Contractor provides a system with date and time stamp capabilities to track and report out-of-compliance activities.		

7.7   First Call Resolution – 2nd Generation

Service Level	Resolution on first call		
Service Level ID	54		
Definition	First call resolution applies when an end-user request or issue is resolved prior to the conclusion of the call or chat to include hot hand-offs to support tiers other than Service Desk. On implementation of end user enablement projects (e.g. self-service or self-help projects), the parties shall mutually agree this SL shall receive 0% weighting for a duration of 6 months (or as mutually agreed); after the six months, the parties shall either validate the current performance target or mutually agree on a revised performance target.		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Percent completed	Call resolved	70%	No earnback provision
Formula	Number of tickets closed and resolved on first call (continuous call) or chat/total number of calls and chats during Measurement Interval		
Measurement Interval	Daily		
Reporting Period	Monthly		
Measurement Tool/Source Data	Contractor provides a system with date and time stamp capabilities to track and report out-of-compliance activities. (Service Manager, chat, SSPR tool).		

8   END-USER SERVICE LEVELS

8.1   Critical Software Patches

Service Level	Operating System (OS) / Microsoft Office patches involving technical issues and security vulnerabilities		
Service Level ID	29-1		
Definition	Implementation of OS patches and updates for desktop computing assets.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to Implement	Measured from the approved mandatory installation deadline which must occur within the timeline respective to the update/patch highest severity rating, per the most recent approved Security Patch Management Procedure (XF.006.006). Example: If the highest severity rating is high, the patch must be deployed within 30 days of the patch release date. If the patch/update is made available on November 1st, the approved mandatory installation must commence before December 1st. If the approved mandatory installation deadline is November 15th, the SLA must be met by December 15th.	93% all PCs	96.5% all PCs

Formula	Qty of workstations patched/updated over patch cycle period ÷ (Qty of workstations in the environment - Qty of Unknown workstations - Qty of Exempt workstations)
	Unknown workstations are those that have not connected to the County network for an extended period (at least 90 days) and have not accepted the deployment.
	Exempt workstations are those that have been approved and documented as exempt.
	Acceptable Exceptions are limited to prevent disruption of critical business functions (i.e., TTC Property Tax collection periods November-December and March – April; employee benefit enrollment in October; ROV election blackout periods; fiscal year end processing; calendar year-end freeze).
Measurement Interval	Monthly based on Patch Cycle, not on the calendar month.
Reporting Period	Monthly based on Patch Cycle
	Initial Report - delivered 7 days prior to completion of the Patch Cycle period
	Final Report - delivered within 72 hours after Patch Cycle period
Measurement Tool/Source Data	Contractor-provided

Service Level	Operating System (OS) and Core Software patching for Critical and Zero Day Vulnerabilities
Service Level ID	29-2
Definition	Implementation of Core Software and OS patches and updates specifically identified as Critical or Zero Day Vulnerabilities. Core Software is defined in Schedule 5, Report 64.

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to Implement	Measured from the approved mandatory installation deadline which must occur within 15 calendar days as defined per the most recent approved Security Patch Management Procedure (XF.006.006).

Example: If the severity rating is Critical, the patch must be deployed within 15 days. If the patch/update is made available on November | 93% all PCs | 96.5% all PCs |

	1st, the approved mandatory installation must commence before November 15th. If the approved mandatory installation deadline is November 5th, the SLA must be met by November 20th.
Formula	Qty of workstations patched/updated over patch cycle period ÷ (Qty of workstations in the environment - Qty of Unknown workstations - Qty of Exempt workstations). Unknown workstations (at least 90 days) are those that have not connected to the County network for an extended period and have not accepted the deployment. Exempt workstations are those that have been approved and documented as exempt. Acceptable Exceptions are limited to prevent disruption of critical business functions (i.e., TTC Property Tax collection periods November-December and March – April; employee benefit enrollment in October; ROV election blackout periods; fiscal year end processing; calendar year-end freeze).
Measurement Interval	As needed based on Critical and Zero Day Vulnerabilities produced with vendor remedy.
Reporting Period	Initial Report - delivered on day 9 from patch availability from the vendor Final Report - delivered within 72 hours after Patch Cycle period
Measurement Tool/Source Data	Contractor-provided

Service Level	Core Software patching involving technical issues and security vulnerabilities
Service Level ID	29-3
Definition	Implementation of Core Software patches for desktop computing assets. Core Software is defined in Schedule 5, Report 64.

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to Implement	Measured from the approved mandatory installation deadline which must occur within the timeline respective to the update/patch highest severity rating, per the most recent approved Security Patch Management Procedure (XF.006.006). Example: If the highest severity rating is high, the patch must be deployed within 30 days of	93% all PCs	96.5% all PCs

	the patch release date. If the patch/update is made available on November 1st, the approved mandatory installation must commence before December 1st. If the approved mandatory installation deadline is November 15th, the SLA must be met by December 15th.
Formula	(Qty of workstations patched/updated over patch cycle period + Qty of in progress workstations patched/updated over patch cycle period) ÷ (Qty of workstations in the environment – Qty of Unknown workstations – Qty of Exempt workstations). In Progress workstations are those that have received the deployment, but the user has not taken the necessary action for the install to complete. Unknown workstations are those that have not connected to the County network for an extended period (at least 90 days) and have not accepted the deployment. Exempt workstations are those that have been approved and documented as exempt. Acceptable Exceptions are limited to prevent disruption of critical business functions (i.e., TTC Property Tax collection periods November-December and March – April; employee benefit enrollment in October; ROV election blackout periods; fiscal year end processing; calendar year-end freeze).
Measurement Interval	Monthly based on Patch Cycle, not on the calendar month.
Reporting Period	As Core Patches are Released. Initial Report - delivered 7 days prior to completion of the Patch Cycle period Final Report - delivered within 72 hours after Patch Cycle period
Measurement Tool/Source Data	Contractor-provided

8.2   Software IMAR

Service Level	Completion of Software IMAR		
Service Level ID	30		
Definition	Acceptable time required to Install, Move, Add or Remove Software at a desktop upon County authorization of Service Request (SR) for items covered in the Optional Items Catalogue (OIC).		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Elapsed Time	30a) 2 business days after an add SR is authorized by County or by requested date in SR or date scheduled by Contractor and accepted by requestor when software license is available at time of SR	30a) 90%	30a) 95%
	30b) 7 business days after an add SR is authorized by County or by requested date in SR or date scheduled by Contractor (based on vendor delivery date) and accepted by requestor if software license is not available at the time of the SR	30b) 90%	30b) 95%
	30c) 3 business days after a move or remove SR is authorized by County or by requested date in SR or date scheduled by Contractor and accepted by requestor Business Day Monday — Friday 6 a.m. to 6 p.m., excluding the County Holidays	30c) 90%	30c) 95%

Formula	Number of instances within Performance Target/Total number of instances during Measurement Interval. User requests that specify IMAR execution will be measured from the point of the scheduled time. 30a) Number of requests completed within 2 business days or by requested date in SR or date scheduled by Contractor and accepted by requestor (when software license is available) divided by number of requests completed (when software license is available) >= 90% 30b) Number of requests completed within 7 business days or by requested date in SR or date scheduled by Contractor and accepted by requestor (when software license is not available) divided by number of requests completed (when software license is not available) >= 90% 30c) Number of software move/remove requests completed within 3 business days or by requested date in SR or date scheduled by Contractor and accepted by requestor divided by number of software move/remove requests completed >= 90% For clarity 30a, 30b, and 30c must be met for this Service Level. Clock will be suspended if County approval is required.
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Contractor-provided

8.3 Hardware IMAR

Service Level	Completion of Hardware IMAR		
Service Level ID	31		
Definition	Acceptable time required to Install, Move, Add or Remove Hardware upon County authorization of Service Request (SR). This applies to End User Resource Unit hardware such as desktop computing devices, network printers, and telephones.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Elapsed Time	31a) 3 business days after an add or install SR is authorized by County or by requested date in SR or date scheduled by Contractor and accepted by requestor when hardware is available at time of SR	31a) 90%	31a) 95%
	31b) 7 business days after an add or install SR is authorized by County or by requested date in SR or date scheduled by Contractor (based on vendor delivery date) and accepted by requestor if hardware is not available at the time of the SR	31b) 90%	31b) 95%
	31c) 3 business days after a move or remove SR is authorized by County or by requested date in SR or date scheduled by Contractor and accepted by requestor Business Day Monday — Friday 6 a.m. to 6 p.m., excluding the County Holidays	31c) 90%	31c) 95%

Formula	Number of instances within Performance Target/Total Number of instances during Measurement Interval. Service Requests that specify IMAR execution will be measured from the point of the scheduled time. 31a) Number of requests completed within 3 business days or by requested date in SR or date scheduled by Contractor and accepted by requestor (when hardware is available) divided by number of requests completed (when hardware is available) >= 90% 31b) Number of requests completed within 7 business days or by requested date in SR or date scheduled by Contractor and accepted by requestor (when hardware is not available) divided by number of requests completed (when hardware is not available) >= 90% 31c) Number of hardware move/remove requests completed within 3 business days or by requested date in SR or date scheduled by Contractor and accepted by requestor divided by number of hardware move/remove requests completed >= 90% For clarity, 31a, 31b, and 31c must be met for this Service Level. Clock may only be suspended if County approval is required.
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Contractor-provided

8.4 OIC Additions, Updates and Removals

Service Level	Completion of addition, update, or removal request pertaining to Optional Items Catalog (OIC)		
Service Level ID	32		
Definition	The elapsed time between Catalog Review Board (CRB) approval of Service Request (SR) to add, remove or update item to or from the OIC and completion of the SR with completion defined as when OIC is updated with addition, removal, or update of item.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Elapsed time	30 Days	80%	90%
Formula	Number of instances within Performance Target/Total number of instances during Measurement Interval		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Contractor-provided		

9 NETWORK SERVICE LEVELS

9.1 Transaction Response Time — Internet/Intranet Access

Service Level	Internet/Intranet systems. Response is measured from each Site		
Service Level ID	33		
Definition	Length of time host systems and networks transmit and process requests across the Internet/Intranet and return data to End-User's screen. Internet/Intranet Respond Time will be measured by accessing the County Internet/Intranet Sites		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Response Time	Intranet – Within 0.5 seconds Internet – Within 0.75	98% 98%	99% 99%
Formula	1. Test transactions will be sent to designated County endpoints for Intranet/Internet locations every 15 minutes. 2. These transactions will be tested 6 a.m. to 6 p.m. M-F, excluding County Holidays. 3. The algorithm shall be: Number of Internet/Intranet transactions per hour (4) x number of hours checked per day (12) x number of days per Month. 4. The percentage is derived from the number of passing transactions/number of possible transactions		
Measurement Interval	Every 15 minutes		
Reporting Period	Monthly		
Measurement Tool/Source Data	Time is measured using a defined sampling scheme, data transfer sizes and network Locations. The current measurement tool is network probes, replaced by APM after deployment		

9.2 Transaction Response Time – Data Center

Service Level	Transaction Response Time for Server Systems — Local Network		
Service Level ID	34		
Definition	Length of time host systems and networks transmit and process requests and return data to End-User's screen. Response Time will be measured using a defined sampling scheme, data transfer sizes and network Locations. County Sites and management of the probes used will be documented in the Standards and Procedures Manual.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Response Time	24/7	• 95% within 1 seconds • 99% within 3 seconds	• 97.5% • 99.5%
Formula	1. Test transactions will be sent to an endpoint selected at random. This will be repeated 100 times, and the average response time of the 100 transactions will be recorded. 2. Step 1 will be repeated twice a day, at 9 a.m. and 10 a.m. as well as 2 p.m. and 3 p.m., two days a Week, on chosen business days at random. 3. At the conclusion of the calendar Month, the recorded data for all samples will be added together, divided by the number of samples, and reported.		
Measurement Interval	See formula		
Reporting Period	Monthly		
Measurement Tool/Source Data	Time is measured using a defined sampling scheme, data transfer sizes and network Locations. The current measurement tool is network probes, replaced by APM after deployment		

9.3 Voice System Call Blocking

Service Level	Voice system call blocking		
Service Level ID	35		
Definition	Percentage of calls blocked, or experiencing busy service, measured per trunk route		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Calls blocked	24/7	Blocking not to exceed 1% of all calls during each hour by route unless otherwise directed by the County	Not to exceed 0.5% of all calls during each hour by route unless otherwise directed by the County
Formula	Number of calls blocked or experiencing busy service each hour per trunk/total calls attempted per hour per trunk. This metric will be calculated for each hour of the Month for each phone switch.		
Measurement Interval	Hourly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data		

9.4 Data Network Availability

Service Level	The percentage of time that the data network is available.		
Service Level ID	36a, 36b, 36c		
Definition	The time during which the network is fully functioning and normal business operations can be carried out with no data loss, downtime, or performance degradation during available site hours.		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Availability	**36a:** D1 = average availability of all network circuits and active components	D1 ≥ 99.95% aggregate availability	D1: ≥ 99.975%
	36b: D2 = Individual site connected via fiber with the lowest availability	D2 ≥ 99.5% per fiber Site availability	D2: ≥ 99.75%
	36c: D3 = Individual site connected via copper with the lowest availability	D3 ≥ 99% per copper Site availability	D3: ≥ 99.5%
Formula	**36A** Components include all circuits and active data network components Component Availability (%) = 100% - Component Unavailability (%) Component Unavailability = Component outage duration / Available Component Hours Component outage duration does not include scheduled outages 36A = if Average Component Availability of All Active Components >= 99.95%, then Pass; otherwise, Fail. **36B & 36C** Site availability (%) = 100% - Site Unavailability Site Unavailability = Total Outages at Site / Site Available Hours Outages do not include scheduled outages 36B= If Site Availability for all Sites linked via fiber >= 99.5%, then Pass; otherwise, see credit table 4.8.14. 36C = If Site Availability for all Sites linked via copper >= 99%, then Pass; otherwise, see credit table 4.8.14.		

Measurement Interval	Monitor Continuously/Measure Daily
Reporting Period	Monthly
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data. All performance criteria are to be measured on a per circuit and component basis.

9.5 Internet Availability

Service Level	The availability of the Internet. The percentage of time that the Internet is available for normal business operations.
Service Level ID	37
Definition	Percentage of time Internet access is available

Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Availability	24/7	99.80%	99.9%

Formula	Availability (%) = 100% — Unavailability (%) Where Unavailability is defined as: (Sum of Outage Duration x 100%) / (Schedule Time — Planned Outage)
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data

9.6 Voice Network Availability

Service Level	The percentage of time that the Voice Services (telephone, PBX or voice mail) is available for normal business operations		
Service Level ID	38		
Definition	Percentage of time that the Voice Services are available for use		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Availability	24/7	99.80%	99.9%
Formula	Availability (%) = 100% — Unavailability (%) Where Unavailability is defined as: (Sum of Outage Duration x 100%)/(Schedule Time — Planned Outage)		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data		

10 DATA CENTER SERVICE LEVELS

10.1 Output Delivery

Service Level	Delivery of printed output		
Service Level ID	39		
Definition	Percentage of time that the printed output is created and delivered on time and free from errors and omissions		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Percent Attained	Per County schedule Monday — Friday 6 a.m. to 6 p.m., excluding the County Holidays	98%	99%
Formula	Number of times output met the print window for delivery/total output deliveries		
Measurement Interval	Daily		
Reporting Period	Monthly		
Measurement Tool/Source Data	The tool supplied by the Contractor automatically records date and time stamps each activity within a process, including uptime and downtime data		

10.2 Daily Backup

Service Level	Daily Backup for: • Incremental • Full
Service Level ID	40
Definition	Backup of files that have changed or are new since the last daily backup including a full backup once a week

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Backup complete	Monthly	99.95	No Earnback

Formula	Daily: Number of objects successfully backed up within Measurement Interval divided by Ttotal number of objects within Measurement Interval Monthly: Number of objects successfully backed up within the month divided by Total number of objects for the month
Measurement Interval	Daily and Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	The tool supplied by the Contractor automatically records date and time stamps each activity within a process. Contractor shall create a Severity 2 Incident ticket in every event which an object failed to be backed up for two consecutive days. Note: Objects can be a UNIX Filesystem, Windows Volume, a Windows or UNIX folder, NetApp or NAS shares/directories, VMWare server image or OS Volume.

10.3 Quarterly Backup / Restore

Service Level	Addresses any gaps in proper operation of backup and restore		
Service Level ID	41		
Definition	Confirmation that the backup and restore is properly operating		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Successful test completion	Test completed and confirmed	100%	No earnback provision
Formula	Successful test completion		
Measurement Interval	Monthly		
Reporting Period	Quarterly		
Measurement Tool/Source Data	Contractor-provided		

10.4 Data Restore

Service Level	Data restore measurements: • Restore Service Request for production data • Restore Service Request for recovery of test data or data volume backups		
Service Level ID	42		
Definition	Initiation of restore Service Request		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
a. Respond Time data 30 days old or less b. Respond Time data 31 days old or more	a. ≤3 hours from Service Request submittal b. ≤8 hours from Service Request submittal	a. 95% b. 95%	a. 97.5% b. 97.5%
Formula	Restore initiation within the required timeframes, SL success requires meeting performance targets on both a AND b.		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Contractor-provided		

10.5 Server Decommission

Service Level	Completion of decommission request		
Service Level ID	43		
Definition	Removal of either a physical or a virtual Server from active status and from active billing, if applicable		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Completion Time	Server decommission Monday — Friday 6 a.m. to 6 p.m., excluding the County Holidays	• 95% within 3 business days • 100% within 30 business days	• 97.5% within 3 business days • No earnback provision
Formula	Number of Servers decommissioned within target/total number of Servers authorized for removal during Measurement Interval		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Contractor-provided		

10.6 Server Provisioning

Service Level	Server Provisioning
Service Level ID	44
Definition	Provisioning a physical production or test Server for use in the network following date of Solution Design Document (SDD) approval. Note: Server provisioning is defined as Operating System is installed, and tools (as defined in the Build Docs) are installed for management, monitoring, backups and anti-virus, network configuration and on-line, and project team has access and authorization in-place.

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Completion	• **44-a Physical (excluding Oracle):** within 40 business days from SDD approval	• 95%	• 97.5%
	• **44-b Virtual:** within 8 business days from SDD approval	• 95%	• 97.5%
	• **44-a Physical (Oracle):** within 59 business days from SDD approval	• 95%	• 97.5%
Formula	• **44-a** Number of Servers Requested for Provisioning within Performance Target / Total Number of Servers Requested • **44-b** Number of Servers Requested for Provisioning within Performance Target / Total Number of Servers Requested • **44-c** Number of Servers Requested for Provisioning within Performance Target / Total Number of Servers Requested Business Day: Monday - Friday 6 a.m. to 6 p.m., excluding the County Holidays		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Contractor-provided		

10.7 [Reserved]

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10.8 [Reserved]

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10.9 [Reserved]

10.10 [Reserved]

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10.11 Server Software Update

Service Level	Operating System Patching for Windows and Linux servers		
Service Level ID	46-1		
Definition	Implementation of operating system patches and updates for Windows and Linux servers		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to Implement	Within the Patch Cycle, starting on the day after Patch Tuesday of current month, when patches and updates made available from Microsoft and RedHat, through Monday before Patch Tuesday of the next month. Example: If Patch Tuesday for November is November 9th and Patch Tuesday for December is December 14th, the patch cycle for the period is November 10th through December 9th. Acceptable Exceptions are limited to prevent disruption of critical business functions (i.e., TTC Property Tax collection periods November-December and March – April; employee benefit enrollment in October; ROV election blackout periods; fiscal year end processing; calendar year-end freeze).	95%	97%
Formula	Quantity of Windows and Linux servers patched/updated over patch cycle divided by the Quantity of Windows and Linux servers in the environment (less approved exceptions).		
Measurement Interval	Monthly based on Patch Cycle, not the calendar month.		
Reporting Period	Monthly based on Patch Cycle, delivered on the Wednesday after completion of the Patch Cycle. Example: If Patch Tuesday for November is November 9th and Patch Tuesday for December is December 14th, the patch cycle for the period is November 10th through December 9th. Report delivery date December 15th.		
Measurement Tool/Source Data	Contractor-provided (Ansible)		

Service Level	Operating System Patching for Solaris and AIX servers
Service Level ID	46-2

Definition	Implementation of operating system patches and updates for Solaris and AIX servers.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to Implement	Within the Patch Cycle, starting on the day after Patch Tuesday of current month, through Monday before Patch Tuesday of the next month. Oracle and IBM release patches on a quarterly basis, not monthly. Example: If Patch Tuesday for January is January 11th and Patch Tuesday for February is February 8th, the patch cycle for the period is January 12th through February 7th. Acceptable Exceptions are limited to prevent disruption of critical business functions (i.e., TTC Property Tax collection periods November-December and March – April; employee benefit enrollment in October; ROV election blackout periods; fiscal year end processing; calendar year-end freeze).	95%	97%
Formula	Quantity of Solaris and AIX servers patched/updated over patch cycle divided by the Quantity of Solaris and AIX servers in the environment (less approved exceptions).		
Measurement Interval	Quarterly based on Patch Cycle, not on the calendar month.		
Reporting Period	Quarterly based on Patch Cycle, delivered on the Wednesday after completion of the Patch Cycle. Example: If Patch Tuesday for January is January 11th and Patch Tuesday for February is February 8th, the patch cycle for the period is January 12th through February 7th. Report delivery date February 9th.		
Measurement Tool/Source Data	Contractor-provided (Ansible)		

Service Level	Operating System Patching for Critical and Zero Day Vulnerabilities
Service Level ID	46-3
Definition	Implementation of operating system (Linux, Windows, Solaris and AIX) patches and updates specifically identified as Critical or Zero Day Vulnerabilities

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to Implement	Within 24 hours of patches or updates being made available from operating system vendor(s) and 98% within 72 hours. A client approved Emergency Change Request is required pre-deployment or post-deployment Acceptable Exceptions are limited to prevent disruption of critical business functions (i.e., TTC Property Tax collection periods November-December and March – April; employee benefit enrollment in October; ROV election blackout periods; fiscal year end processing; calendar year-end freeze).	92%	95%
Formula	Quantity of servers patched/updated divided by Quantity of servers impacted by the Critical or Zero Day Vulnerability in the environment (less approved exceptions).		
Measurement Interval	As needed based on Critical and Zero Day Vulnerabilities produced with vendor remedy.		
Reporting Period	As needed but within 24 hours of implemented patches and updates for Critical or Zero Day Vulnerabilities for initial report and within 96 hours for the final report.		
Measurement Tool/Source Data	Contractor-provided		

Service Level	Middleware Vulnerability Remediation for Production PAIDs		
Service Level ID	46-4		
Definition	Remediation of 'critical' and 'high' vulnerabilities found in middleware software that support production applications.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to implement	Within the rolling 60-day Remediation Cycle (RC), starting on the first day of month and last day of following month (generally 60 days). SL report and exceptions report shall be delivered on the 14th of the month immediately following completion of the RC.	80%	90%

| | Example: If RC #1 period is June 1st through July 31st with reporting due August, then RC #2 period is July 1st through August 31st with reporting due September and so on.

Example timeline:
• Vulnerability scan execution – June 1st
• RC #1 period start – June 1st
• Vulnerability scan execution – July 1st
• RC #2 period start – July 1st
• RC #1 period end – July 31st
• Vulnerability scan execution – August 1st
• RC #3 period start – August 1st
• Delivery of report for cycle #1 – August 14th
• RC #2 period end – August 31st
• Vulnerability scan execution – September 1st
• Delivery of report for cycle #2 – September 14th
• RC #3 period end – September 30th
• Vulnerability scan execution – October 1st
• Delivery of report for cycle #3 – October 16th

Acceptable exceptions are limited to:
• Preventing disruption of critical business functions (i.e., TTC Property Tax collection periods November-December and March – April); Employee benefit enrollment in October; ROV election blackout periods; fiscal year end processing; calendar year-end freeze; etc.).
• Current application version not certified for update of middleware.
• Significant upgrade project in progress for PAID will be impacted.

Vulnerability remediation shall be applied to development, test, and production environments.

Vulnerabilities are identified in the vulnerability scan data provided by the ITO Security team. Though scanning is done more often, the scan data used for this SL will be | | |

	from the scans executed on the 1st of the month of the appropriate remediation period months.		

Formula	Quantity of in-scope "critical" and "high" middleware vulnerabilities (as identified in the vulnerability scan data) remediated during the RC **divided by** Quantity of in-scope "critical" and "high" middleware vulnerabilities (as identified in the vulnerability scan data) at the beginning of the RC.
	
	 "In-scope" quantity excludes acceptable exceptions.
	
	 "Remediated during the RC" is calculated by comparing the in-scope vulnerability scan results from the end of the current RC to the in-scope vulnerability scan results from the beginning of the current RC. Any in scope vulnerabilities from the beginning of the RC that is no longer evidenced at end of the RC data, is considered "remediated".
	
	 For example, for the RC period June 1st through July 31st, formula calculation is as follows:
	
	     (Quantity of "critical" and "high" middleware vulnerabilities remediated ⟨June RC)
	 ─────────── **divided by**───────────
	 (Quantity of in-scope "critical" and "high" middleware vulnerabilities on Ju
	
	 Furthermore, for the subsequent RC period July 1st through August 31st, formula calculation is as follows:
	
	     (Quantity of "critical" and "high" middleware vulnerabilities remediated ⟨July RC)
	 ─────────── **divided by**───────────
	 (Quantity of in-scope "critical" and "high" middleware vulnerabilities on Ju

Measurement Interval	Monthly, based on rolling 60-day RC.
Reporting Period	Bi-monthly (every two months), based on RC, delivered on the 14th of the month after completion of the RC. The exceptions report will also be delivered on the 14th of the month after completion of the RC. If the 14th of the month is a weekend or holiday, the report will be provided on the next business day. Example: For the RC period June 1st through July 31st, the SL and exceptions reports shall be delivered on August 14th. For the subsequent RC period July 1st through August 31st, the SL and exceptions reports shall be September 14th, and so on.
Measurement Tool/Source Data	Contractor-provided

Service Level	Application Vulnerability Remediation for Production PAIDs		
Service Level ID	46-5		
Definition	Remediation of 'critical' and 'high' vulnerabilities found at the application level for production applications.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Time to Implement	Within the rolling 60-day Remediation Cycle (RC), starting on the first day of month and last day of following month (generally 60 days). SL report and exceptions report shall be delivered on the 14th of the month immediately following completion of the RC. Example: If RC #1 period is June 1st through July 31st with reporting due August, then RC #2 period is July 1st through August 31st with reporting due September and so on. Example timeline: • Vulnerability scan execution – June 1st • RC #1 period start – June 1st • Vulnerability scan execution – July 1st • RC #2 period start – July 1st • RC #1 period end – July 31st • Vulnerability scan execution – August 1st • RC #3 period start – August 1st • Delivery of report for cycle #1 – August 14th • RC #2 period end – August 31st • Vulnerability scan execution – September 1st • Delivery of report for cycle #2 – September 14th • RC #3 period end – September 30th • Vulnerability scan execution – October 1st • Delivery of report for cycle #3 – October 16th Acceptable exceptions are limited to: • Preventing disruption of critical business functions (i.e., TTC Property Tax collection periods November-December and March – April; Employee benefit enrollment in October; ROV election blackout periods; fiscal year end processing; calendar year-end freeze; etc.). • Vulnerability remediation requires an application upgrade. • Significant upgrade project in progress for PAID will be impacted. Vulnerability remediation shall be applied to development, test, and production environments.	80%	90%

	Vulnerabilities are identified in the vulnerability scan data provided by the ITO Security team. Though scanning is done more often, the scan data used for this service level will be from the scans executed on the 1st of the month of the appropriate remediation period months.
Formula	Quantity of in-scope "critical" and "high" application vulnerabilities (as identified in the vulnerability scan data) remediated during the RC **divided by** Quantity of in-scope "critical" and "high" application vulnerabilities (as identified in the vulnerability scan data) at the beginning of the RC. "In-scope" quantity excludes acceptable exceptions. "Remediated during the RC" is calculated by comparing the in-scope vulnerability scan results from the end of the current RC to the in-scope vulnerability scan results from the beginning of the current RC. Any in scope vulnerabilities from the beginning of the RC that is no longer evidenced at end of the RC data, is considered "remediated". For example, for the RC period June 1st through July 31st, formula calculation is as follows: $$\frac{\text{(Quantity of "critical" and "high" application vulnerabilities remediated during the June RC)}}{\text{(Quantity of in-scope "critical" and "high" application vulnerabilities on June 1}^{st}\text{ scan)}}$$ Furthermore, for the subsequent RC period July 1st through August 31st, formula calculation is as follows: $$\frac{\text{(Quantity of "critical" and "high" application vulnerabilities remediated during the July RC)}}{\text{(Quantity of in-scope "critical" and "high" application vulnerabilities on July 1}^{st}\text{ scan)}}$$
Measurement Interval	Monthly, based on rolling 60-day RC.
Reporting Period	Bi-monthly (every two months), based on RC, delivered on the 14th of the month after completion of the RC. The exceptions report will also be delivered on the 14th of the month after completion of the RC. If the 14th of the month is a weekend or holiday, the report will be provided on the next business day. Example: For the RC period June 1st through July 31st, the SL and exceptions reports shall be delivered on August 14th. For the subsequent RC period July 1st through August 31st, the SL and exceptions reports shall be September 14th, and so on.
Measurement Tool/Source Data	Contractor-provided

10.12 Server Availability

Service Level	The percentage of time that the server is available		
Service Level ID	47		
Definition	The percentage of time that the system is available for business operations.		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Availability	24/7	99.5% - 99.8% per production Server per Step Reduction Schedule Table 95% per test Server 95% per utility Server	99.9% per production Server 97.5% per test Server 97.5% per utility Server
Formula	Availability (%) = 100% — Unavailability (%) Where Unavailability is defined as: (Sum of Outage Duration x 100%)/((Schedule Time — (Planned Outage)) Use the Step Reduction Schedule Table to determine the applicable Fee Reduction percentage and subsequently calculate the Fee Reduction amount for a given month. Determine the Fee Reduction percentage based on sum total of Servers that missed the SL Performance and 6-month interval in which given month occurs. For example, in January 2021, four servers missed the SL Performance. Since January 2021 is in the 'Months 7-12' interval, a 25% Fee Reduction percentage applies for calculating the Fee Reduction amount. Step Reduction Schedule Table		

Step Reduction Schedule Table

Step	Sum Total of Servers that Missed SL Performance	*Months 1-6 Fee Reduction 99.5% per Production Server	**Months 7-12 Fee Reduction 99.8% per Production Server	***Months 13+ Fee Reduction 99.8% per Production Server
0	0 to 3	0%	0%	25%****
1	4 to 6	25%	25%	50%
2	7 to 9	50%	50%	75%
3	10+	100%	100%	100%

	*July – December 2020 ** January – June 2021 *** July 2021 and after **** One server miss at 0%, 2 or 3 server miss are at 25% For clarity, unplanned outage time shall not be accrued if the server is part of a high availability system/cluster, where the service provided by the server system/cluster remains available. Utility Servers exist in the environment to optimize support capabilities. No County traffic passes through these servers and they have no direct impact on access, availability, or performance of County users or data. Utility Servers provide: • Redundant Accessibility • Administration of Services • Administration of Cyber Security and Compliance • Command Line Interfaces for Administration of ESXi As of 08/10/2020, there are nine utility servers: USSDSCOSD780, USSDSCOSD781, USPLSCOSD105, USTLSCOSD105, USSDGACSD0001, USTLPACSD0001, USPLVUCSD025, USTLVUCSD050, and USTLPOCSD0012.
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data

11 APPLICATIONS SERVICE LEVELS

11.1 Project Management Plan Rework

Service Level	Each Project Management Plan (PMP) rejection that requires revision, and: a) the revision is delivered during the Measurement Period; and b) the rationale for rejection is either due solely to Contractor-related issues, or a combination of Contractor and County issues
Service Level ID	48
Definition	Project delay in Business Hours due to Rejection and Revision of PMP. The number of Business Hours delayed is defined as the number of business hours from the County's notification date to Contractor of a PMP rejection through, and including, the County's receipt of Contractor's revised PMP. As a part of the rejection process, the County will identify the category that the rejection falls within, as well as the specific rejection reason. 1. Contractor Caused Reasons for Rejection (SL clock starts) must be categorized as: A. Project scope is incorrect based on county input document provided B. Contractor Math error C. Contractor Schedule issue D. Contractor Fees applied incorrectly E. Changes made after "draft" review 2. County Caused Reasons for Rejection (SL clock does not start) must be categorized as: A. County requested changes to scope B. County requested changes to list of planned work products to be delivered C. PMP timeframe for approval has expired D. County requested changes to business requirements E. Time is lost solely due to contract disputes/reasons

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Schedule	Number of Business Hours delayed during Measurement Period ≤Target Baseline Total of County Business Hours delayed	The Target Baseline Total of Business Hours delayed is • 102 hours	No Earnback provision

Formula	Average Number of County Business Hours Delayed = sum of County Business Hours Delayed on each applicable PMP in the Measurement Period/number of PMPs If the rationale for rejection of a PMP is a combination of Contractor and County issues, then the applicable Business Hours Delayed on the specific PMP for the purposes of this algorithm will be reduced by 50%, or as mutually agreed-upon by the Parties.
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Metric data is created by the Contractor using Service Request Tracking Sheets

11.2 Service Request Schedule Performance

Service Level	Each completed Service Request with an approved PMP. Exclusions: • Firm fixed price Service Requests This SL will be in effect for each in-flight Service Request which had an approved PMP prior to the implementation of this SL. Exceptions to this will be on a case-by-case basis and will be agreed upon prior to the implementation of this SL.
Service Level ID	49
Definition	Service Requests completed within last approved schedule excluding any non-approved project revisions as identified via formal change request process.

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Schedule	Meet SPI target Monday — Friday 6 a.m. to 6 p.m., excluding the County Holidays	$SPI \geq 0.90$	No Earnback provision

Formula	'm' = multiplier for Fee Adjustment calculation. 'm' = 0.05 'n' = factor for Fee Adjustment calculation. 'n' = 165,000 SL Fee Adjustment = m * (n/SPI²)
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Last approved schedule and SPI

11.3 Variance to Application Budget

Service Level	Service Request Budget Performance		
Service Level ID	50		
Definition	Measurement of performance to budget and how the Contractor meets its projections excluding any non-approved project revisions as identified via formal change request process.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Budget	Adherence to budget	CPI => 0.90	No Earnback provision
Formula	'm' = Multiplier for fee reduction. 'm'=0.05 Service Level Fee Reduction = m * (Last Approved Budget / CPI)		
Measurement Interval	Each completed Service Request with an approved Project Management Plan (PMP). Exclusions: • Firm Fixed Price Service Requests This Service Level shall be in effect for each in-flight Service Request which had an approved PMP prior to the implementation of this Service Level. Exceptions to this shall be on a case-by-case basis and will be agreed upon prior to the implementation of this Service Level. The types of costs that are to be included in the budget and actual calculations for the Service Level are labor billed through resource units as defined in the Agreement. The fee reduction upper bound is the weighting percentage of the at risk pool.		
Reporting Period	Monthly		
Measurement Tool/Source Data	Last approved budget and CPI		

11.4 Application Availability

Service Level	Measurement of service for general application availability		
Service Level ID	51		
Definition:	The percentage of time that the application is available for normal business operations. Application environments that have performance issues not within control of the Contractor to correct and as demonstrated by the Contractor will be eligible for an exclusion at the County CIO's discretion		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Availability	Available 24/7	99.90% P1, P2 and P3 applications	99.95% P1, P2 and P3 applications
Formula	Total available hours for P1 / total hours in measurement period for P1 AND Total available hours for P2 / total hours in measurement period for P2 AND Total available hours for P3 / total hours in measurement period for P3		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data		

11.5 Application Availability (Priority 1)

Service Level	Measurement of service for general application availability for Priority 1 (P1) applications
Service Level ID	51-1
Definition:	The percentage of time that the application is available for normal business operations. Application environments that have performance issues not within control of the Contractor to correct and as demonstrated by the Contractor will be eligible for an exclusion at the County CIO's discretion

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Availability	Available 24/7	99.90%	99.95%

Formula	Total available hours for P1 / total hours in measurement period for P1
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data

11.6 Application Availability (Priority 2)

Service Level	Measurement of service for general application availability for Priority 2 (P2) applications		
Service Level ID	51-2		
Definition:	The percentage of time that the application is available for normal business operations. Application environments that have performance issues not within control of the Contractor to correct and as demonstrated by the Contractor will be eligible for an exclusion at the County CIO's discretion.		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Availability	Available 24/7	99.90%	99.95%
Formula	Total available hours for P2 / Total hours in measurement period for P2		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data		

11.7 Application Availability (Priority 3)

Service Level	Measurement of service for general application availability for Priority 3 (P3) applications
Service Level ID	51-3
Definition:	The percentage of time that the application is available for normal business operations. Application environments that have performance issues not within control of the Contractor to correct and as demonstrated by the Contractor will be eligible for an exclusion at the County CIO's discretion.

Service Measure	Performance Target	SL Performance (%)	SL Earnback
Availability	Available 24/7	99.90%	99.95%
Formula	Total available hours for P3 / Total hours in measurement period for P3		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Tool supplied by the Contractor automatically records date and time stamps for each activity within a process, including uptime and downtime data		

11.8 Documentation Update Accuracy

Service Level	Measures adherence to update the Applications configuration repository and Application architectural documents
Service Level ID	52

Definition:	Projects that require updates to in-scope artifacts or repositories are refreshed according to the established process
	In scope project items include:
	Architecture Documents (with exclusion of those PAIDs receiving SaaS support):
	    • Solution Design Documents required for:
	        o New Implementation of an application
	        o Upgrade of and existing application
	        o Tech Refresh
	    • Architecture Diagrams required for:
	        o New Implementation of an application
	        o Upgrade of and existing application
	        o Tech Refresh
	        o TPAR for new/modified firewall rule
	        o Third party IP address change
	
	Specified Apps Manager fields (with exclusion of those PAIDs receiving SaaS support):
	    1. Support Bundle – Must be completed.
	    2. Application Status – Current Status or Pending Status is set to correct status
	    3. Production Release Date –Is set to the date identified for the change to be implemented
	    4. NDSR – must be yes if an NDSR is identified during the project and reset to 'No' when the NDSR Period of Performance has expired.
	    5. Certificates (If none-"None" in name field)
	        a. Name - cannot be blank
	        b. Type - cannot be blank
	        c. Issuer - cannot be blank
	        d. Expired Date - cannot be blank
	        e. Issue Date - cannot be blank
	        f. Contractor Contact Email - cannot be blank
	    6. Servers (X number of servers)
	        a. Server Name - cannot be blank
	        b. Server Environment - cannot be blank
	        c. Server Location - cannot be blank
	        d. Server Purpose - cannot be blank

7. Software (X items of s/w needed for the application)
    a. Name – updated/entry created if RFC identifies that SW was installed, removed or updated.
    b. Version – updated/entry created if RFC identifies that SW was installed, removed or updated.
    c. Vendor – updated/entry created if RFC identifies that SW was installed, removed or updated.
8. Application Associations/Dependencies
    a. PAID – updated/entry created if RFC identifies application association.
    b. App Name/Dependency Type – updated/entry created if RFC identifies application association.
    c. Portfolio – updated/entry created if RFC identifies application association.
9. Application Interfaces
    a. Name – updated/entry created if RFC identifies interface.
    b. Description – updated/entry created if RFC identifies interface.
    c. Type – updated/entry created if RFC identifies interface.
    d. Frequency – updated/entry created if RFC identifies interface.
10. MSI
    a. Name – updated/entry created if RFC identifies new, removed or updated MSI.
11. Active Directory (AD)/Service Account (SVC)
    a. Name – updated/entry created if RFC identifies new, removed or updated Service Account or AD Account.
    b. Type – updated/entry created if RFC identifies new, removed or updated Service Account or AD Account.
12. Document Link to current Configuration Instructions
    a. Doc Type – must be completed
    b. Name – must be completed
    c. Link – must be completed and linked documents must be updated as validated by the 'Modified' date in the file properties of the configuration instruction.
13. Document Link to current Installation Instructions
    a. Doc Type – must be completed
    b. Name – must be completed
    c. Link – must be completed and linked documents must be updated as validated by the 'Modified' date in the file properties of the Installation Instructions.
14. Document Link to current Architecture Diagram
    a. Doc Type – must be completed
    b. Name – must be completed
    c. Link – must be completed and linked documents must be updated as validated by the 'Modified' date in the file properties of the Architecture Diagram.

	15. Document link to current Solution Design Document
	    a. Doc Type – must be completed
	    b. Name – must be completed
	    c. Link – must be completed and linked documents must be updated as validated by the 'Modified' date in the file properties of the SDD.		

Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Document updated	In Scope documents updated per schedule. Schedule will be derived from open actions during CRCB readiness review. Readiness review items determined from the weekly Approved RFC's spreadsheet used by the CRCB.	95%	97.5%

Formula	For documented RFCs: Total in scope documents and Apps Manager fields completed correctly and those that met action due dates as identified during Review /total in scope documents and Apps Manager fields for documented RFCs Each in scope document is counted separately. Each in scope Apps Manager field is counted separately.
Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Document and field compliance are measured and documented during the Change control process. The source data that triggers an event to be in-scope for this SL is the weekly Approved RFC's spreadsheet. The Gate Review Coordinator resource documents compliant items and necessary actions in the Gate Visibility Board and tracks to completion. Schedule is identified as action date on the Visibility board and 95% of those follow up dates are met. Maximum due date is 15 business days from Apps Manager actions identified. For instances where a new or updated SDD or Architecture diagram is required, the new/updated SDD or Architecture diagram would be submitted to EA for approval within 15 business days. SL for each artifact is measured based on the identified completion month of the last action due date for that artifact, not the completion month of the associated RFC.

11.9 Application Response Time

Service Level	Response Time of the Application for End-User to include all functions of the Application. Application environments that have performance issues not within control of the Contractor to correct and as demonstrated by the Contractor will be eligible for an exclusion at the County CIO's discretion.		
Service Level ID	53		
Definition	Effective Response Time for End-Users accessing the Application		
Service Measure	**Performance Target**	**SL Performance (%)**	**SL Earnback**
Response Time	Response Time 24/7 <2 seconds	Aggregate 98% Per Application	NA
Formula	Use the Step Reduction Schedule Table to determine the applicable Fee Reduction percentage and subsequently calculate the Fee Reduction amount for a given month. Determine the Fee Reduction percentage based on sum total of Applications that missed the SL Performance and interval in which given month occurs. For example, in January 2022, two Priority 1 Applications missed the SL Performance. Since January 2022 is in the 'Months 1-9' interval, a 50% Fee Reduction percentage applies for calculating the Fee Reduction amount. Step Reduction Schedule Tables for Priority 1, 2, and 3 Applications:		

Priority 1 Applications	October 2021 – August 2023	September 2023 and after
Fee Reduction Percentage	Applications Missing Target	Applications Missing Target
0%		
25%		
50%	1	1
100%	2+	2+

Priority 2 Applications	October 2021 – August 2023	September 2023 and after
Fee Reduction Percentage	Applications Missing Target	Applications Missing Target
0%	1-2	0-1
25%	3-5	2-3
50%	6-8	4-5
100%	9+	6+

Priority 3 Applications	October 2021 – August 2023	September 2023 and after
Fee Reduction Percentage	**Applications Missing Target**	**Applications Missing Target**
0%	1-2	0-1
25%	3-5	2-3
50%	6-8	4-5
100%	9+	6+

Measurement Interval	Monthly
Reporting Period	Monthly
Measurement Tool/Source Data	Measured based on submittals that incorporate measurements from Application Performance Management tool

11.10 Root Cause Analysis Action Closure

Service Level	Root Cause Analysis Corrective and Preventative Action Completion		
Service Level ID	55		
Definition	Closure of identified corrective and preventative actions from Root Cause Analyses (SL 24)		
Service Measure	Performance Target	SL Performance (%)	SL Earnback
Elapsed Time to produce RCA report	Actions closed within published timeframe (subject to mutual agreement)	99%	99.5%
Formula	Number of instances within Performance Target/total number of instances during Measurement Interval For clarity – actions requiring CoSD approval/support may be excluded subject to mutual agreement.		
Measurement Interval	Monthly		
Reporting Period	Monthly		
Measurement Tool/Source Data	Measured by the Problem management system		

12 TRANSITION SERVICE LEVELS

The County recognizes that transitioning from one primary Contractor to another requires a unique level of cooperation and facilitation between the Legacy Provider and the Contractor. In general, the Contractor will assume responsibility for Service Framework-specific Service Levels upon Cutover of the applicable Service Framework. The Contractor will not be responsible for Service Levels (or portions of Service Levels) relating to Service Frameworks that are not within its control. For Service Levels that span Service Frameworks (e.g., Incident Service Levels), the Contractor shall have responsibility when the fix is within a Service Framework for which the Contractor has already assumed control and responsibility.

13 SPECIAL REQUIREMENTS

In addition to Service Levels, Contractor shall comply with the Special Service Levels specified in Schedule 4.8 Services Levels - Exhibit 4.8-1 Special Service Levels.

14 NETWORK CREDIT TABLE EXAMPLES

SL36b and 36c shall compute SL credits based on the following:

Network Availability: Allow 1 failure for availability target every 100 sites (rounded up)

> 0% of allocated weight if # of failures is less than or equal to allowable failures
>
> 25% of allocated weight if # of failures exceeds allowable failures
>
> 50% of allocated weight if # of failures exceeds 2x allowable failures
>
> 100% of allocated weight if # of failures exceeds 3x allowable failures

For clarity, if the number of sites is 1 to 100, the allowable failure count is 1; if the number of sites is 101 to 200, the allowable failure count is 2; if the number of sites is 201 to 300, the allowable failure count is 3, etc.

Examples based on 125 T1 sites and 171 Fiber sites (1 allowable failure for T1, 2 allowable failures for Fiber):

> **Example #1** - One "Fiber" location does not meet its individual availability target; no SL credit is due to the County
>
> **Example #2 -** Three "Fiber" locations do not meet their individual availability targets; an SL credit of 25% of the allocated weight is due to the County
>
> **Example #3 -** Three "Fiber" locations do not meet their individual availability targets and three "T1" locations do not meet their individual availability targets; an SL credit of 75% of the allocated weight is due to the County (25% + 50%)

Example #4 - Three "Fiber" locations do not meet their individual availability targets; six "T1" locations do not meet their individual availability targets; an SL credit of 100% of the allocated weight is due to the County (25% + 100%; however the maximum credit due is capped at 100% of the assigned weight)

END OF SCHEDULE